

The background of the slide is a spiral-bound notebook with a brown cover and a light beige, textured paper. The spiral binding is on the left side, with the wire visible through a series of holes. The text is centered on the page.

Project Management Tools from My Lessons Learned

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There is No Quick Fix

It Requires Thoughtfulness and Discipline

Planning

Decisiveness Problem Solving

Organizing Results Orientation

Prodding



How does a project evolve?

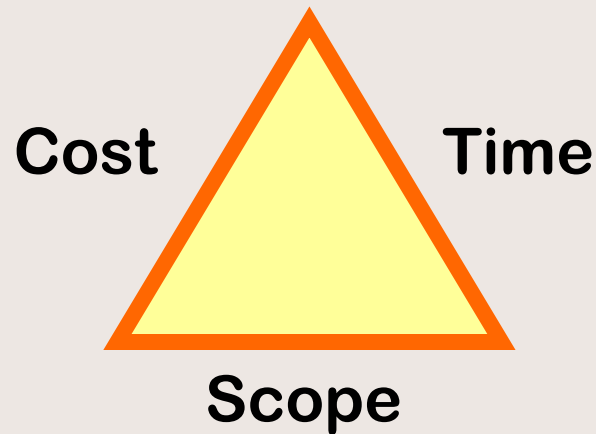
Projects follow a consistent pattern



What Is a Project?

As Experienced

It is a near impossible task that you are given. It needed to be done yesterday for next to nothing.



A decorative spiral binding on the left side of the slide, consisting of a series of metal loops.

Apply your time productively

- Clarify Requirements
- Plan – Build a schedule
- Estimating
- Track progress and adapt
- Make it fun and memorable
- Learn from your experience

The value is in the planning, not the plan. – Jim Pellicano

- My approach to Projects has an emphasis on planning
 - It clarifies the project objectives.
 - It helps you think through various ways to accomplish the work.
 - It gets the project team and sponsors aligned with the project.

“Better results, achieved faster”





First a Quick Experiment

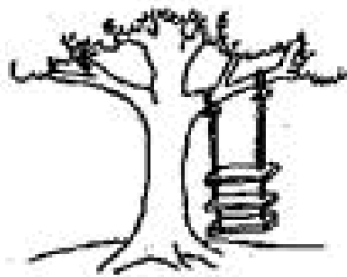
**How long does it take to
clean a car?**

The background of the slide is a spiral-bound notebook. The notebook has a brown cover and a light beige, textured fabric-like surface. The spiral binding is on the left side, with the metal wire visible through a series of holes. The text is centered on the notebook page.

Requirements

Managing Expectations

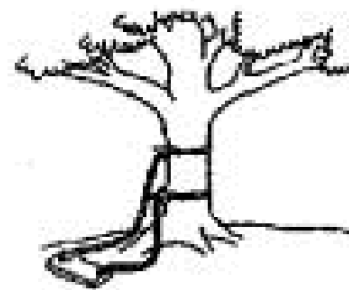
$$S=P/E$$



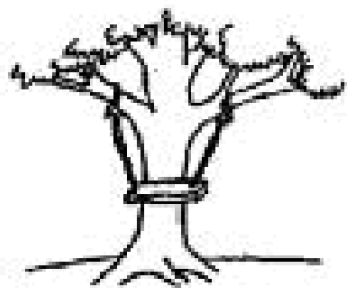
**As proposed
by the project
sponsor.**



**As specified
in the project
request.**



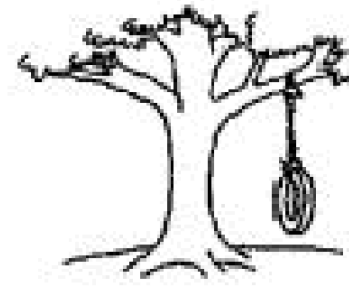
**As designed
by the senior
architect.**



**As produced
by the
engineers.**



**As installed at
the user's
site.**



**What the
customer
really wanted.**

Clarifying Expectations

I Know You Think You Heard What You Thought I Said...

