

# Agile Contracts



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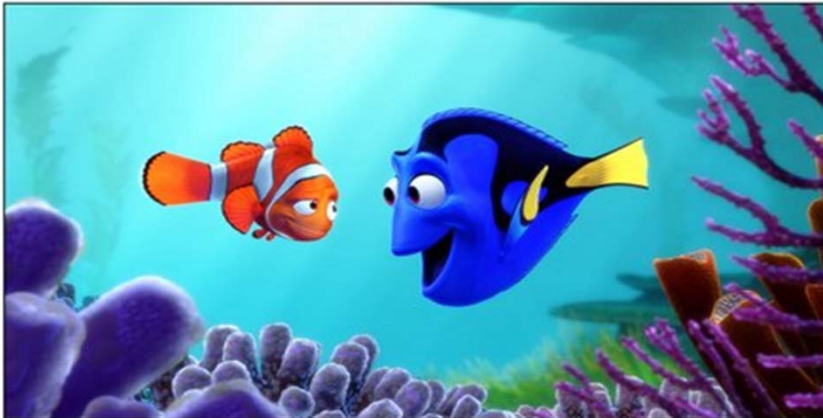
# NK Shrivastava, PMP, RMP, ACP

## RefineM

Helping organizations turn their project management capability into a *competitive advantage*

- ▶ CEO/Consultant since Dec 2011
  - Agile Coaching/Adoption
  - Project Management/ Process Improvement Consulting and Training
  - Project Management Toolkits (for PMs, Executives and Agile Practitioners)
- ▶ Former Board Member – SWMO PMI Chapter

My professional journey b/f RefineM



- ▶ 20+ years of Successful Project Leadership
  - Led 100s of projects of all sizes, successfully
  - Recovered many projects, saved millions of \$
  - Implemented numerous process improvements
  - Coached/mentored 100s of PMs, and some executives

# Agenda

1. About You
2. About Myself
3. Agile Contracts
  - a. Overview of Agile and Contracts
  - b. What needs to be in an Agile contract?
  - c. Types of Contracts
  - d. Example of Agile Contracts
4. Q & A

# Your Expectations

What are your expectations from this webinar?

Why are you here today?  
*Other than Networking & PDUs*



# Agile Contracts



- Overview of Agile and Contracts
- What needs to be in an Agile Contract?
- Types of Contracts
- Examples of Agile Contracts
- Q&A



# Agile Contracts

- How long have you been working on Agile projects?



# Waterfall vs. Agile



## Waterfall

## Agile

Fixed scope. Time/cost estimated

Fixed time/cost. Flexible scope

Clear picture of the end product

Product evolves over time

Product over process

Process over product

Delivery at the end

Continuous delivery throughout

Change requests controlled/resisted

Changes welcomed, even late

# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

**Individuals and interactions** over processes and tools

**Working software** over comprehensive documentation

**Customer collaboration** over contract negotiation

**Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

*Was developed in 2001 by 17 agile advocates in Snowbird, UT*

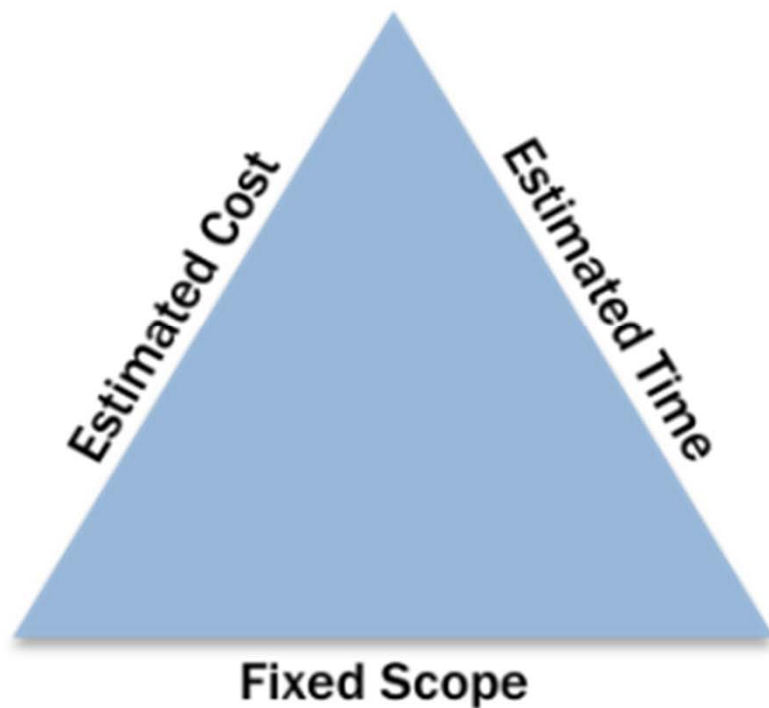
# Agile Twelve Principles

1. **Satisfy the customer thru early and continuous delivery**
2. **Welcome changing requirements even late in development**
3. **Deliver working software frequently a couple of weeks/months**
4. **Work together daily** (business people and developers)
5. **Motivated individuals**, build projects around them, and give them freedom
6. **Face-to-face conversations** is the most efficient and effective method
7. **Working software is the primary measure of progress**
8. **Sustainable development** i.e. maintain a constant pace indefinitely
9. **Continuous Attention** to technical excellence & good design enhance agility
10. **Simplicity** – the art of maximizing the amount of work not done – is essential
11. **Self-organizing teams** deliver the best architectures, requirements, and designs
12. **At regular Intervals** the team reflects on how to become more effective

