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Key Elements In An IT Business Case

by Chip Gliedman

BEST PRACTICES

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by **Chip Gliedman**

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EXECUTIVE SUMMARY

Every major IT project or initiative should be accompanied by a business case. The business case lays out the reason(s) for the investment, the expected benefits of the initiative, the costs to make it happen, an analysis of risks, and future options that are created. It documents the relevant facts and situational analysis, key metrics, financial analysis, project timelines, and demonstrates the business imperatives for initiating and funding the project. It serves as a communications tool that moves discussion of a project away from a debate about technical merits or the emotional discussion of the evils of any vendor or platform. Putting in place a common, comprehensive, and codified structure for the business case also allows different projects with different goals to be compared and contrasted, and for the goals and business value of projects selected for funding to be communicated to all involved.

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NOTES & RESOURCES

Forrester has assisted with the development of more than 50 IT project justifications and business case template projects. This research synthesizes the lessons learned from those projects.

Related Research Documents

"The Foundation of Sound Technology Investment: The Total Economic Impact™ Methodology"

September 26, 2003, Planning Assumption

"The Enterprise Architecture Business Case" August 21, 2002, Planning Assumption

"Include Cost Benefit Analysis With Project Initiation Processes"

July 3, 2001, IdeaByte

THE BUSINESS CASE AS A COMMUNICATIONS TOOL

Tight economies and budgets, past overspending, and general disenchantment with the promises of technology have increased the requirement for a business case to justify potential IT projects. The business case is a document that outlines the who, what, when, why, and how of a project, as well as the financial costs and benefits. While different organizations will have different specific requirements, there are some basics that should be included in all business cases. With these elements, the business case acts as the central point of truth on a project, its costs and goals. As such, it serves as the key communications vehicle for the project and should be circulated and understood by all involved in the project — from its funding, through its development, and on to its use and benefits realization. Once established, the business case process:

- **Speeds the project approval process.** Clear communication leads to fewer passes through the funding process. The goals and benefits of the project are understood by all.

At a large educational institution, a proposed initiative was twice rejected by the management board since it did not appear to provide value sufficient to justify its costs. This institution, as part of its adoption of a business case development process, re-evaluated and resubmitted this project using its new formal analysis process. The business impact and value became clear to the board and the project was funded at the next meeting.

- **Increases project success.** When everyone knows the reasons, goals, and bounds of an initiative, project success improves. The business case serves as the road map that keeps the project focused on the key business goals and values.

At a large, distributed financial institution, three large projects (more than \$10 million in budget) were proposed and initiated during a single year. While plans, specifications, and requirements documents were produced for all three, the one project that had a multidepartment business case associated with it was the only one still on track and considered successful three years later.

- **Takes (some) emotion out of decisions.** Decisions that involve a choice between competing computing platforms or large and powerful vendors often turn into emotionally charged battles between opposing camps within the organization. Moving the discussion to one of metrics and numbers minimizes the emotion and returns some level of objectivity back into the process.

At a public utility, the decision between two large application vendors was stalemated as discussions became more and more partisan. Only when a neutral third party produced a business case that evaluated the expected costs and benefits of each solution was the discussion able to progress.

KEY ELEMENTS OF THE BUSINESS CASE

While every organization has slightly different needs, there is a set of elements common to successful business cases (see Figure 1). Each component of the business case document will serve a specific purpose, and the document as a whole should address the concerns of all constituencies.

Executive Summary

An executive summary should be the first section in any business case. It provides all of the information required to understand the basics of the proposed project in a clear, simple, high-level package. The executive summary serves as the first impression for the project and it must be clear, compelling, and to the point. The executive summary contains:

- **Key compelling factors.** Start with the reasons why this project is being proposed at this time. Any changes in legislation, market dynamics or corporate direction that triggered the consideration of this initiative should be identified. Showing relevance to the organization is the first step in showing value.
- **The what of the project.** There must be a basic description of the solution being proposed and the problem that will be solved. This description should be predominantly in business terms, rather than technical, since the benefits of the project to the organization is a more compelling story for top management than the intricacies of the implementation.
- **Overview of the financial impact.** Since one of the key goals of the business case is to secure funding and approval for an initiative, a clear understanding of the reasons the organization should turn cash into technology must be included. The financial analysis should include summary cost and benefit information, as well as whatever other analysis — like ROI, net present value (NPV), or internal rate of return (IRR) — that is standard within the organization.
- **Who will be impacted.** Identify the stakeholders in the project, including key project management and business customers. Accountability for deliverables and the business benefits adds to the credibility of the analysis.

