

Introduction to Project Management

**The Process of Delivering Value:
Understanding Constraints, Risks, and Uncertainty**

Rick Freedman, Author and Agile Coach

IN THE MISTS OF TIME---



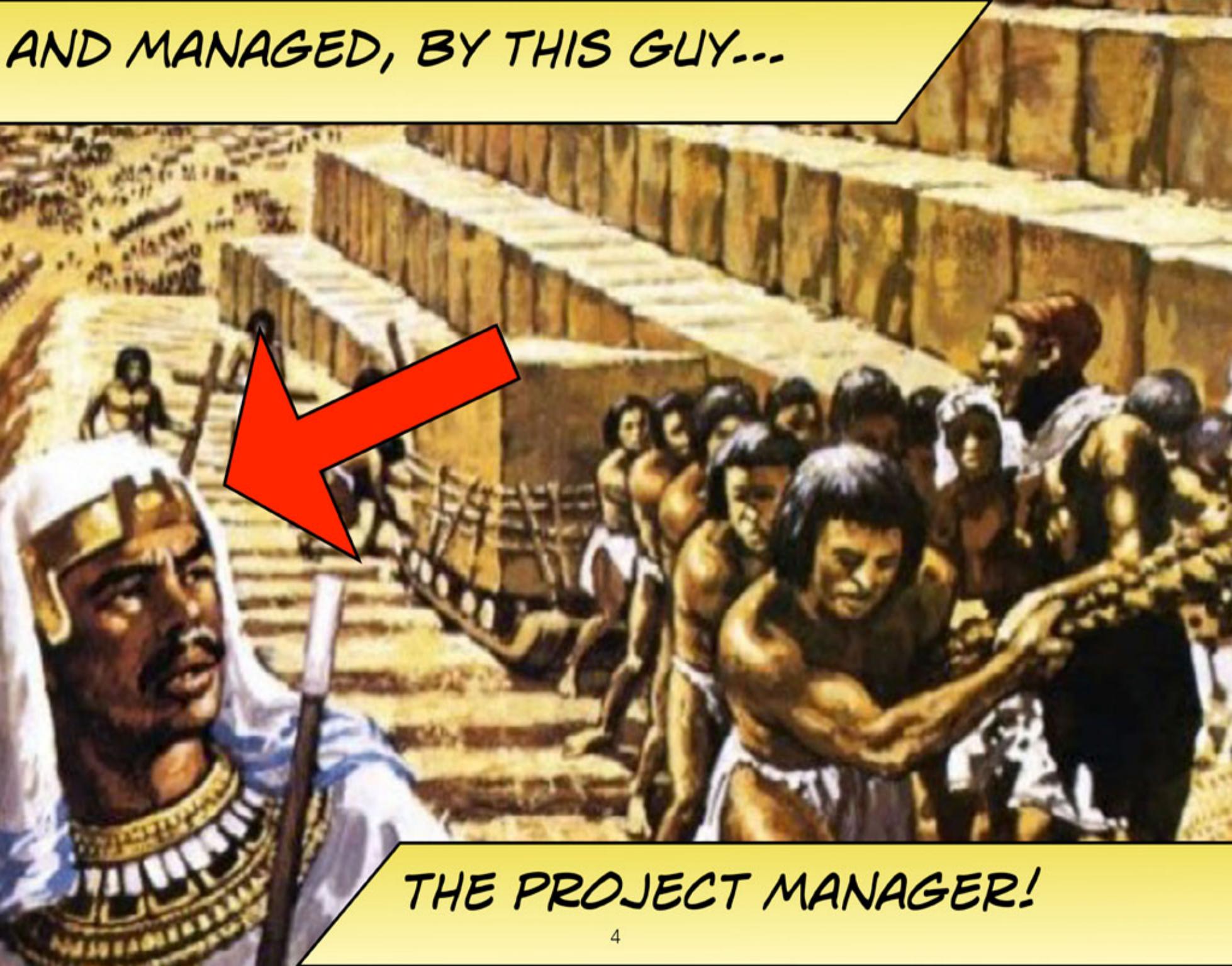
AROSE--THE FIRST PROJECTS!

THE WONDERS OF THE WORLD---



WERE DESIGNED, PLANNED---

AND MANAGED, BY THIS GUY...



THE PROJECT MANAGER!

Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

What is Project Management?

PROJECT MANAGEMENT

The application of knowledge, skills, tools, and techniques to project activities to meet project requirements.

Project Management Institute PM Body of Knowledge

Lightening Round

Warmup Exercise:

In the chat box, in one sentence, tell us about a project you've experienced, or are working on now.

Ideas:

Successes

Challenges

Failures

Feelings

15 minutes total

What is a Project?

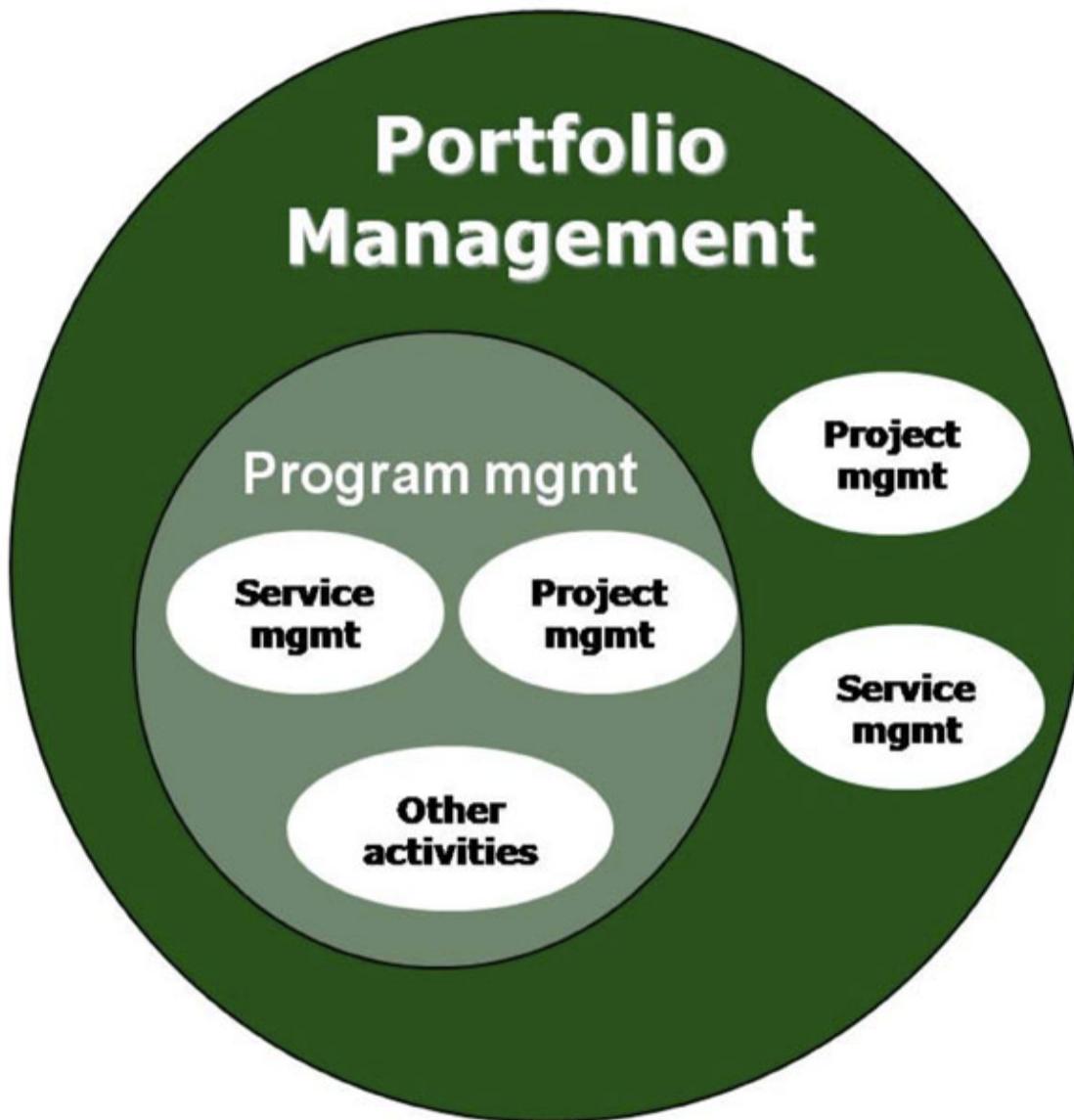
- A project is an activity that :
 - is temporary having a start and end date
 - is unique
 - brings about change
 - has unknown elements, which therefore create risk

Why Project Management?

“The delivery of business outcomes is realized through the success of projects, and in essence that is the way that project management strategies drive organizational success.”

*Source: The Value of Project Management,
a white paper by Project Management Institute*

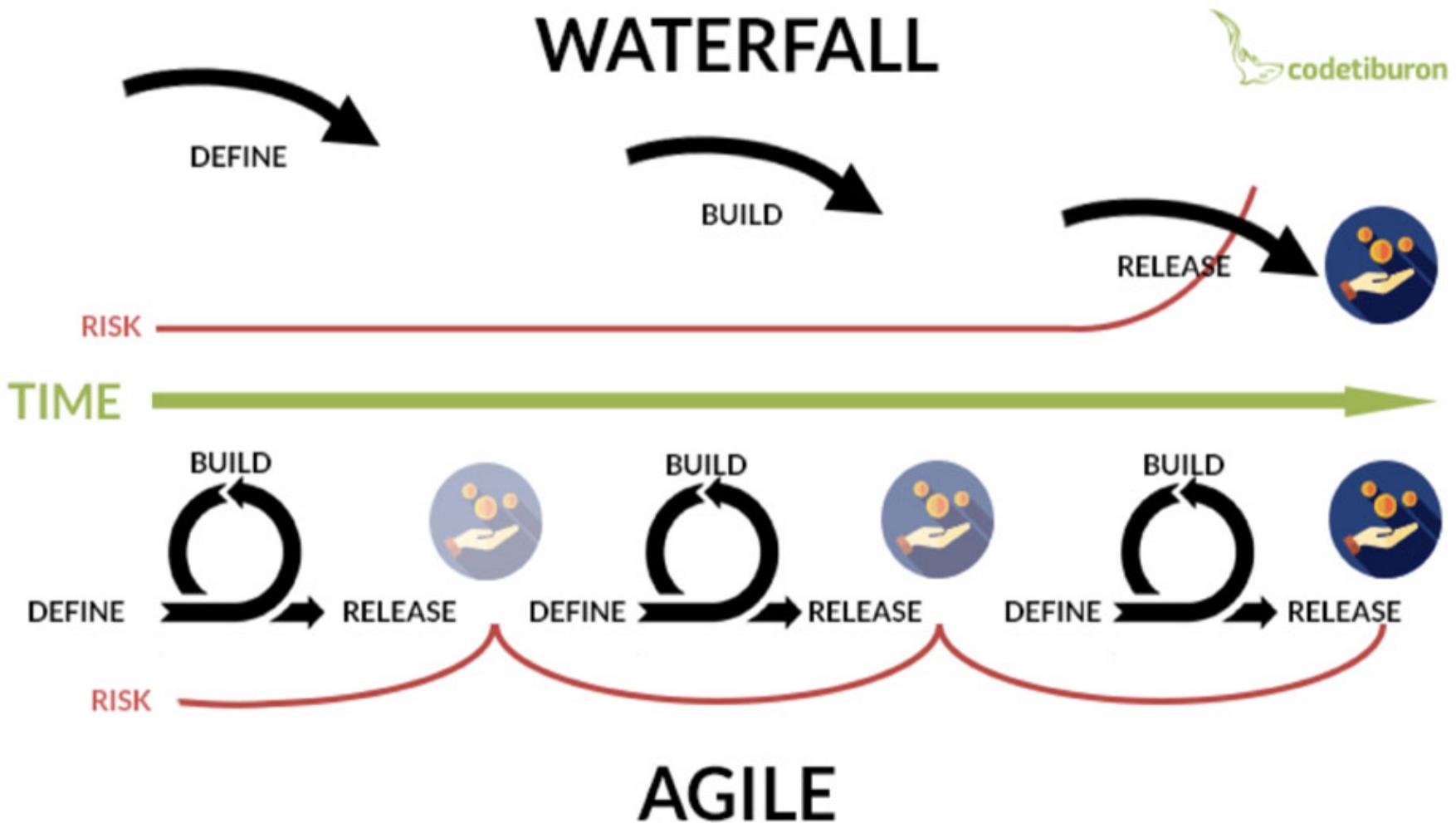
Projects in the Enterprise



Projects in the Enterprise



Waterfall or Agile?