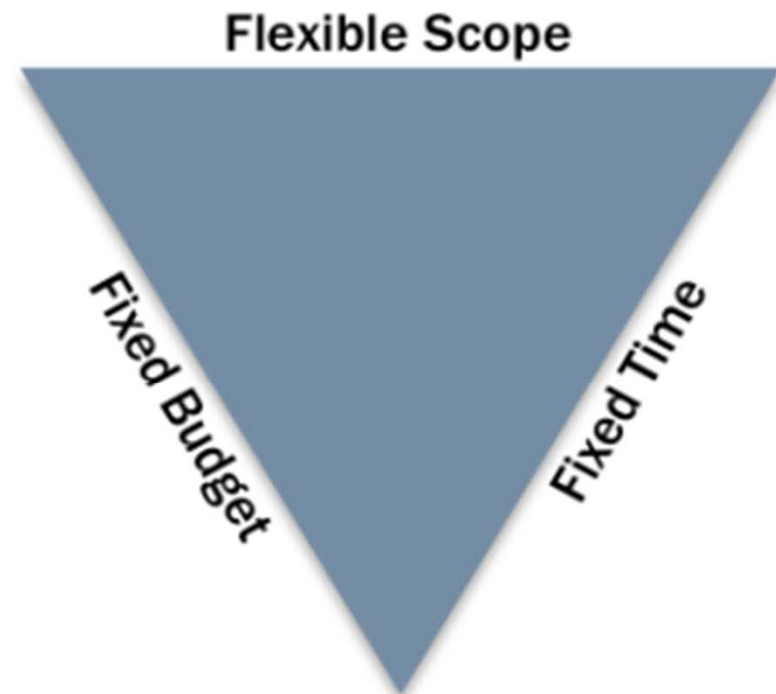
# Waterfall Vs. Agile

## Flexible on scope/features

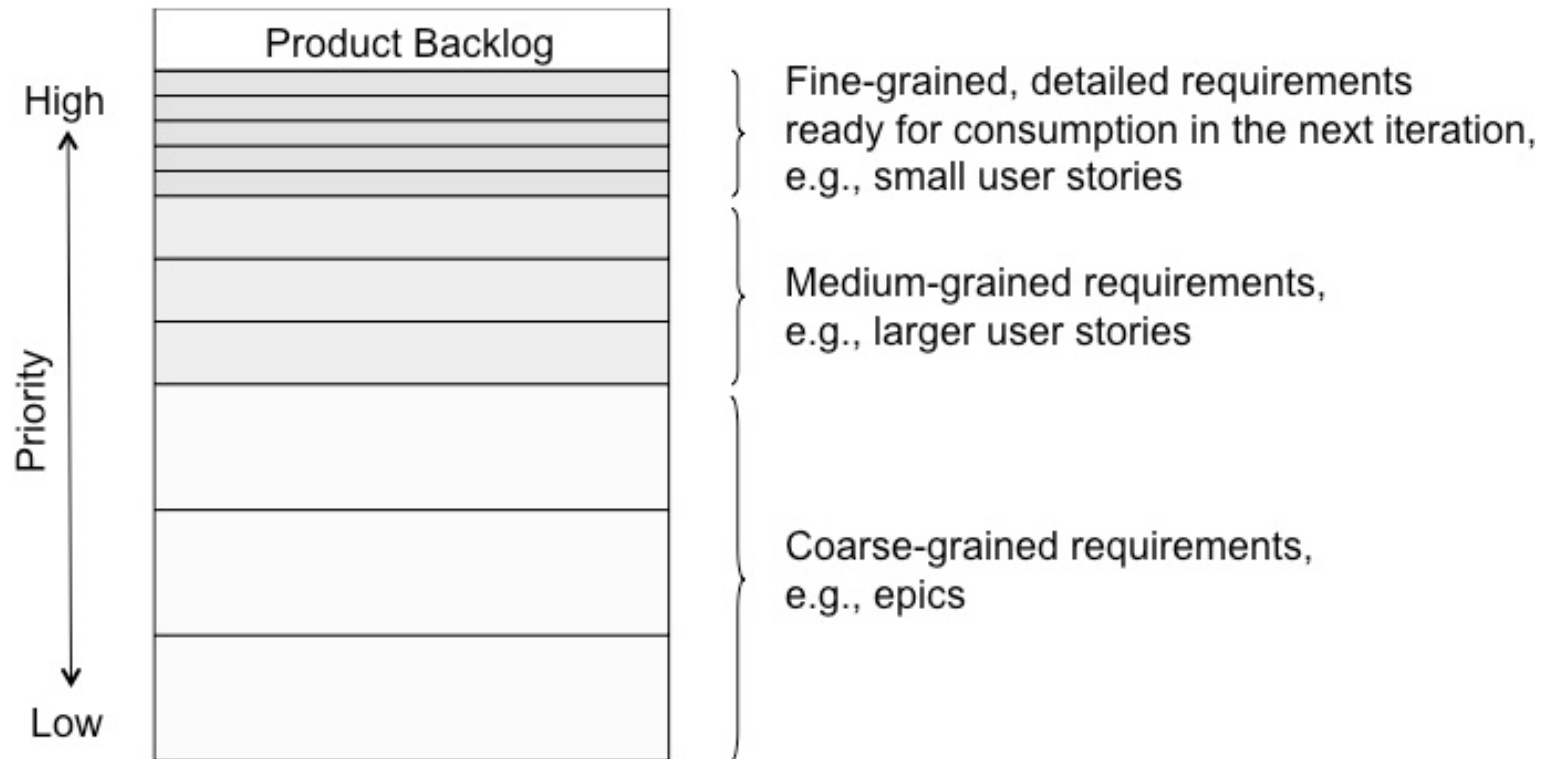
### Traditional



### Agile/Time-boxed

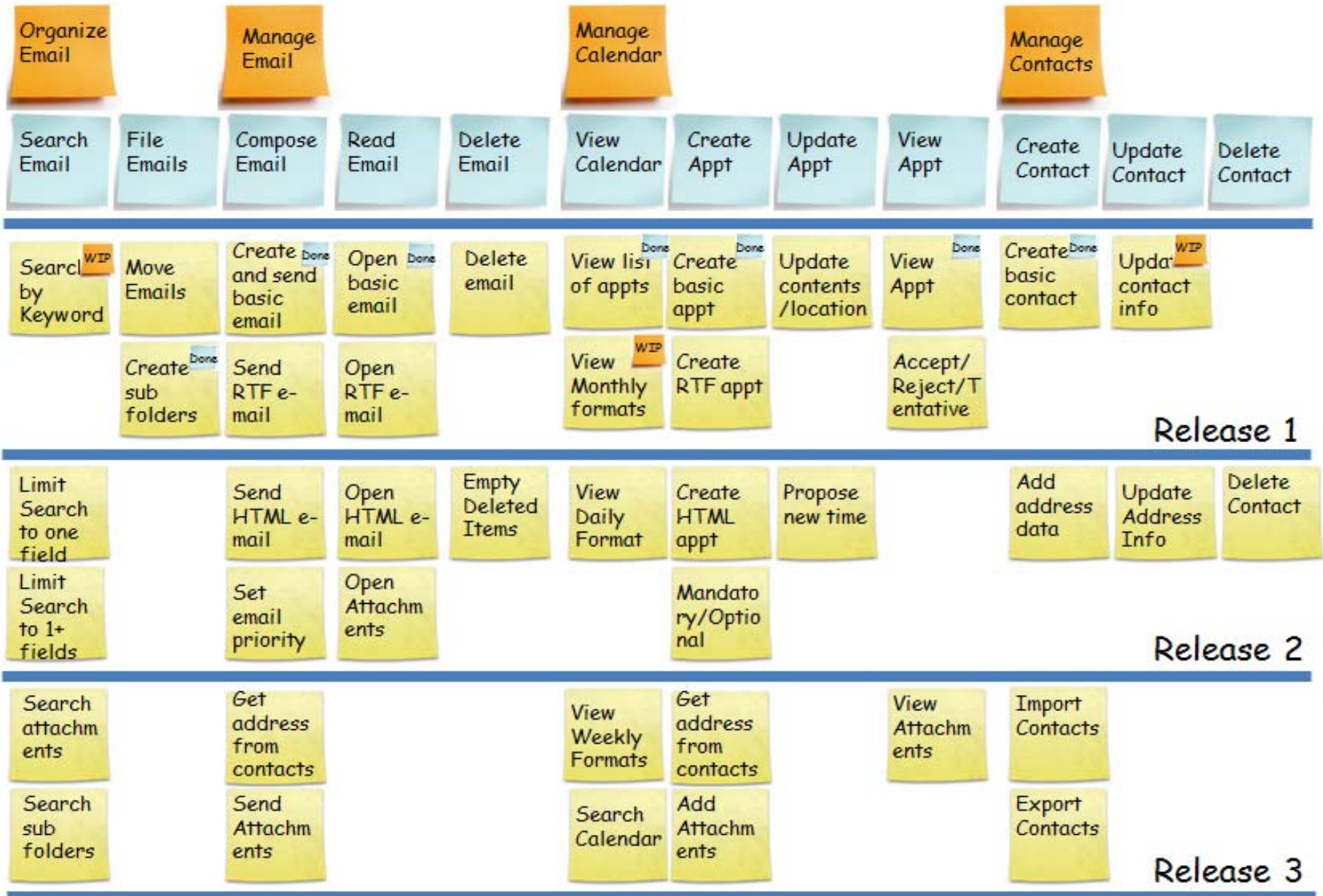


# Product Backlog





# Story Mapping



# What Is A Contract?

- \* Three things needed for a procurement relationship:
  - ✓ Buyer
  - ✓ Seller
  - ✓ Contract
- \* A contract defines the relationship between buyer and seller and what each will receive as part of the deal.



