

Skerry Lowndes White Paper

Controlling the Cost of Change

Over the operational life of highly integrated systems, the largest and fastest growing TCO component is the Total Cost of Change.

Gartner (Meta Group), December 2003

Best Practices Don't Stay Best for Long: Why Change Is an Important Concept in Business Process Management Ontology

Most organisations today are aware of the importance of clear, effective and efficient business processes in achieving their corporate goals. They have also often gone to considerable trouble and expense to put those processes in place, using such methods as BPR, benchmarking¹ and Six Sigma™. Meticulously selected and tuned ERP systems running on carefully chosen infrastructure make the optimized processes a reality. Finally, conceptual frameworks such as Balanced Scorecard™ and Capability Maturity Model (CMM) are applied to set precise targets and measure performance against them, these days often in near-real time with the help of Corporate Performance Management (CPM) software connected to the underlying transactional and financial databases via ETM (Extraction, Transformation and Loading) engines and Enterprise Application Integration (EAI) connectors. As these instances from the steadily thickening IT alphabet soup indicate, increasingly powerful technologies are becoming more and more important as an integral part of business; not just at the execution layer, but also for strategy, planning, and management. Unfortunately, in a scramble to leverage the latest technology, organizations all too often fall into the trap of defining their business process management and performance management initiatives as technology tool strategies rather than business strategies. Still, we can learn from technological developments when thinking about our business processes and management systems, especially from such recent paradigm shifts as the move from proprietary to open technology, from centralized to distributed architecture, from major upgrades to near-linearly scalable, from monolithic to component-based. If our systems and technologies are open, easily scalable and adaptive, should not our processes and management systems be too? An optimized, benchmarked process is a snapshot in time: as your organization's operating environment changes, its once optimal processes will slowly become less optimal. The same applies to scorecards and KPIs. How to factor in the effects of change on the organization should be an important dimension of any business process management framework. It seldom is.

¹ A Fortune article by Stanley Bing ("While You Were Out", no 19, 1 November 2004) recently defined benchmarking consultancy, only half jokingly, as "a consultancy that studies good companies and then sells insights to others that are feeling clueless". Benchmarking may help an organization catch up to the industry average, but it will not in itself bring a lasting change in performance.

It is no exaggeration to say that many organisations today find themselves in a quasi-permanent state of upheaval, whether as a result of Business Process Outsourcing (BPO), changing customer preferences, mergers or acquisitions, or the increasing burden of regulation and compliance, as evinced by the approval of the Basel II international capital adequacy framework and the Sarbanes-Oxley act. Change brings opportunities, but also requires an investment, not just in direct monetary terms, but also in time and effort that has to be diverted from the “business as usual”. If the potential benefits can usually be itemized and quantified with relative ease, the costs often prove more elusive. The reality is that even carefully planned change impinges on normal business process operations, management systems and the organization in general. The ensuing *business disturbance* is the first, most obvious, yet often underestimated cost of change. This is only the beginning: change affects organizations in many, often unforeseen ways. The costs attributable to change exist on several levels and come in several flavors, for example:

1. Are the change costs unavoidable (integral to the change looked for,) or avoidable (either preventable with some foresight and planning, or optional)?
2. Are the change costs related to the substance of the proposed change, or to its planning and management?
3. Are the change costs a direct result of the change initiative or any of its objectives, or an indirect consequence?
4. Can the costs be allocated to a (cross-departmental) process, or are they departmental in nature?
5. Are the change costs quantifiable with certainty, conditionally or probabilistically quantifiable, or not meaningfully quantifiable at all?
6. Can the change costs be ascribed to relative organizational capability immaturity, e.g. do they stem from organizational incoherence during execution, resistance to change, slow or ineffective decision-making procedures, etc.?

Only by carefully considering, identifying and, if possible, estimating potential cost items arising from the proposed change in each of these categories can executives begin the process of controlling and minimizing them. Probabilities may be applied where a definite figure cannot be given. Postulating probabilistic or conditional change costs has the added advantage of contributing to capability maturity and learning, as new insights may be gleaned from comparison with the actual, *post hoc* costs after completion of the change program.

Degrees of Change

Change takes many forms. A useful categorization is provided by the order of change; a classification of degree that has the benefit of simultaneously capturing a classification in kind. First-order or adaptive change is change within the existing boundaries of the process, enterprise architecture, business model or paradigm. Second-order change requires moving beyond existing boundaries in order to change fundamentals rather than form. It is more challenging than adaptive change because, as the economist Joseph Schumpeter and the painter Pablo Picasso both pointed out, in order to create you must first destroy. Second-order change is destructive-creative change.

