Tool 31: Current investments and costs

Purpose of this tool: provide insight in the cost centers of IT in an organization by evaluating all current and developing projects on financial criteria.

The following steps are defined by <u>Michel Benaroch</u> in his article '<u>Managing information technology investment risk: a real options perspective</u>1, as an approach to manage IT investment risks. These steps must be reapplied when time passes, since some risks can resolve while new risks can arise.

Step 1: Define the investments and its risks

- 1. Define investment goals and requirements
- 2. Identify initial IT solution
- 3. State investment assumptions (economic, technological etc.)
- 4. Reveal investment risks in light of the assumptions
- 5. Link investments and decisions to payoff and costs

Step 2: Recognize viable shadow options

Map particular risks to options that can control them. Beware: mapping some risks to certain options could raise new risks. Therefore, it is sometimes necessary to reiterate this step.

A <u>decision tree</u>² could be used to show this step.

Step 3: Design alternative investment configurations

- 1. Use the in step 2 recognized (viable) shadow options to identify alternative ways to configure the investment(s)
- 2. Assess risk trade-offs between the identified configurations

Step 4: Evaluate options and investment configurations

Calculate option values for the investment configurations. This step finds the most valuable configuration. Identify the options' creation cost, maintenance cost, and exercise cost.

A lot of extensions are possible in this model, making it suitable for more complex cases.

On the next page the slide of this tool can be found.³

¹ This is a link to an abstract. The full text is available for download on this site (on the right top of the site, below 'cached').

² This article is not about IT investments, but the concept is the same.

³ This slide is based on Benaroch's Figure from the syllabus (p. 134)