

Agile Project Management

Much Ado About Agile 2006

The Agile Vancouver Conference

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Why Talk About Agile Project Management?

- Isn't it just the same as the project management we already know?
- **No!**
- Agile Projects **are** different:
 - The team dynamics are different
 - The mechanics are different
 - The role of the Project Manager is significantly different

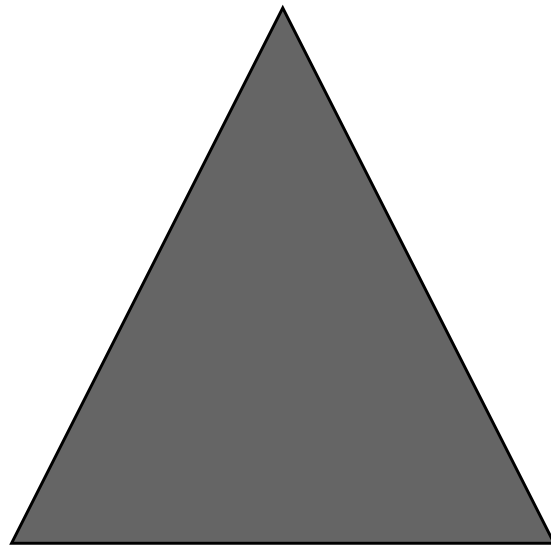
Characteristics of Agile Projects

- Envision-Explore-Adapt vs. Plan-Do mindset
- Software is built and tested frequently
- Working software is developed in a series of short iterations
- Plans are based on delivering packages of small “units of change” at each iteration
- Scope is selected for each iteration to deliver the best business value, balancing business need vs. technical feasibility
- Keep things (product and process) as simple as possible
- Incorporate learning & respond empirically

Scope Must Be Negotiable

Traditional

Functionality



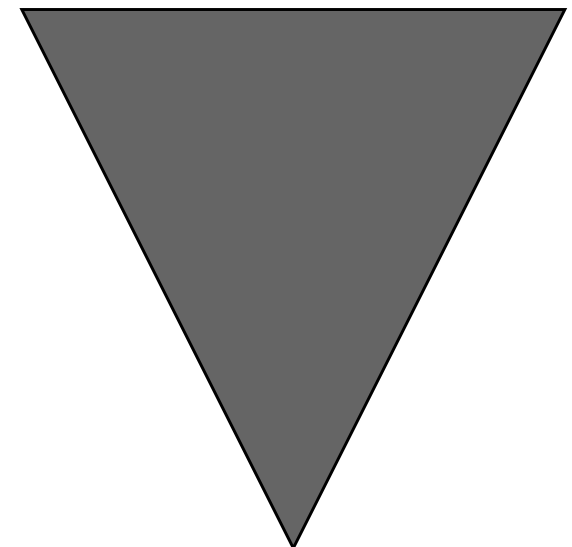
People

Time

Agile

Time

People



Functionality

← **Fixed** →

← **Variable** →

Critical Success Factors

- An Agile project approach works best when you have:
 - Requirements that are uncertain or volatile
 - A motivated, experienced, and disciplined development team
 - Actively involved and committed customers
 - Application evolution vs. build-to-specification development strategy
 - Changes are relatively cheap and easy to implement
 - Management that buys in to the concept