# Why a Contract?

- \* Set the rules of engagement
- \* Share risks
  - ✓ Neither side should take on too much or too little risk
  - ✓ Otherwise the contract is not fair
- \* Build trust
  - ✓ Always look for ways to build trust
  - ✓ Helps in short-term as well as in long-term

# Benefits of Agile

- \* Customers get immediate, constant value
- \* Developers form self-motivating teams
- \* Both sides agree on:
  - ✓ Fixed cost and time (boxed)
  - ✓ Flexible scope – changes are expected, even late in the project
  - ✓ Collaboration – throughout the duration of the project

**What needs to be in place for this to work?**  
**A solid Agile contract**



# Critical Success Factors for Agile

- \* Flexibility on scope
- \* Emphasis on early, continuous delivery
- \* Welcome changes
- \* Emphasis on how project is run
- \* Collaboration between customer and developer
- \* Constant feedback

**How does the Agile contract meet these challenges?**

# What needs to be in an Agile Contract?

- \* Flexibility
- \* Commitment
- \* Risk-sharing
- \* Defined checkpoints



# Flexibility

- \* **Flexibility around scope**

- ✓ Allow team to work on highest-priority backlog items

- \* **Flexibility around process**

- ✓ Emphasize their process, not product
- ✓ Length of sprints
- ✓ Number of story points delivered
- ✓ Empowered team





# Risk Sharing

- \* **Both sides need to share risk of:**
  - ✓ Economic / price fluctuations
  - ✓ Cost / time overruns
  - ✓ Unforeseen circumstances



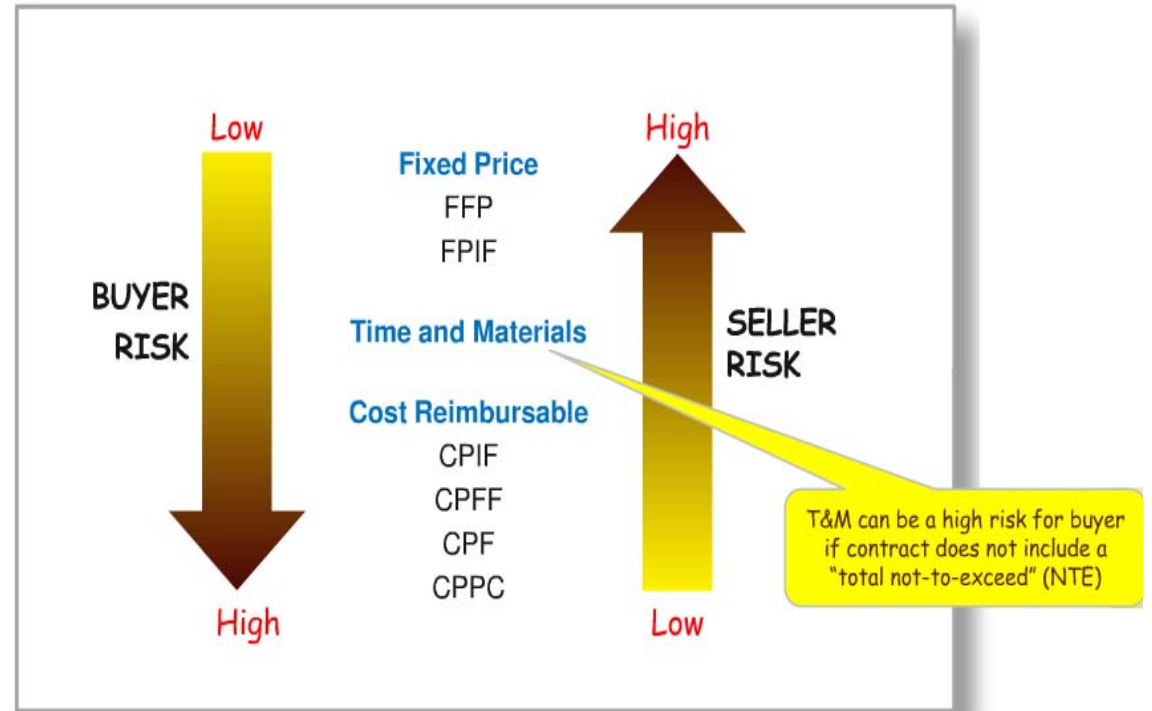
# Defined Checkpoints

- \* **Checkpoints related to sprints**
  - ✓ Is sprint review satisfactory?
  - ✓ Is customer satisfied with work done?
  - ✓ Definition of “Done”.
- \* **Checkpoints related to releases**
  - ✓ Does customer want more sprints or is this enough?



