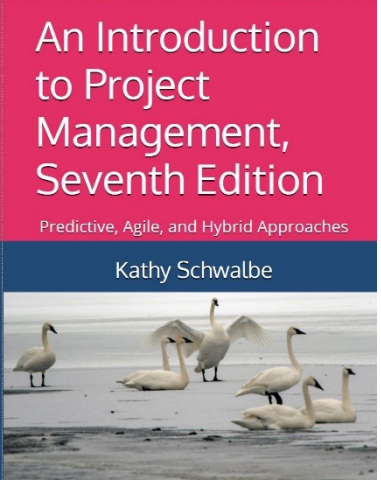


Chapter 3: Project Life Cycles and Initiating Projects

Note: See the text itself for full citations. Text website is http://intropm.com.

Learning Objectives

- Discuss the importance of establishing a development approach, cadence, and project life cycle to optimize project outcomes
- Describe the five project management process groups, and map the process groups to knowledge areas for predictive project management
- Understand the importance of top management commitment, organizational standards, and Project Management Offices
- Summarize the initiating process for a predictive project management approach, be able to prepare a business case, perform a stakeholder analysis, create a project charter and assumption log, and describe the importance of holding a good project kick-off meeting
- Understand the difference between initiating a predictive project and an agile or hybrid project, describe the Scrum framework, and be able to create a product vision statement, product roadmap, initial product backlog, and release plan

Read the Opening Cases

- Kristin in leading the Just-In-Time Training project using a predictive approach to project management
- Debra is leading the Global Construction Human Capital (GCHC) project using a more agile/hybrid approach

Development Approaches and Project Life Cycles

- An important change in the *PMBOK® Guide - Seventh Edition* is the inclusion of a project performance domain called development approaches and project life cycles. Before initiating projects, it is important to consider which approach to use.
- A **development approach** is a method used to create and evolve the product, service, or result during the project life cycle, such as predictive, iterative, incremental, adaptive, or hybrid method.
- **Cadence** is a rhythm of activities conducted throughout the project.

Figure 3-1. The Continuum of Development Approaches

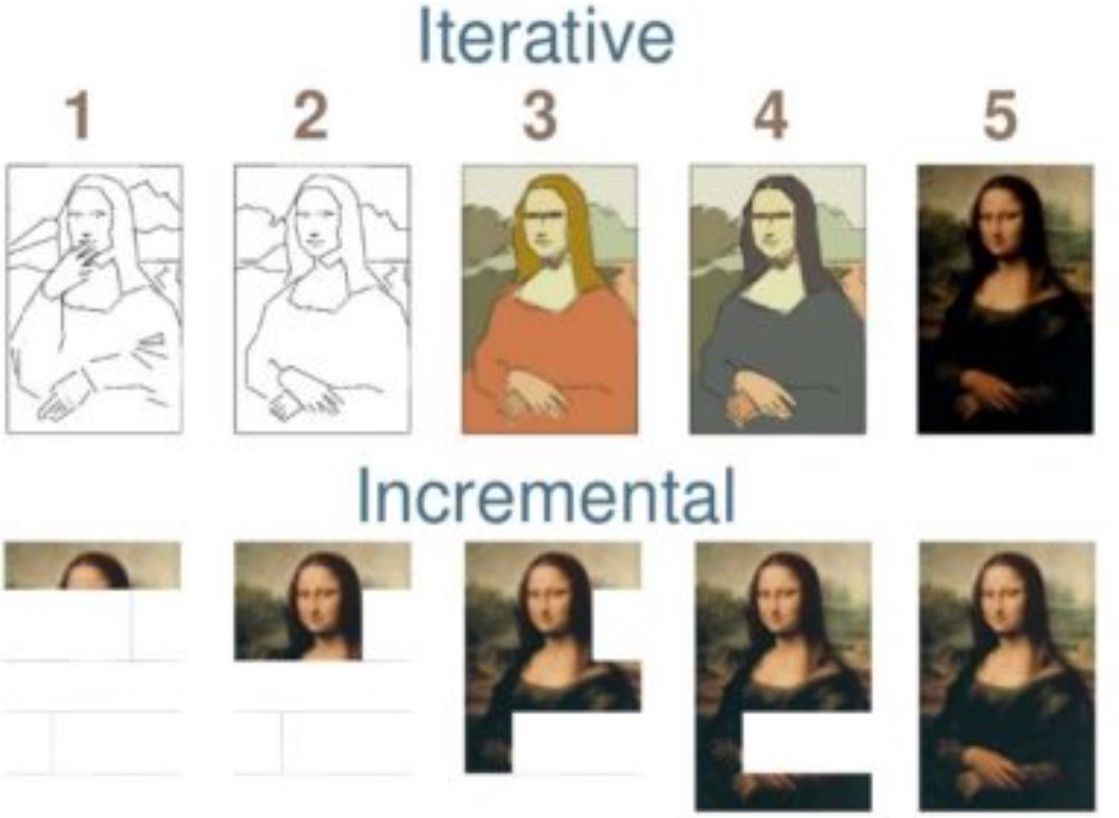
Predictive	Iterative	Incremental	Agile
Requirements are defined up-front before development begins	Requirements can be elaborated at periodic intervals during delivery		Requirements are elaborated frequently during delivery
Deliver plans for the eventual deliverable. Then deliver only a single final product at end of project timeline	Delivery can be divided into subsets of the overall product		Delivery occurs frequently with customer-valued subsets of the overall product
Change is constrained as much as possible	Change is incorporated at periodic intervals		Change is incorporated in real-time during delivery
Key stakeholders are involved at specific milestones	Key stakeholders are regularly involved		Key stakeholders are continuously involved
Risk and cost are controlled by detailed planning of mostly knowable considerations	Risk and cost are controlled by progressively elaborating the plans with new information		Risk and cost are controlled as requirements and constraints emerge