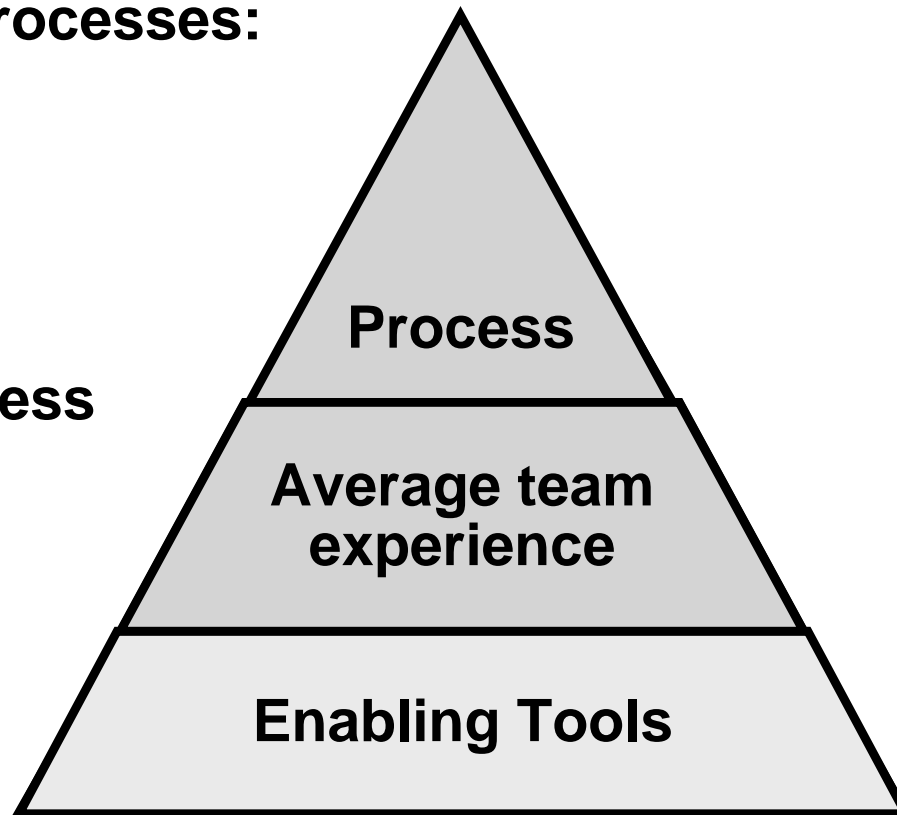
Team Dynamics - Self-organization

- Everyone in the team contributes to the outcome
- Each team member applies their expertise to project problems as appropriate
 - First, the Team works out what need's to done to achieve the goals
 - Then, Individual team members “sign up” for their share of the work and get on with it
- The PM's job is to keep the team honest and focused on overall project goals
- Where is there room for the old-school PM assigning tasks?

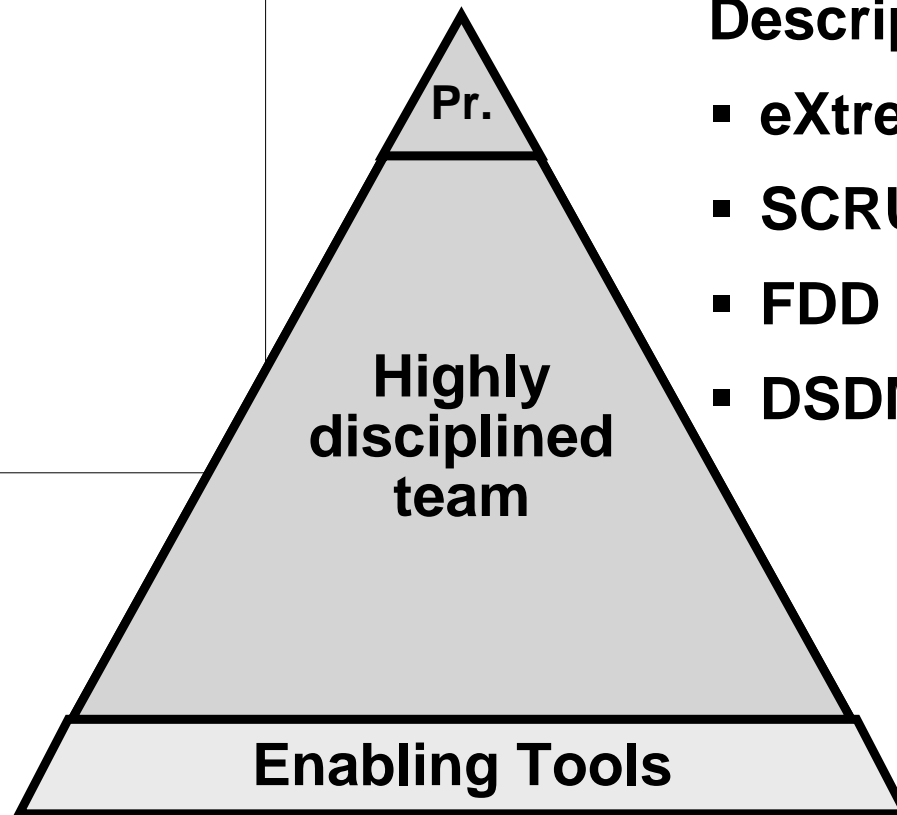
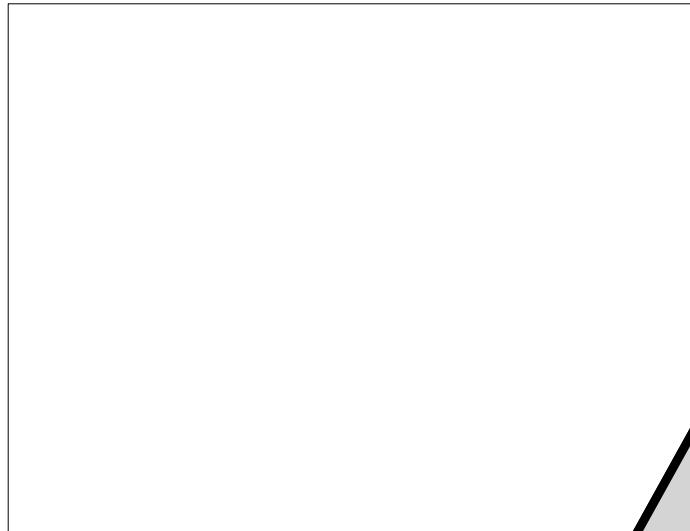
Why Is Culture So Important?