# Major Types of Contracts

- \* **Fixed Price/Fixed Scope**  
(may be Fixed Time too)
- \* **Time and Material (T&M)**
- \* **Cost reimbursable**



**Which one is most suited for Agile projects?**



# Agile Contract Examples



- **Money for Nothing and Change for Free**
- **Graduated Fixed Price**
- **Fixed Price Work Packages**
- **DSDM Contract**
- **Customized Contract**

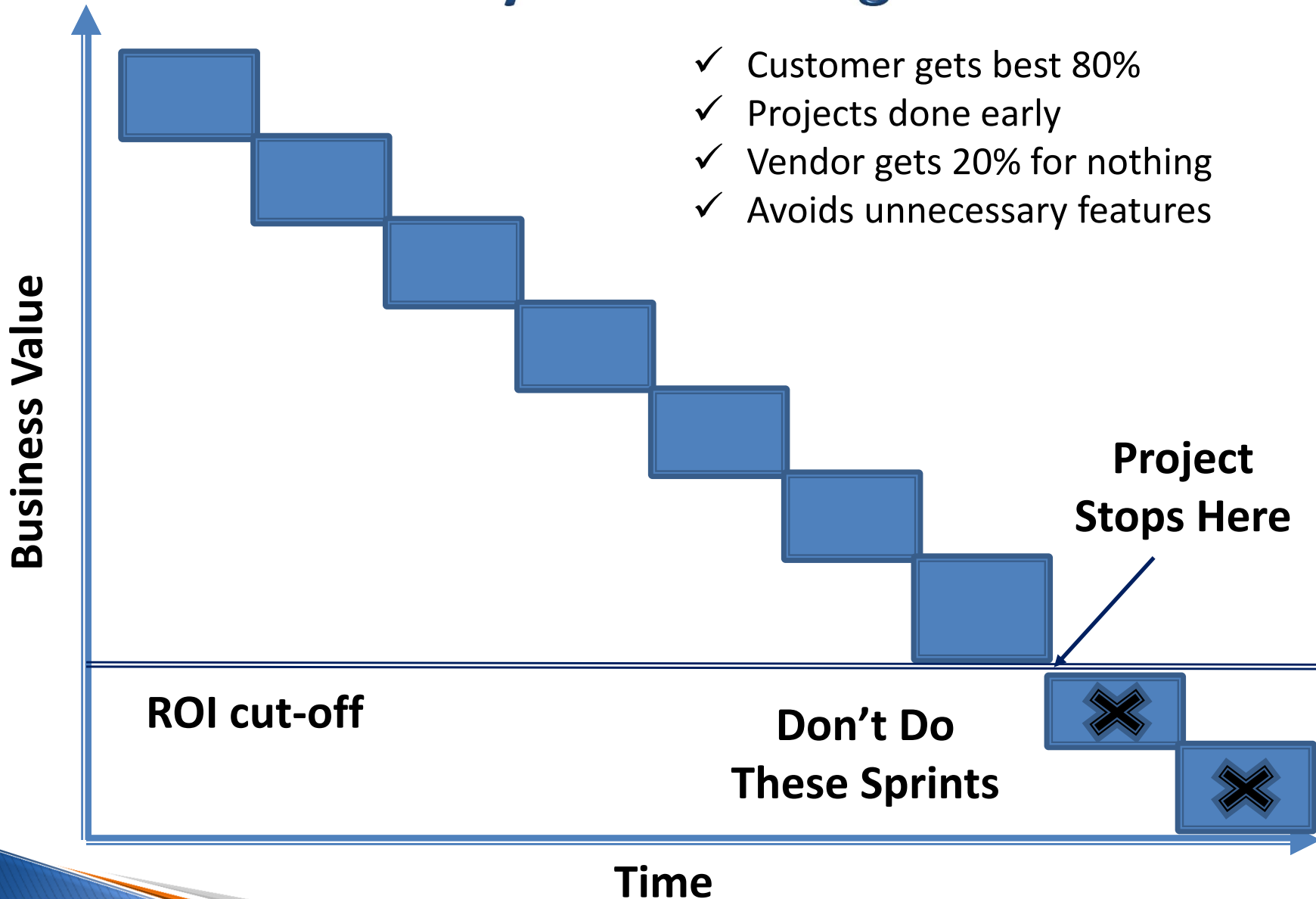
# Money for Nothing And Change for Free

- \* **Standard fixed price**
- \* **Time and materials clause for additional work**
- \* **“Money for Nothing” Option**
  - ✓ Customer can terminate early if ROI of remaining items not sufficient
  - ✓ Vendor gets back 20% of remaining contract value
- \* **“Change for free” option**
  - ✓ Customer can reprioritize backlog at end of iteration
  - ✓ If total contract work not changed, these changes are free
  - ✓ Customer *must* remain engaged in each iteration