Figure 1 Business Case Elements

Section name:	Description:
Executive summary	Should stand on its own
Problem description	The why of the project
Current practices	Describes current state
Best practices	Describes ideal state
Gap analysis	Difference between current and ideal
Solution description	The what of the project
Solution overview	How the problems will be addressed
Resource requirements	Includes both project resources and those required as a result of resulting business changes
Alternatives considered	Adds credibility to the recommendation
Project timeline	Shows scope and scale of effort
Risk analysis	Describes areas of uncertainty
Key goals and metrics	Established key performance indicators, baselines, and projections
Financial analysis	Translates the project into business value

Source: Forrester Research, Inc.

- **Timeline.** Include a brief overview of the timing and key milestones, which will set expectations for spending and benefits. This allows those impacted to begin to allocate resources or to consider this project in light of other initiatives or business plans during the same period.

The rest of the business case document provides the detail, supporting information, and validation for the information in the executive summary. Although the executive summary is the first section of the business case, it will likely be written last. Some people find it useful to draft the executive summary at the start of the writing process to guide their analysis, knowing that a complete rewriting will be required after the rest of the document is completed.

Problem Description

A clear exposition of the problem or the opportunities facing the organization should set the stage for an understanding of the proposed solution. Too often technology initiatives are solutions in search of a problem. Identifying and communicating the key goals of the initiative -- what will be made better by this undertaking -- is the second step in showing the value of the project. The problem description should include:

- **Current situation.** Describe how the organization currently functions or what external forces are compelling action. This section will be as detailed as required and can include process diagrams, statements from stakeholders in the business or technology group as to the scale of the problem, statistics, and other supporting material. If appropriate, include cost and resource requirements to support the current situation.
- **Best practices.** Document recognized best practices or research of how other organizations perform the same tasks or address similar problems and opportunities. This highlights the scale of the problem to the reader.
- **Gap analysis.** Differentiate current practices and best practices to help build consensus. Likewise, the gap analysis is the first step in building a cost/benefit analysis since it defines the potential scale of the benefits available.

Solution Description

The solution description summarizes the plan to address the problems identified. Since most business cases are first written at the earliest stages of a project plan, specific details of the technology implementation, recommended products, and resource requirements may still be in flux. This does not alleviate the writer from making a clear case that conveys confidence in the team's ability to adequately address the problem or opportunity and deliver a solution of value to the organization. The solution description can include:

- **Solution overview.** This is a concise description of how the problem will be solved, including the technology solution, business process changes required, and key dependencies in other departments.
- **Resource requirements.** Describe of estimated costs to implement the solution, including future requirements for new or modified procedures in other departments.
- **Alternatives considered.** This section will outline the other scenarios considered and the key reasons they were not recommended. A minimum of three scenarios or alternatives should be considered and documented to add credibility: 1) Do nothing, retain the current state. Sometimes it is less expensive overall to not solve a problem, especially if the cost of the solution is greater than the benefits. 2) The first alternative solution is generally the recommended solution. 3) The second alternative solution presents a second solution, which adds credibility to the recommendations. It shows the readers of the business case that more than one solution was considered and evaluated. Often, the two alternatives may be a strategic solution to the problem, or one that has benefits outside of the specific problem resolution, while the other is the tactical or low-cost solution that just addresses the problem with the minimum resource requirements.