Prescriptive processes:

- CMMI
- ISO 12207
- ISO 9001
- Unified Process



Why Is Culture So Important?



Descriptive processes:

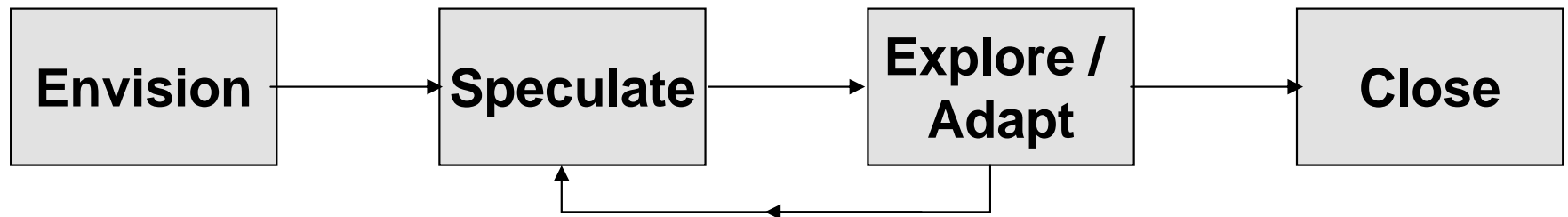
- eXtreme Programming
- SCRUM
- FDD
- DSDM

You Can't Do Agile, You Have To Be Agile!

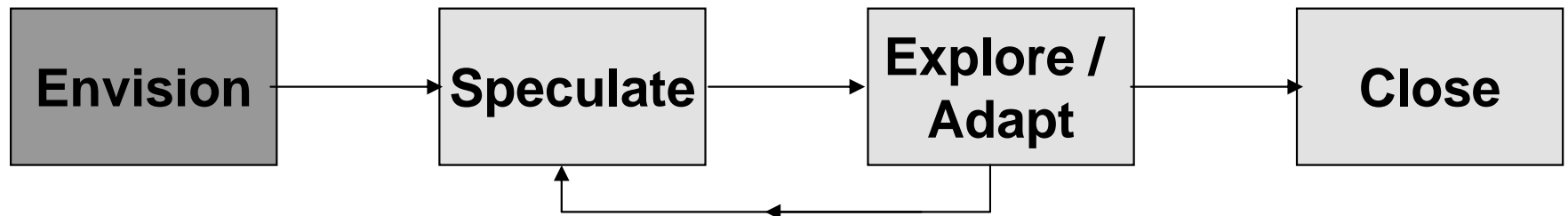
- Having an Agile culture means:
 - Focused on delivering real business value at all times
 - Full-time customer representation
 - Balance of powers between development and business
 - Common sense and realism
 - Commitment & Integrity
 - Self-organizing, self-disciplined teams
 - F2F collaboration as much as possible
 - Shared accountability for success and failure

The Anatomy Of An Agile Project

- Four phases, analogous to the traditional PMI model (Initiate – Plan – Execute – Close-Out)