- Identify the influential stakeholders
- Write out and agree on the charter
 - Get it in black and white
 - Keep it simple
- Be specific
 - Dates
 - High level requirements
 - Cost
 - Authority

Charter to Take a Trip

- **First, I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth.**

-John F. Kennedy, May 25, 1961, Speech to Congress



Charter for a Test Set

- T1 and FT1 channel testing
- Outside Plant feature set
- Water resistant
- Under 3 pounds
- Handheld
- 3 hours of battery life
- Under \$6,000
- Shipping in 12 months
- \$2M development cost



Rules for a Charter

- **Keep it short**
 - No more than one page or chart
- **Keep it simple**
 - The essential elements, top level
- **Get alignment**
 - Everyone should agree on this short and simple document
- **Be specific**
 - Objective, dates, cost

Documenting Requirements

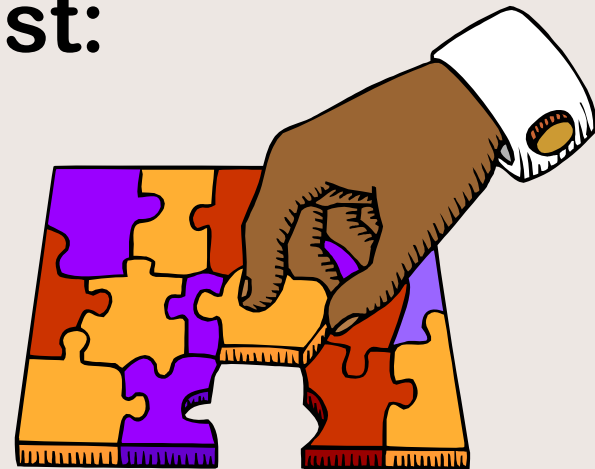
- **Complex deliverables need requirements spelled out**
 - Bits and bytes
 - Speeds and feeds
- **Sometimes must prototype to confirm needs**
 - Particularly true for user interfaces
 - Beware “I’ll know it when I see it”
- **Becomes the test for completion**