- **Project timeline.** The timeline gives a description of the key milestones and stages of the project. While some aspects of the project plan will still need to be defined, showing the expected time-frames will set project expectations properly.
- **Risk analysis.** No estimate of cost or benefit is without risk. When considering risk, one should use the financial definition of risk, where risk equates to uncertainty. Because each estimate of cost or benefits within the business case will be based on a set of assumptions, these assumptions should be documented, their potential impact on cost or benefit estimates noted, and any mitigation strategy communicated. The financial impact of risk on the cost and benefit estimates can be covered in the section on financial analysis.

The risk analysis should be integrated within the document. In many of the business cases we have reviewed, Forrester finds that the risk analysis section is relegated to an appendix and the impacts of risk are not considered in the estimates for cost and benefits.

Key Goals And Metrics

Critical to project success is a clear definition of the metrics for success. The metrics defined in the business case should guide project planning, requirements definition, solution selection, and implementation strategy. Agreement on metrics also ensures alignment between business issues and IT solutions (see Figure 2).

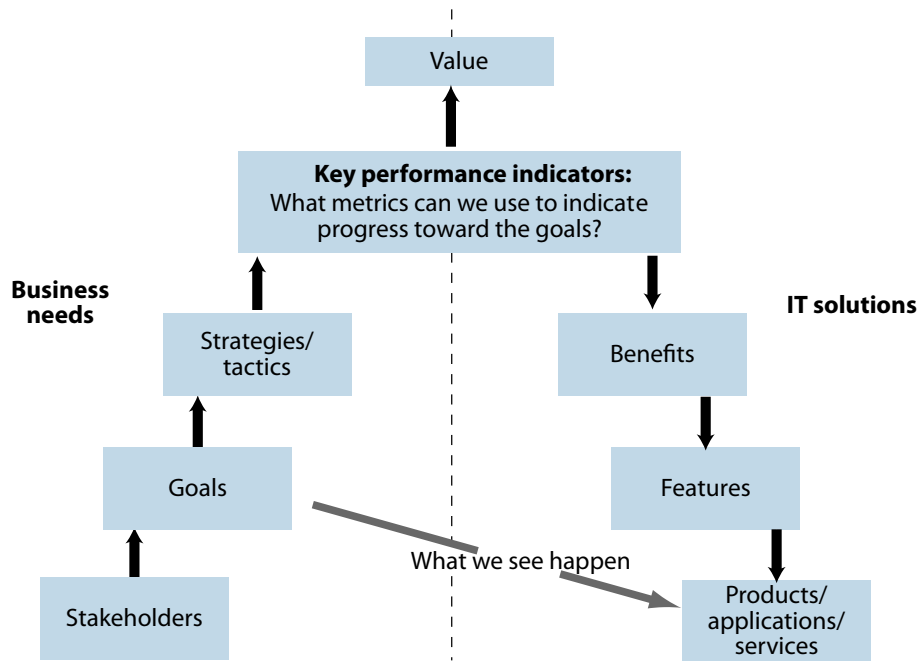
While metrics will likely be discussed in both the current problem and proposed solution sections, consolidating them into a separate discussion area ensures that all parties are in agreement on the key indicators of project success, the current baseline values for those metrics, and the projected change in the metrics.¹

Financial Analysis

A successful business case is not complete without a thorough analysis of the financial impact of the initiative. The financial analysis should be structured using a format that has been approved by management. The financial analysis monetizes all of the project issues — the costs, benefits, future options or flexibility, and risks. The financial analysis translates the proposed solution into the universal language of money.

