

Portfolio Estimating
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Classically, when we think about portfolio management, the focus is on the optimization of the value of an asset pool. In the investment world value is the estimated rate of return along with the estimated risk variance. The objective is to balance high return and high risk assets with lower return and lower risk assets to achieve a more predictable desired overall return. While there are many models and techniques for balancing return and risk for pools of assets, the common denominator is they all apply a structured approach with defined variables. It's about rational decision making. My vision for the future of software development portfolio management is the application of rational decision making, and that starts with portfolio estimation.

Given a portfolio backlog of software development projects, whether defined as epics or something else, they need to be prioritized for release and implementation. Key variables to this decision are the relative value or importance, the estimated cost, the estimated schedule time, and risk associated with cost and schedule. Stated another way, the release decision is a trade-off between the importance of the epic's contribution to the greater program objectives, it's cost to develop, it's schedule time consumed, and how certain we are of both. We intuitively know that higher value projects should be pursued earlier rather than later. Yet, what if a high value project will cost more than the next three projects combined and together they are clearly more valuable? What if we face the same question on schedule? To make it even more confusing, our estimates of cost and schedule are rarely precisely known and have risk ranges associated. These questions illustrate the critical importance of portfolio estimating in rational decision making.

The good news is that by utilizing existing software cost estimating tools we have access to all the information needed to weigh estimated cost, schedule, and risk ranges. If we simply combine with a determination of an epic's importance or rank ordering of the portfolio, we can decide release order through rational decision making.