Source: Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Sixth Edition* (2017), Figure X3-1, p. 666.

Figure 3-2. Iterative and incremental development approaches

The customer provides feedback after every iteration, often done in a set amount of time

Each increment builds on top of the previous one

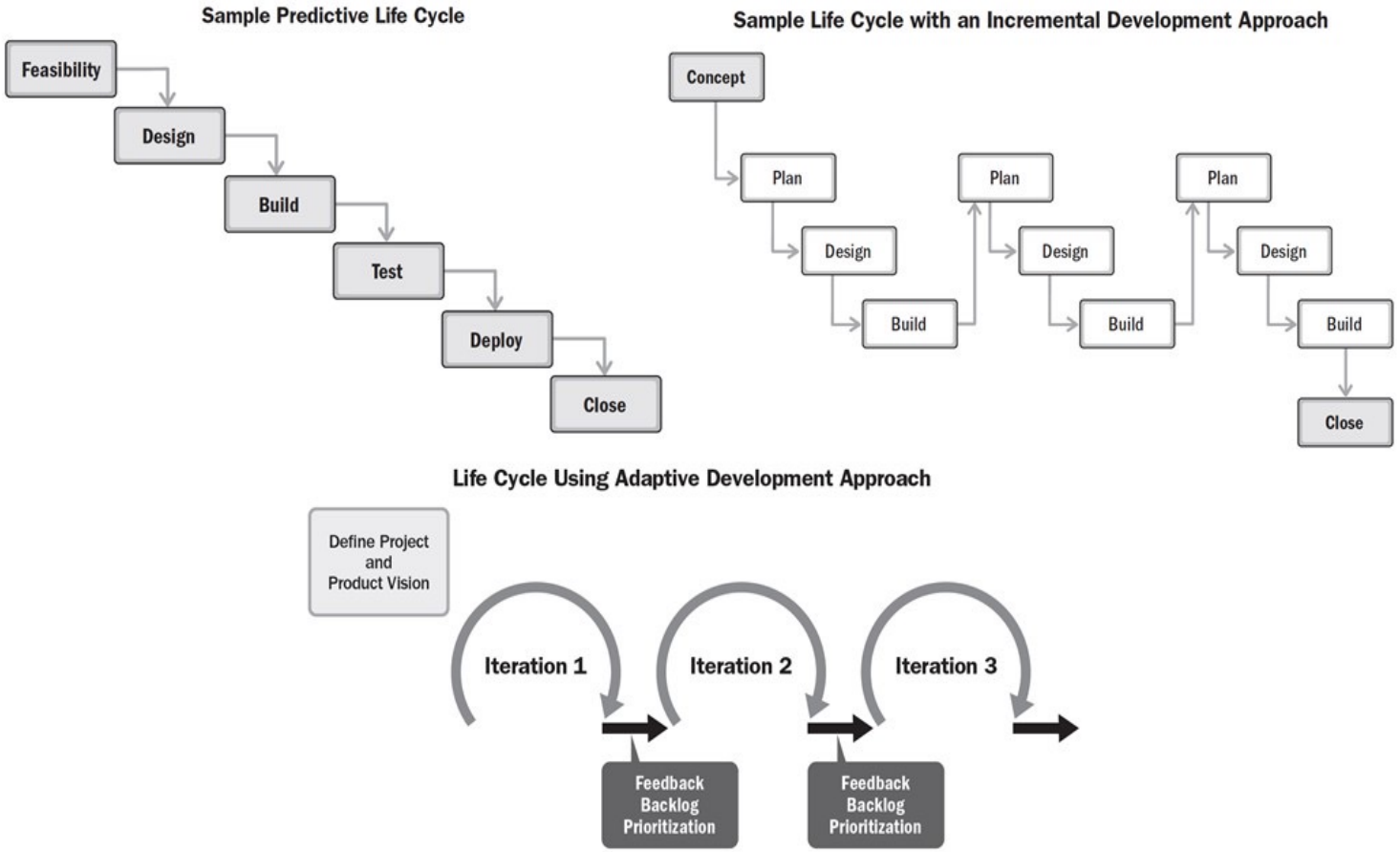