Exercise:

- In the Chat Box:
- *“What do you know about Agile Project Management?”*
- One sentence!
- 15 minutes total

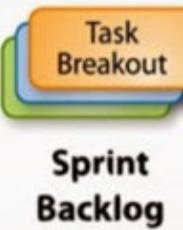
“4D” Project Management Lifecycle



Agile Project Management Lifecycle

The Agile: Scrum Framework at a glance

Inputs from Executives,
Team, Stakeholders,
Customers, Users



What Constitutes Project Success?

Successful Projects are delivered:

- With value to the user
- With acceptance by the stakeholders
- Within the allocated time period
- At the expected performance, specification and quality level
- With the business results expected
- With managed scope changes
- Without disturbing the main work flow of the organization
- With ongoing operational and support structures in place



Exercise:

- In the Chat Box:
- “*Why do projects fail?*”
- One sentence!
- 15 minutes total

WHY do projects FAIL?

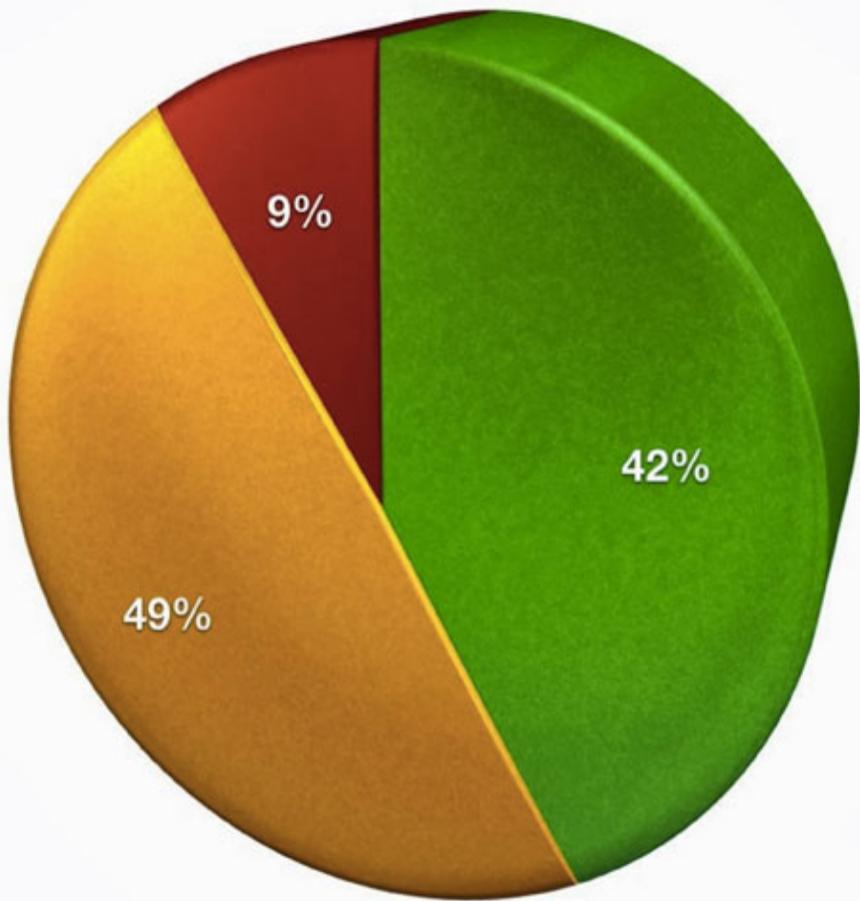
- Changing priorities within organization – 40%
- Inaccurate requirements – 38%
- Change in project objectives – 35%
- Undefined risks/opportunities – 30%
- Poor communication – 30%
- Undefined project goals – 30%
- Inadequate sponsor support – 29%
- Inadequate cost estimates – 29%
- Inaccurate task time estimate – 27%
- Resource dependency – 25%
- Poor change management – 25%
- Inadequate resource forecasting – 23%

Challenges in Project Management

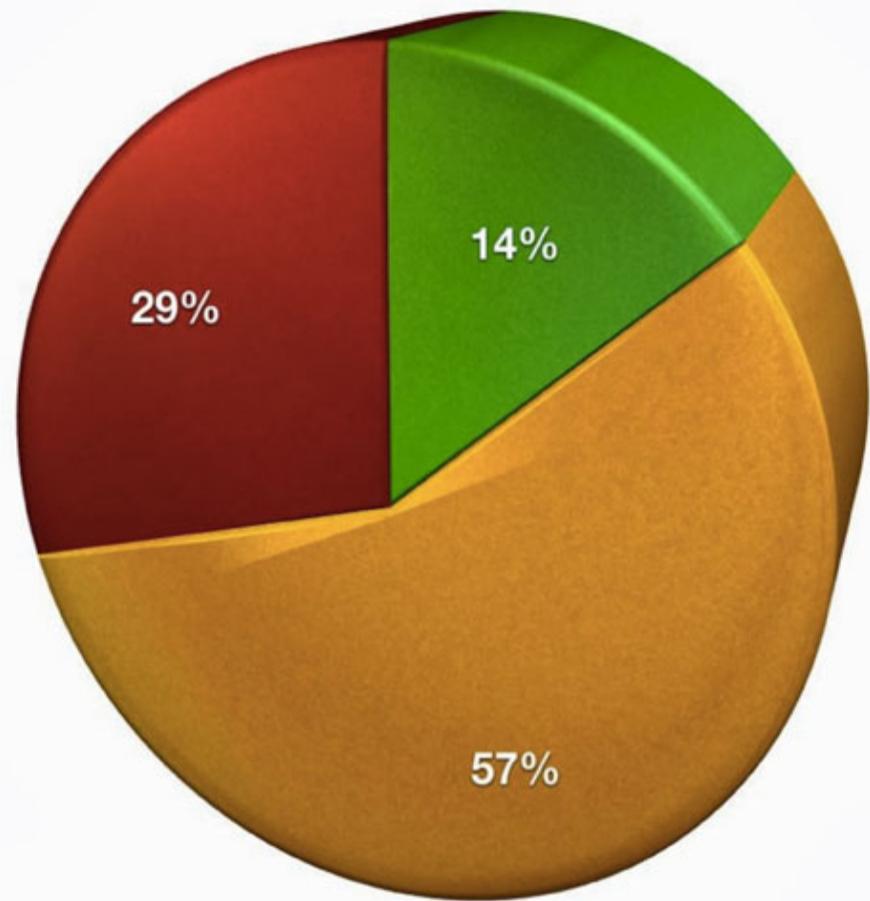
- Technology changes as we work
- Business Models are disrupted continuously
- Customers can't communicate what they need
- Technicians can't communicate in business language
- Sponsor and stakeholder relationships are hard
- Teams take time and care

Project Success and Failure

Agile



Waterfall



● Successful ● Challenged ● Failed

Project Myths

Project management is obsolete;

***...we're agile now; we don't need to
plan, we emerge!***

Project Myths

Project management is all technical;

...as long as I'm a subject matter expert, I'll figure out how to deliver it.

Project Myths

Project management is all process:

I don't need to understand the mechanics of what I'm building, I just need to build it.

Project Myths

Project management is all about relationships;

***...If i can motivate my team we'll get it done,
whatever process we use.***

Q&A



15 minute break...

Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

The Project Manager

A project manager is a person who has the overall responsibility for the successful initiation, planning, design, execution, monitoring, controlling and closure of a project.

PMI: Project Management Institute

Let's go back to our 4D Methodology...



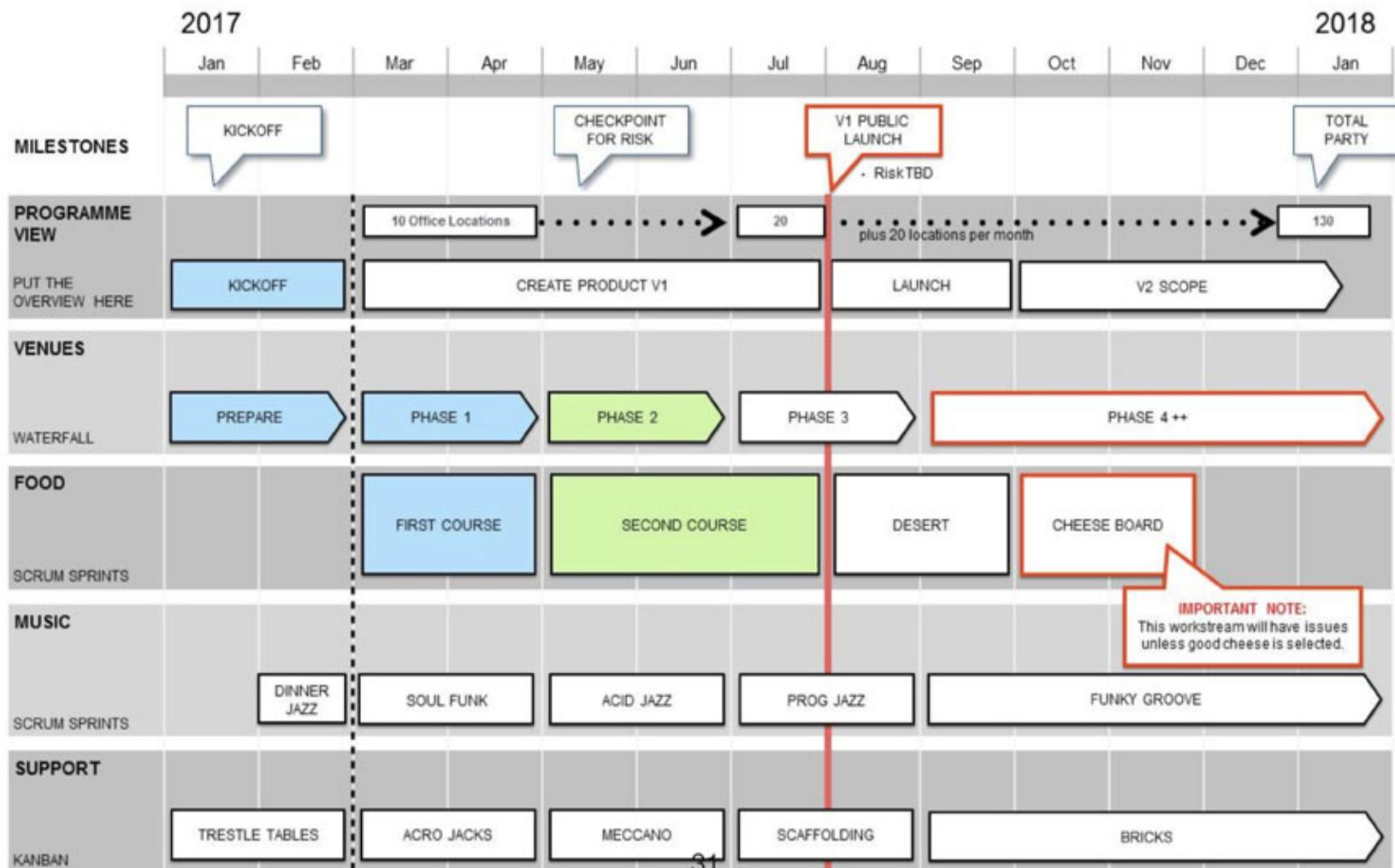
4D: Discover

- Business Meaning of the Project
- Customer Requirements and Expectations
- Project Scope
- Customer Budget
- Customer Schedule
- Resource Requirements
- Constraints and Risks