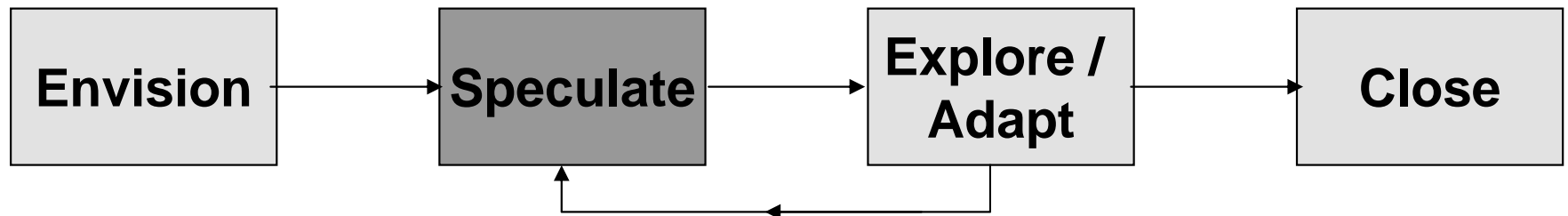


The Envision Phase



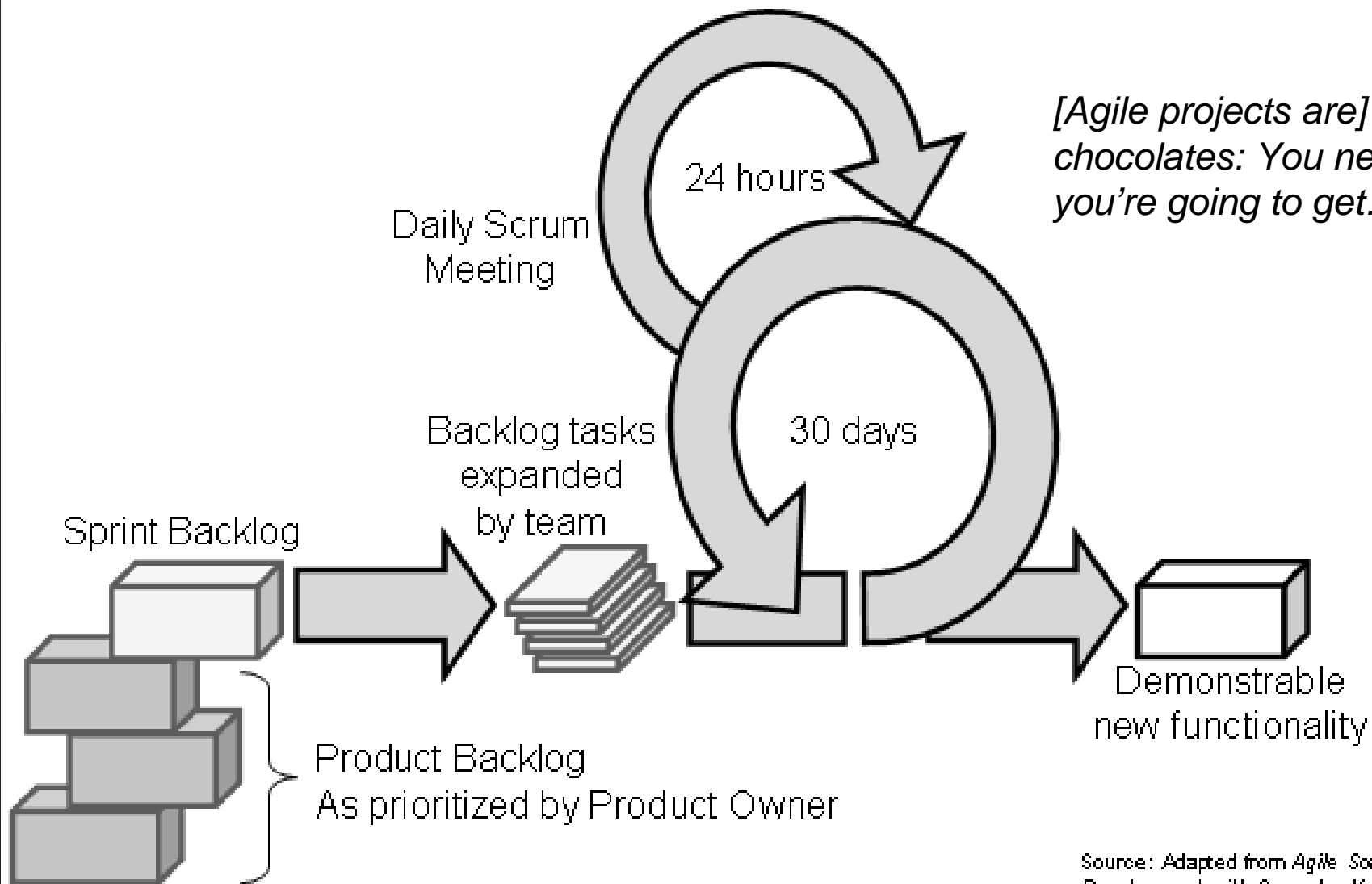
- Establishes the overall direction and priorities to guide project decision-making
- Cool ideas:
 - The Vision Box
 - The Elevator Test Statement
- Focus on building a common understanding across the entire team

