



Valuation Methodologies

Traditional

These methodologies have their roots in the world of financial measurements, with IT-specific metrics and attempts at risk assessments.

- Economic Value Added (EVA)
- Total Cost of Ownership (TCO)
- Total Economic Impact (TEI)
- Rapid Economic Justification (REJ)

EVA equals net operating profit minus appropriate capital charges. EVA encourages managers to monitor assets as well as income, and keeps them aware of the trade-offs between the two. Cost is commensurate with the size of the company and project

TCO is an efficiency measure best used for helping service-oriented departments like IT squeeze better price and performance ratios out of key business processes such as operations, disaster recovery, change management and tech support. TCO does not assess risk or provide a way to align technology with strategic and competitive business goals.

TEI is a decision-support methodology designed to accommodate risk and flexibility - deferred or potential benefits often left out of straight cost-benefit analyses. TEI calculates flexibility using a futures-options methodology, such as Real Options Valuation or the Black-Scholes model, both of which attempt to value options to be exercised later. TEI works best when analyzing two distinct scenarios, build versus buy or Oracle versus Sybase.

REJ (Microsoft's) seeks to flesh out TCO by aligning IT expenditures with business priorities. The five-step process requires IT to: develop a business assessment road map identifying a project's key stakeholders, critical success factors and key performance indicators; work with stakeholders to identify how technology can influence success factors; perform a cost-benefit equation; profile potential risks representing probability and impact of each; and run standard financial metrics. REJ is best suited for managing single projects rather than an entire project portfolio.



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Qualitative Methods (Heuristic)

These methods attempt to round out quantitative measures with subjective and qualitative inputs to assess the value of people and processes.

- Balanced Scorecard
- Information Economics (IE)
- Portfolio Management
- IT Scorecard

BS joins traditional finance lag indicators with operational metrics and integrates them into a broader framework that accounted for intangibles like corporate innovation, employee satisfaction or effectiveness of applications. Uses 4 views - financial, customer satisfaction, internal processes, and growth and learning. **NOTE:** primarily a tool for managing strategy, it rarely works without top-level executive sponsorship.

IE aims to provide a neutral method of evaluating a portfolio of projects and allocating resources where they will be of greatest benefit. The idea is to force IT and business managers to articulate, agree on and rank priorities, and draw more objective conclusions about the strategic business worth of individual projects. IE is a relatively fast way to prioritize spending and align IT projects with business goals. Its risk analysis is fairly detailed, if still subjective.

PM To contribute to a company's bottom line, organizations must view IT staff and projects not as costs but as assets managed by the same criteria a fund manager would apply to any other investment. That means CxO's should continuously monitor existing investments and evaluate new investments by cost, benefit and risk. Run-the-business investments are low risk, low yield. Growth is medium on both sides. And transforming the business tends to be a high-risk, high-yield activity. The level of risk associated with a component should determine the tightness with which it is managed.

ITS modeled after Balanced Scorecard, but uses four perspectives, business growth, productivity, quality (both internal and external to IT) and decision making.



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Probabilistic Methods

These methods use statistical and mathematical models to calibrate risk within a range of probabilities.

- Real Options Valuation (ROV)
- Applied Information Economics (AIE)

ROV aims to put a quantifiable value on flexibility. The technique was applied to leasing, mergers and acquisitions, and manufacturing. What kind of investment do we make in technology to create that kind of flexibility?. Thus began the movement to value infrastructure and other ground-floor technologies, because nearly all other technical innovations are built on top of those base decisions.

AIE combines options theory, modern portfolio theory, traditional accounting measures like NPV, ROI and IRR, and a raft of actuarial statistics to quantify uncertain outcomes and generate a bell curve of expected results that objectively incorporates both risk and return..