4D: Design

The Project Roadmap



4D: Design

- The Solution
- The Project Process
- Team Roles and Responsibilities



4D: Develop

- **The Solution**
- **Workflows and processes**
- **Training**
- **Deployment Plan**
- **Operational (Support and Maintenance) plans**



4D: Deliver

- The Solution
- Workflows and processes
- Training
- Operational (Support and Maintenance)



Roles of the PM

- Planning and Defining Scope
- Activity Planning and Sequencing
- Resource Planning
- Time Estimating
- Cost Estimating

Roles of the PM

- Developing a Budget
- Risk Analysis
- Issues Management
- Monitoring and Reporting Progress
- Team Leadership

Roles of the PM

- Strategic Influencing
- Business Partnering
- Controlling Quality
- Benefits Realization
- Customer Satisfaction

Project Manager: Personality Type?

Project managers:

- Can't be conflict-averse
- Can't be "yes-men" (or women)
- Should be consensus-builder
- Should engage with stakeholders and sponsors
- Should be multi-threaded
- Should provide project leadership



Responsibility without authority

“No Responsibility without Authority”

Rule #1 in Mgmt. 101!

- Project Management violates Rule #1!
- Project managers are typically “off the org chart”
- Our teams typically have other jobs
- Our teams typically have other managers

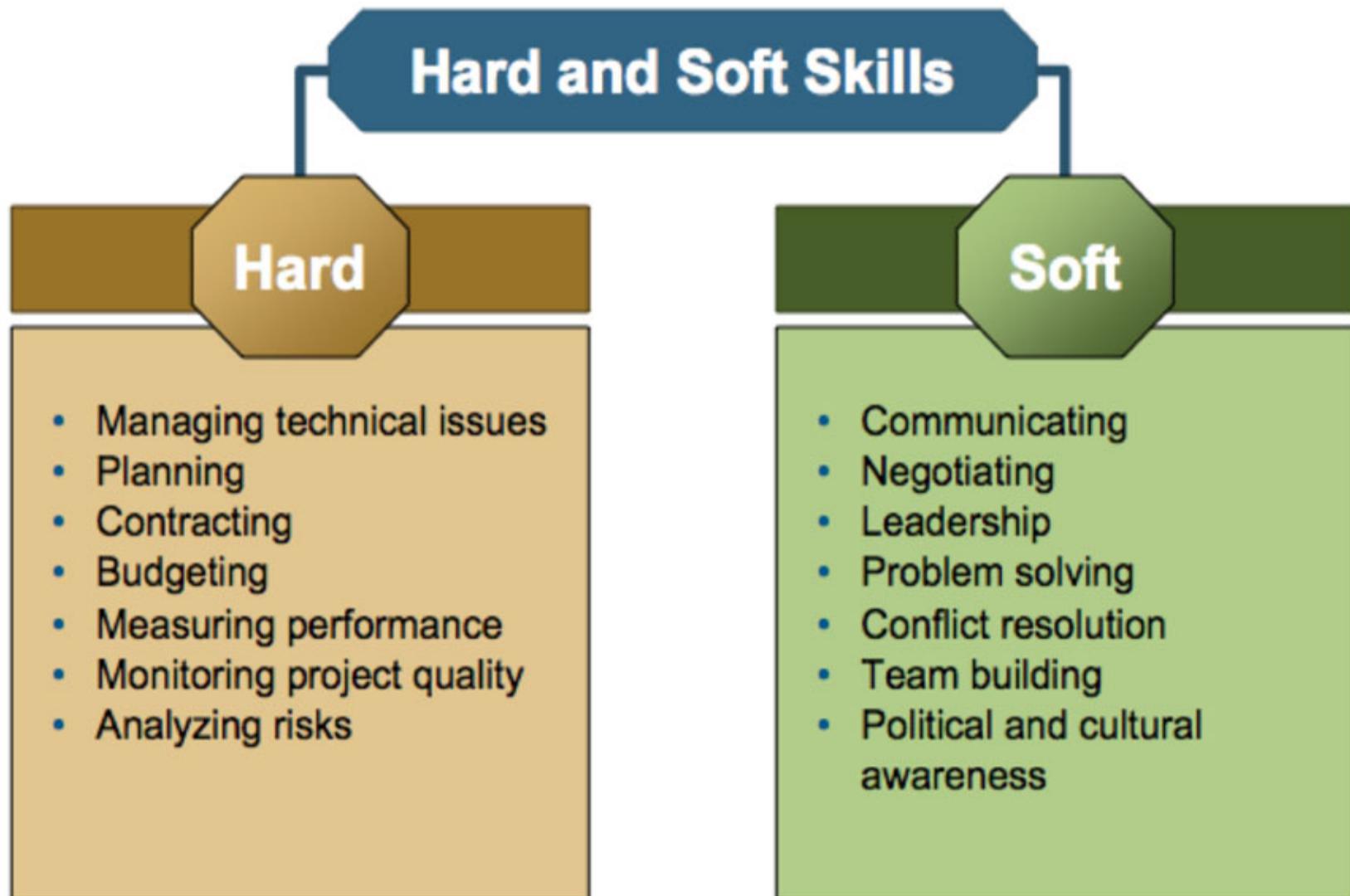


Project management is an exercise in influence!

Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

Skills of the Project Manager



Top-Level PM skills

- **Project tools and techniques**
- **Communication**
- **Facilitation**
- **Team Leadership**
- **Technical Grasp**
- **Relationship Skills**

Project tools and techniques

- **Project Management Software**
- **Project Management Standards**
 - **Reporting**
 - **Metrics**
- **Project Methodology**
 - **SDLC**
 - **Agile, Waterfall, Hybrid?**

Communication

- **With the project team**
- **With the sponsors**
- **with the stakeholders**
- **with the business**
- **with the program and portfolio level**
- **with enterprise-level leaders**

Facilitation

PMs facilitate lots of project events:

- Kickoffs
- Solution workshops
- Planning sessions
- Status sessions
- Issue conversations

Facilitation

PMs have to be skilled at:

- framing the conversation
- gaining participation
- brainstorming and voting techniques
- building consensus
- exposing issues and risks
- coming to a conclusion

Team leadership

- PMs are matrix managers:
 - low organizational authority
 - high personal authority
- build team cohesion, purpose
- resolve issues, technical and personal
- drive accountability
- drive innovation and creativity

Exercise:

Must PMs know the technical discipline?

Tell us in the chat window, one sentence:

- **Do PMs need technical experience?**
- **Why, or**
- **Why Not?**

15 minutes

Technical grasp

The eternal debate:

- Must PMs know the technical discipline?
- Pro:
 - low risk of ‘being fooled’
 - ability to add value to technical conversations
- Con:
 - Propensity to get lost ‘in the weeds’
 - Can’t focus on two disciplines

Relationship skills

PM owns relationships with:

- the project team**
- the sponsors**
- the stakeholders**
- the business**
- the program and portfolio level**
- enterprise-level leaders**

Team Relationships

“A team is a small number of people with complimentary skills who are committed to a common purpose, set of performance goals, and an approach for which they hold themselves mutually accountable”



Wisdom of Teams

Teams need:

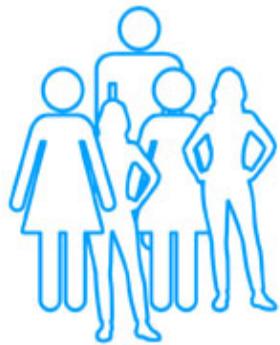
- A sense of purpose and a clear cut mission.
- The mission to be broken down into meaningful performance goals for each team member to pursue.
- to develop certain work approaches, procedures and processes to ensure that they accomplish a task efficiently and effectively.
- have to support the common mission and take their individual responsibility seriously to do their part in accomplishing a task.
- a mix of skills, experience and expertise, in order to meet the challenges of the team task.

The Wisdom of Teams, Katzenbach and Smith

PM: Face of the Project



Sponsors



Stakeholders



PM: Represents the Project



Senior Leadership



PMO



Relationship skills

PMs must:

- **build trust**
- **seek to understand**
- **remain neutral**
- **build confidence**
- **motivate**
- **inform**
- **persuade**
- **influence**

Q&A



15 minute break...