Guiding a change effort, especially of the second order, to a happy ending is a daunting task. It is also what CEOs and senior executives are spending an increasing amount of their available time – some thirty to forty percent

according to some studies² – doing these days. It should come as no surprise that the need for formulaic solutions to a thorny management issue has spawned a new, wide-ranging branch of consulting called “change management”. Estimating the return, and hence the costs of first order change is usually straightforward. The process involves the gathering of factual accounting, operational and transactional data; re-estimating whichever parameters you are using as criteria under changed conditions; extrapolating linearly, and plugging the figures you end up with into some sort of return-on-investment calculation model. We may argue about the applicability or relative merit of particular evaluation frameworks such as ROI or EVA, or the probabilities of the underlying assumptions, but the process is essentially unambiguous. Even in a moderately ambitious second-order change undertaking, however, the traditional management approach used in business, ie, the use of procedures and performance indicators and the assignment of roles and responsibilities on the basis of the parts of the system to be changed, breaks down, because the parts themselves are changing! This does not mean that estimating the return, and hence the cost of second-order change is an impossible undertaking, only that it is a complex process requiring ingenuity not readily captured in a best practice procedure, often involving several alternative scenarios, and yielding probabilistic rather than deterministic results that require intelligent interpretation. What’s more, to succeed at second-order change requires a high-performance team at the helm. To retain control of such change demands a type of leadership from executives that is counter-intuitive to many professional managers: one that to a large extent devolves intelligence and ownership of change activities to those executing them, so that the emerging structure may be sensed, interpreted and responded to quickly and adequately, but this is a discussion on leadership styles and business change tactics that would lead us outside the scope of this chapter.

Change in Today’s Business Environment

Before we can start cataloging change cost items, we should define the nature of the environment in which change takes place. From this perspective it is useful to step back for a minute and look at the big picture of how novel ideas, changing business practices and the increasingly central use of technology are shaping business in the first decade of the 21st century.

1. **Networks:** “Corporations have become a complex web composed of multiple networks embedded in a multiplicity of institutional/cultural environments.”³ These multiple networks are continually morphing and traverse organizational boundaries, which become more fluid: not only is the global economy increasingly a global business network, but corporations are transforming themselves from rather fixed, hierarchical structures to adaptive networks of gradually more self-directed business units, teams and projects. Recent business trends such as strategic alliances, business process outsourcing, licensing-subcontracting agreements, white-labeling of products and services, and shared R&D initiatives reinforce this trend.
2. **Flexibility in the process, not the product:** A small group of visionary companies – Toyota is one of the most well-known examples – realized long before the idea became mainstream that enabling workers to cope with local emergencies autonomously on the shop floor could translate into a leap in effectiveness, efficiency and quality, thus enabling them to steal a march on the competition. This requires knowledge sharing and fostering a culture of learning by doing. Increasingly, this idea from the manufacturing process level is being replicated on the business process and decision-making process levels.

² One study among 100 large UK companies in 2002 found that “[...] 35% of all directors’ time is devoted to change, with 79% of major initiatives – such as corporate restructures, down-sizing, acquisitions and mergers – being actively managed on a daily basis either by the MD, a board director or other senior management.” (Executives Online).

³ Manuel Castells, *The Rise of the Networked Society* (1996).

3. **Organizations as Complex Adaptive Systems (CAS):** Continuing on the theme of devolved knowledge and action in business processes, we note the steadily growing body of work on the application of principles from chaos and complexity theory on management and the organization of business. Although the practicability of this proposition continues to be hampered by the lack of a generally accepted, concise definition, an increasing number of organizations are applying basic principles from this field to their organizations. Those in charge of leading a change initiative could benefit from the principles and practical examples that have been developed in this area: whereas traditional models view change as a linear process with predictable outcomes, much of the change we see today is essentially non-linear and only partially predictable, evolving through informal networks, group learning, small changes, iterative improvement and a political decision-making process. A key task of management in such a transitional situation is to *manage the boundaries* of the informal, devolved change process.
4. **Increasingly integrated information flows and the emergence of semantic web services:** As we have already stated in chapter, strategy is implemented through process. This truism lies at the root of all improvement paradigms, from Joachim Murat's streamlining of Napoleon's military supply chain in 1792 revolutionary France, through Frederick W. Taylor's introduction of the principles of scientific management of the late 19th century, to W. Edwards Deming's work on the systematic management of quality in Japan in the 1950s and the business process reengineering wave of the 1990s. But no matter how essential process is to any improvement in effectiveness, efficiency or quality, we shouldn't overlook the importance of data, or, more precisely, information.⁴ Process and information are inextricably linked, but until recently data was seen as secondary to process as well as to the software systems in which the data itself is processed, and typically locked up in proprietary databases. With companies' processes getting ever more interlinked through web and wireless technologies, data is taking on a new significance: it is imperative that integrated processes "speak the same language". For instance, in an integrated value chain, "my" unit of measure must have the same definition as "your" unit of measure. The requirement for a shared semantic framework in a connected, on-demand world is but the start. We believe that semantic web services will make possible new types of "loosely coupled", extensible and adaptive value chain interactions, which may in turn spawn new types of business models. This heralds the beginning of the end for stovepipe information systems. It will also be a chief driver of change over the next five to ten years.