The Speculate Phase



- Produce a refined list of scope items
- Develop a Release Plan that shows how the product will evolve over several iterations
- Develop detailed Iteration Plans for the next Iteration based on current business priorities
- Update Release Plans at the conclusion of each Iteration

Agile Project Planning



[Agile projects are] like a box of chocolates: You never know what you're going to get...

- Forrest Gump

Source: Adapted from *Agile Software Development with Scrum* by Ken Schwaber and Mike Beedle.

The Balance Of Powers

- Business people (the Customer) make the business decisions
 - Dates
 - Scope
 - Priorities
- Technical people make the technical decisions
 - Estimates
- Coordinate a collaborative process where we bring these two areas of team strength together into a unified purpose

Example - Release Plan

Story	Time Estimate (Ideal Weeks)	Assigned Iteration	Assigned Release
Find lowest fare	3	2	1
Show available flights	2	1	1
Sort available flights by convenience	4		2
Purchase ticket	2	1	1
Do customer profile	4		
Do simple customer profile	2	1	1
Do full customer profile	3		
Review itineraries	1	2	1
Cancel itinerary	2		2
Print immigration paperwork	4		
Show hotels	3		2
Show hotel availability	2		2
Offer sophisticated hotel search	3		
Book a hotel	1	1	1
Provide hotel/spaceline programs	3		
Offer airplane hire	3		

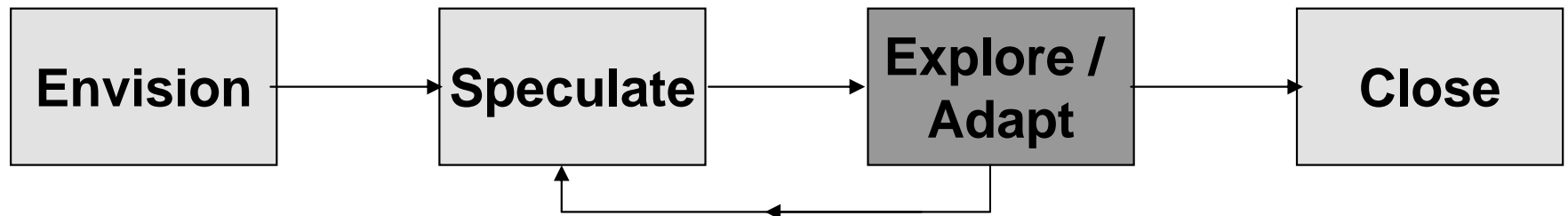
Example Iteration Plan

Story	Time Estimate (Ideal Days)	Assigned To:
Find lowest fare		
Alternative fare finder object	2	KB
find candidate fares by date range	1	MF
Update planet ports to find alternatives	1	KB
Find candidate fares for alternative ports	1	KB
Special offers - major space lines	2	MF
Special offers - low-price space lines	3	RJ
UI for low fares	1	RJ
Review itineraries		
Simple UI display of itineraries	2	WC
Display detail for one itinerary	2	RJ
Book a hotel		
Hotel booking interfacer	1	MF
Interface to IHAB	2	MF
Interface to hiHat	2	MF
Interface to Hilltown	2	WC
Interface to Woodstar	1	RJ
(Show hotels - IHAB by city)		
Query IHAB for hotels in named city	2	WC
UI for named city display	1	WC
Other		
UI cleanup	2	KA
Network performance improvement	2	KB
Investigate using IPv84	1	KB