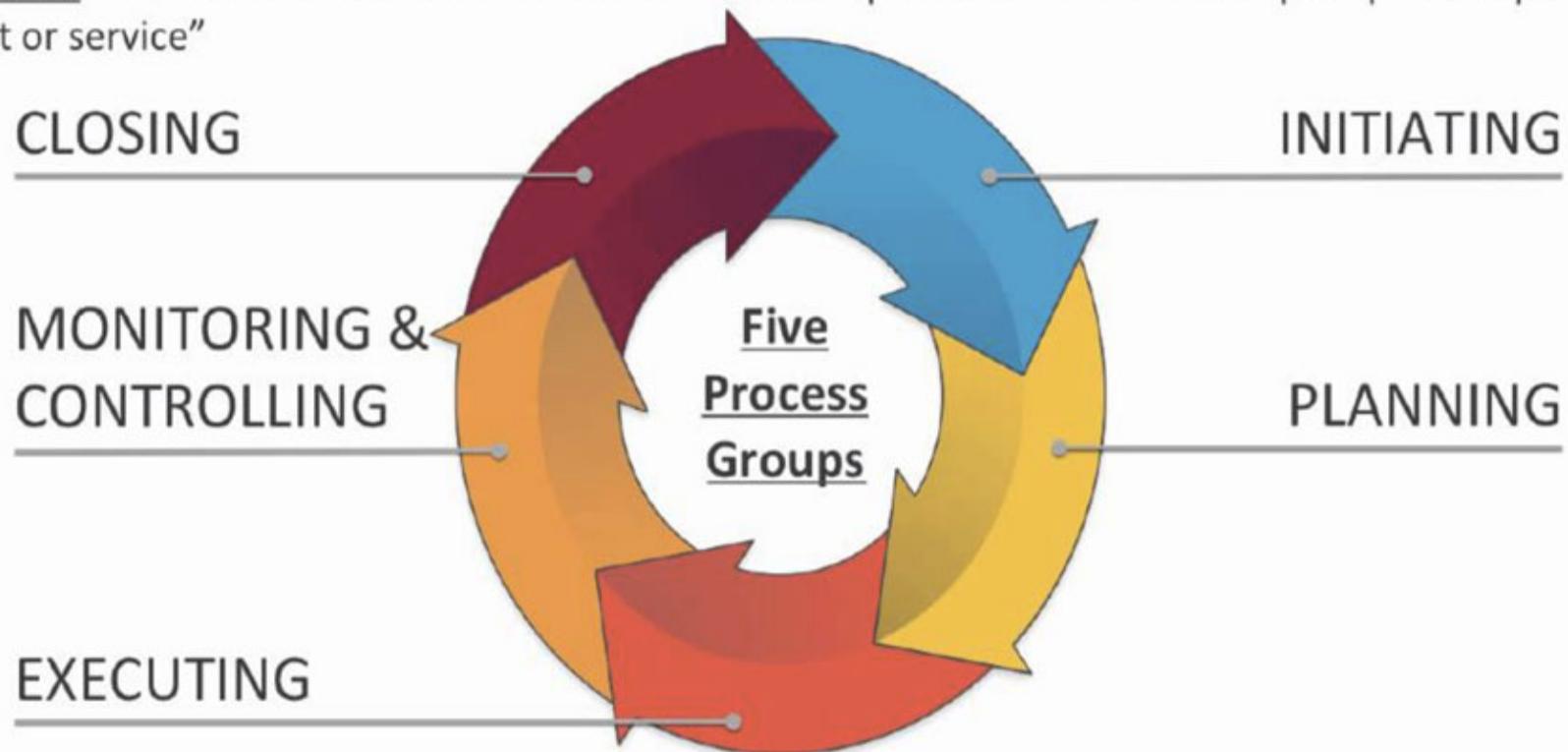
Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

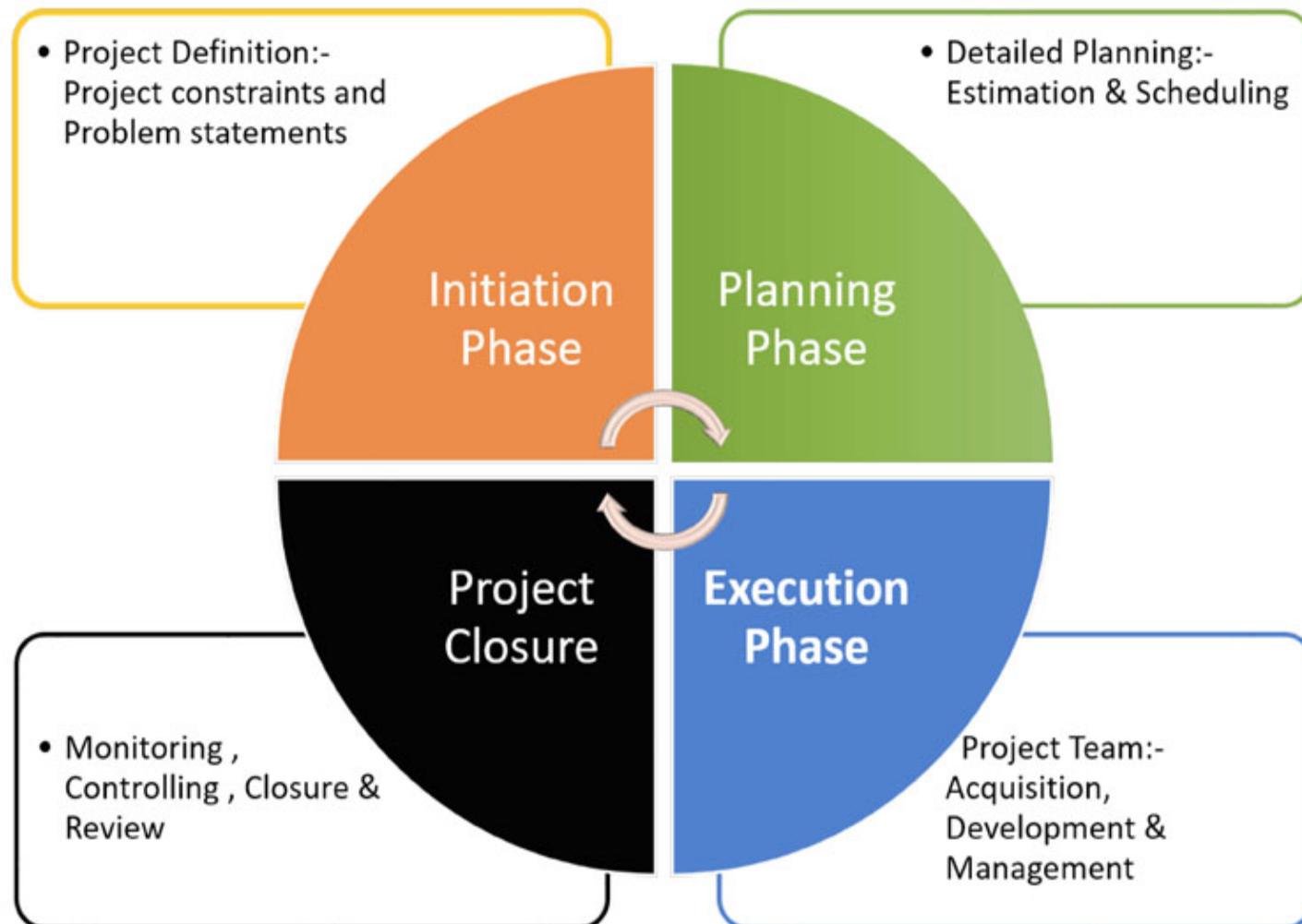
Project Processes: PMI

The Five Process Groups

A Process is a “set of interrelated actions and activities performed to achieve a pre-specified product, result or service”



The PM Workflow



Project Processes: Traditional



Project Processes: Agile

The Agile: Scrum Framework at a glance

Inputs from Executives,
Team, Stakeholders,
Customers, Users



Product Owner



The Team



Product Backlog

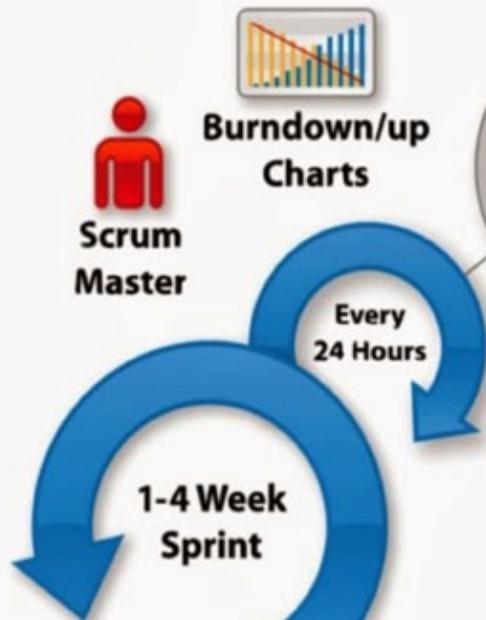
Team selects starting at top as much as it can commit to deliver by end of Sprint

Sprint Planning Meeting

Task Breakout

Sprint Backlog

Sprint end date and team deliverable do not change



Finished Work



Sprint Retrospective



Burndown/up Charts



Daily Scrum Meeting



Sprint Review

What's Wrong with Waterfall?

- Too many failures
- Big Up Front Plans (BUFP) become obsolete fast
- Estimates are unreliable
- Projects delivered on time, on budget, and on spec can still have no business value
- Requirements change over time
- Customers can't articulate what they want
- Valuable products are the only measure of success

The Agile Revolution

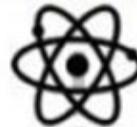
Agile is based on Lean ideas:

- Embrace *kaizen* or continual improvement
- Eliminate waste
- Focus the value stream on the customer
- Balance flow / work in progress (WIP)
- Decisions at the level of responsibility
- Apply the Plan-Do-Check-Act method

PDCA Cycle



THE AGILE MINDSET



DOING AGILE

LEFT BRAIN. LOGICAL. TASKS.

BEING AGILE

RIGHT BRAIN. EMOTIONAL. SOCIAL.

INSPECT/ADAPT
EMPIRICISM
DELIVERY

FOCUS

WASTE & FLOW

NUMEROUS
FRAMEWORKS

MANY PRACTICES

SAFe
KANBAN

SCRUM

XP

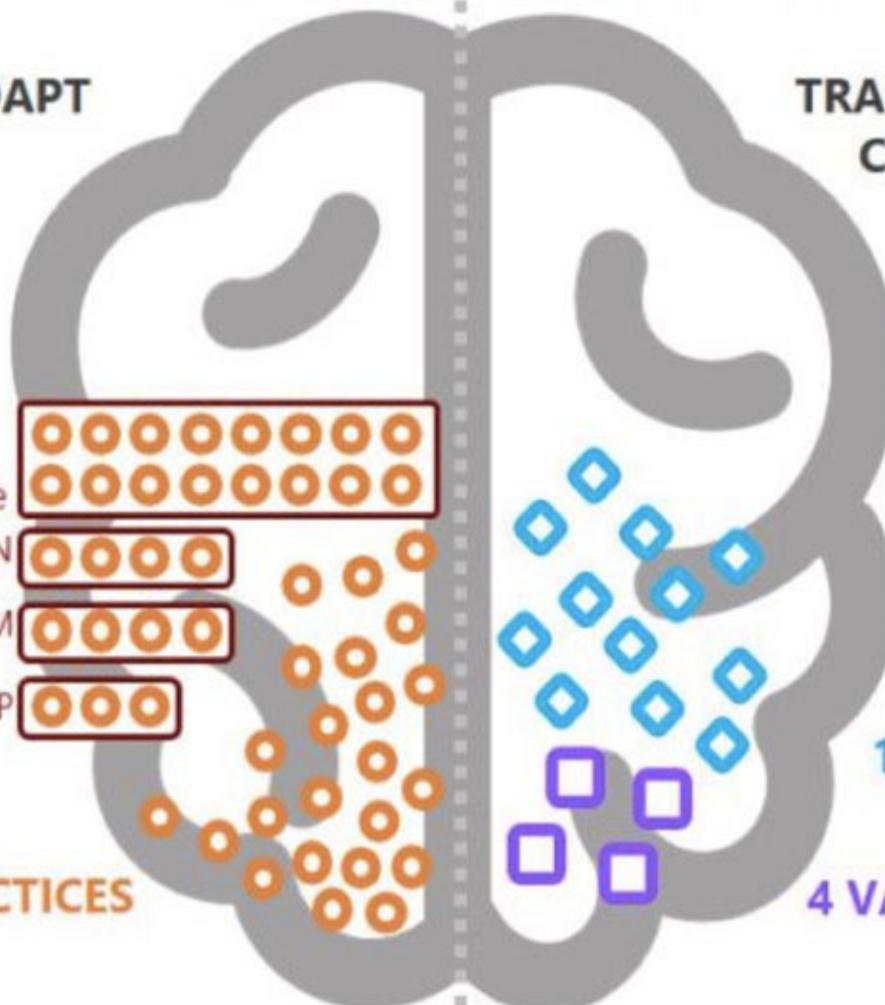
TRANSPARENCY
COLLABORATION
TRUST

RESPECT FOR PEOPLE
USER-CENTRED
VALUE-CENTRED

OPENNESS
COURAGE
COMMITMENT

12 PRINCIPLES

4 VALUES



Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

What is Risk?

