Strategic components for identifying and justifying a program

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Contents:

from the Rational Edge: Mike Hanford continues the program management discussion he initiated in the May 2004 issue, looking at the decisions involved in creating a program after you apply a strategic process to identify business needs. He discusses steps and deliverables to justify proceeding with the program, and how to plan make the transition to mobilizing the effort.

Typically, marketplace needs and a cohesive enterprise business strategy are the drivers for organizations to tackle large, complex efforts that combine delivery of software elements with changes to business models and organizational structure and capabilities. Yet at the start of such efforts, many program managers/directors discover that goals, boundaries, costs, and other key data about their new programs are ill-defined, poorly quantified, and either partially documented or not documented at all. Often these missing or incomplete items delay the start of work and result in a loss of critical mass and momentum. In this article, we will identify and review the strategic components that organizations must develop and deliver to provide the framework and knowledge required to mobilize a program. This discussion will be based on a portion of the IBM® Rational SUMMIT Ascendant Program Management Method, shown in Figure 1.

Figure 1: Extract from the IBM Rational SUMMIT Ascendant Program Management Method

Creating and validating a strategic vision

Large enterprises continuously analyze and validate the company's strategic direction, role, and marketplace position against the competition. They use a variety of tools and techniques, all aimed at identifying and quantifying potentially profitable opportunities and deflecting competitive threats. Often these analyses indicate a necessary change in the stated direction and help to define contributions that would create more value.

The analysis process also delivers a vision statement that outlines potential achievements, identifies possible impact on products and services, and defines a set of benefits or returns to the enterprise that map to goals or desirable results.

At this point, the vision statement must be tested against the enterprise's current direction as well as competing visions and ideas. Deciding that a vision is good or useful is not alone enough reason to act upon it. In addition, the testing will identify current practices, assets, roles, and products that would be impacted by acting on the vision, the type and degree of impact, and the feasibility of the required changes. It will help managers view all of these factors against the business' needs to continue supporting current clients and products, and to operate efficiently.

If the vision statement does survive this initial testing and validation, the next step is to quantify the impact that successfully implementing the vision would have upon the enterprise. This assessment has multiple dimensions, including:

- Identifying change areas
- Assessing risks
- Identifying and quantifying benefits
- Constructing and validating a financial model
- Justifying a decision to proceed

The goal is to assess both the vision's potential value and its implementation cost, providing enough information for executives to decide whether the value justifies the expenditures. If the decision is affirmative, there is justification to move into planning.

As we have seen, in IBM Rational SUMMIT Ascendant, an organization creates a program strategy through a series of iterations, with review and approval gates at the end of each iteration. Through dialogue and oversight at each gate, executive leaders can exercise control to ensure that proposed initiatives fit the overall business direction.

Strategic planning

Strategic planning involves defining and setting boundaries for specific initiatives to achieve the vision. These initiatives might involve several projects of several types, each designed to fulfill some portion of the vision. Managers may group similar projects into *programs* that support the achievement of a single outcome or business result. Then, as a further step, they may group all programs supporting either a major product line or LOB (line of business) within an enterprise into *portfolios*.

Program managers describe each project within their program in an outline project charter document, including goals, project components, definition of success, and project qualifiers such as assumptions, risks, and limitations.

Figure 2 shows a sample outline project charter as a work-in-progress — some items have yet to be filled in.

Outline project charter
Building maintenance project

1. Management summary
   a. Short description of the proposed project success definition for the proposed project
      - To keep all buildings within the Hotel Lautec facility in virtually the same condition they were in when they left the builder's hands.

   b. Business problem/opportunity the project will address
      - Focus group participants consistently remarked that the hotel's buildings and common areas looked "tired." Management sees an opportunity to transform this image so that the hotel will always look "fresh" and attract more guests.
2. Goals and boundaries
   1. Strategic goal(s) supported
      - Goal 3 - To create an upscale property that is country club-like in both appearance and amenities.
   2. Project boundaries
      - All maintenance-related activities, which include routine upkeep such as painting, cleaning common-use areas, preventive maintenance, and repair of mechanical equipment
   3. Project prerequisites and dependencies (to come)
   4. Major expected results/deliverables

- The software deliverable associated with this project will provide periodic updates to management about the buildings' condition, current maintenance efforts, near-term projected efforts, and costs in comparison to budget.

