



CDC UNIFIED PROCESS PRACTICES GUIDE



BUSINESS CASE

Document Purpose

The purpose of this document is to provide guidance on the practice of **Business Case** and to describe the practice overview, requirements, best practices, activities, and key terms related to these requirements. In addition, templates relevant to this practice are provided at the end of this guide.

Practice Overview

A Business Case assists organizational stakeholders in making decisions regarding the viability of a proposed investment/project (hereafter referred to as project) effort. Use of a Business Case is considered standard practice throughout private and public industry. In government there are also specific laws and regulations that mandate the use of Business Cases for certain project types. For example, Capital Planning and Investment Control (CPIC) requires some form of Business Case for all information technology (IT) projects. The Exhibit 300, Capital Asset Plan and Business Case, is required by the Office of Management and Budget (OMB) for all Major and Tactical projects at the Department of Health and Human Services (HHS). In addition, CPIC performs regularly scheduled reviews that may require updates to the Business Case document. How often these reviews happen is dependant upon the type of project.

Prior to the development of a Business Case, a Business Needs Statement is required for the initial presentation of any new project concept. This document should provide sufficient information to justify a decision to move forward with the development of a full Business Case. This decision results from a review of the Business Needs Statement by an appropriate governance body and should be obtained prior to the beginning work on the Business Case.

Once the Business Needs Statement has been completed, approved, and the development of a Business Case authorized, the much more detailed Business Case document must be developed. Information used as part of the Business Needs Statement should be used as a starting point to populate the Business Case document and expanded upon to meet any related requirements mandated by CPIC, OMB, other regulations, policies, processes and/or practices. For more information on regulatory requirements regarding CPIC refer to the CDC Unified Process (UP) CPIC Process Guide located on the CDC UP website at <http://www.cdc.gov/cdcup/>. Additional information and templates are located on the CPIC website at <http://intranet.cdc.gov/cpic/>.

The HHS Enterprise Performance Life Cycle (EPLC) defines a Business Case as a documented, structured proposal for business improvement that is prepared to facilitate a selection decision for a proposed project or project by organizational decision makers. The Business Case describes the reasons and justification for the project in terms of business process performance, needs and/or problems, and expected benefits. It identifies the high-level requirements that are to be satisfied, an analysis of proposed alternative solutions (with reasons for rejecting or carrying forward each option), assumptions, constraints, a risk-adjusted cost-benefit analysis, and preliminary acquisition plan.

The Business Case should identify and validate an opportunity to improve business accomplishments of the organization or to correct a deficiency related to a business need and what business benefits can be expected by implementing this project. The Business Case presents information regarding a proposed project to stakeholders responsible for making sponsorship decisions. When documenting this information it is important to state these needs and opportunities in business terms. The document assists with communicating to prospective sponsors the rationale for a proposed project by presenting it in a way that aligns with the objectives of the sponsoring organization and justifies, in non-technical terms, reasons for initiating it.

The Business Case is used to document and present, prior to any investment, the variables and alternatives associated with making an investment decision. The document ensures that such variables have been thoroughly considered, and documented, and that both the value and the risks associated with



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the project are understood by its stakeholders. A Business Case should demonstrate that the information contained within it has been carefully considered and analyzed to present the best possible solution that most closely aligns with the organizational goals and objectives. The level of detail contained within a Business Case is often dependant upon what's appropriate for the size, complexity, and cost of the proposed project. The greater the size, complexity, and/or cost, the more detail will be required. The Business Case should contain information outlining items such as:

- Background description of the business need/issue
- Explanation of the identified benefits of addressing that need
- Identification of significant assumptions and constraints related to relative solutions
- Alignment of project benefits with organizational objectives
- Justification for undertaking the project
- Description of performance goals and measures
- Definition of success for the proposed project
- Analysis of alternative solutions, including the possibility of staying as is
- Identification of preferred recommended solution
- Explanation of why the preferred solution is recommended
- Analysis of procurement sourcing options
- Identification of preferred recommended procurement source(s)
- Explanation of why the preferred procurement source(s) is recommended
- Estimation of required resources such as funding, labor, materials, etc for both the project and ongoing support and maintenance of any related or ongoing project efforts
- Description of how benefits of executing the project will be realized
- Estimation of return on investment, break-even point, operational/ongoing costs, etc.
- Explanation of project risks/issues and strategies to address them

Any information provided within the Business Case should be at a level of detail sufficient to familiarize readers with the history, issues, and opportunities that can be realized from the project. High-level analysis and preliminary risk assessment is performed to establish/support the Business Case. The business process is modeled and possible alternatives identified. High-level system requirements, technical design concept/alternatives, and cost estimates are prepared. The overall strategy for acquisition is defined, including consideration of internal versus external acquisition, whether requests for information are necessary, how work will be divided, and expected contract types.