The Total Cost of Ownership Model

Total Cost of Ownership (TCO), devised by Eric Stegman at the Gartner Group, has become an integral part of ROI calculation in many organizations, most particularly within the IT function. Its usefulness and impressive adoption rate stems mainly from its capacity to flush out underlying cost drivers, *over the whole of the useful lifetime of the product or service*, that are not readily apparent on the surface when the acquisition of a new product or service is being considered. Examples of such "hidden" costs include new infrastructure investments necessitated or brought forward by changes to a business process, or replacement costs based on expected lifetime. TCO is more than a methodology for calculating the "fully burdened" cost of proposed changes to IT or network architecture, though: its ultimate purpose is to offer us a solid foundation for strategic investment decisions. Similarly to the shift in focus from acquisition cost to TCO, we would argue that organizations need a more complete model of *change cost budgeting* and control. By analogy with TCO, we have termed this approach Total Cost of Change (TCC). We readily admit that the word "total" conveys an ambition rather than a guaranteed outcome, but we also believe TCC not

⁴ For the purpose of this white paper we define information as data that is meaningful and useful within a given context.

only will have an impact for the bottom line, but may mean the difference between success and failure. One big caveat applies to the concept of Total Cost of Change, just as it does to Total Cost of Ownership: it should never be used alone as the full justification for investments in change of any kind. The value of TCC lies in its function as a means of uncovering more costs up-front than would otherwise be the case, so they may be budgeted for, planned for, managed and contained. It can never give more than a partial answer to the question of what the total business value is of any change project. For that we first need another concept, which has been termed the Total Benefits of Change. Value is what you are undertaking the change to achieve. Whereas you “manage” costs, you don’t “manage” value: you describe it, create it and measure it.

What Lies Beneath: The Typical Business Case as Iceberg

Many consultancies large and small now offer business case templates and ROI calculator spreadsheets, both for generic use and for highly specific types of investment, such as a switchover from PSTN to VoIP. Such costing models are really little more than applied accountancy with an engaging user interface. While not denying the usefulness of such tools as time-saving device and “what if” scenario builder, most do not adequately address the root causes of the underestimation of the total cost of change for the majority of change initiatives. Worse, they may well end up worsening the effects of change cost underestimation in many organizations, precisely because at first they give the illusion of improved control at the budgeting stage. The key factor in developing a truthful, reliable business case is *what should be measured*, and this is usually far from obvious, especially as regards costs.

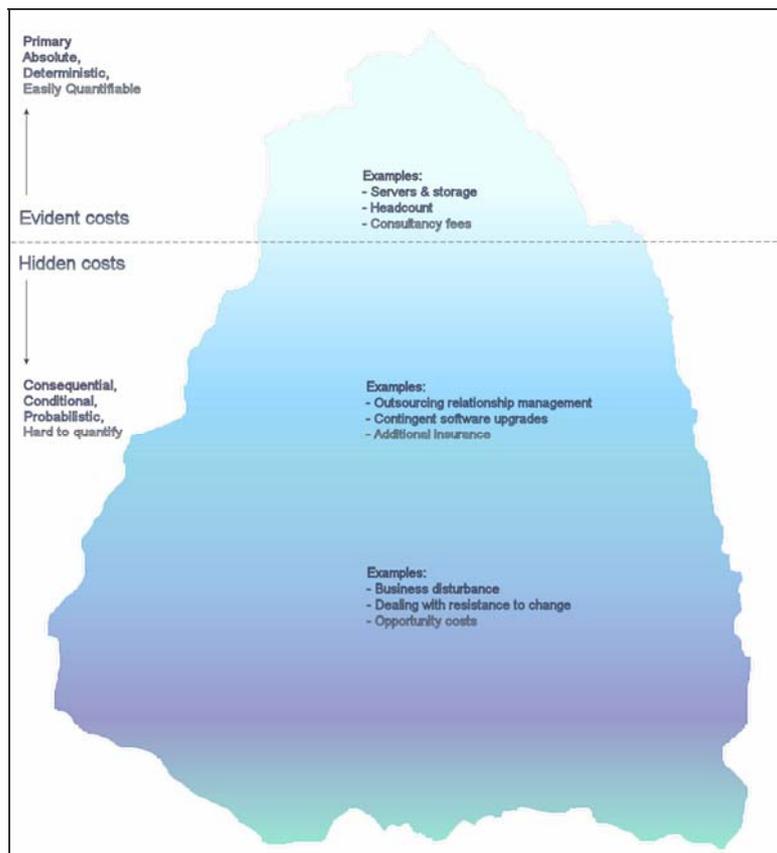


Figure 1 The typical business case as iceberg

The problem is that evident costs are often less than half the story. Evident costs are:

1. **Primary**, i.e. an essential component in realizing the change being proposed.
2. **Absolute**, i.e. not contingent or conditional on any decision, event or other expenditure.
3. **Deterministic**, i.e. can be determined in advance with certainty or near-certainty.
4. **Easily quantifiable**, i.e. require few or no qualitative assumptions or judgments.