3. Project qualifiers (all to come)
   1. Management-defined constraints/limitations
   2. Assumptions
   3. Identified risks
   4. Identified impact areas

Figure 2: Outline project charter (work-in-progress)

When the outline project charter documents are complete, managers can prepare the program definition document that summarizes content from all the project charter documents and defines the program in outline form (see sidebar).

Both the project charters and the program definition are subject to review and change/validation at the time the program is actually mobilized.

During program implementation, new information, the passage of time, market changes, and shifts in management can all lead to changes in the goals, contents, and needed outcomes for a program and its constituent projects.

Program definition

- Sets scope and boundaries
- Defines needed outcomes
- Assesses impact on IT

So far, we have described the process of identifying, defining, and justifying a major program effort very briefly. In the remaining sections of this article, we will examine several process elements in greater detail.

Lifecycle model: Strategic vision and program development and delivery

In IBM Rational SUMMIT Ascendant, evolving a strategic vision, creating plans, and launching the program proceed according to a well-defined lifecycle, as shown in Figure 3.

Figure 3: IBM Rational SUMMIT Ascendant program definition and commitment lifecycle

We will briefly describe each of the model's five components along with associated results.

Strategic Business Analysis

This component relates to analyzing current business and IT directions within the organization, opportunities for new products and changes to existing products and services, threats to existing market share, client relationships, and sales and delivery needs. The major results are a strategic assessment document and one or more presentations, and/or work sessions with the enterprise's executives. This component is designed to assess the value of both current initiatives and new opportunities; it looks at their potential impact and associated risks.

Strategic Vision Development

This component deals with identifying new (or different) directions and initiatives, based on the strategic business analysis results. It is here that the organization seeks to define specific vision components that take advantage of identified opportunities and to identify ways to deflect threats to the enterprise. In addition, it looks at the value and impact of existing initiatives, recommending which ones to continue, enhance, cancel, or defer.

The major result is a strategic vision document with some segments devoted strictly to business topics and others to IT elements required to support the business direction. This document identifies — at a high level — new, changing, and continuing initiatives, along with the business direction or drivers they support.

Strategy Justification and Approval

It is important to understand the dimensions of potential initiatives defined in the strategic vision. This component deals with developing and quantifying these dimensions to assess the initiatives' comparative value. In addition to advancing business goals, each initiative should yield some other benefit for the enterprise, such as:

- Additional revenue and profit
- Costs savings or reductions
- Favorable return-on-investment (ROI)

Assessing and ranking all potential contributions allows executives to make choices about where and how much to invest. In addition, they need ongoing comparisons of costs against returns as efforts go forward so they can decide whether to continue investing in these efforts.

Strategy Program Planning

This component represents the beginning of the planning work. It encompasses several deliverables that identify requirements and milestones at a relatively high level. First, the program outline describes the program's contents and boundaries, effectively serving as a program charter. The program outline lists projects the program will comprise and describes major deliverables, and boundaries among the projects. This is the first document that decomposes the program into a number of discrete projects.

These deliverables form the foundation for later in-depth planning efforts. They also record early thoughts and decisions about the program; collectively, they are a valuable element that traces back to the strategic vision.

Implementation Program Launch

This component encompasses a transition from the analytical to the actual. Its activities and results prepare the organization for program mobilization and ramp-up, which entails recruiting additional staff.

Naming an executive sponsor is key to accomplishing the transition effectively. This senior-level officer/executive will be responsible for producing the desired program results. Deliverables for this component include an outline charter document for each project, an initial/draft program budget, and a mobilization plan.

When the launch component work is complete, you will be ready to begin mobilizing staff and other resources to initiate the program work.

Justifying, planning, and launching the program

This article focuses on the later stages of developing a strategic vision and program strategy because the process and deliverables required to conduct a thorough business analysis and create a business strategy vary greatly from one enterprise to another. Typically, program leaders have not been assigned yet when these activities take place, so they do not participate in them. That said, let's look at some practical aspects of justifying, planning, and launching the program.