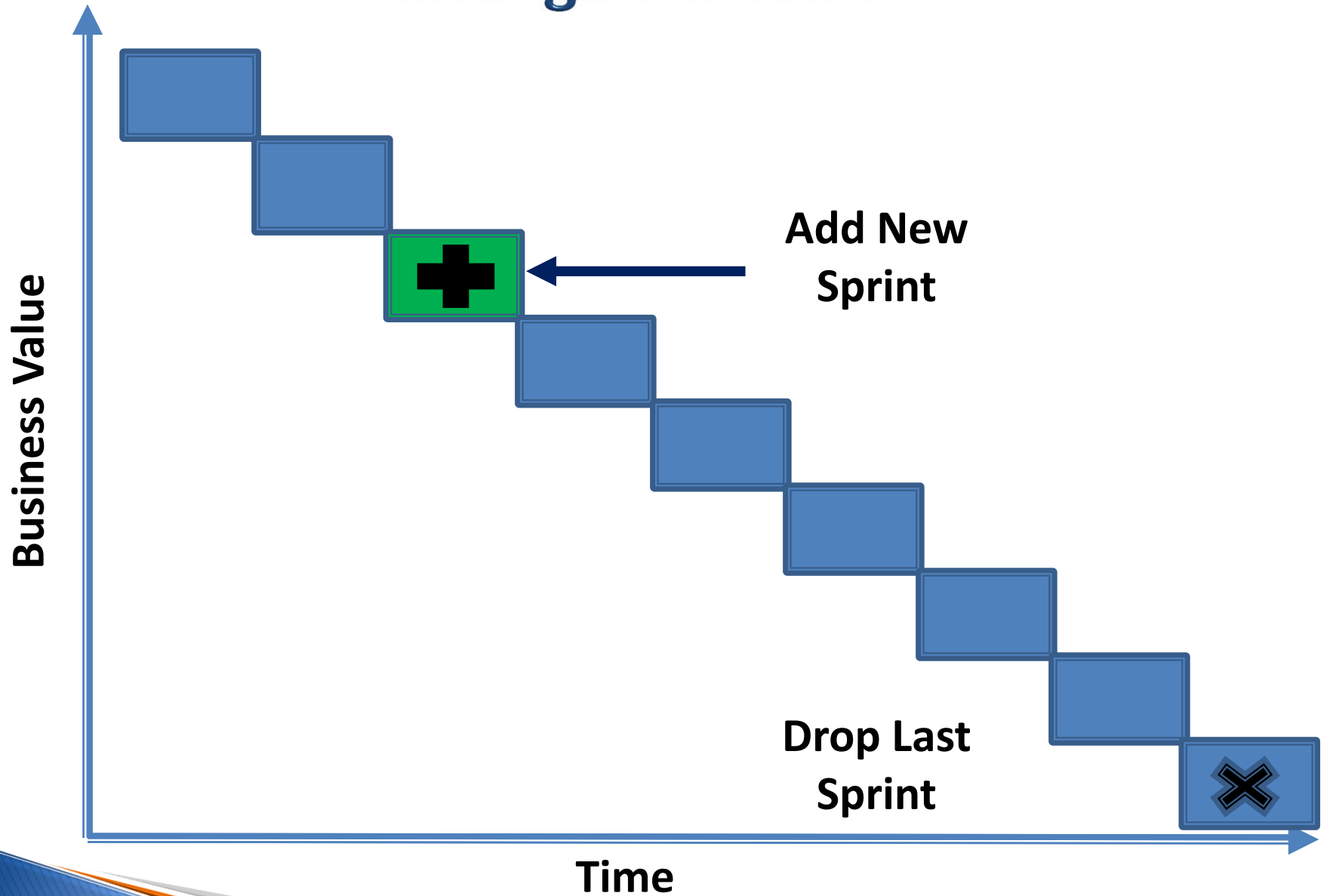
**Sounds pretty good, right?**

*“Money for Nothing, Your Change For Free” Created by Jeff Sutherland*

# Money for Nothing



# Change For Free



# Graduated Fixed Price

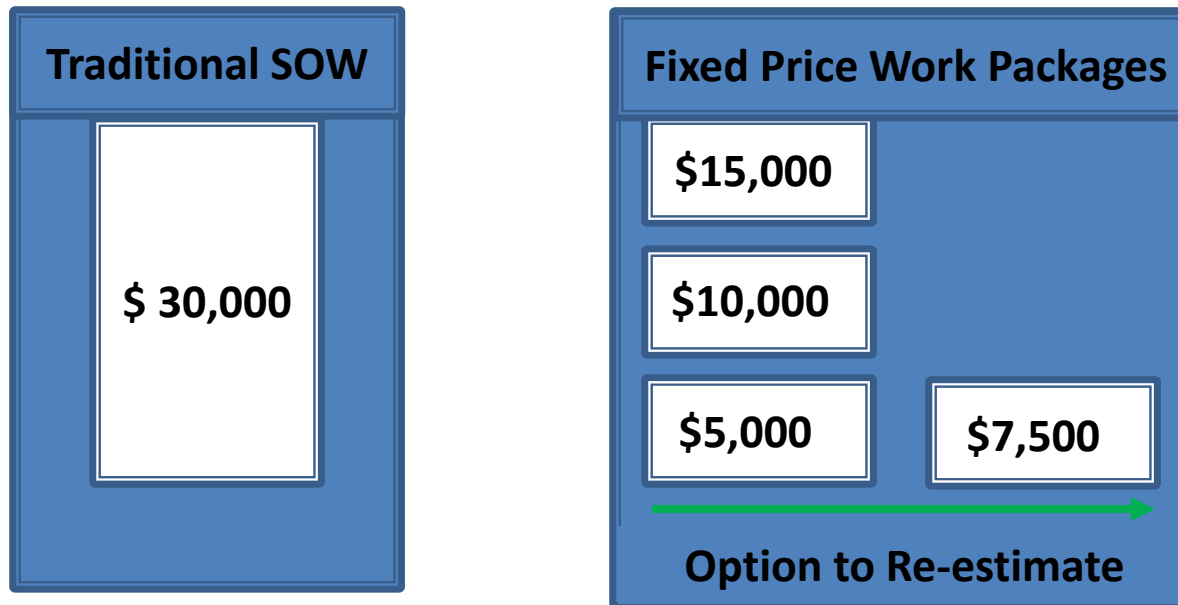
- \* **Hourly rates for supplier differ based on delivery:**
  - ✓ Early: Customer pays supplier for fewer hours, but at a higher rate.
  - ✓ As planned: Customer pays supplier for hours worked at standard rate.
  - ✓ Late: Customer pays supplier reduced rate for the hours worked.

