IT441-Enterprise Architecture
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The Value and Risk of Creating an Enterprise Architecture

Value vs. Risk

- On the value side, EA has the unique capability to bring together views of strategy, business, and technology that allow an enterprise to see itself in current and future operating states.

- On the risk side, creating an EA for an entire enterprise can be time consuming, costly, and disruptive to business services.

Value

- Align strategy and business requirements with technology,
- Improved planning,
  - Top-down and bottom-up alignment
- Decision-Making
  - Comprehensive views
- Communications
  - Same set of documents.

Managing Risk

- Risk is related to uncertainty, and in applied form is the potential source(s) for the failure,

- Several types of risks that relates to EA:
  - Financial,
  - Lack of Acceptance,
  - Loss of Key Personnel,
  - Schedule Delays,
  - Documentation Tools.

Mitigation Risk

- reduce the likelihood that sources of risk will emerge and negatively impact a program such as EA

- Actions that mitigate risk (lower uncertainty) include:
  - strengthening executive support for the EA program,
  - solidifying budgets,
  - not being the first adopter of EA tools and documentation techniques,
  - ensuring there are trained back-ups on the EA team,
  - and using a detailed EA implementation methodology to guide the overall program.

Quantifying EA Program Value

- Building a business case that includes an :
  - alternatives analysis,
  - cost-benefit analysis,
  - and return on investment calculation
  - is the primary
- Is the primary measure for evaluating the contribution to profitability and/or mission success.

Quantifying EA Program Value

- Many aspects of EA value can be quantified, including the following areas:

1. Shortening Planning Cycles,

2. More Effective Planning Meetings,

3. Shorter Decision-Making Cycles,

4. Improved Reference Information,

5. Reduction of Duplicative Resources,

6. Reduced Re-work.

Quantifying EA Program Value

7. Improved Resource Integration and Performance,

8. Fewer People in a Process,

9. Improved Communication,

10. Reduction in Cycle Time.

Quantifying EA Program Costs

- The cost of EA should be approached from a program lifecycle view that centers on phases for implementation, maintenance, and refreshment.

- One way to estimate EA program costs is to look at each area of the EA implementation methodology, and identify the direct and indirect costs to accomplish each of the steps.

- The cost of establishing an initial version of the EA will be more than the cost of updating and maintaining it, due to the direct and indirect costs associated with establishing new EA processes and capabilities, and gaining stakeholder support.

Quantifying EA Program Costs

- In general, the cost estimation would include the following:
  - EA program administration and other enterprise administrative tie-ins
  - Salary/benefits for a Chief Architect and EA team staff
  - Meetings, facilities, materials, and support for stakeholder planning sessions
  - Computers, applications, and web developers to establish the EA repository
  - Interviews and materials to document EA current views
  - Future scenario planning sessions with stakeholders
  - Interviews and materials to document EA future views
  - Development and documentation of the EA Management Plan
  - Purchase, use, and refreshment of EA modeling applications and computers
  - Regular (e.g., annual) updates to EA documentation and the online repository

Quantifying EA Program Costs

- EA salaries in 2012 conducted by the author:
  - a senior enterprise architect's position can command over $100,000 per year,
  - Mid-level positions (3-5 years of experience) can earn in the range of $60,000 to $80,000.00 per year,
  - and the junior positions for beginning architects can earn in the range of $40,000 to $50,000 per year.,
  - the outsourcing of a Chief Architect and/or Senior Consultant position are over $200 per hour, which translates to over $412,000 per year,
  - The rate for mid-level EA professionals can range from $125 to $175 per hour, so at the upper end of this range the outsourcing of one of these positions can cost over $360,050,
  - The rate for junior EA professionals can range from $55 to $85 per hour, and at the upper end of this range the cost of outsourcing can be over $175,100.

Linking EA and Strategy

- Documenting strategy involves the identification of goals, initiatives, and outcome measures:

  – Strategic Goals: Strategic goals typically require several years to accomplish. Changes in strategic goals are made in response in internal and external business and technology drivers and/or changes in laws and regulations,

  – Strategic Initiatives: These are the business and technology activities, programs, and projects that enable accomplishment of strategic goals,

  – Strategic Measures: These are outcome measures that identify when a strategic initiative has successfully met a strategic goal.

Linking EA and Business Planning

- Strategy creates business requirements and technology supports solutions for meeting those requirements. EA documents three primary issues at the business level:

  - Supporting Strategic Goals: Touch points between strategic initiatives and business activities need to be clearly documented,

  - Documentation of Business Activities: Documenting the creation and delivery of business products and services is important in supporting Business Process Improvement (BPI) and Business Process Reengineering (BPR) projects,

  - Identifying Supporting Technologies: Analyzing business requirements and activities can reveal critical supporting technologies (e.g. marketing activities require sales trend analysis data, and a manufacturing process requires various types of resources including raw materials, facilities, labor, computers, data, and/or robotics).

Linking EA and Technology Planning

- Technology is a type of resource that enables information and other resource flows to support the creation and delivery of business products and services, which in turn enables the achievement of strategic goals,

- It is important that technology not drive business and strategy planning, especially in resource-constrained enterprises, where the expense of duplicative non-strategic technologies cannot be afforded,

- It's more important for the enterprise to understand its primary directions and priorities, plan necessary business activities, and then identify the supporting resources, including IT.