FREQUENTLY OVERLOOKED OR UNDERESTIMATED CHANGE COST SOURCES

1. **Business disturbance.** All change requires assimilation by the people, work teams, business functions and organization affected. By assimilation we mean the process of reacting to, finding a way of dealing with, adapting to, and eventually internalizing the change process itself and all its planned and unanticipated, immediate and longer-term effects. Assimilation takes time and effort that has to come out of the normal, fixed daily quota of business hours: that's why we get *business disturbance*, an important but elusive direct contributor to the total cost of change. Interestingly, the thing or circumstances being changed – the *substance* of the change – usually requires only a moderate amount of assimilation and so causes relatively minor disturbance. The companies that are most successful at introducing new technology focus at least as much on understanding and planning for the *effects* the technology will have on people and process as on the software and hardware itself. The ROI on your application software expenditure is less a function of acquisition cost than the ease with which it is integrated into the organization.
2. **Not planning for system management and support.** Not optimizing environment, system architecture, organization, tools and procedures for easy management and support *before* implementation can quickly drive up costs, as you find that problems take longer to solve than necessary and you need more support staff than you budgeted for.
3. **In-house specialization.** A quick scan of any major Internet job site shows just how much the need for specialized skills is still a major driver of IT costs, even in the midst of the current outsourcing boom. In large organizations, labor costs for IT support staff typically represent between 35 and 40 % of total IT costs. Business analysts with specialized ERP knowledge, DBAs, integration specialists and other experts customize and manage increasingly complex application and system environments. The focus of all this specialization is usually much more on *effectiveness*, i.e. achieving and keeping available the ever changing functionality demanded by the business, than on ensuring applications and systems as a whole remain *flexible* and run as *efficiently* as possible. This lack of attention to the flexibility and efficiency of the overall IT architecture as more and more applications get “bolted on” is itself a source of higher than necessary costs.
4. **Shifting expenditures around.** We see the opposite of in-house specialization when IT departments try to become leaner and turn fixed costs into variable ones by outsourcing such services as system integration, business analysis and project management. The problem attached to this strategy – if indeed it is a strategy rather than knee-jerk tactics – is that instead of achieving real savings, expenditures just end up being shifted around, in this case right out the door, where expensive system integrators and consultants are eagerly waiting. Flexibility has its price, and it's better to understand in ad-

vance what this price will be before taking decisions that entail losing important skills and would be difficult to undo.

5. **Managing outsourcing agreements.** Business process and technology outsourcing has become a fashionable way for organizations to concentrate on their core processes and trim costs. Because the most urgent need is to squeeze more bang for the buck out of IT, negotiations often focus too much on costs, with too little consideration given to the flexibility of the arrangement and how the quality of the outsourced services will be measured. Without a clear and flexible arrangement, the scope and quality of services can eventually be compromised, leading to expensive contract renegotiations or even more expensive contract termination. We tend to agree with consultancies such as McKinsey, who view business process outsourcing as a kind of M&A activity that require the same amount of due diligence. Outsourcing also always comes with opportunity costs, but these are often overlooked in the rush to achieve financial benefits in the short term. To be successful in the long run, see your outsourcing arrangement as a partnership that requires senior management involvement to set up and dedicated experienced staff to manage on an ongoing basis.
6. **Administrative overhead of primary change** cost items such as training and outsourced application development. These costs include such items as project coordination, administration, accounting and reporting (the project management office function); requirements change control; resource planning and management; scheduling staff members for classes; procurement; ongoing vendor performance evaluation, and contract administration.
7. **Management information requirements** for the implementation of balanced scorecards, management dashboards and performance measurement tools have design implications on the application, database and metadata levels. They should therefore be addressed at the very start to obviate the need for costly and disruptive redesign after implementation.
8. **Process and technology inertia, or the business cost of not moving forward.** This opportunity cost arises from the labor-intensive character of optimizing process and managing software, and the usually already sizable sunk costs associated with these activities. When changing one piece of software always necessitates changes in other parts of the application framework, this necessarily acts as a brake on innovation and flexibility. Yet no company can afford the loss of revenue and erosion of customer base that would result from getting too far behind as technology keeps evolving, offering major process efficiency improvements for the organization and improved ease-of-use for the end-user. Examples include the “wireless hospital” and the “wireless supply chain”. To remove this inertia, your information infrastructure and your organizational culture must support continuous innovation and change.
9. **Unplanned downtime and disaster recovery** can quickly affect profitability. The probability of occurrence and potential impact of any downtime should be estimated for all critical processes and systems.

Controlling the Cost of Change

It is not where the puck is that counts. It's where the puck will be.