In examining each of these activities, we will address four practical questions:

- Who should do the work?
- Who else should participate?
- What work should be done?
- How complete should the results be?

Justifying the program

Justifying a program requires that you understand and quantify the program's dimensions. Only then can you produce a well-defined set of expectations and value proposition that will make executives feel confident about approving and funding the program. These dimensions include projected costs, existing initiatives that will have to be deferred or delayed, benefits to the enterprise, "fit" with the strategic vision, and impact and risk analyses (see sidebar).

Let's look at our first question: Who should do the work? A small program enablement team with two to three full-time members should be sufficient to complete the justification and planning and launch work. The team should be a mix of middle-level business managers and IT management/technical staff.

All members of the program enablement team should also have solid planning

Justification dimensions

- Projected costs
- Quantifiable and non-quantifiable benefits

credentials and a good understanding of business area(s) the program will affect. Their work will consist of planning, developing deliverables, and integrating part-time participants into the process.

- Deferred initiatives
- Strategic vision "fit"
- Business impact assessment
- Risk analysis and mitigation strategies

One member should be a full-time team leader. Ideally, this person will continue on during program implementation — or at least throughout the mobilization effort — to provide continuity.

Our second and third questions are, respectively: Who else should participate in assembling/validating the justification? What work should be done? Table 1 responds to these questions in terms of the dimensions we identified above.

Table 1: Justification dimensions, staff, and work requirements

Justification dimension	Staff/participants	Work/results
Projected costs	Financial staff member	• Develop financial model. • Access enterprise financial data. • Ensure conformance with enterprise financial practices. • Validate cost data.
Quantifiable and non-quantifiable benefits	Business area(s) manager	• Identify potential benefits/returns. • Determine scope/scale. • Understand benefits' impact.
Deferred initiatives	Business area(s) and IT managers Enterprise PMO staff	• Identify current initiatives. • Determine their value. • Identify deferral possibilities. • Make deferral decisions.
Strategic vision "fit"	Vision segment owner	• Assess program "fit" and suitability. • Validate value/potential. contribution to success
Business impact assessment	Business area(s) managers Change management specialist	• Identify impact areas and types of impact. • Quantify degree/scale of impact. • Validate positive downstream potential.
Risk analysis and mitigation strategies	Business area(s) and IT managers Risk management specialist	• Identify risks. • Assess potential impact. • Outline risk mitigation plan.

A fourth practical question is: How complete should the results be? In the strategic assessment and planning stage, program initiatives address questions and issues at a high-level while competing for attention with other initiatives, both potential and ongoing. How much data do you need, and how complete should it be before you present it to executive decision makers?

The answer to this question is the old, reliable consulting answer: "It depends." In this case, it depends on the nature of the business enterprise, the types of programs the enterprise typically undertakes, and the degree of risk acceptance in the culture. For example, enterprises that produce competitive products such as airplanes or automobiles are used to undertaking very large initiatives and accepting significant degrees of risk for each venture. In contrast, enterprises that offer services, such as banking or finance, are just coming to understand very large initiatives and are typically risk adverse.

With respect to risk mitigation, the data you submit to executive leaders need only make them comfortable enough to approve continuation of the program definition and planning process. The mobilization effort will provide multiple opportunities and checkpoints for reviewing and refining your justification for the program — and for postponing or canceling it without major financial loss.

Planning the program

Planning a program and its constituent projects is an iterative effort that continues throughout the program lifecycle. Following the early, high-level strategic planning, later iterations will flesh out the details and relationships among plan components. At the outset, it is important to name an executive sponsor(s) for the program and create various planning deliverables, including a first-cut program budget.

Let's again begin with the first practical question: Who should do the work?

Program planning dimensions

- Capital investment and expenses
- Benefits and ROI
- Goals and milestones plan
- Program outline document
- Program (initial) size estimate

The program enablement team should continue to drive the effort, drafting the plans, and creating the planning documents. In addition, a budget analyst should help estimate capital and expenses and ROI and should, ideally, become a program office staff member when the program is mobilized.

The budget analyst should be a staff specialist from the finance organization or CFO's office. He or she should be have in-depth knowledge of the enterprise's financial systems and be able to apply enterprise standards for financial management, budget construction, and expense records.