Project Completion	Total Hours Spent	Graduated Rate	Total Fee
Early finish	800	\$120 / hour	\$96,000
As planned	1000	\$100 / hour	\$100,000
Late finish	1200	\$90 / hour	\$108,000

Graduated Fixed Price created by Thorup and Jensen. Adapted from *PMI-ACP® Exam Prep, Premier Edition* by Mike Griffiths, p. 87

# Fixed Price Work Packages

- \* **Fixed price on work package level, not SOW level**
  - ✓ Allows customer and supplier to re-estimate based on new information
  - ✓ Allows smaller scope of estimation for greater precision
  - ✓ Used by Marriott International



Adapted from *PMI-ACP® Exam Prep, Premier Edition* by Mike Griffiths, p. 87

# DSDM

- \* Driving Strategy, Delivering More
  - ✓ Customer, supplier reach consensus on delivered value rather than work off specifications
  - ✓ Detailed contracts comprehensively cover project process
- \* Used primarily in UK, Europe
- \* DSDM.org (DSDM Consortium)



Adapted from *PMI-ACP® Exam Prep, Premier Edition* by Mike Griffiths, p. 87

# Customized Contracts

- \* **Combine elements of all of these**
  - ✓ Customer has flexibility to reprioritize work
  - ✓ No incentive for seller to add lot of contingency costs
  - ✓ Protects both parties
  - ✓ Encourages positive behavior



Adapted from *PMI-ACP® Exam Prep, Premier Edition* by Mike Griffiths, p. 87

# Bottom Line

- \* **Agile contracts need to help development, not hurt**
  - ✓ Emphasize flexibility
  - ✓ Specify collaboration, roles and responsibilities
  - ✓ Define metrics for success



**An effective Agile contract is the base for success**

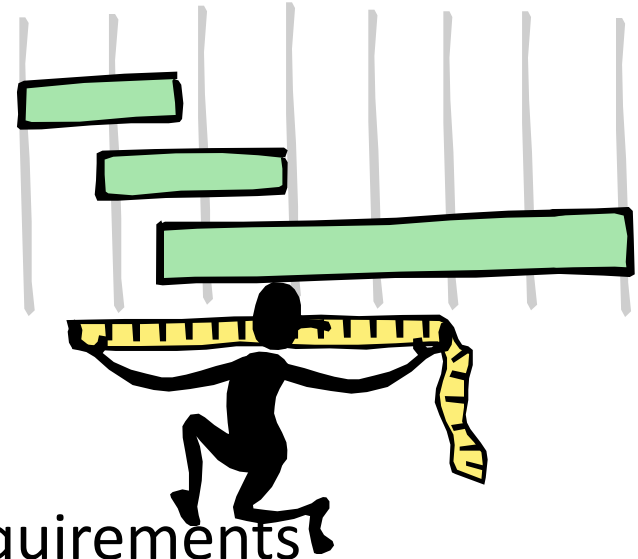
# Metrics

- \* **Velocity**

- ✓ Number of story points per sprint
- ✓ How team is performing

- \* **Defects**

- ✓ Measures quality of the code
- ✓ Also measures understanding of requirements
- ✓ Repair to build ratio



# Tools to Measure

## \* Velocity

- ✓ Burndown chart (sprint level)
- ✓ Burnup chart (release level)

## \* Defects

- ✓ Bug / defect tracking system
  - JIRA
  - VersionOne
  - Other PPM tools
  - Open source/Free such as Bugzilla



# Summary

- \* Agile contracts need to promote trust, flexibility, risk-sharing, and collaboration
- \* Many different options are available for Agile contracts
- \* The examples presented are just a starting point
- \* Define metrics for success and tools to measure



# Q&A

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- ▶ Thank you for attending this presentation
- ▶ Upcoming Agile classes:
  - Agile Planning and Estimating      April 20-23
  - Agile Business Analysis              April 23-24
  - Certified Scrum Master                April 28-29
  - Certified Scrum Prod. Owner        April 30-May 1

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# Questions?