Wayne Gretzky

Clarity from Structure: A Framework for Change Cost Budgeting

How can we get from the recognition that many costs of change are difficult to detect and calculate in advance to a state of affairs where change budgets are routinely more complete and accurate? In part the problem is simply a corollary of the future being unknowable in advance, but there is more to it than that. We do believe that it is possible to become better at change cost budgeting. When faced with any problem it is usually a good strategy to stand back and try to (a) break the problem down into parts, and (b) discern an underlying structure. What are the key components of the problem we face in trying to calculate something that approximates the total cost of change?

1 CHANGE SCENARIOS

First of all, there are always choices. One of the first tasks must therefore be to describe – if necessary brainstorm – change scenarios, based on what is strategically and commercially needed and desired, and what is organizationally and technologically possible, within a given financial envelope. We can then go on to name and estimate costs for each of the scenarios being considered. Depending on the size and scope of what is being proposed, scenario building may require input from senior management, the business lines, process managers, IT management, HR and possibly external advisors. It is our experience that in reality, ideas at this stage often remain too long within the realm of the business lines and/or senior management, whereas input from those who know and understand the process, the technology and the organization is necessary not only to serve as a checklist and reality check, but to contribute actively in taking the idea from the concept to the design stage.

2 TYPES OF CHANGE COST

We can categorize costs in many different ways. An essential differentiator is whether a cost is quantifiable or non-quantifiable, or not meaningfully expressible in monetary terms. Non-quantifiable costs can be just as important as quantifiable ones and should be recognized, but, knowing their non-quantifiable nature, we can save ourselves the pointless task of trying to put a figure to them.

3 INVESTMENT RETURN PERSPECTIVE

We must also consider in advance how performance of the investment in change will be judged once the change has been achieved. For that we need to know how costs relate to those organizational or financial elements of the organization that are set up to be measured. The most commonly used measurement dimensions are:

1. Asset efficiency view: performance of asset class, e.g. cost per transaction

2. Function performance view: performance of (vertical) business function or department, e.g. employee retention ratio
3. Process performance view: performance of the complete (horizontal) process, e.g. total cost per order filled
4. Innovation and growth view: performance of strategic, transitional change, grounded in the market(s) served, e.g. market share.

Each of the above performance measurement dimensions is useful, as they provide us with complementary information.

4 CHANGE COST CATEGORIES

Looking at the fundamental nature of the change being proposed, we can define a number of distinct cost categories. As a mnemonic, and by analogy with the principle of a protocol stack, we have arranged these categories in a “change cost stack”, loosely reflecting increasing difficulty in arriving at a precise identification and estimation from base to top:

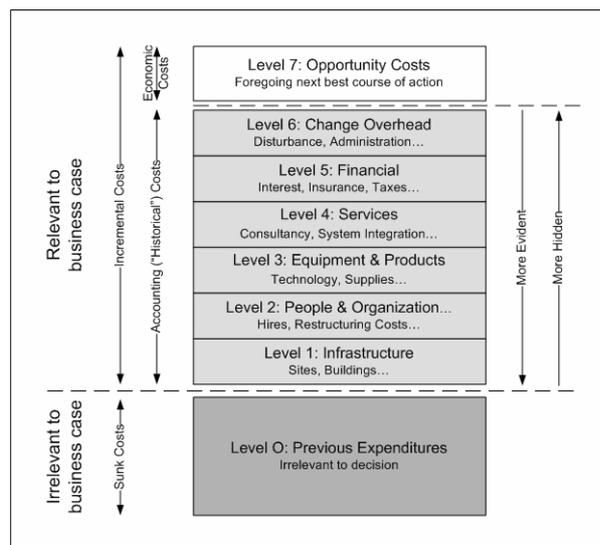


Figure 2 The "change cost stack"

In addition to the “accounting” or “historical” costs of layers one through six, “economic” or “opportunity” costs should also be considered. The opportunity cost of an action or choice is the value foregone when the next best alternative is not chosen. Opportunity costs “complete the picture”, enabling us to compare different change scenarios correctly.

Although a detailed discussion of the principles of behavioral finance would take us way beyond the scope of this chapter, we cannot stress enough the importance of avoiding the psychological trap of considering sunk costs (represented as layer zero) in any investment decision. Whereas consideration of current process, technology and organization is obviously important from the point of view of what is possible and advisable in terms of process change, integration or upgrading of technology, and organizational change, the costs associated with past decisions that have resulted in the current state in any of these three areas are not. Even if it is a deep-rooted human trait to do so, past expenditures should not in any way influence our decision.