Scheduling



Practical Scheduling

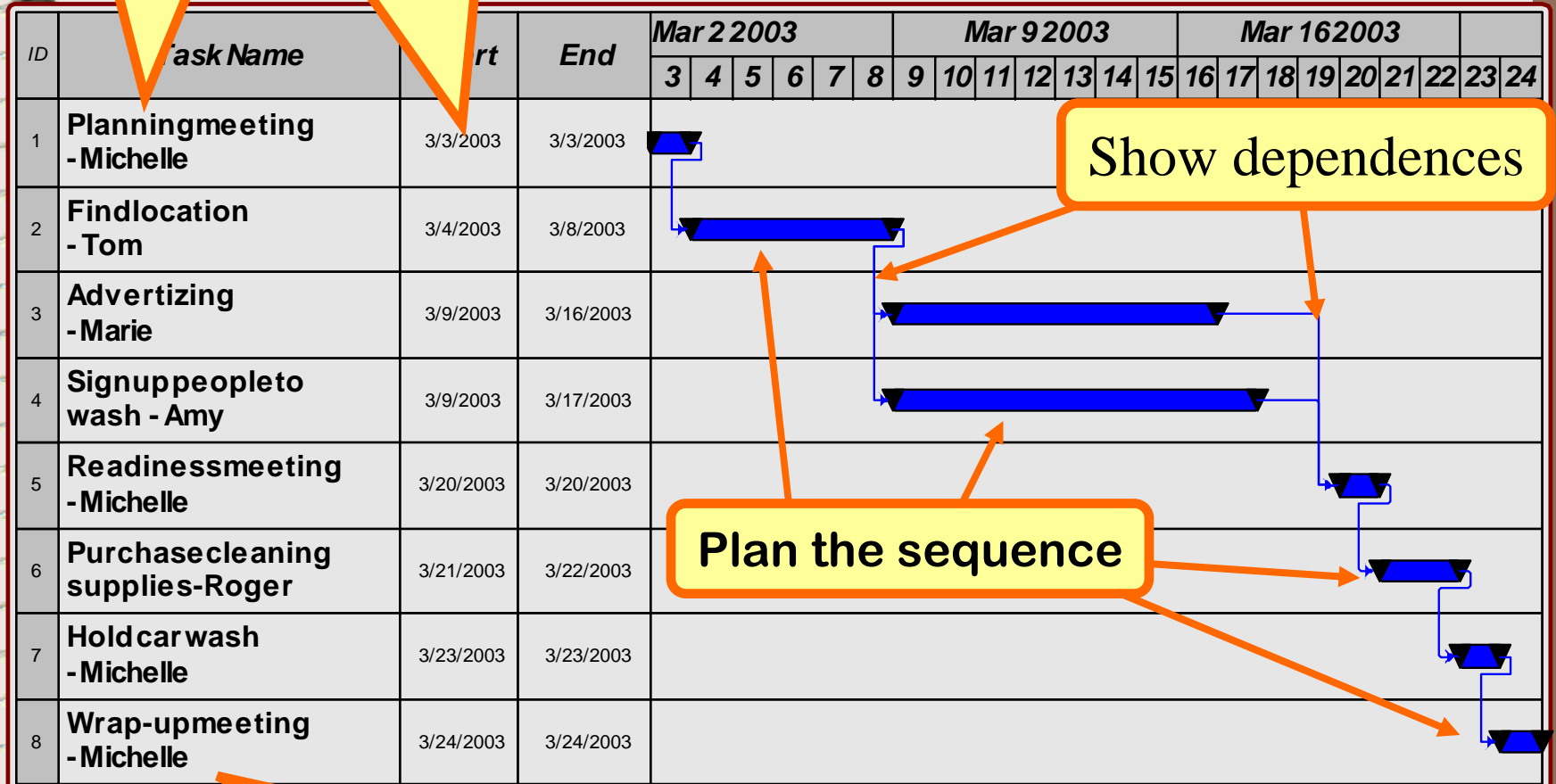
- Break the project down into manageable steps
- Scheduling is like assembling a puzzle that trades off time, cost and requirements against:
 - Dependencies
 - Parallel tasks
 - Who can do what



Establish
Manageable
Tasks

Gantt Chart Schedule

Set specific dates



Show dependences

Plan the sequence

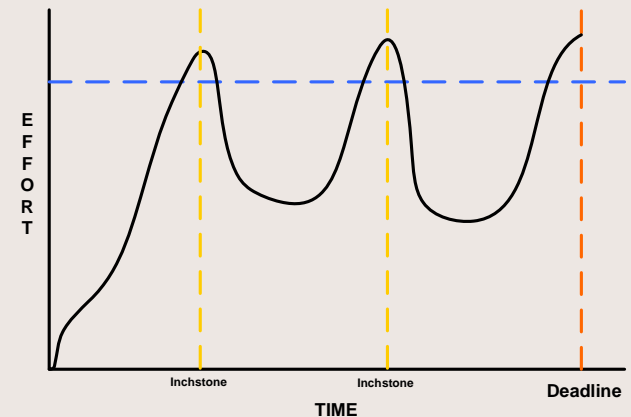
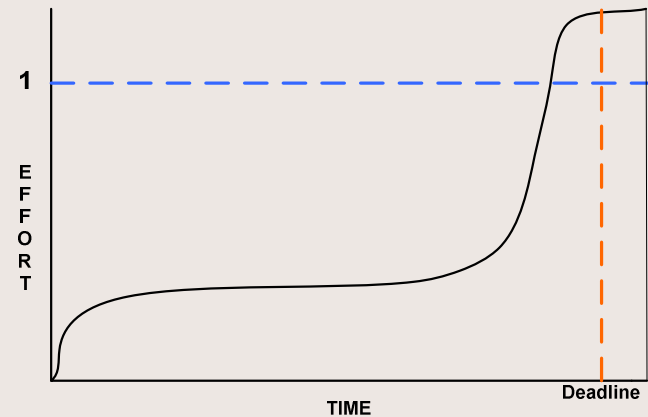
Assign Owners

What Scheduling Tool to Use?

