

# Invention on Schedule

The real world has deadlines and endpoints

Business -- usually finance sets schedule

Education – courses end, proposals are due

Processes are created to get new things done in time to matter, and well enough to succeed.

(NOT to make more work for people!)

In business world

First stage – what can be done with no \$\$

Second stage – with initial (aware) investors

Final (??) stage – external investors

Each stage ends in a decision, and that focuses attention, creates a process.

Our projects are first stage operations, and borrow techniques from the second stage as well.

Disciplined processes require:

Completeness (don't focus on the most interesting details, and lose the whole)

Everything gets written down

Problems which are identified get solved

We'll use techniques for:

Technology assessment (will it work?)

Market assessment (who else has done it?)

UI assessment

Heuristic evaluation

Cognitive walkthrough

Low-Fi prototyping

Results all contribute to final presentation

# Technology Assessment

Identify critical (and missing) technology pieces

Are they governed by a Moore's Law?

Invent or wait a year?

Where will the competitive solution be when you finish?

Are there critical pieces that need an infrastructure you can't provide?

Two paths to an estimate of computing power requirements:

Size from the algorithm up

Scale from some comparable solution

For any mobile application, estimate

Battery life required, and what is available

Communication requirement and range

(are there infrastructure restrictions?)

Market requirements – basically, use Google a lot, and keep looking!