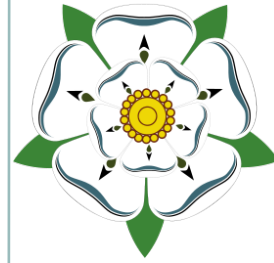


Project Tracking Techniques

"Even if you are on the right track,
you'll get run over if you just sit there."

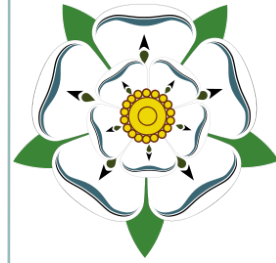
Will Rogers

Objectives

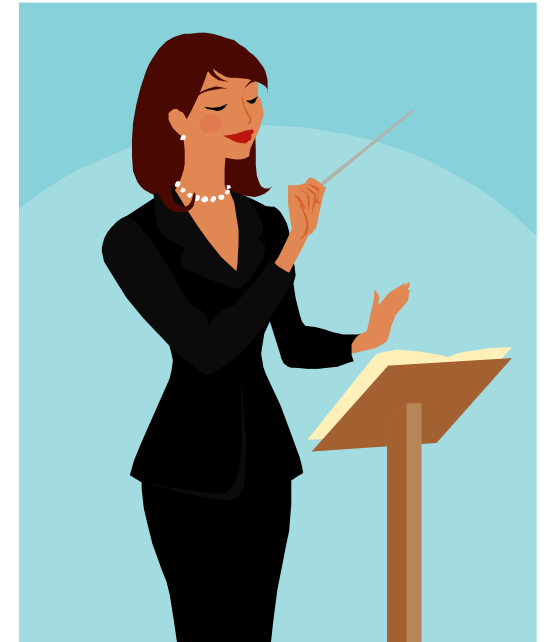


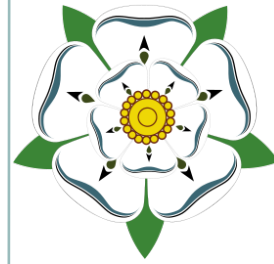
- Understand ways to track projects
- Recognize the benefits of collecting metrics
- Learn the appropriate metrics to collect
- Understand the need to report progress to the stakeholders

The PM Role in Project Tracking



- Determine the level of detail needed to identify meaningful variances
- Analyze and interpret data to make effective decisions
- Manage day-to-day activities while keeping the long term objectives in view
- Think globally, act locally

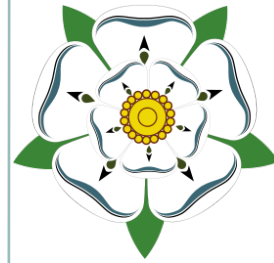




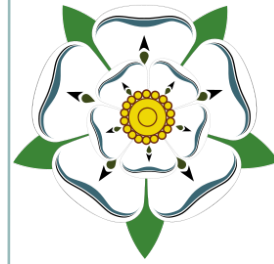
The Baseline

- Progress cannot be measured unless a starting point is defined
- Establishing a project baseline is critical in the management of a project
- The baseline is established between the project team and the stakeholders
 - Consensus is essential