Never Slip The Dates

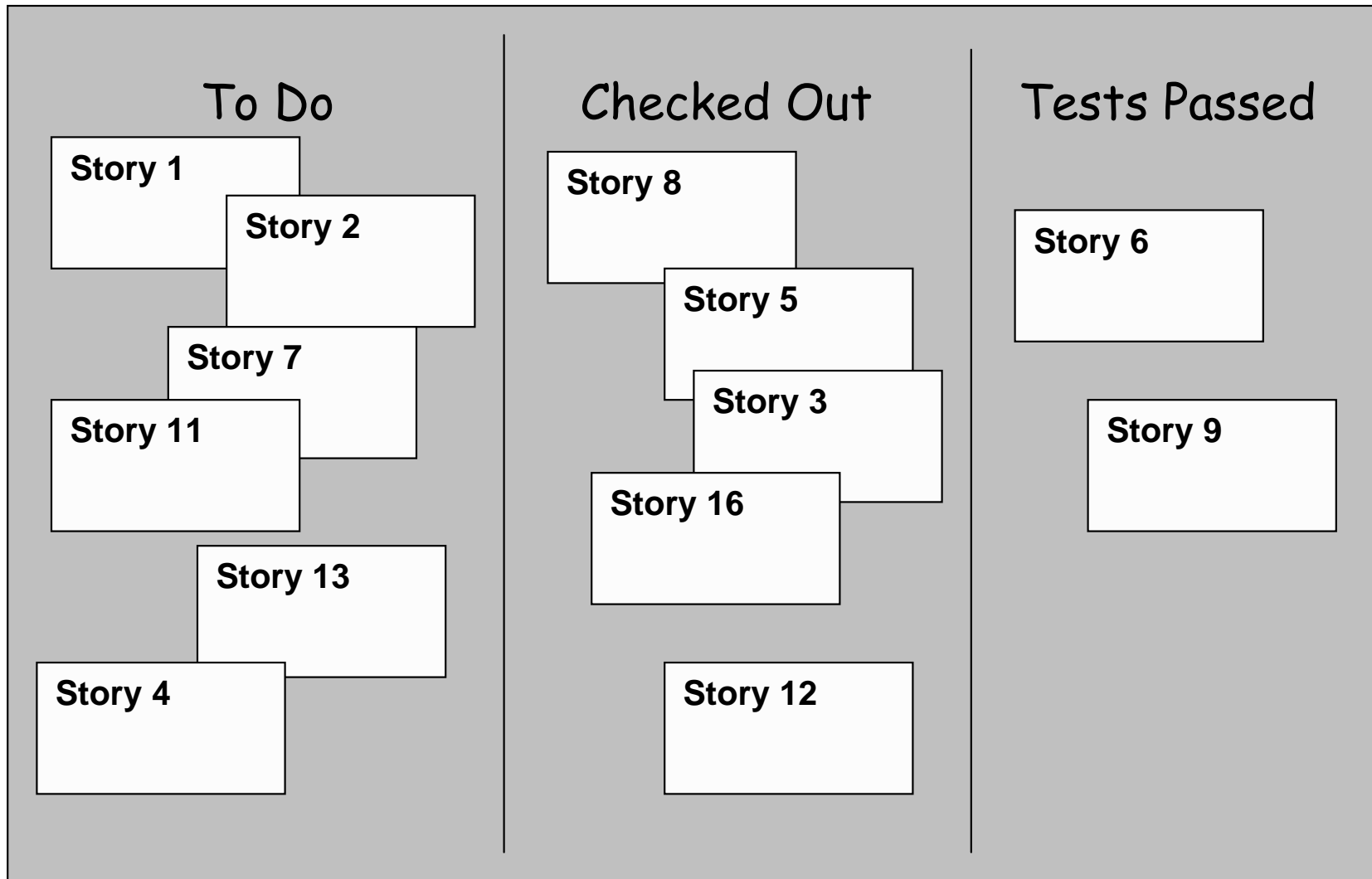
- There isn't enough time...
- ...means you have taken on too much work to do!
- Your only (realistic) options are:
 - Reprioritize and choose not to do some things
 - Reduce the size of some of things you still have to do
 - Add someone else to the team to do some of the things you were supposed to do
- Slipping the date is too easy to do, and leads to lost credibility, and bad habits