The Business Case is often created early in the project life cycle. However, depending on the size and/or complexity of a project, the Business Case may sometimes be developed incrementally. For example, a preliminary Business Case, or strategic outline, may be used to confirm the overall strategic approach of the project. As more information becomes available preliminary data is leveraged to outline and then finalize a more complete Business Case. A similar approach may be taken if the project approach is iterative in nature. A higher-level Business Case may be used early in the project life cycle to justify the project. As the project progresses through its life cycle, and more information is obtained about the required work, the Business Case should be updated to reflect this as part of each iteration.

Regardless of which approach is used, the Business Case document needs to be presented to potential stakeholders in a form that easily communicates the pros and cons of sponsoring and not sponsoring the proposed project. Some basic elements of a typical Business Case include items such as:

- General information
 - Purpose
 - Evaluation criteria
 - High-level business impact
 - Alternative analysis
 - Financial considerations
 - Work breakdown structure (WBS)
- Summary of spending



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- Investment/Project description
- Justification
- Performance goals & measures
- Investment/Project management
- Alternatives analysis
- Risk/Issues analysis
- Acquisition strategy
- Funding plan
- Enterprise architecture
- Policies, procedures, and regulations

The EPLC states that the Project Manager is ultimately responsible for the development of the Business Case. However, this effort is often performed with a team of stakeholders providing input. Stakeholders typically involved in Business Case development may represent areas from project management, product development, finance, analysts to perform competitive analysis, critical partners, etc. Their input is used in the development of the Business Case which at a high-level may be accomplished by using the following strategy.

1. Assessing the Organization

Projects are typically undertaken to leverage an opportunity, improve something, or to address a particular need such as changes in business objectives, strategy, vision, environment, legislation, regulation, policies, competition, products, etc. Regardless of origination, understanding the organization, its goals, objectives, and resources, is vital to communicating value of the proposed project.

It's important to investigate the business need before attempting to find a solution. Determine the root cause and understand its associated variables. Once identified, describe the need, its causes, the impact it has on the organization, and how and when it may be resolved by the proposed project. Understand the organization's business dynamics and use that to align proposed project goals with organizational objectives. The goal is to show that the project is consistent with organizational objectives. Some of the activities performed at this stage of Business Case development may include assessment of:

- Current, future, and potential stakeholder
- Key organizational strategies and objectives
- Critical success factors
- Key performance indicators that may eventually be used to measure project success
- Identification and modeling of business processes
- Success factor alignment with organizational goals and objectives
- Enterprise Architecture (EA) review and incorporation
- Security considerations

2. Identifying and Evaluating Alternative Solutions

After gaining a detailed understanding of the business need, identify and analyze potential alternative resolutions and identify one preferred solution. Research all options and show how each may address the business need. Some examples of alternatives to consider may include:

- Buy vs. build vs. lease vs. reuse of existing people, equipment, or processes
- Outsource vs. in-house development
- Commercial off the shelf (COTS) vs. Government off the shelf (GOTS)
- Mainframe vs. server-based vs. clustering
- Unix vs. Linux vs. Windows

Include an analysis of items such as risk, cost, training, technology, availability, etc. Provide realistic estimates based on research and input from subject matter experts. Anticipate potential stakeholder responses to each alternative and address them in the Business Case. Consider comparing the pros and cons of each alternative side-by-side in a table.



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Use this information to populate the appropriate section(s) of the Business Case document. To help ensure that the best potential solutions are selected consider the following steps:

- Identify as many alternative solutions as possible
- Include staying as is (status quo) as an alternative
- Quantify the pros and cons of implementing each alternative
- Forecast the costs associated with implementing each alternative
- Forecast the potential business impacts associated with implementing each alternative
- Assess the feasibility of implementing each alternative including security concerns
- Identify and analyze the risks and issues associated with implementing each alternative
- Prioritize alternatives in order of best fit for the organization based on time, scope, cost, and quality

3. Recommending a Preferred Solution

A Business Case should provide managers the information necessary to make financial decisions regarding prioritizing enterprise expenditures based on the value of the proposed project versus other projects. Define a set of criteria (benefits, costs, feasibility, risk, return on investment, total cost of ownership, etc) to use for analyzing each alternative solution. Devise a standard mechanism for scoring each alternative based on the importance of each criterion and select the preferred solution based on this analysis.

Increase accuracy of the information presented by basing future estimates on historical data whenever possible. In the absence of historical data, consult with subject matter experts and estimate conservatively to provide realistic projections of future benefit. Provide an explanation of why the selected solution best addresses the business need compared with other options. Keep the presentation of the selected project recommendation simple. Avoid complicating the presentation with technical jargon, acronyms, and ambiguous words. The goal is to present a concise solution to the potential project sponsor. If they cannot understand the proposal it's unlikely that they will be inclined to sponsor it.