The financial analysis should be presented using the financial equations and calculations standard to your organization and can include:

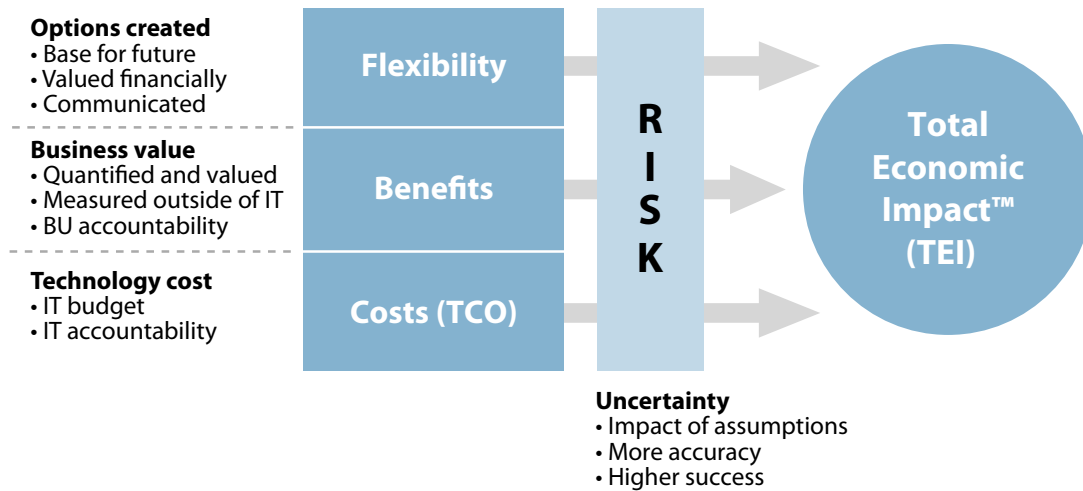
- **ROI.** ROI is usually used as a ratio of costs (investments) to benefits (returns). Calculations of ROI can vary by company since there is no universal formula that is accepted by the Financial Accounting Standards Board (FASB).

Figure 2 Business Needs And IT Solutions Meet At Common Metrics

Source: Forrester Research, Inc.

- **Discounted cash flow (DCF).** A DCF analysis evaluates the movement of funds in and out of your organization over time, taking into account the time value of money. The two most common methods of DCF analysis are NPV and IRR.
- **NPV.** NPV compares the value of money spent today versus the value of benefits that will occur in the future after taking inflation and return into account. This is most appropriate for investments with direct benefits, rather than flexibility benefits.
- **IRR.** IRR calculates the discount rate at which the present value of a series of investments is equal to the present value of the returns on those investments. IRR is a commonly used financial metric that makes it easy to compare different investment options with a common set of standards.

One method for calculating the inputs for the formal financial analysis is the Total Economic Impact™ (TEI) methodology. It takes the large problem of quantifying and valuing the project and breaks it down into four components (see Figure 3).² Once segmented, appropriate tools can be applied to each subcategory to generate estimates and values. The results can then be aggregated into a traditional cash flow or budget impact analysis. The four components of TEI are:

Figure 3 The Total Economic Impact Methodology For Financial Analysis

Source: Forrester Research, Inc.

- **Costs (impact on IT).** The TEI cost category contains the changes in IT costs relative to maintaining the status quo. Some cost models look to capture all of the potential cost areas, with the goal of conclusively determining the total costs for performing an IT function. TEI, on the other hand, is more concerned with the changes to IT spending that a project under consideration will involve. These cost changes, usually higher for a period of development or implementation and then potentially decreasing over time, can be considered as the investment required to bring the new initiative, application, or technology online. The impact on IT, as quantified in the cost category, can be positive when money is saved, or negative when money is spent.
- **Benefits (impact on the business).** TEI's benefit category captures the quantified data relating to changes in the non-IT departments. With many systems, the initial implementation will require changes to personnel or behavior in the affected user departments. Marketing people will either be unavailable or less productive in their marketing tasks. Salespeople will be in training, instead of performing their chartered tasks. Therefore, new systems may have a negative initial benefit, as reflected in the goals of these departments, which will hopefully be compensated with an improved long-term productivity gain, or positive impacts.

Quantifying and valuing business benefits can be a challenge, especially if the organization does not have a previous history of benefit quantification. While features of a new system may be well-defined, benefits are often described qualitatively. To properly evaluate the benefits of a new or a changed technology, benefit statements need to be followed by: as measured by X and which is worth X. The benefits analysis requires an exchange rate to be defined that translates the expected impacts on the business into financial terms.