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# Supporting Slides



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# Contracts for Software Development

- \* For software development contracts, contract needs:
  - ✓ The purpose of the project
  - ✓ How it will be run
  - ✓ What to do if things go wrong

**Software development process has special considerations**

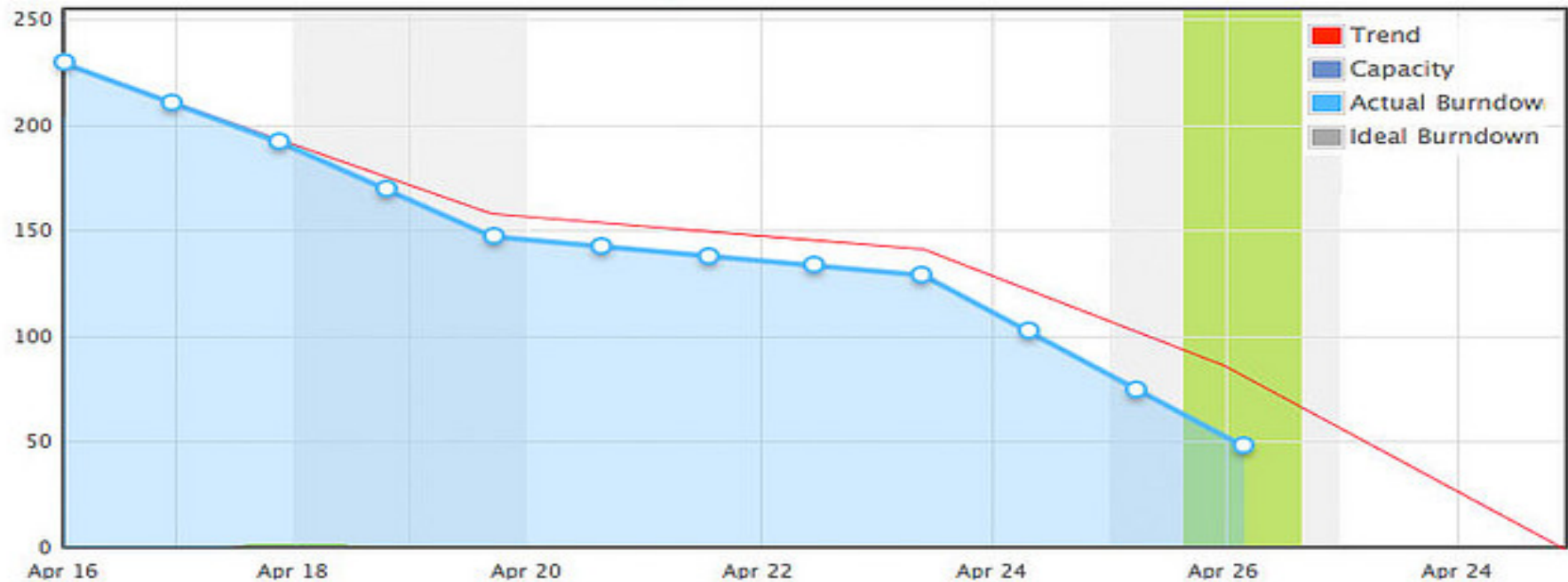
**Contract should also have these**

# Example Burndown Chart

Sprint Backlog for j\_sprint (team: b-team) (displaying some of 2 items)

Start: 16.04.2009 End: 28.04.2009 Status:

Sprint Burndown Chart



# Fixed Price (FP)

- \* Buyer and seller agree on a set price for a defined scope
- \* Incentive Fee (FPIF)
  - ✓ Seller receives incentives for meeting specific performance goals
- \* Award Fee (FPAF)
  - ✓ Award amount is available for meeting performance goals
- \* Economic Price Adjustment (EPA)
  - ✓ Fixed price changes based on economic index factors (e.g. inflation)
- \* Specifics to Agile
  - ✓ Often shorter in Agile
  - ✓ Sometimes covers one sprint

# Time and Materials (T&M)

- \* Time and Material (T&M)
  - ✓ Seller is paid based on labor costs and material costs
  - ✓ Needs oversight to make sure costs controlled
- \* Capped T&M
  - ✓ Suppliers cover their costs up to a fixed cap
  - ✓ Customer doesn't pay more than the cap
  - ✓ Both sides share risk of cost overrun
  - ✓ Good for risk sharing

# Cost-Reimbursable (CR)

## ▶ Cost-reimbursable contracts

- ✓ The seller's cost are reimbursed, plus an additional amount.
- ✓ The buyer has the most cost risk because the total costs are unknown.
- ✓ This form of contract is often used when the buyer can only describe what is needed, rather than what to do.
- ✓ The seller will therefore write the detailed contract statement work.
- ✓ For Agile, important to keep costs under control due to changes.

# Cost-Reimbursable Types

- ▶ Cost Plus Fixed Fee (CPFF)
  - ✓ Buyer pays all costs, but fee is fixed at specific amount
  - ✓ Helps to control costs
- ▶ Cost Plus Incentive Fee (CPIF)
  - ✓ Pays all costs and an agreed-upon fee plus performance incentives
- ▶ Cost Plus Award Fee (CPAF)
  - ✓ Pays all costs with fee based on meeting performance criteria

# IDIQ / Delivery Order

- \* Indefinite Duration Indefinite Quantity / Delivery Order
- \* Another type sometimes used in Agile
  - ✓ Duration may change
  - ✓ Quantity may change
  - ✓ Most flexible
  - ✓ Hard to manage multiple ones at once