The Explore / Adapt Phase

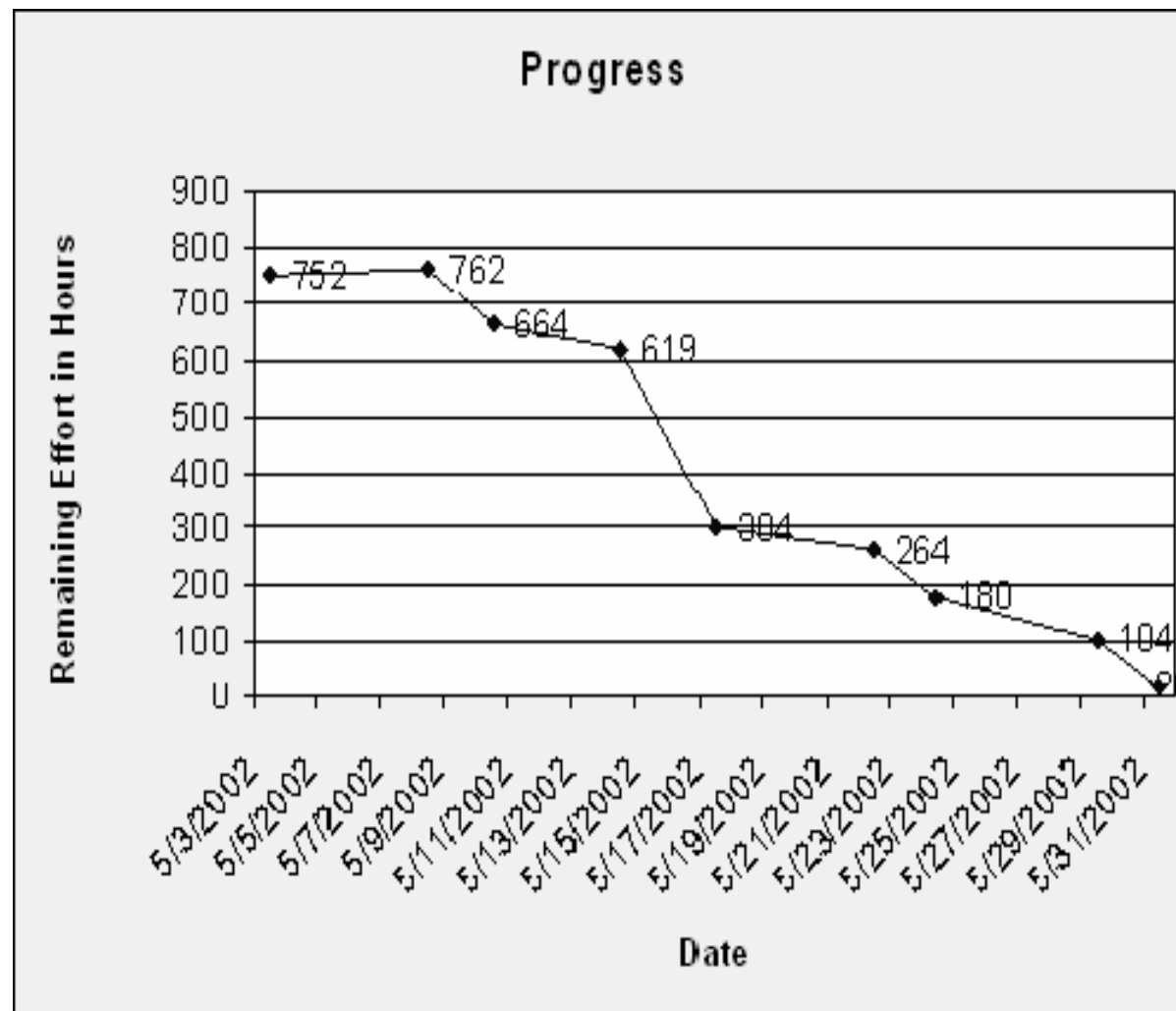


- Explore / Adapt is how agile teams execute
 - Develop iteratively
 - Demonstrate completed feature sets to the Customer
 - Learn from iteration experiences and adjust future plans
- The PM focuses the team on convergence
 - Daily team meeting
 - Eliminate roadblocks
 - Information radiators