Finally, a specialist in size estimation (knowledgeable about models, tools, etc.) should work on projections for both the overall program and its constituent projects.

Again, we will use a table to address the second and third practical questions: Who else should participate in planning, sizing, and financial analysis? What work should be done? Table 2 responds to these questions in terms of planning dimensions.

Table 2: Planning dimensions, staffing, and work requirements

Planning dimension	Staff/participants	Work/results
Capital investment and expenses	Executive leaders; may include the CEO and Board of Directors Business area(s) and IT managers Financial or CFO office staff	• Review current/projected budgets, planned expenditures, and anticipated revenue. • Define a financial model. • Agree on financial assumptions. • Iteratively run /review/refine financial scenarios. • Define /present /agree on alternatives and initial funding.
Benefits and ROI	Executive leaders; may include the CEO and the Board of Directors Business area(s) and IT managers Financial or CFO office staff	• Review/refine quantifiable and non-quantifiable benefits and returns. • Define an ROI model and agree on assumptions and conditions • Iteratively run/review/refine ROI scenarios. • Define/present/agree on alternatives and final ROI quantification.
Goals and milestones plan	Business area(s) and IT managers Executive leaders; may include the CEO and Board of Directors	• Agree on a planning model. • Plan/hold joint planning work sessions. • Agree on goals/goal owners. • Agree on major milestones and associated results. • Agree on commitments to achieve individual milestones. • Assemble/agree on a plan.
Program outline document	Business area(s) and IT managers Executive leaders; may include the CEO and Board of Directors	• Plan/hold joint definition work sessions. • Assemble "straw man" program elements: goals, scope, outcomes, limitations, participation. • Refine and review/validate program elements. • Assemble program outline.
Program (initial) size estimate	Business area(s) and IT managers Executive leaders; may include the CEO and Board of Directors	• Agree on a sizing model and validation model. • Agree on sizing assumptions • Iteratively run/review/refine sizing scenarios • Identify/quantify/resolve sizing issues. • Make program funding, goals, and schedule adjustments. • Agree on initial sizing.

The fourth practical question is: How complete should the results be? The capital and expenses figure should represent the total program cost. Under that dimension, you can segment costs in a way that conforms with enterprise financial practices. But all participants should agree that the estimate is only preliminary. It should cover the program launch and mobilization, but a major financial review is then necessary, near the end of the mobilization effort, to refine the overall cost figures.

Estimates for quantifiable benefits and ROI are also preliminary; the program staff should conduct periodic reviews to check/reset these metrics. Goal and milestone documentation must indicate owners for each major goal as well as others who will perform associated work. The program outline must clearly indicate expected program outcomes and specifically name business areas, products, organizations, and locations that are within — and outside — the program scope.

The initial size estimate should indicate the overall size in terms of both labor hours and other major program cost components — including implementation.

Launching the program

The work and results of a launch represent a transition from considering what might be possible to deciding what people will actually do. The launch effort will establish and validate readiness for beginning the mobilization effort, which includes defining governance, acquiring program staff, and establishing a program management office. It requires naming the executive sponsor(s), recording outline information about each project (a charter document), and creating a plan (specifying tasks, needed results, resources, and schedule) for the mobilization effort. It also includes creating the first program budget and validating it against the approved capital and expenses estimate. Finally, during this period, arrangements for outside (or inside) staffing are concluded.

Launch dimensions

- Executive sponsor(s) selection
- Project outlines (charters)
- Program mobilization plan
- (Initial) capital and expense budget
- Consulting and staffing agreements

Who will do this work? The program enablement team will continue to drive the effort, drafting plans and creating planning documents.

The program enablement team will provide the new executive sponsor with a complete picture of decisions and activities to date, describing pending decisions or issues needing resolution.

In addition, a liaison person (typically from purchasing) must negotiate consulting and outside staffing contracts. This person might need lead time to review new and existing agreements in order to complete the negotiations before mobilization begins.

Who else should participate in planning, budgeting, and negotiating staffing agreements? What work should be done? Table 3 examines these questions in terms of the launch dimensions.