- Use what is right for the job
 - A List
 - Word, Excel, Visio
 - Microsoft Project
 - Many other good schedule tools
- The tool should:
 - Organize the tasks and resources
 - Convey clearly to others what to do
 - Allow you to measure progress

The Impact of Milestones

- Effort increases as deadlines approach.
- Use inch stones to keep the effort level up.
- Maximize the area under the curve.



Schedule Rules

- What are your schedule rules?
- Part of your culture
 - Distractions, reassignment,
- Repeatable, consistent

Sample Schedule Rules

- **No one double scheduled (level resources)**
 - Tech leads 60%
 - Individual contributors 80%
- **Single resource per task**
- **No milestone on fixed date (use tool)**
- **Every task should have a resource**
- **Every task linked**
- **No task more then 5 days**
- **Keep schedule current (re-plan incomplete tasks) at least weekly**

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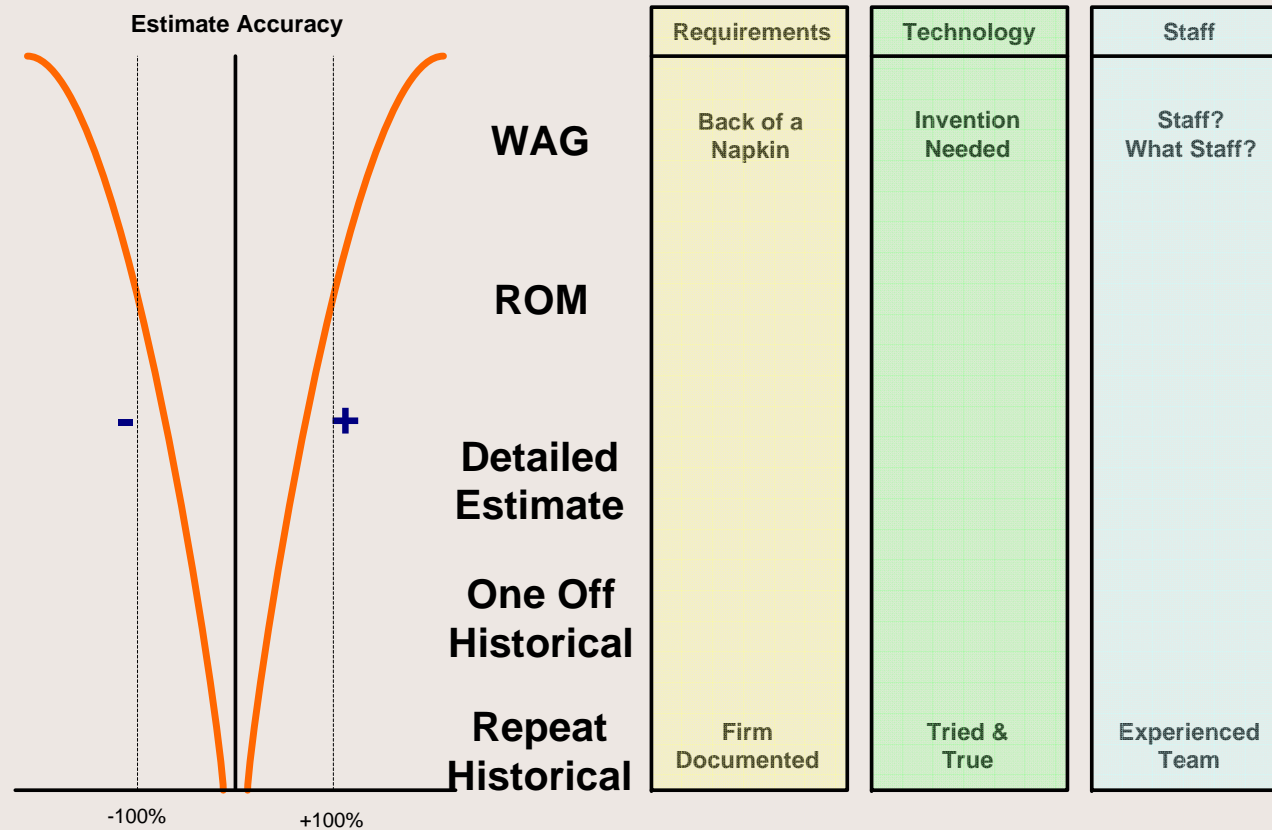
Estimating