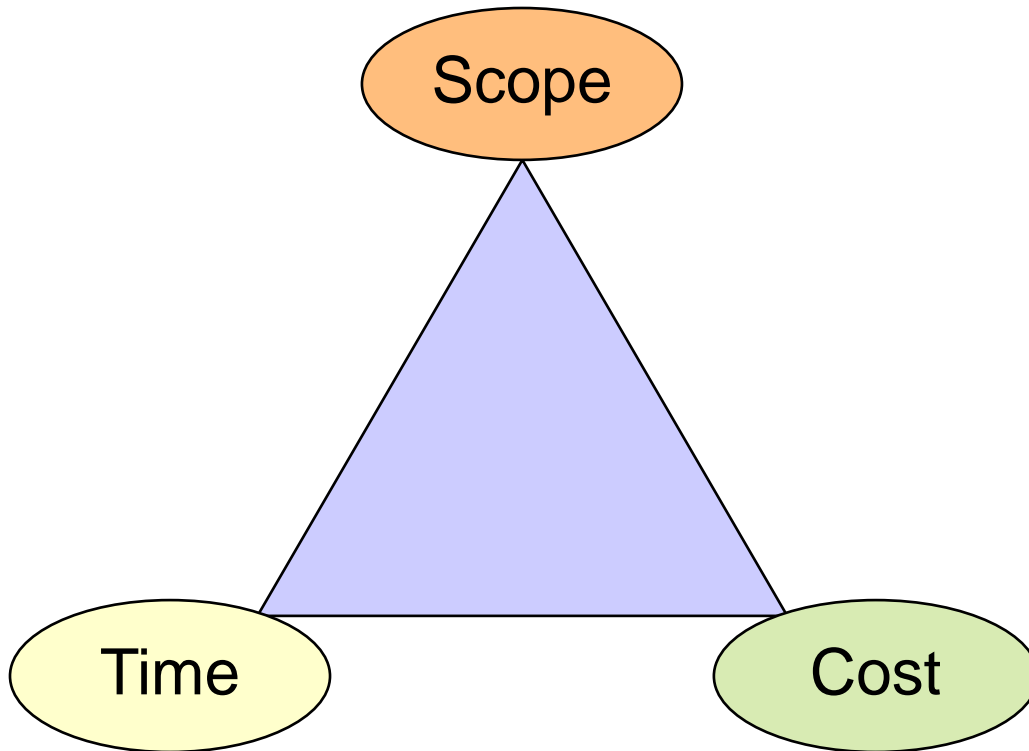
Project Baseline



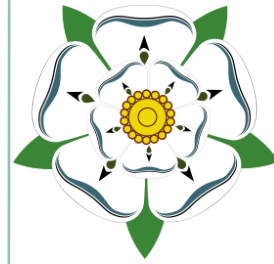
- A baseline is be a single work product, or a set of work products that can be used as a logical basis for comparison
- A baseline may also be established as the basis for subsequent activities
- A known point in time from which progress can be measured



The Project Baseline



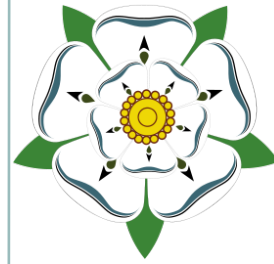
= Baseline



Iteration Baselines

- In iterative projects (AA SDLC) baselines may be created at the start of each iteration
 - The same way the a ship crosses the ocean
- Velocity (and direction) can be measured and adjusted
- Burn-down charts will be covered later

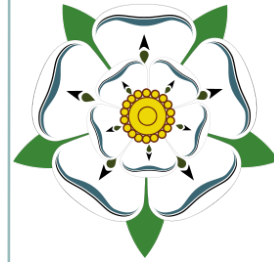




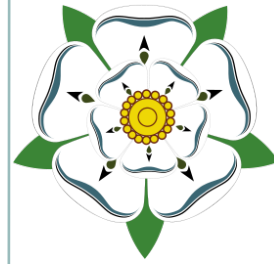
What to Track

- The choice of metrics to collect for a project will vary with the type and size of project as well as the time in the lifecycle
- Only collect metrics that provide value
- Beware of the Heisenberg uncertainty principle
 - You may get what you measure