Source: Jeff Patton (accessed 2021)

Project Life Cycles

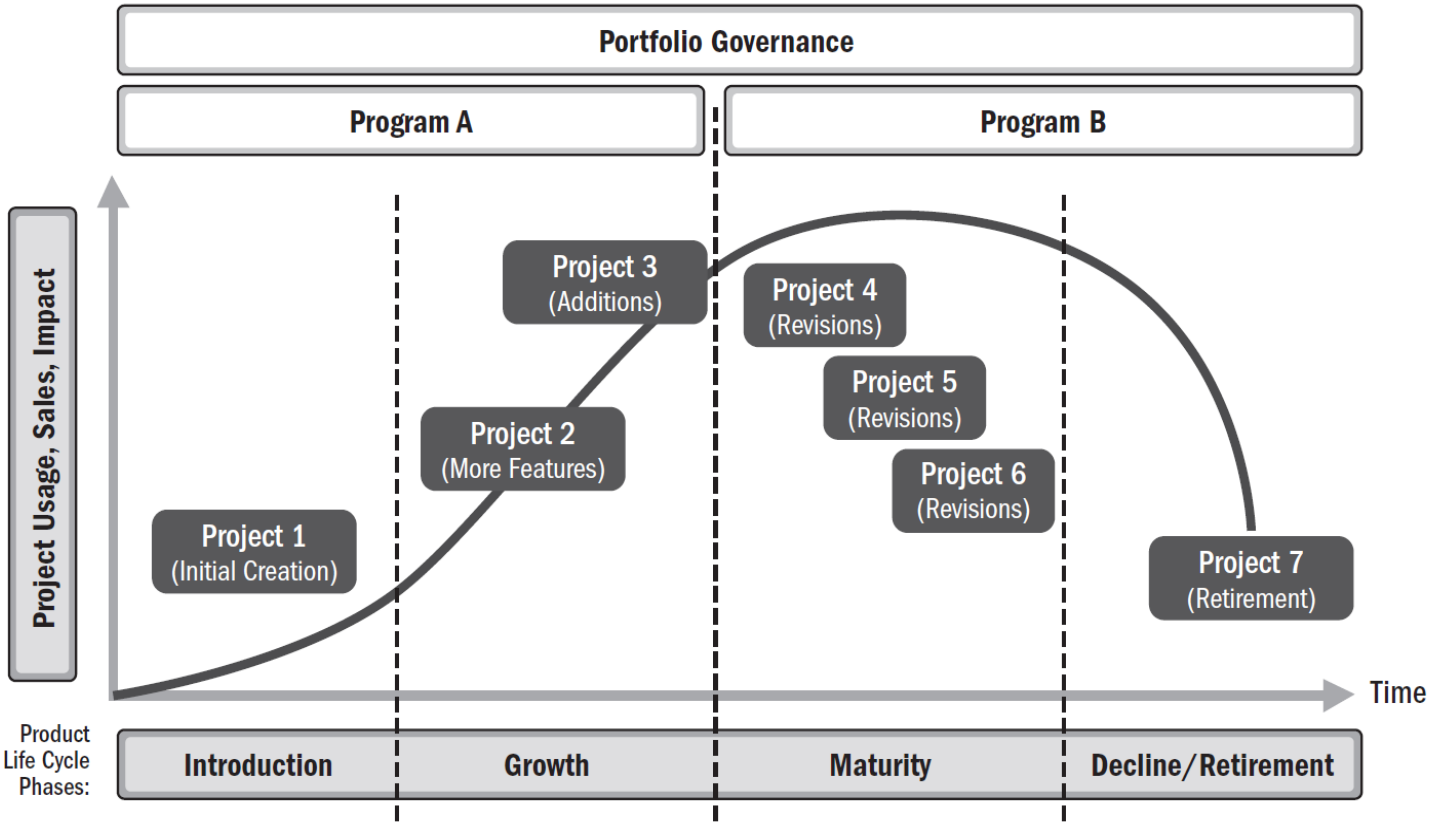
- A **project life cycle** is a series of phases that a project passes through from its start to its completion.
- A **project phase** is a collection of logically related project activities that culminates in the completion of one or more deliverables.