**How long does it take to wash a
car?**

Estimates are a part of all phases of a project

- **Schedule**
- **Cost**
- **Technical performance**
- **Re-planned activities**
- **Recovery actions**
- **Get well plans**

Estimates come in many varieties



Estimating Cost and Effort

And this will cost me what?

- **Experience is the best guide**
 - Ask others (avoid conventional ignorance)
 - Historical (documented records)
- **Bottom Up – Very detailed**
 - Tends to over estimate
- **Top Down – Big picture**
 - Tends to under estimate
- **Balance – Use multiple methods**
- **Need data to justify, negotiate**

Mark or John Estimates

- Mark can do anything in half the time and his estimates reflect that
- John is extremely meticulous, detail oriented and careful and his estimates reflect that
- Know your estimator and how realistic their inputs are for your team.

Organization Culture

- What are the typical distractions, special assignment and churn that impact the project team?
- How does that impact plans?

Capture All Costs and Efforts

- Labor
- Overtime
- Purchases
- Fees
- Travel
- Equipment
- Lease
- Supplies
- Software
- Shipping
- Set-up activities
- Configuration control
- Data conversion
- Prototypes
- Clarifying requirements
- Staffing efforts
- Documentation
- Design Reviews
- Bug fixes
- Post delivery support

A spiral-bound notebook with a textured, light brown cover and a dark brown border. The spiral binding is on the left side. The text "Tracking Progress & Adapting" is written in a bold, black, sans-serif font across the center of the cover.

Tracking Progress & Adapting

Monitoring and Communicating

Keeping Everyone on the Same Page

- **Frequent status meetings**
- **Track schedule, cost and requirements performance**
- **Develop list of key issues to track**
- **Expect recovery plans**
- **Status stakeholders (management, peers, important interested parties)**

Status Meeting Agenda

Hold a status meeting not a problem solving session

- Each area reports status
- Review overall schedule
- Review overall cost
- Status open action items
- Assign new actions, owner & date
- Schedule any follow-up meetings for complex issue resolution

Get Issues Out Fast and Soon

- Problems Fester and Grow
- Create an environment that expects excellence, but welcomes bringing forward *real* problems.
- The project manager sets the tone for whether problems are solved quickly or are wished away.

A background image of a man with brown hair, wearing a blue shirt and a brown leather jacket, working on a project in a workshop. He is holding a small object in his hands. The workshop has various tools and equipment visible in the background.

Strive for Work-A-Rounds

- A work around finds a way to still meet the primary objectives.
- When problems arise challenge the team to find a solution that still achieves the primary objective
 - Agree on the primary objective
 - Create alternatives (MacGyver)
 - Overtime,
 - Change in requirements or re-phasing,
 - Temporary use of expert,
 - New approach (necessity is the mother of invention),

The soft side



Who have you thanked?

- People are the engine that perform a project's work.
- Trust is the grease that makes a project run smoothly.
- Honest appreciation, recognition, respect and trustworthiness help create an environment of trust.

Making It Memorable

Make It Fun

- **Have a theme**
- **Plan the kick-off meeting with some pizzazz**
- **Have some play and social time**
- **Thank people as you go along**
 - **Weekly recognition**
 - **Recognize accomplishments**
- **Have a closing activity**

The Finishing Tool



Conduct a Lesson Learned Session

- Every project teaches us something
- Spend at least an 30 minutes making a list of key insights
 - Things that worked
 - Things that flopped
 - Document actual times and costs

Make Your Next Project a Run for the Roses!



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