Using Metrics

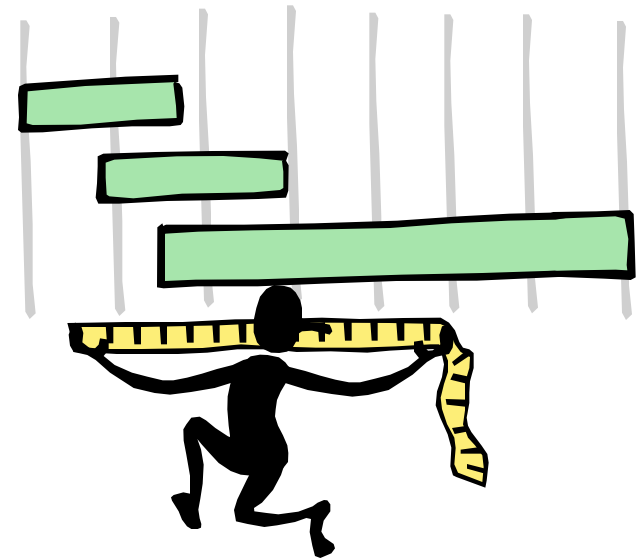


- A measurement plan should be developed early in the project
 - Introducing metrics late will not produce reliable results and will decrease morale
- During the project the project manager will
 - Collect metrics
 - Analyze the results
 - Formulate action plans if needed
 - Publish the results to team and stakeholders

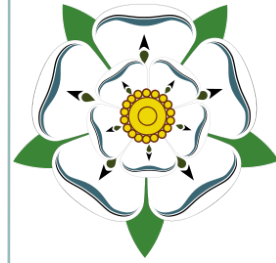


Example Metrics

- Tracking time spent is only valid when combined with work completed
 - We will discuss Earned Value later
- Defects detected and fixed
- Functionality completed
 - Function points
 - Use cases
 - User Stories
- Not Lines of Code - please!

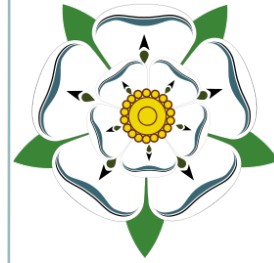


Time Tracking

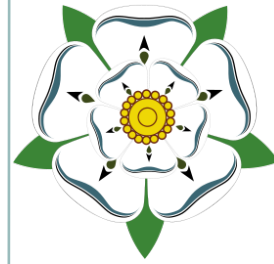


- The easiest and most common metric to collect
 - Relatively inexpensive
 - Can be extremely accurate
- Can be compared against plan
- Can be used to adjust staffing
 - Or scope
- Beware of being seen as “big brother”

Tracking Levels

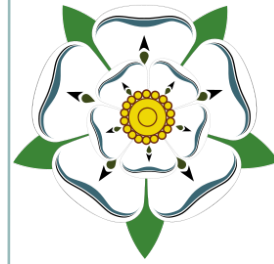


- Task level
 - The least-detailed level at which you can track progress
 - The task is the smallest unit for which you can update work
 - Measure the total labor required to complete a task
- Assignment level
 - Provides more tracking details, but you must assign resources to tasks
 - At this level, you can see tasks that have one or more resources assigned to them, each associated with work and cost values



More Tracking Levels

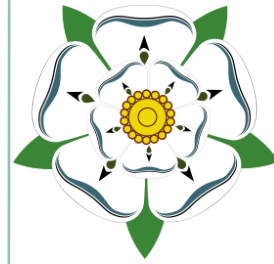
- Totals to Date
 - Tracking the aggregate cost or work of a task or an assignment up to the current date
 - For example: a resource worked 23 hours on an assignment since the assignment began
- Progress by Time Period
 - Tracks work completed in a given time span
 - Good for measuring progress against schedule
 - Can be used to track staffing against plan



Analyze the Metrics

- Indicators are generated from the data collected
 - The raw data says very little
- Establish thresholds and trigger associated action items
- Look at trends
 - Can be early indicators of future problems



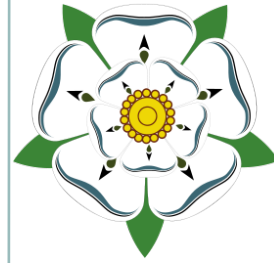


Distribute the Information

- All team members and stakeholders should receive the results
- Information is distributed
 - Through regular progress reports
 - According to the communication plan
- Ensure accurate data
 - And accurate interpretation



Summary



- Project tracking involves measurement
- Metrics should be collected, analyzed and published for all projects
- Decide early on the type of metrics to be collected and tracked
- Establish guard bands, variance triggers and correction plans
- Collect only what can be used