Figure 3-3. Project Life Cycles



Source: Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition* (2021), Figures 2-9, 2-10, and 2-11, pp 43-45.

Figure 3-4. Sample Product Life Cycle



Source: Project Management Institute, Inc., *The Standard for Project Management, Seventh Edition* (2021), Figure 2-4, p. 19.

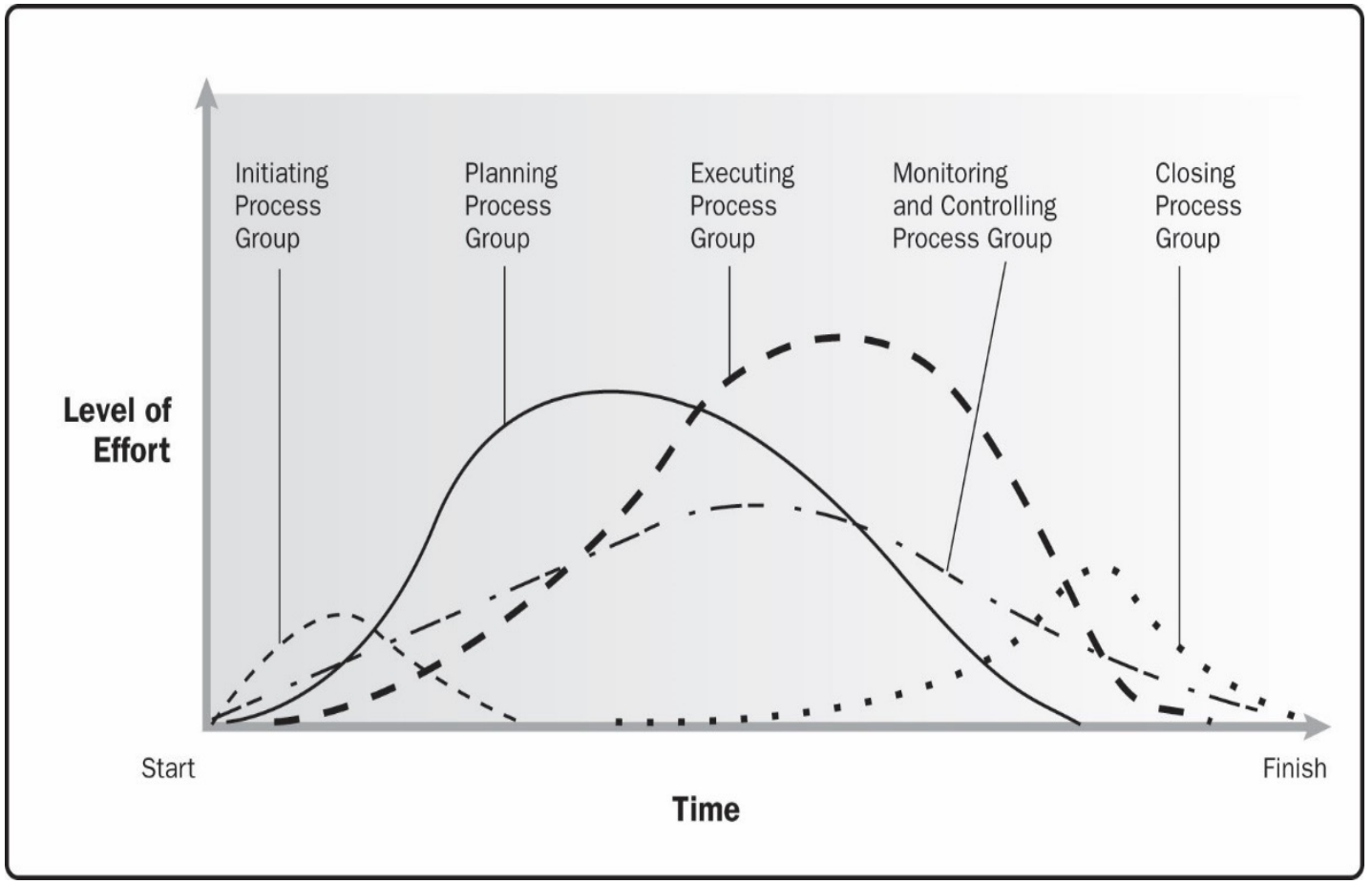
Project Management Process Groups

- **Project management process groups** progress from initiating activities to planning activities, executing activities, monitoring and controlling activities, and closing activities
- A **process** is a series of actions directed toward a particular result

Description of Process Groups

- **Initiating processes** include actions to begin projects and project phases
- **Planning processes** include devising and maintaining a workable scheme to ensure that the project meets its scope, time, and cost goals as well as organizational needs
- **Executing processes** include coordinating people and other resources to carry out the project plans and produce the deliverables of the project or phase.
  - A **deliverable** is a product or service produced or provided as part of a project
- **Monitoring and controlling processes** measure progress toward achieving project goals, monitor deviation from plans, and take corrective action to match progress with plans and customer expectations
- **Closing processes** include formalizing acceptance of the project or phase and bringing it to an orderly end

Figure 3-5. Example of process group interactions within a project or phase



Source: Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)– Sixth Edition* (2017).

Figure 3-6. Time Spent on Each Project Management Process Group

Process Group	Alpha PM	Average PM	Alpha Difference (%)
Initiating	2%	1%	100% more
Planning	21%	11%	91% more
Executing	69%	82%	16% less
Monitoring & Controlling	5%	4%	25% more
Closing	3%	2%	50% more
Total	100%	100%	

Characteristics of the Process Groups

- The level of activity and length of each process group varies for every project