5 CHANGE COST LIFECYCLE

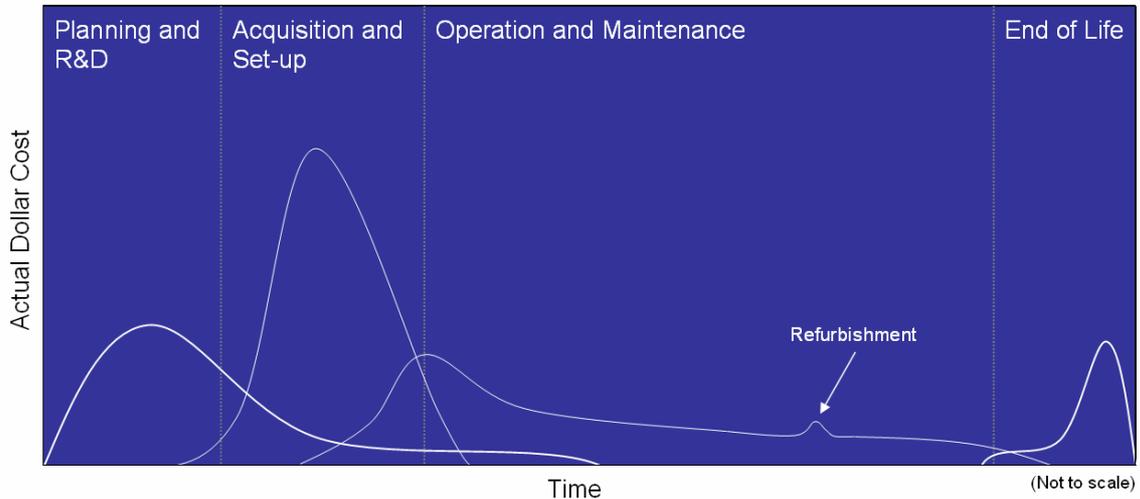


Figure 3 Change cost lifecycle

6 CHANGE COST PROBABILITY

In the main it is a good idea to set up cost estimation framework that accommodates for a range and/or probabilities to be assigned to each cost estimate, as all change undertakings of any consequence will have assumptions, uncertainties and unknowns attached to them; the bigger the undertaking, the less likely that you will have the luxury of dealing with a single, absolute figure for every cost item. Because of the need for the cost estimation exercise to be straightforward so as not to become long-drawn-out and become an important cost driver itself, and because we generally have little detailed information on the factors that drive the shape of the distribution, only a few probability distributions are suitable for the task of modeling the behavior of cost items in business cases⁵. They are:

Distribution	Parameters	Shape	Rationale for use
Triangular	Min, Max, Most Likely Value (MLV)	Skewed triangle	Actual distribution shape is unknown and available information does not give us any hints. Ease of use.
or Bi-triangular	Min, Max, MLV, Left and right relative probabilities	Two different right-angled triangles back to back	Same as for triangular distribution, but we also want to reflect the natural assumption that the most likely value has a confidence level that is better than that of a coin flip (50%).
Empirical	Experience data or estimated values	Variable	Availability of experience data or estimates to construct an empirical distribution. More applicable to engineering projects.
Normal	Mean, Variance	Gaussian curve	There are strong signs that costs follow a normal distribution. However, we simply do not know if this is generally the case for change in processes or organizations.

The use of probability distributions for business decisions has been amply and thoroughly treated in literature and it would not serve any purpose to pass over this topic cursorily here, but we feel an important point about the triangular probability distribution should be made at this point. The triangular probability distribution is often advocated for the purpose of cost and risk estimation when the actual distribution is not known, because the required

⁵ With the exception of pure engineering scenarios.

data is always available (minimum, most likely and maximum values), and because it is easy to understand. Unfortunately, these reasons are not sufficient for us to decide whether or not the triangular distribution yields a sound approximation of expected outcomes. As we shall see, its simplicity comes at the price of typically introducing a bias for the mean and standard deviation.

In a normal vendor offer context, there will almost always be a greater range for cost increase (max-MLV) than for cost savings (MLV-min), as in the following illustration.

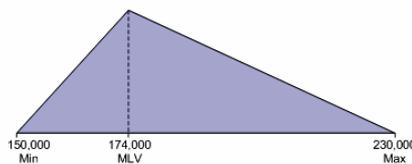


Figure 4 Triangular distribution

Unfortunately, in a normal triangular distribution the probability of achieving an actual cost < most likely value is a function of the distance to the minimum value, to be exact: $p(\text{cost} < \text{MLV}) = (\text{MLV} - \text{min}) / (\text{max} - \text{min})$. This has the unfortunate implication that a vendor's quote assumed to follow a triangular distribution such as the one depicted above, even though based on the experience and considered judgment of subject matter experts, would incorporate a significant overestimation of the likelihood of the actual cost at completion would be appreciably greater than the most likely value, while in reality the vendor's experts who helped put together the offer may be very confident, and rightly so. In other words, we must find a way to reflect the probability of coming in at or under the most likely value that is not derived from the position of the most likely value relative to the minimum and maximum values. We can achieve this by using a bi-triangular distribution, in which the relative probabilities of achieving an at-completion cost below or above the most likely value is represented by the relative sizes of two different triangles back to back, as follows:

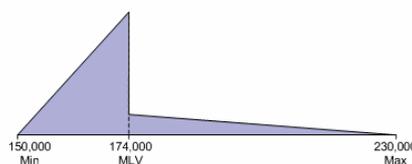


Figure 5 Bi-triangular distribution

In the example above, by using a bi-triangular distribution instead of a triangular distribution, the probability of coming in at or under the most likely cost is raised from significantly less than 50% to around 75%⁶.