“A potential event or circumstance that could have a negative influence on our project.”

Why Manage Risk?

- Risk Management is the **core** of project management:
 - If projects weren't risky, we wouldn't need project management!
- Risk management uncovers the details of the project
- The Three 'R's:
 - Robustness,
 - Resiliency,
 - Recovery

The Risk Process



Assessing Project Risk

Risk Assessment Matrix				
Impact of Risk (Consequence)	Major	Medium	High	Extreme
	Moderate	Medium	Medium	High
	Minor	Low	Medium	Medium
	Unlikely (0-33%)	Moderately Likely (33%-66%)	Highly Likely (66%-100%)	
Seriousness of Risk = Probability x Impact		Probability of Risk (Likelihood)		

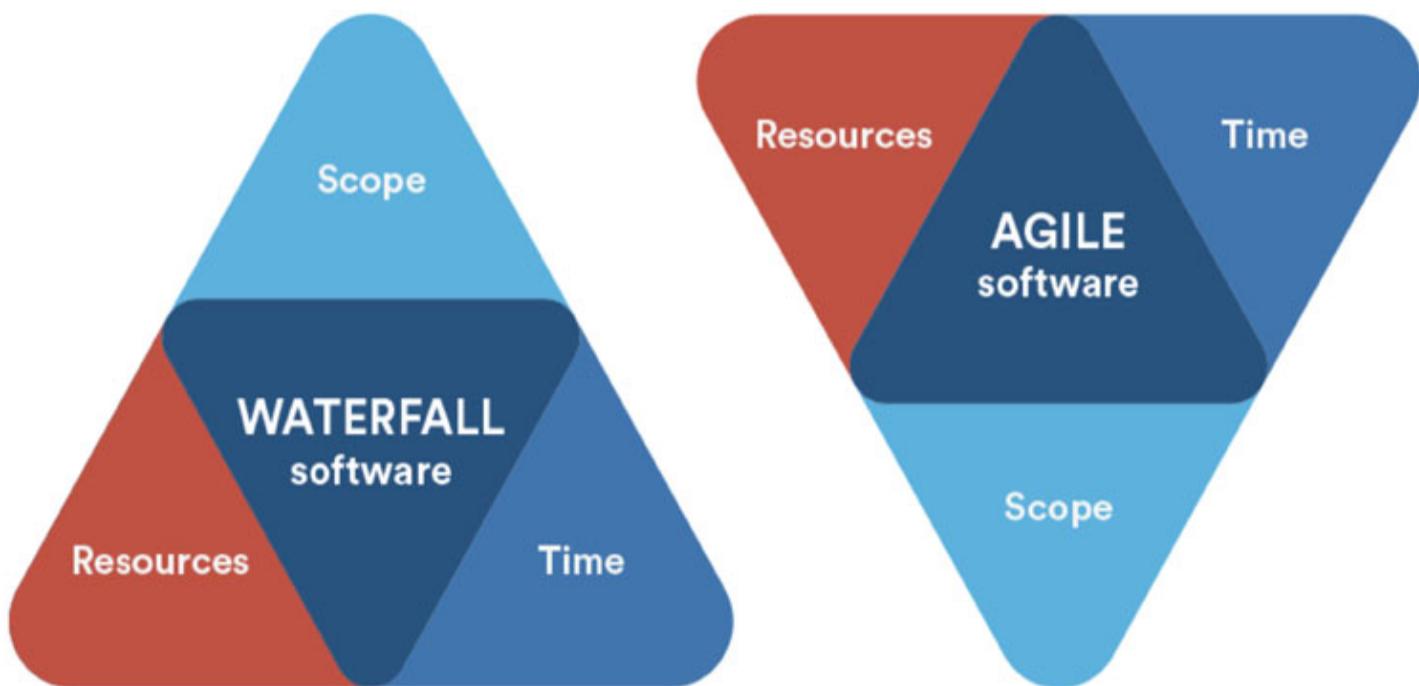
The Famous...

TRIPLE CONSTRAINT



Agile: Flipping the Script on Constraints

Fixed



Estimated

Q&A



15 minute break...

Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

Uncertain about what?

- The Business Meaning
- The Customer's Intent
- The Technical Feasibility
- Resource Capacity and Skills
- The Definition of Success
- The Real Deadline and Budget

The Business Meaning

Software requirements are a communication problem!

Exercise:

Why are requirements a communication problem?

One sentence.

15 minutes

The Business Meaning

- Software requirements are a communication problem!
- The vision in the customer's mind is hard to articulate
- The languages we use (technical, business) are incompatible
- Strategic meaning gets filtered through layers
- ROI and other 'hard' metrics are unreliable

The Business Meaning

We try to solve this by:

- Starting our process with a Vision
- Requiring collaboration from the business
- Naming a Product Owner with that specific job
- Requiring a business outcome for every story
- Testing the business results incrementally
- Changing to accommodate dynamic market conditions

The Customer's Intent

Customer specifications are ambiguous:

- Language gap
- Customer tries to specify solution, not problem
- Customer can't define what they want until they see it.
- BRDs and other Spec Docs are wide open to interpretation
- Technicians often can't explain their designs in business language
- Customer has a 'look and feel' expectation that's hard to articulate

The Customer's Intent

We try to solve this in by:

- Articulating a Vision and a set of features
- Specifying systems with user stories
- Demonstrating the evolving system frequently
- Responding to the Demo feedback loop
- Enabling changes to accommodate customer needs

The Technical Feasibility

- Will it work?
- Will it perform?
- Will it scale?
- Is it robust?
- Is it maintainable?
- Is it secure?

The Technical Feasibility

We try to solve this by:

- Bringing feasibility studies into early iterations
- Doing ‘Spikes’, technical research stories
- Focusing on Minimum Viable Products
- Experimenting
- Failing Fast

Resource Capacity and Skills

- Can you build a delivery team?
- Do they have the right skills?
- Can they communicate clearly?
- Are they motivated?
- Are they competent?
- Are they available?
- Can you engage SME's when needed?

Resource Capacity and Skills

We try to solve this by:

- Building cross-functional teams
- Building small, co-located teams
- Breaking features into reasonable sizes
- Building in frequent communication
- Planning the release to forecast SME needs

The Real Deadline and Budget

- Budgets and deadlines are often arbitrary
- Related to business urgency, not capacity and capability
- Customers obscure their real resources

The Real Deadline and Budget

We try to solve this by:

- Using timelines and a fixed cadence
- Varying scope rather than budget and schedule
- Collaborating closely with the business
- Building trust by delivering value frequently
- Encouraging transparency

Q&A



15 minute break...

Introduction to Project Management

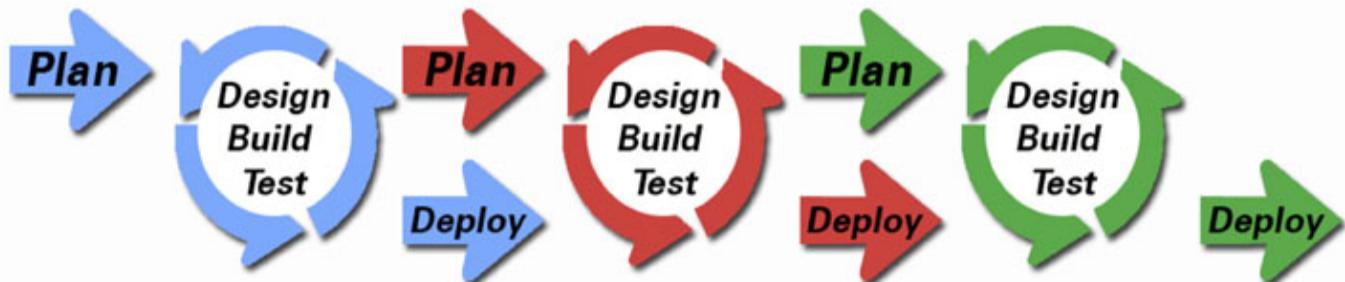
- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

Agile or Waterfall

Waterfall
(Plan Driven)



Agile
(Value Driven)



Project Timeline

I Can't Use Agile...

how do you build...

Half a Bridge?



Minimum Viable Product

The Wrong Way



The Right Way



1



2



3



4

Example of MVP Delivery...



Tightrope, to...

Rope Bridge...



Stone Bridge...



Brooklyn Bridge.



Waterfall

- Disciplined and rigorous
- Easier budgeting and scheduling
- Repeatable
- Known process
- Known metrics
- Known tools
- Fits hierarchical culture

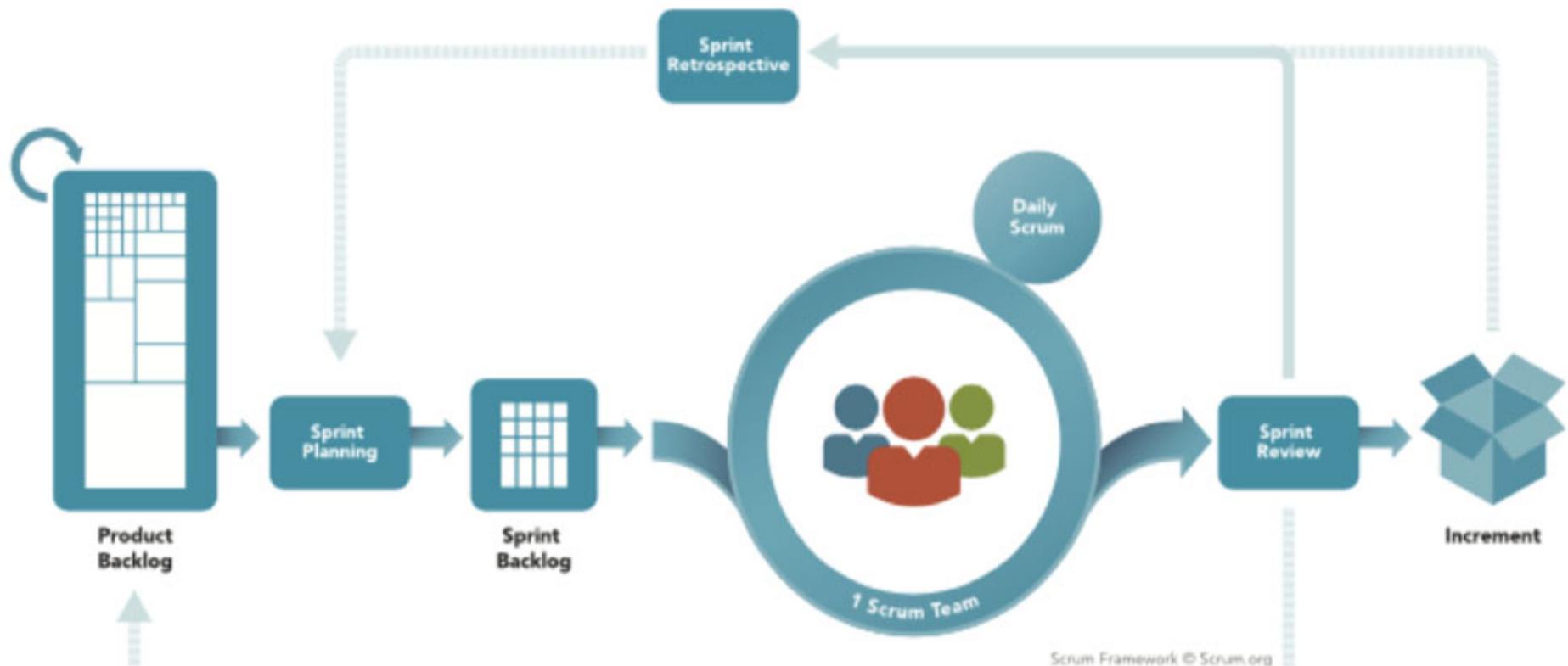
Agile

- **Adaptable**
- **Change-friendly**
- **Collaborative**
- **Built-in feedback loop**
- **Built-in continuous improvement loop**
- **Enhanced success rates**
- **Innovative and experimental**

Traditional Project Management Lifecycle



Agile Project Management Lifecycle



Simplified Scrum Cycle

the biggest risk...