Table 3: Launch dimensions, staffing, and work requirements

Launch dimension	Staff/participants	Work/results
Executive sponsor selection	Executive leadership; may include the CEO and Board of Directors	• Identify candidates. • Review qualifications/availability. • Hold informal discussions. • Select the best candidate.
Project outlines (charters)	Business area(s) and IT managers Leader/team member for strategic vision delivery	• Review/refine project list. • Iteratively draft/review/refine project outline segments. • Validate boundaries/dependencies. • Publish/approve the set of outlines.
Program mobilization plan	Business area(s) and IT managers Enterprise PMO staff Internal resource owners and managers	• Review mobilization goals, needs, and best practices. • Iteratively outline/review/refine iteration activities. • Quantify/qualify immediate staffing needs. • Initiate staff search. • Validate/publish mobilization schedule.
(Initial) capital and expense budget	Vision segment owner Leader/team member for strategic vision	• Review/understand outline of capital and expenses – from strategic vision. • Define program chart of accounts.

	delivery Business area(s) and IT managers Financial or CFO office staff	• Populate/review/refine chart of accounts. • Transform funding into budget model. • Review/validate/approve initial budget.
Consulting and staffing agreements	Business area(s) and IT managers Leader/team member for strategic vision delivery Purchasing liaison for outside staffing	• Review/understand outline. Capital and expenses – from strategic vision • Review initial budget. • Draft/review staffing needs. • Outline/validate program staffing model. • Outline/validate (initial) program staffing plan. • Review/update existing vendor agreements. • Initiate negotiations with outside vendors as needed.

How complete must the results be? The budget is the key to moving ahead with mobilization. It must clearly identify the available (and immediately spendable) funding. Funding must be sufficient to complete the mobilization effort. The budget document should give specific spending authority to at least one individual involved in the program.

At a minimum, managers should identify the individual projects and goals, and establish a set of boundaries that delimit each project. The mobilization plan must be executable; that is, it should identify tasks and expected results, estimate the work's magnitude, identify usable resources (including level of commitment and availability), and include a schedule with major milestones and a completion date. It should identify at least one executive sponsor who will be available no later than the mobilization start date (earlier is better). If the program involves outside resources, the process and approvals for engaging them must be completed (or scheduled for completion) no later than two weeks before mobilization — to allow time for interviews and initial staff selection.

Getting and maintaining strategic consensus

Because the number of items in the strategic space for which agreement is necessary is so substantial, a key to success is gaining consensus iteratively, for each decision, and then maintaining it as you consider new strategic elements. In fact, there can be no forward movement that is not solidly based upon consensus.

For each lifecycle component shown in Figure 3, there must be consensus-building to validate each set of steps; in the end, executive leaders must agree to continue on to the next lifecycle stage. Ideally, they will do so in a face-to-face discussion, with each member expressing his or her willingness to move forward.

If some people voice doubts or point to seemingly significant issues, it is wise to define a set period in which to address these before moving to the next stage. Once the program effort is underway, it is far more difficult to resolve issues and/or adjust course. In addition, because fewer individuals are involved at this early stage, it is easier to reach consensus about how to address issues.

Table 4 provides a simple list of key points that require consensus.

Table 4: Consensus checkpoints and goals

Consensus checkpoints	Goals
Completed preliminary cost and benefit estimates	• Agreement that the overall cost is reasonable and appropriate. • Assessment that benefits will provide a suitable return on the cost.
Check for fit with strategic vision "fit"	• The goals and desired program outcomes are solidly in the mainstream of the strategic vision.
Completed quantification of benefits/returns	• It Is probable, and readily believable, that the scale of benefits and returns will be realized
Completed initial size estimates	• When judged against the needed outcomes, the initial sizing seems of sufficient scale to achieve them

Completed capital and expense budget	• Confirm that the budget conforms with both enterprise financial practices and regulatory/legal requirements. • Validate that budgeted costs are realistic in scale, viewing them against those of previous projects and programs and/or current marketplace conditions.

This article discusses just a sample of the guidance that is available through IBM Rational Unified Process and IBM Rational SUMMIT Ascendant. Our Program Management Method provides program managers with guidance both pre- and post-mobilization. For more information about this method, please either follow this link: http://www-306.ibm.com/software/rational/howtobuy/index.html or call 1-800-728-1212.

About the author

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