7 PUTTING IT ALL TOGETHER: A FRAMEWORK FOR CHANGE COST BUDGETING

The various components of change cost budgeting we have just described do not exist in a vacuum, unrelated to anything else, but are related to each other and other elements of the decision framework:

⁶ Purists will note that the bi-triangular distribution has a flaw: its discontinuity at the MLV does not correspond to real life. A better solution would perhaps be a normal distribution with positive skewness. However, with this approach we would run into the drawback outlined in the beginning of this section: the parameters we would need to construct such a distribution are not available to us.

1. Each change cost item is part of one or more change scenarios
2. Each change cost item is of the quantifiable or non-quantifiable type
3. Each change cost item belongs to a change cost category
4. A change cost can be conditional on another change cost item
5. A change cost can be allocated to business process, business function or asset class, as well as to investment return criteria
6. A change cost can have a probability distribution.

The following object-class diagram put the change cost components in context and provides a framework for building a general-purpose change cost estimation tool:

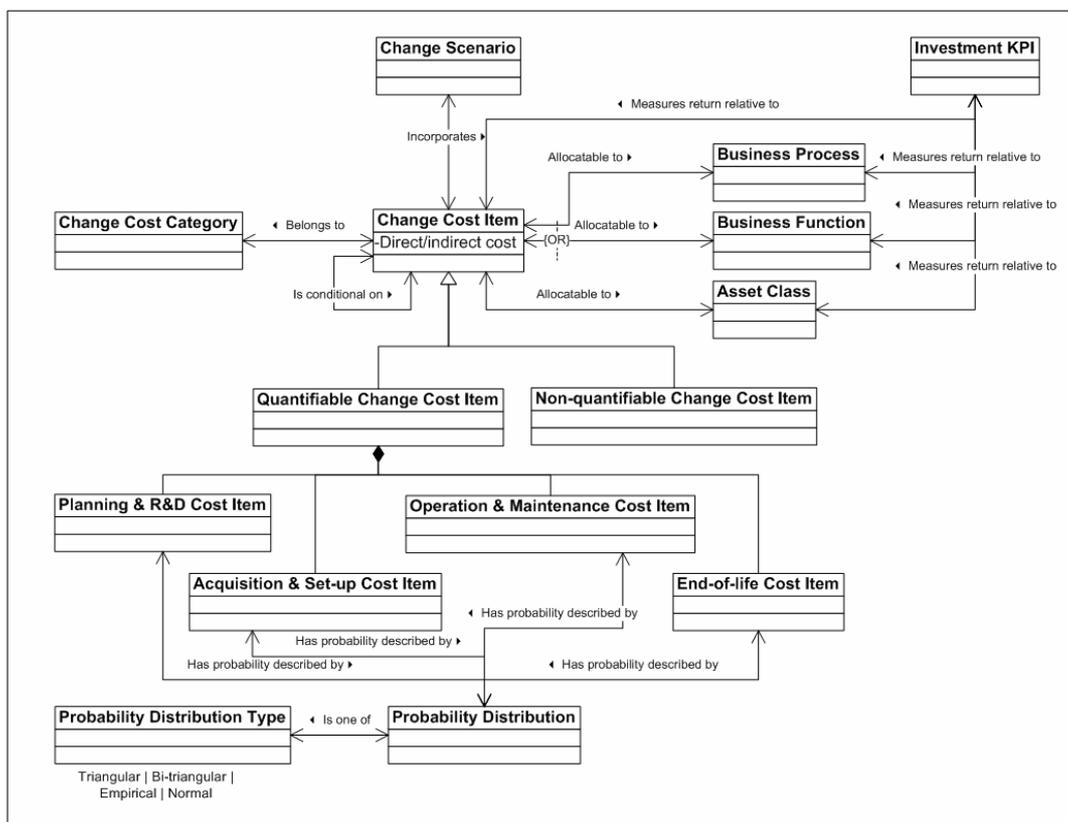


Figure 6 The complete picture? – The change cost object-class diagram

A Process for Change Cost Budgeting

Defining and estimating costs is an important part of the investment evaluation and decision process. Most organizations will already have some sort of project costing model in place, and many organizations apply a formal, mandatory process for evaluating the benefits and costs of investment decisions above a certain amount. What fol-

lows is not intended to replace what you already have and know to work quite well, but to suggest, for reference and validation, a top-level outline structure for the costing part of any investment evaluation exercise.