...is building something the customer doesn't want, won't use, or gets no value from.

We're delivering iteratively...

...with an opportunity
for the customer to
course-correct
frequently.

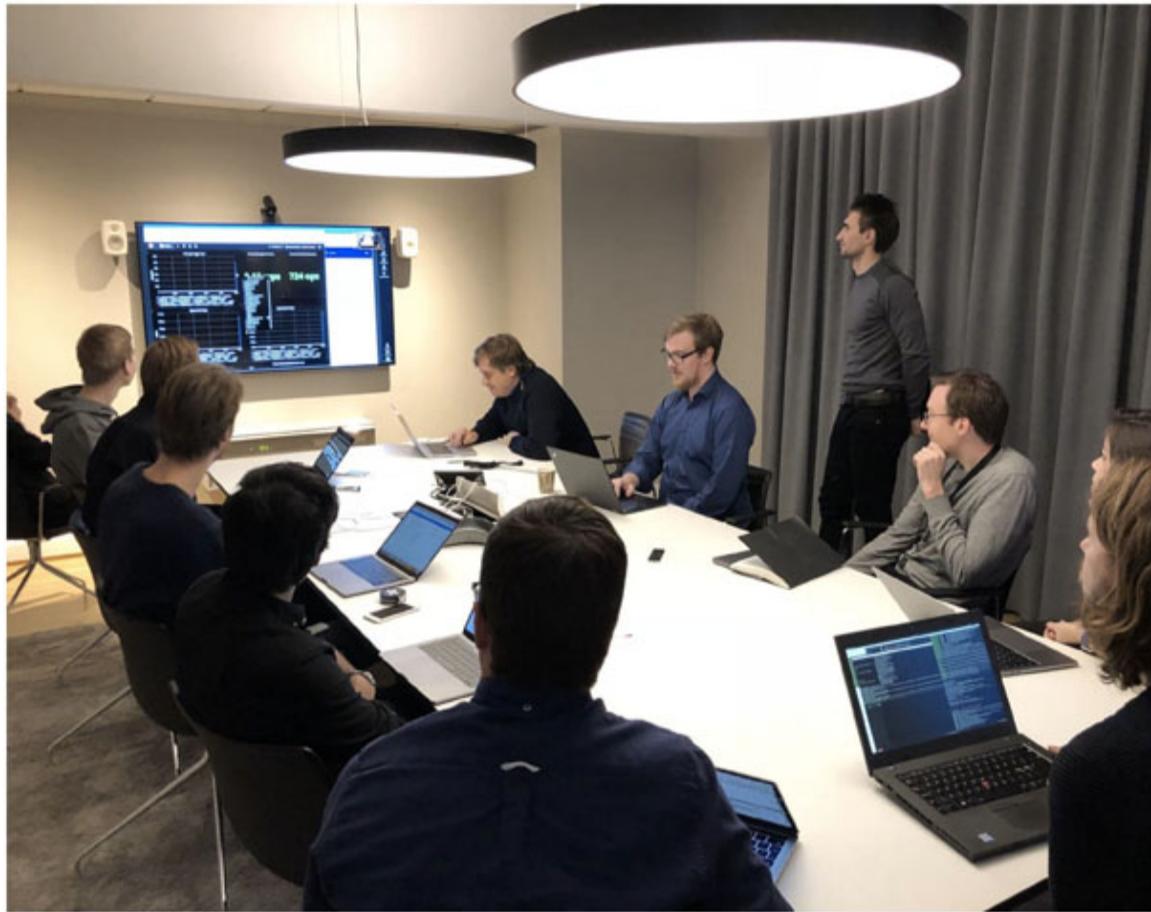
Incremental plan



Iterative plan



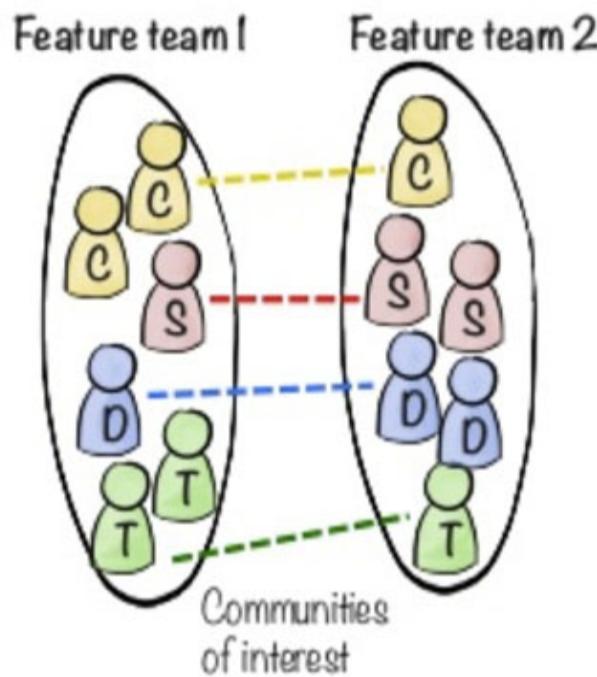
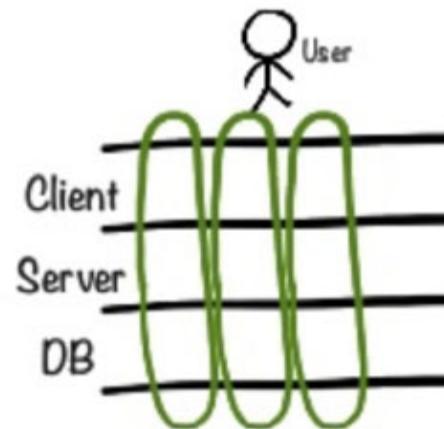
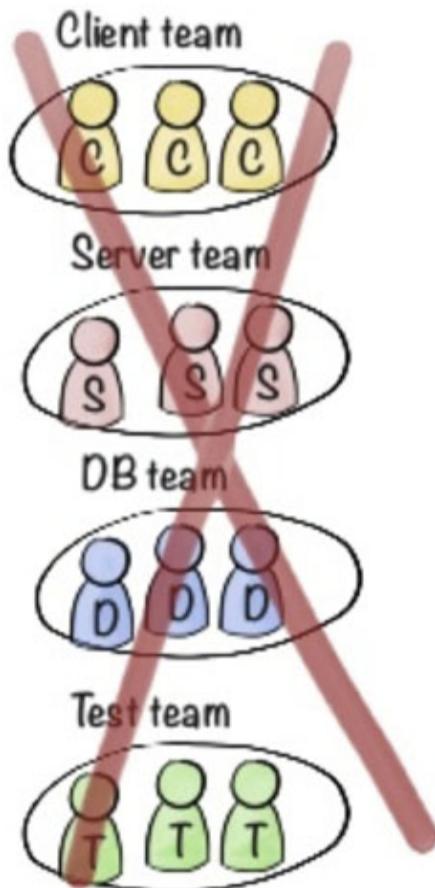
With a Built-In Feedback Loop...



