

Workshop: Setting up your program for Accurate Level-of-Effort Estimation

Perhaps the most important team skill and competency, supporting the ability to accurately project anticipated cost and schedule, is level-of-effort estimations.

Projects often proceed on a rough-order-of-magnitude (ROM) estimation only, which is an expert opinion of project cost based on analogous projects, but without having the benefit of detailed requirements or work breakdown structure (which only comes later on in the initiation phase). ROM estimates are useful for starting up a potential product, but need to be fine-tuned as level-of-effort estimates in order to draw up an adequate resource plan and meaningful schedule. Without these pre-requisites it is not possible to accurately track project delivery across an entire phase or stage.

Level-of-effort estimations need to be provided by experts familiar with the hands on work required, and the most available experts are in this regard will be your internal project teams.

Even if you are relying on vendors (who should already be trained in estimation) for technical solution delivery, implementation of those solutions across your organisation generally requires work on the part of your internal teams to fully configure, populate, integrate, test, train, transition, and commission the new solution. Many development projects that get off to a good start later fail to complete merely because the implementation phase was never broken down or estimated. Projects like these can run on unnecessarily, draining resources and budget that could otherwise be re-assigned to new projects.

Your internal project teams and working groups likely need up-skilling and coaching before they are confident enough to begin provide estimates for their work. In addition, practical estimation workshops focusing on work breakdown estimates help create team buy in to the project schedule that results. The most important consideration is that development of estimation skill takes repeated practice, and if you wish to develop your internal team's ability to estimate work in the foreseeable future, they will need to start practicing estimation techniques now.

I will tailor a presentation and workshop to help organisations establish the fundamentals for team estimation that makes meaningful schedule and accurate delivery tracking possible. Please contact me for details projectstudio@swanriver.com.au

Covers the following topics:

- Level-of-Effort (Work) vs Duration estimates
- Essential pre-requisites for Level estimation
 - o Common mistakes to avoid
 - o Requirements and Breakdown Structure
 - o Product Breakdown (e.g. deliverables) vs Work (e.g. activity) Breakdown
- Estimation Techniques
 - o 3-Point Estimation
 - o PERT
 - o Delphi technique
 - o Resource Utilisation
 - Agile Point Estimation (level of relative complexity)
 - Planning Poker



• Advanced Estimation

- o Impact on the domain, security, number of business objects, technical interfaces, etc.
- Network Analysis
- o Simulation (Monte Carlo technique) via spreadsheet
- o Lead, Lag, Float, and Critical Path
- Fostering an environment conducive to estimation
 - o Program approach encourages repeated practice of estimation across its projects
 - o Capitalising on accurate estimates using Earned Value Management
 - o Organisational commitment to achieving Project Management Maturity