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*Enduring Relevance*

# How Bad Can IT Decisions Be? Economics Says Sometimes Pretty Bad

Behavioral economics has emerged as the hot subspecialty in the dismal science today. While traditional economic theory assumed people were always rational actors in their decision making, from our experience in IT investments, we know otherwise. What can behavioral economics tell us about how to avoid the pathologies that creep into IT investment decision making and destroy value creation?

Two common decision-making pathologies into which behavioral economics has provided some visibility represent two sides of the same window: over optimism and loss aversion. Managers often overstate the expected returns of agiven investment. Not only are expectations dashed when those returns do not materialize but managers underestimate certain challenges, which manifest themselves at some point during investment implementation. Sound familiar?

A second problem involves the exact opposite situation. Managers are terrified of making decisions if there is a chance of a loss, particularly if poor results would reflect negatively on them and somehow endanger their careers. Loss aversion creates lost opportunities and indecisiveness.

There's more. A third decision-making dysfunction bears a distinct identity from the other two and is what economists call the "principal-agent" issue. The principal is the company. The agent is the employee whose decision rights can have a material impact on the conditions of the company. Sometimes the objectives of the company and the employee decision maker are not aligned. The agent, deliberately or unconsciously, makes decisions that further a personal agenda at the expense of the organization.

A simple example of this involves a decision made to invest in an investment vehicle with short-term gains at the expense of an investment with potentially greater gains, but the impact of which is further out on the timeline. In organizations where managers

move frequently from one new job to another, the incentive is for them to choose investments that provide returns as fast as possible so they get credit for those decisions. The investment choice is not necessarily the best but in the best interest of the agent.

A fourth manifestation of decision-making goofiness is "champion bias." Because the person evangelizing the investment is a drinking buddy of the operations chief or has good teeth, nice hair, and slick presentation skills, the decisiongatekeepers are drawn toward the idea like a moth to a light bulb, instead of favoring it on its financial and other merits. Mr. Magoo's superior investment idea, on the other hand, is tossed into the dumpster for reasons having nothing to do with the quality of the idea itself.

Now that economics has bothered to explain these managerial nightmares, let's consider one solution. It should be familiar to readers, as I have advocated it since the start of my contributions to Cutter's thought leadership: economic analysis. I will argue how economic analysis can positively affect each decision-making pathology behavioral economics explains.

**Overoptimism:** Bottom line, if you pitch an investment idea with a high return, you better have the facts to back up the forecasts, whether or not they can be financially quantified. One of the most powerful features of a transparent ROI analysis is an exploration of the assumptions that generate sunny predictions. Perversely, overoptimism is often characterized by a lack of any risk analysis, and we know how important this is when high price-tag IT investments are considered.

**Loss aversion:** Minimizing the inclination to avoid making decisions can be confronted if the final investment decision based upon quantitative and qualitative information is shared among a team that put the economic analysis together. (Since economic analysis should be a team exercise involving IT and the unit wanting the technology, this shouldn't be difficult.) It might also help if a senior manager signs off on the final presentation. The senior executive isn't responsible for every piece of data contained in the proposal but nevertheless vouches for its veracity and completeness.

**Principal -- agent:** A transparent, rigorous economic analysis of the merits of an IT investment might not unearth hidden agendas but it can certainly chop secret motives off at the knees because forecasts are challenged.

**Champion bias:** A core principle to a commitment to economic and risk analysis around IT investment means that the decision is based solely on the merits of the proposal and not who is presenting it. Human nature loves the attractive over the not so beautiful, but in a culture of decision making based upon facts and reasonable judgments, Mr. Magoo will get his shot.

Experienced managers surely didn't need an academic explanation for behavior they have been aware of for years. As if the fact that economics, now capable of injecting an explanation of human psychology into decision making, suddenly adds legitimacy to problems many managers have known to be

problems for years. What economics' new-found attention to dysfunctional decision making does legitimize is the use of thorough economic analysis techniques as one option to deal with this problem.