Sprint Demo

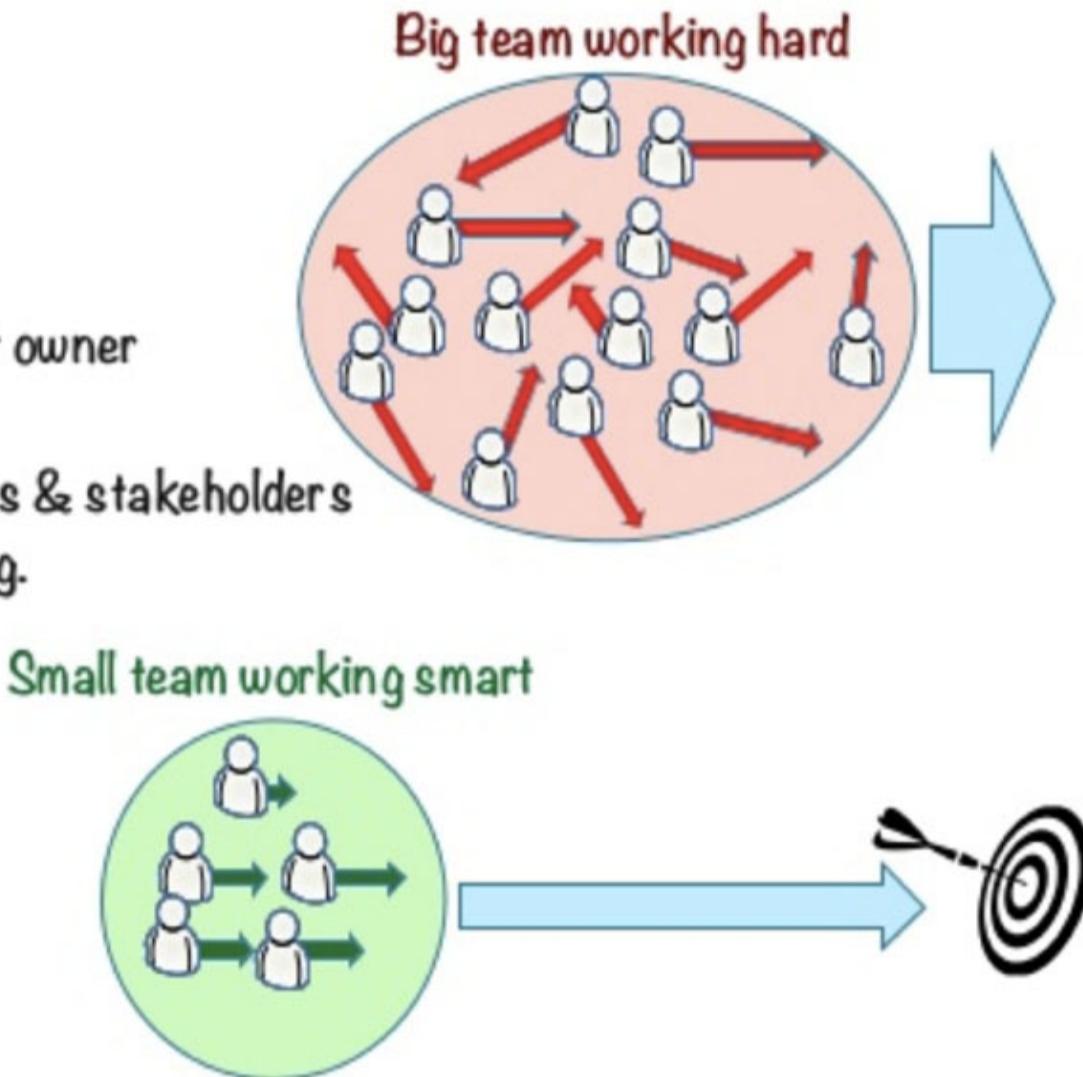
Agile Team Concepts

Cross-functional teams
are vertical

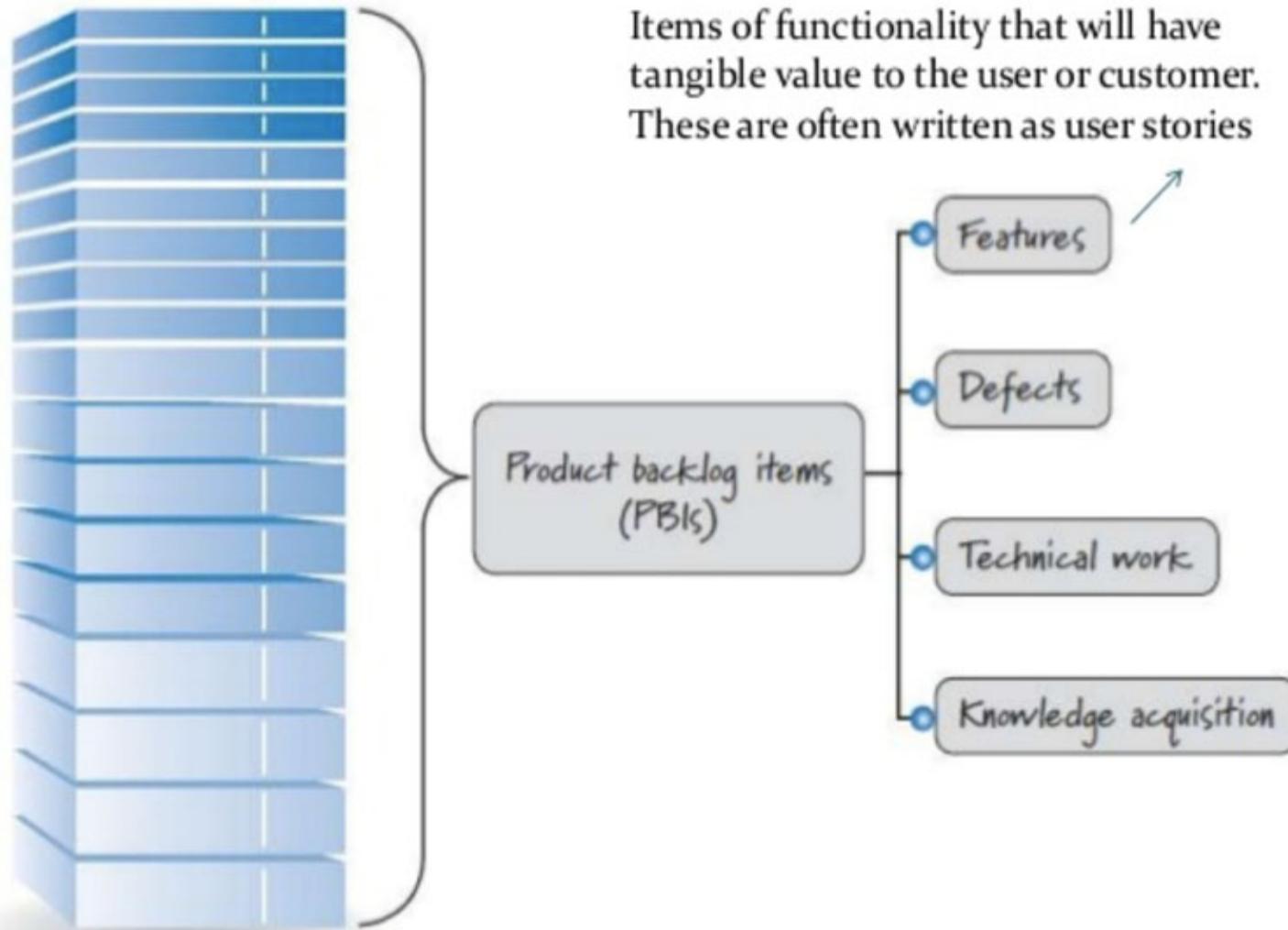


Agile Team Concepts

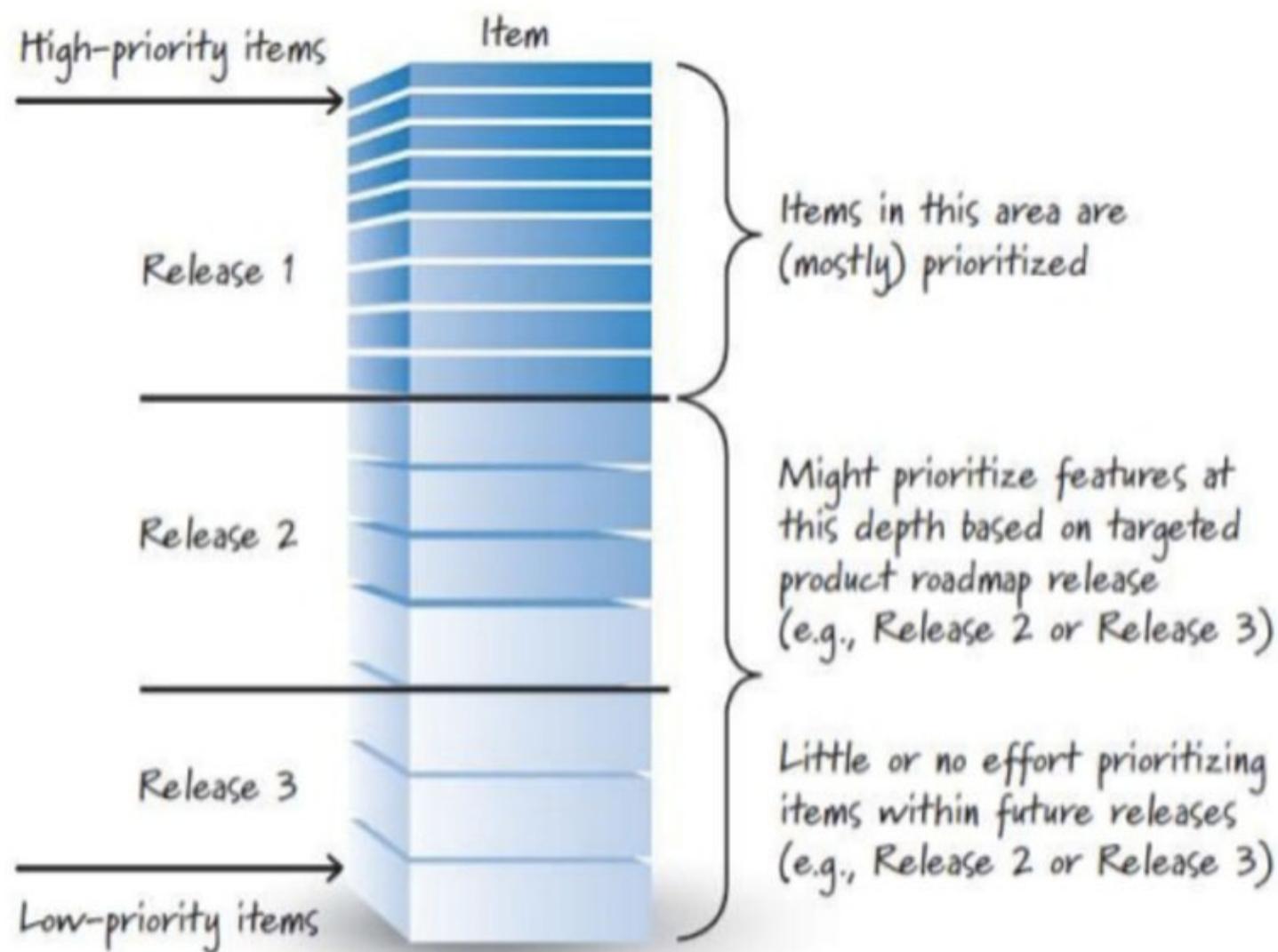
- Colocated
- Small (3-7 ppl)
- Self-organizing
- Cross-functional
- Clear mission & product owner
- Empowered to deliver
- Direct contact with users & stakeholders
- Focused. No multitasking.
- Transparent



