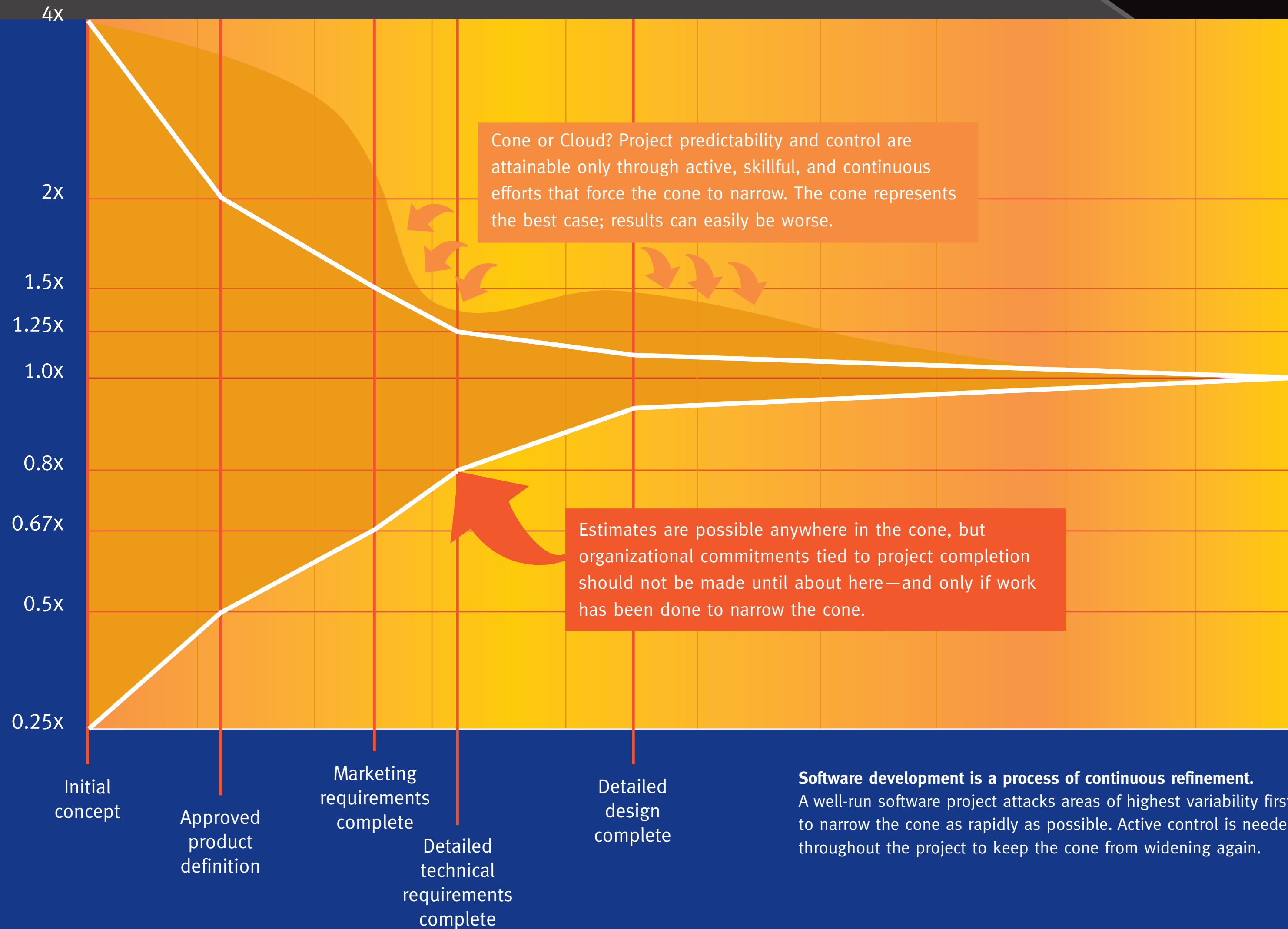# Cone of Uncertainty:

All software projects are subject to inherent errors in early estimates. The Cone of Uncertainty represents the best-case reduction in estimation error and improvement in predictability over the course of a project. Skillful project leaders treat the cone as a fact of life and plan accordingly.

Remaining variability
in project scope
(cost, size, or features)

4x
2x
1.5x
1.25x
1.0x
0.8x
0.67x
0.5x
0.25x

Cone or Cloud? Project predictability and control are attainable only through active, skillful, and continuous efforts that force the cone to narrow. The cone represents the best case; results can easily be worse.

Estimates are possible anywhere in the cone, but organizational commitments tied to project completion should not be made until about here—and only if work has been done to narrow the cone.

Initial
concept

Approved
product
definition

Marketing
requirements
complete

Detailed
technical
requirements
complete

Detailed
design
complete

Software development is a process of continuous refinement.
A well-run software project attacks areas of highest variability first to narrow the cone as rapidly as possible. Active control is needed throughout the project to keep the cone from widening again.

Construx®
SOFTWARE DEVELOPMENT BEST PRACTICES