Kanban boards

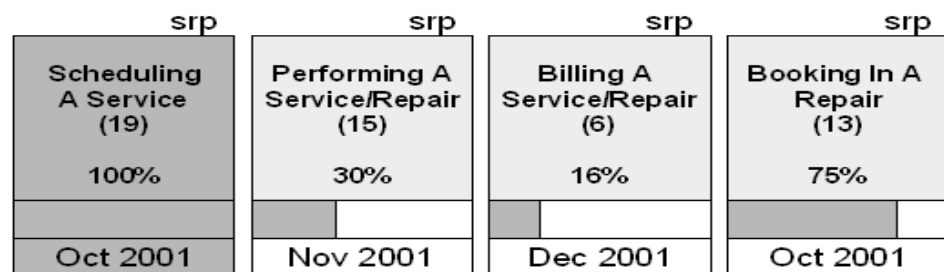


The Burndown Chart

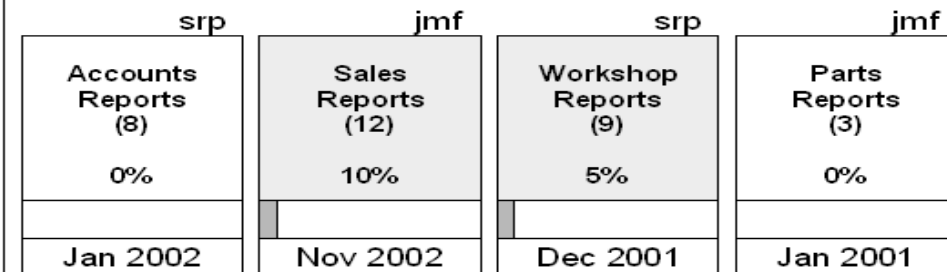


Parking Lots

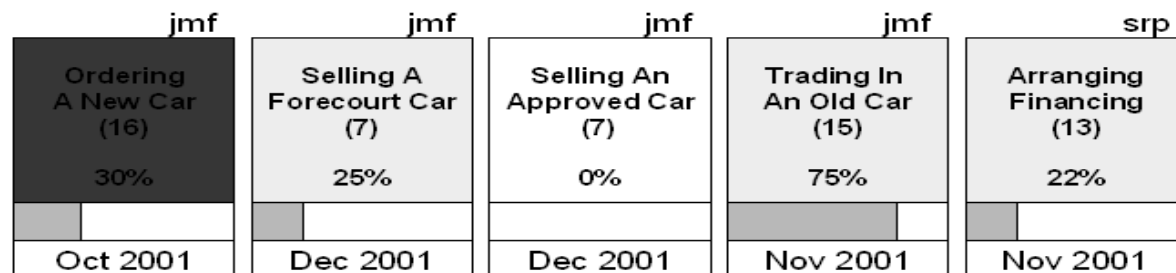
Workshop Management (WM)



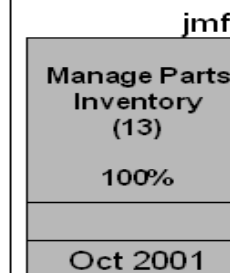
Franchise Management (FM)



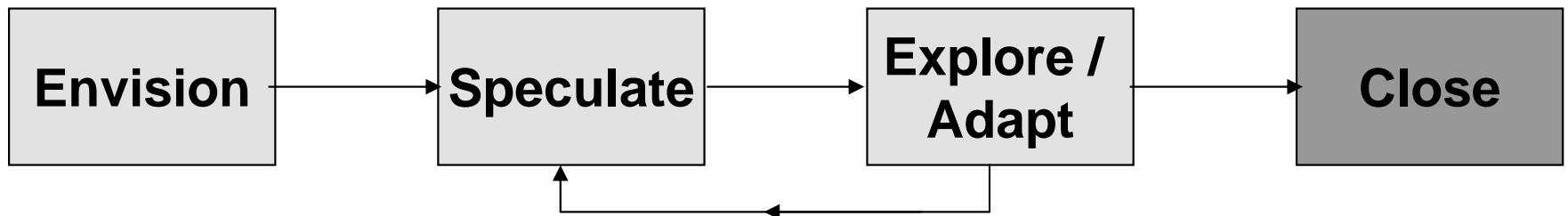
Sales Management (SM)



Parts Management (PM)



Purpose Of The Close Phase



- The Close Phase brings an orderly close to the project.
- This is one area where Agile and traditional PM are the same
- The key activities are:
 - Celebrate success
 - Clean up open items
 - Capture lessons learned

The Successful Agile Project Manager

- Leadership-Collaboration vs. Command-Control
- Managers – cope with complexity
 - Plan and budget
 - Organize and staff
 - Track and control
- Leaders – cope with change
 - Set direction
 - Align people
 - Enable motivation

Agile Project Leadership

- The Agile Project manager is a leader and facilitator who:
 - Ensures the project team has a productive work environment
 - Ensures the team is collaborating effectively
 - Removes roadblocks promptly
 - Insulate team from external noise during iterations
 - Ensures timely decisions are made
 - Monitors and communicates progress - information radiators
 - Works with the customer and team to adjust commitments if necessary

Questions?