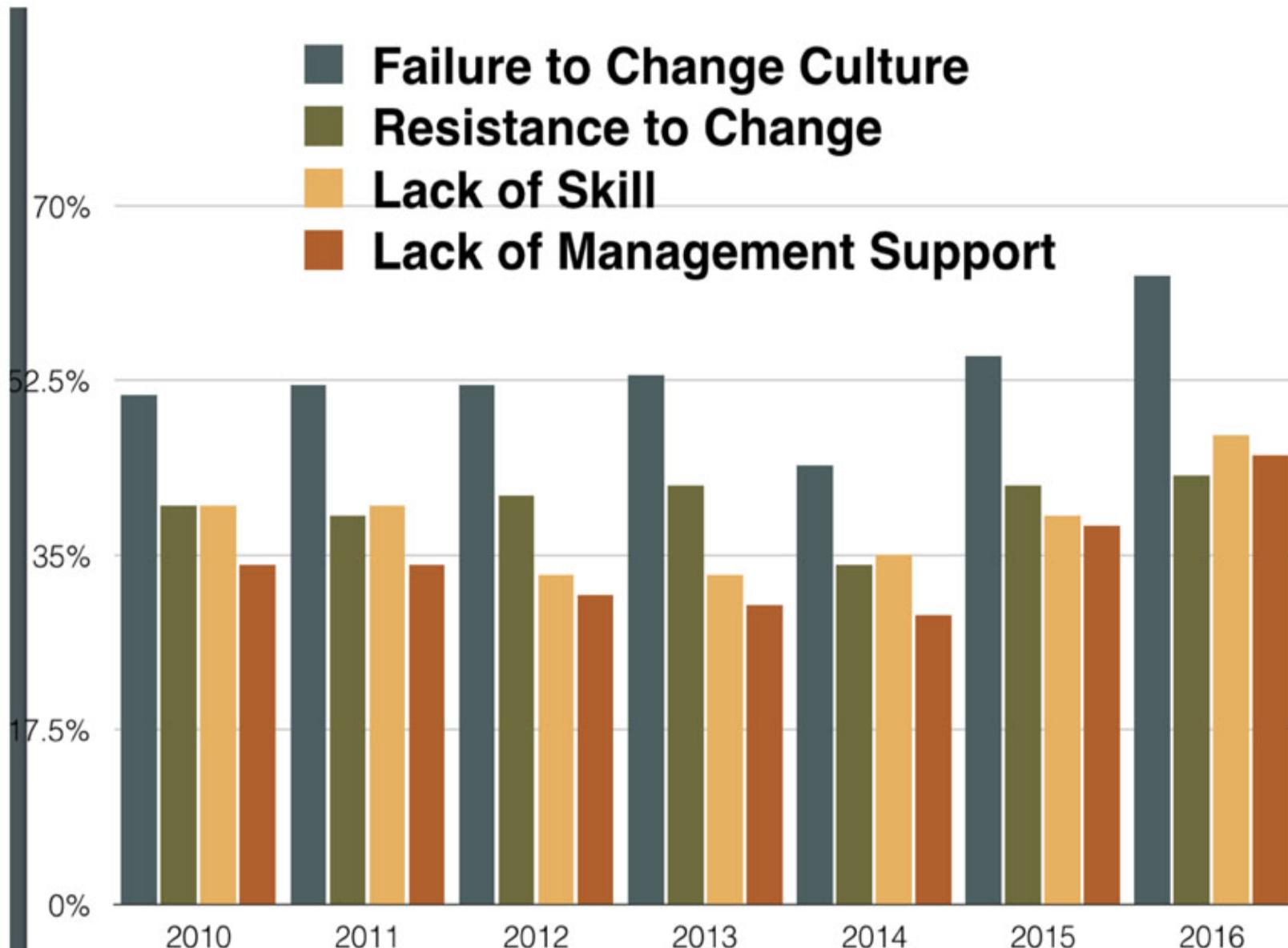
Agile Project Plan: The Backlog



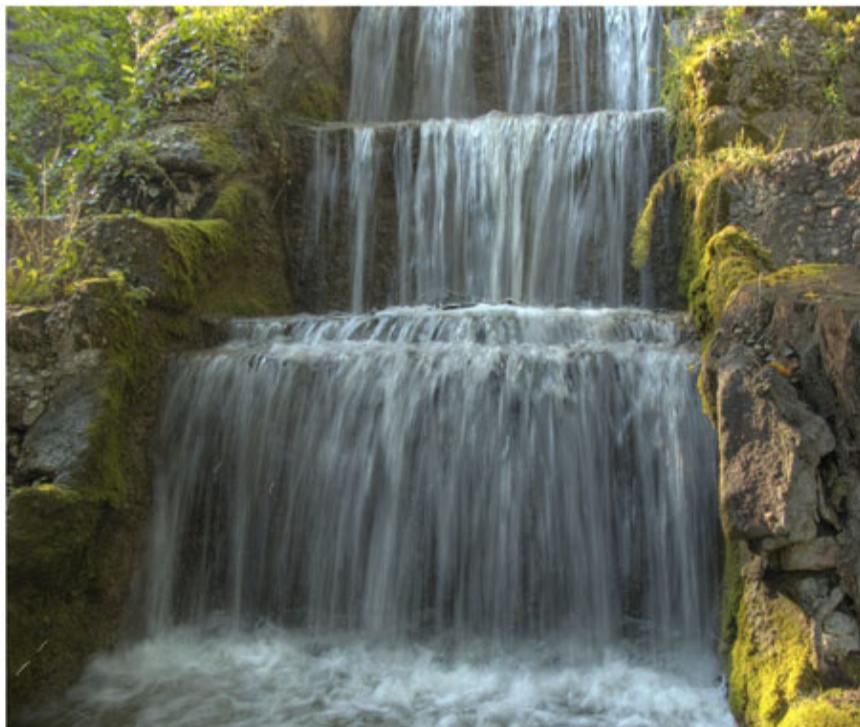
Agile Insight: The **Dynamic** Backlog



Why Not Agile?



Waterfall is a good fit for...



- Well-known projects
- Repeating known practices
- One ‘chunk of work’
- Regulated, ‘phase-gated’, high-audit environments
- ‘Big Bang’ deployment

Agile is a good fit for...



- R&D or never-been-done projects
- Projects with feasibility or experimental elements
- Testing acceptance with MVP
- Testing adoption with MVP
- Speed to value

2 Scenarios:

1. PMO: Support or Enforcement?
2. Agile Transition: Practical Challenges

Project Management Office, or... Project Cops?



A quick story:

A large health insurer experienced project chaos:

- Too many methodologies,
- No standards for plans, estimates or budgets,
- No visibility into value created,
- Large number of failed or challenged projects

Implemented a PMO. PMO had difficulty reaching consensus, decided to take an enforcement role. Developed an 'approved' method and then policed the teams.

Project Management Office, or... Project Cops?



A quick case exercise:

Should the PMO enforce project standards?

- If not, how to avoid chaos?
- If so, how to avoid “Project Cop” syndrome?

Everyone please contribute through chat!

PMO Challenges

1

50% of project management offices close within 3 years
(Association for Project Mgmt)

2

Since 2008, the correlated PMO implementation failure rate is over 50% (Gartner Project Manager 2014)

3

Only a third of all projects were successfully completed on time and on budget over the past year (Standish Group's CHAOS report)

4

68% of stakeholders perceive their PMOs to be bureaucratic
(2013 Gartner PPM Summit)

5

Only 40% of projects met schedule, budget and quality goals (IBM Change Management Survey of 1500 execs)

Transition to Agile... Over the Rainbow?



A quick story:

CIO of a large franchise operator, after attending an agile conference and learning the benefits of agility, determined that his organization will ‘go agile’.

He formed an Enterprise Agile Transition committee, and challenged them to deliver a plan for agility in one year.

The team, composed of IT and some middle managers, presented a team-up approach and began spinning up some pilot teams.

Transition to Agile... Over the Rainbow?

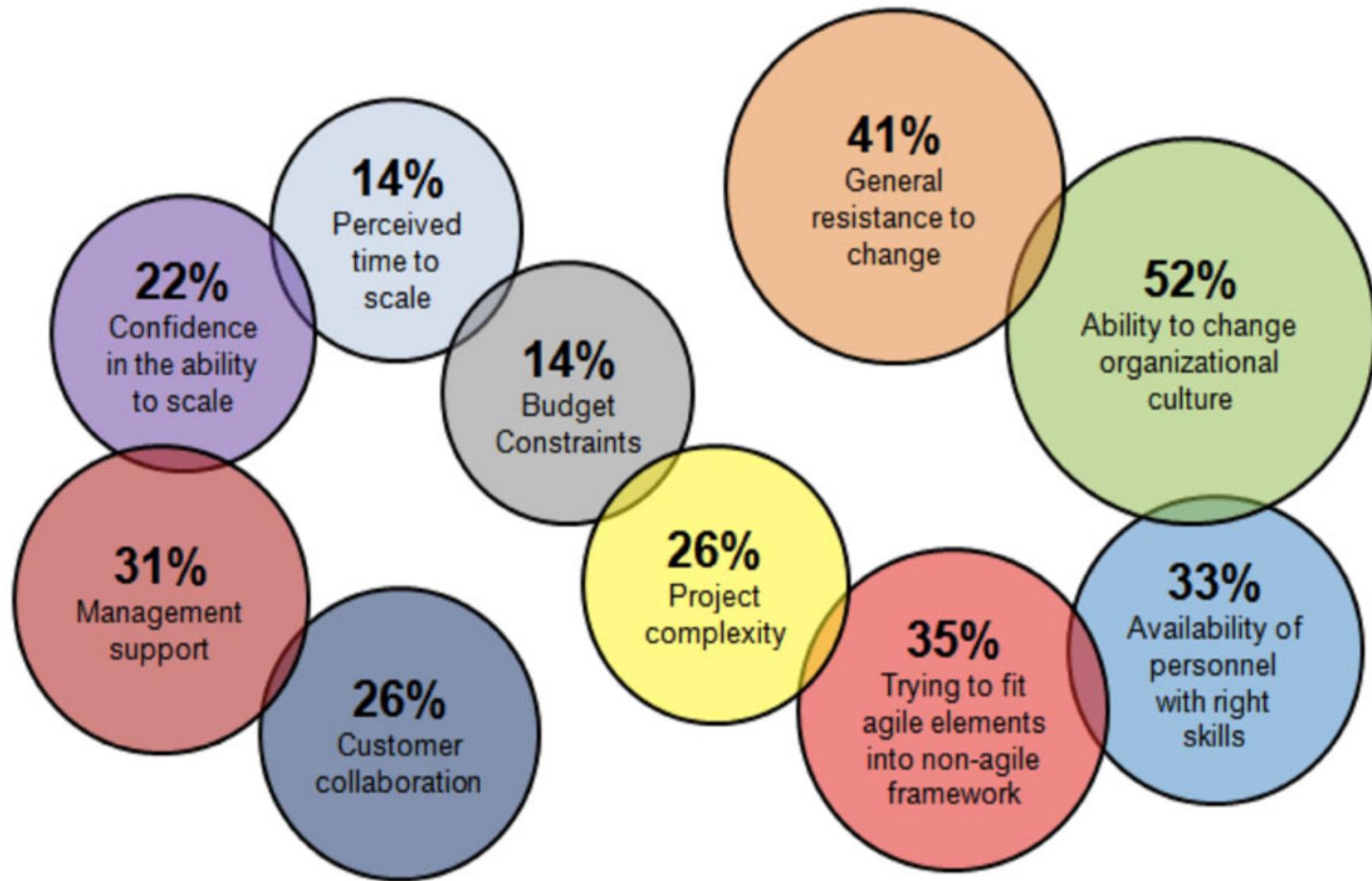


A quick case exercise:

- What do you think of the CIO's approach?
- Is setting a timeline for Agile Transition a good idea?
- What sort of challenges would you anticipate:
 - Cultural?
 - Political?
 - Personal?

Everyone please contribute through chat!

Agile Transition is Hard!

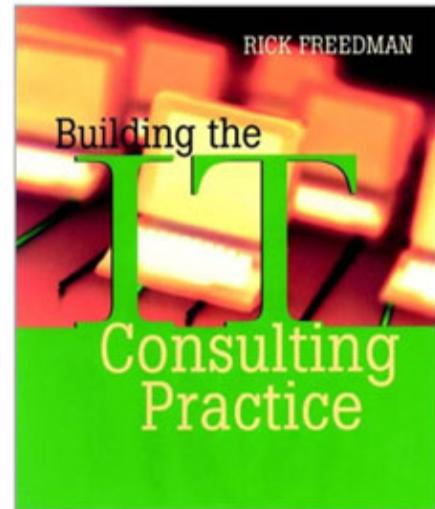
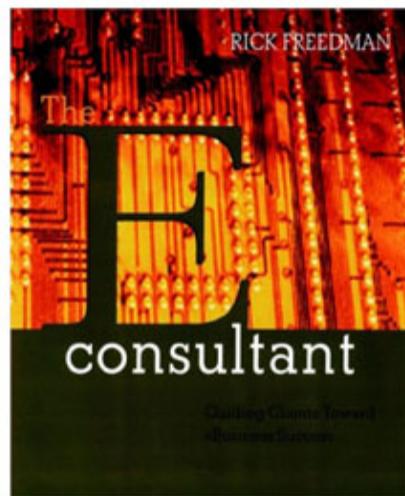


Introduction to Project Management

- Fundamental Project Management Concepts
- Role of the Project Manager
- Skills of the Project Manager
- Project Management Processes
- Project Risks and Constraints
- Dealing with Project Uncertainty
- Distinction between Traditional and Agile Projects

Presenter:

Rick Freedman, Author & Agile Coach



Consultant Master Class

Rick Freedman



Microsoft for Partners

Rick

Perfecting Your Practice
by Rick Freedman

Q&A

Thank
You!