- **Flexibility (future options).** Future options can be looked at as the value of being able to take a second or third action in the future. In this regard, it is much like a financial purchase option. With a financial option, one can purchase the right to acquire a stock or property for a price negotiated today. In the same regard, investing in additional infrastructure above today's needs, for example, can enable the deployment of future applications. In many cases, these applications may not yet be identified or budgeted, but taking these actions in the future still has value to the organization and the scale of that value should be monetized and communicated.
- **Risk.** In TEI, the risk analysis translates the initial estimates for cost and benefits into a range of potential outcomes. Once this range has been determined, by either adjusting the final estimates or by evaluating the effect of risk on the individual components of the cost and benefits, an expected value for this range of possible outcomes can be determined. This provides risk-adjusted costs and risk-adjusted benefits that can be used to communicate a risk-adjusted ROI.

RECOMMENDATIONS

DEVELOP A BUSINESS CASE TEMPLATE

Having a standard template for business cases will simplify their creation, create the ability to compare different projects, and ease the funding process. When developing the template:

- **Use forms.** While no one enjoys paperwork, turning the process into one where users fill in the blanks on a standard set of forms should increase the use of the template and the standardization of the results. The forms developed can include: instructions, standard exchange rates like the budget impact of different types of employees, the average revenue per customer, and appropriate formulas, like NPV and IRR.
- **Make the process modular.** Break the business case analysis into stages with appropriate depth and overhead requirements: 1) A project initiation phase captures ideas and the basic framework of the analysis is presented. Depth and validation may not be available. The goal is allocation of resources to further analyze the idea and produce the business case. 2) A project approval phase develops a full business case

and project plan for presentation to funding entities. 3) A project development and rollout phase uses a summary of the business case, communicating the project goals, key metrics, and financial impacts and accompanies all project documents and status reports.

- **Build on existing systems.** Likelihood of success improves when an existing process is used as a base and is enhanced to fill up gaps. Change is frightening to many, and minimizing the perception of change will increase comfort in the new system.
- **Designate resources.** Establish training in the template, make completed examples available for review, and identify power users who can assist those with a good idea in turning the idea into a business case.
- **Reward success.** Communicate the value of the business case itself when a project has been approved and funded. Others will see the use of the business case as a tool to get their projects funded.
- **Pilot and refine.** Develop a business case framework and template with the assumption that it will be modified in 12 months. Pilot the initial template, learn from the initial projects put through the process, and fix the system to streamline it or make it more robust, as appropriate.
- **Establish requirements for the use of the business case.** At some point in time, the use of the business case template for funding all projects over a threshold value must be mandated.

ALTERNATIVE VIEW

DON'T REINVENT THE WHEEL

Although the need and desire for a well-structured business case should be a given, the specific form and elements can vary by organization. Agreement on the template and its use must be agreed on by IT, business leaders, and finance. Areas that may differ between organizations can include:

- **The position and format of the risk analysis.** Some industries have externally mandated requirements for risk analysis. For example, the Basel II requirements in the financial industry and the Clinger-Cohen Act in the US federal government require organizations to perform a risk analysis on systems. Such requirements will supersede any suggested form of risk analysis.
- **The format of the financial analysis.** TEI is one methodology of financial analysis. However, if an organization has an approved model for analyzing capital spending requests in other departments, the IT organization should first look toward adopting that model, and then work with the finance organization to add supplementary components that best show the value of technology investments.

ENDNOTES

¹ For an excellent discussion of the problems and solutions to measurement problems, as well as a simple process to ensure that the right metrics have been defined and dubbed “The Clarification Chain,” see Douglas Hubbard “Everything Is Measurable,” *CIO Magazine*, November 15, 1997, at www.cio.com/archive/enterprise/111597_checks.html.

² During this period of corporate contraction, economic pressures and tight spending, evaluating where an organization should expend resources can be a business-critical decision. See the September 26, 2003, Planning Assumption “The Foundation of Sound Technology Investment: The Total Economic Impact™ Methodology.”

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