A caveat must be made at this point: The word “process” comes with the connotation of a number of discrete steps to be taken sequentially in time, but unfortunately real-life organizational decision-making is more complex, involving iterations, multiple parties, uncertainties, politics, and judgment calls. The most important of these complicating factors is the fact that we are trying to cost a project, but we cannot properly speak of a project until we have a pretty good idea of what it is we’re going to do and how we’re going to do it; an understanding that comes with designing the solution. But when we’re designing the solution we have already embarked on the project which we have yet to justify! In other words: during the costing phase there are still too many unknowns to calculate a budget with great confidence:

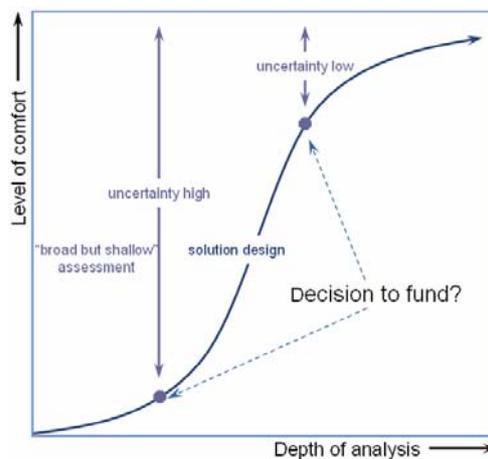


Figure 7 The cost of a high confidence level

The distance to travel on the path from a broad concept through detailed requirements to design of the solution during the project evaluation and estimating stage is one of the greatest sources of contention between those who have been tasked with estimating the impact and cost of a proposed change and those who later have to put it into operation and control it.

If we look at the process, a crucial yet often overlooked aspect is the need for clear and frequent communication between key representatives of all parties concerned: it’s not just the concept that begets the solution, but picturing the solution working will feed back into the concept, as will the possibilities and limitations of organization and technology. Not only must the solution be designed and the technology selected, but the operation and maintenance of the solution should be well understood too. Plan for this to be a demanding exercise in which you will have to go through a number of iterations while sticking to an agreed timeframe. In this respect, we have found that facilitated sessions are often a good way to get many parties aligned quickly.

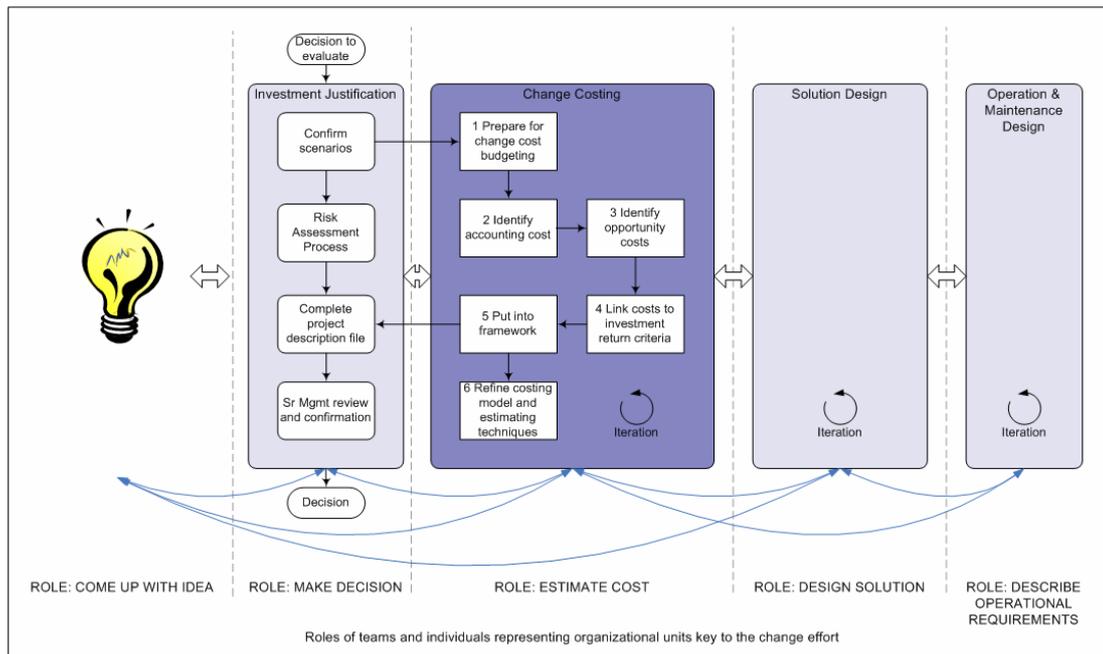


Figure 8 Change costing process

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About Skerry Lowndes

Skerry Lowndes is a management consultancy focused on helping their clients better define and control their business and IT change for measurable results they themselves define. We don't merely advise – we help you execute.

Whether we are advising you on business improvement or implementing your technology change projects, we always focus on the Business-IT boundary, as we have found that there are always issues and opportunities in this area. We use tried-and-tested methods and a conceptual framework that allow us to identify the most effectual focus areas and improvement levers for any given situation and needs.



Primary Focus Area(s)

Primary Lever(s)

Targeted Results

Skerry Lowndes has experience that spans the globe and covers a broad range of industries.

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