4. Describing the Implementation Approach

Quantify the benefits of the proposed preferred solution. Explain how the project will be initiated, planned, executed, and closed. The goal is to illustrate that the proposed project has been carefully considered, aligns with organizational goals and objectives, and will benefit the organization if executed. At a high-level, outline the steps involved in initiating the project and to plan project activities. This should also list high-level plans to monitor and control project resources, finances, quality, risks, suppliers, communications, etc. Include an analysis of how the implementation will affect business processes, technology, job functions, etc. Outline the approach that will be taken to create project deliverables and gain acceptance for each deliverable produced and identify activities required to hand over the final solution to project stakeholders.

Best Practices

The following best practices are recommended for **Business Case** development:

- **CPIC + C&A** - Consider CPIC, C&A, and other policies, procedures, and regulatory requirements for both the proposed project and the Business Case document itself. Consider OMB's scoring system (OMB Circular A-11 for IT specific projects)
- **Start Early** - Incorporate information about security, accreditation, privacy, data center, etc
- **Leverage** - Look for ways to extend the benefits of the project beyond the immediate problem being addressed by the proposed project. Leveraging the work to resolve multiple needs may increase the likelihood of project sponsorship
- **Alternatives** - Identify at least three viable alternatives solutions
- **Enterprise Architecture** - Identify if components of existing enterprise architecture exist that may be leveraged to satisfy any project requirements



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- **Soft Benefits** - Include soft benefits in alternatives analysis even if not directly quantifiable. Soft benefits may include influences on employee behavior, increased client satisfaction, etc
- **Vocabulary** - Present concepts in business terms limiting the use of technical jargon and ambiguous acronyms
- **Review** - Present the completed Business Case document for final review, preferably to cross-functional team, prior to presenting to the prospective business sponsor

Practice Activities

For software development projects the following practice activities are appropriate:

- Contact the CPIC office for assistance
- Assess the organization
- Identify the agency's performance goals
- Define a strategy for Business Case development
- Identify and evaluate alternative solutions including prospective COTS/GOTS solutions
- Involve stakeholders in analyzing all prospective solutions
- Consider enterprise architecture, business processes, and security concerns
- Consider risks and issues
- Recommend a preferred solution using established criteria
- Outline the proposed implementation approach
- Finalize the Business Case document
- Present the Business Case document to the appropriate stakeholders for review prior to final presentation to prospective sponsor, Business Owner, and eventually governance process
- Update the Business Case during the CPIC review process to reflect changes/updates

Practice Attributes

This section provides a list of practice attributes to help project teams determine the extent to which **Business Case** impacts their project.

Practice Owner	CDC UP Project Office – NCPHI
Criteria	All projects regardless of type or size should justify expenditure of resources on any and all projects. Document this information in the form of a Business Case is one valid approach to doing this. All IT investments require some form of Business Case that should be completed before any contracting efforts. Exhibit 300 Capital Asset Plan and Business Case is required by the Office of Management and Budget for Major investments at the Department of Health and Human Services. An Exhibit 300 Business Case must be developed for all Major investments.
Estimated Level of Effort	Moderate
Prerequisites	IT projects require compliance with HHS EPLC. This requires governance approval of Business Needs Statement authorizing the development of a Business Case.
Practice Dependencies	Business Needs Statement
Practice Timing in Project Life Cycle	Development of a Business Case is required by all projects prior to receiving funding approval. This activity is performed in the very early stages of a project life cycle before any significant amount of resources is expended on any project efforts.
Templates/Tools	<ul style="list-style-type: none"> • CDC UP Business Needs Statement Template • CDC UP Business Case Template – Lite • CDC UP Business Case Checklist



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	<ul style="list-style-type: none">• CPIC Project Prospectus – required for all Major, Tactical, and Supporting projects• CPIC Business Case Template – required for all Tactical/Major projects• CPIC OMB 300• CDC UP CPIC Process Guide• CDC UP Work Breakdown Structure Practices Guide
Additional Information	http://intranet.cdc.gov/cpic/

Key Terms

Follow the link below to for definitions of project management terms and acronyms used in this document.
<http://www2.cdc.gov/cdcup/library/other/help.htm>

Related Templates/Tools

Below is a list of template(s) related to this practice. Follow the link below to download the document(s).
<http://www2.cdc.gov/cdcup/library/matrix/default.htm>

- CPIC Business Case Template (located at <http://intranet.cdc.gov/cpic/>)
- CDC UP Business Case Template - LITE
- CDC UP Business Case Checklist
- CPIC OMB 300 (located at <http://intranet.cdc.gov/cpic/>)