  - Normally, executing tasks require the most resources and time, followed by planning tasks
  - Monitoring and controlling processes are done throughout the project's life span
  - Initiating and closing tasks are usually the shortest (at the beginning and end of a project or phase, respectively), and they require the least amount of resources and time
  - However, every project is unique, so there can be exceptions
- Note that process groups apply to entire projects as well as to project phases
  - A **phase** is a distinct stage in project development, and most projects have distinct phases

Mapping the Process Groups to the Knowledge Areas

- You can map the five process group into the ten project management knowledge areas
- Based on the *PMBOK® Guide – Sixth Edition* (2017), there are 49 total processes in project management
- Figure 3-7 provides a big-picture view of the process groups and knowledge areas

Figure 3-7. Project management process group and knowledge area mapping

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

Source: Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Sixth Edition* (2017).

What Went Right?

- Key findings from a five-year study by Ibbs and Reginato:
  - Organizations with more mature project management practices have better project performance, which result in projects completed on time and within budget much more often than most projects
  - Project management maturity is strongly correlated with a more predictable project schedule and cost performance
  - Organizations that follow good project management methodologies have lower direct costs of project management (6 percent) than those that do not (11 percent)
- Several experts have warned against cutting back on project and portfolio management during touch economic times

The Importance of Top Management Commitment

- Without top management commitment, many projects will fail
- Some projects have a senior manager called a **champion** who acts as a key proponent for a project
- Projects are part of the larger organizational environment, and many factors that might affect a project are out of the project manager's control

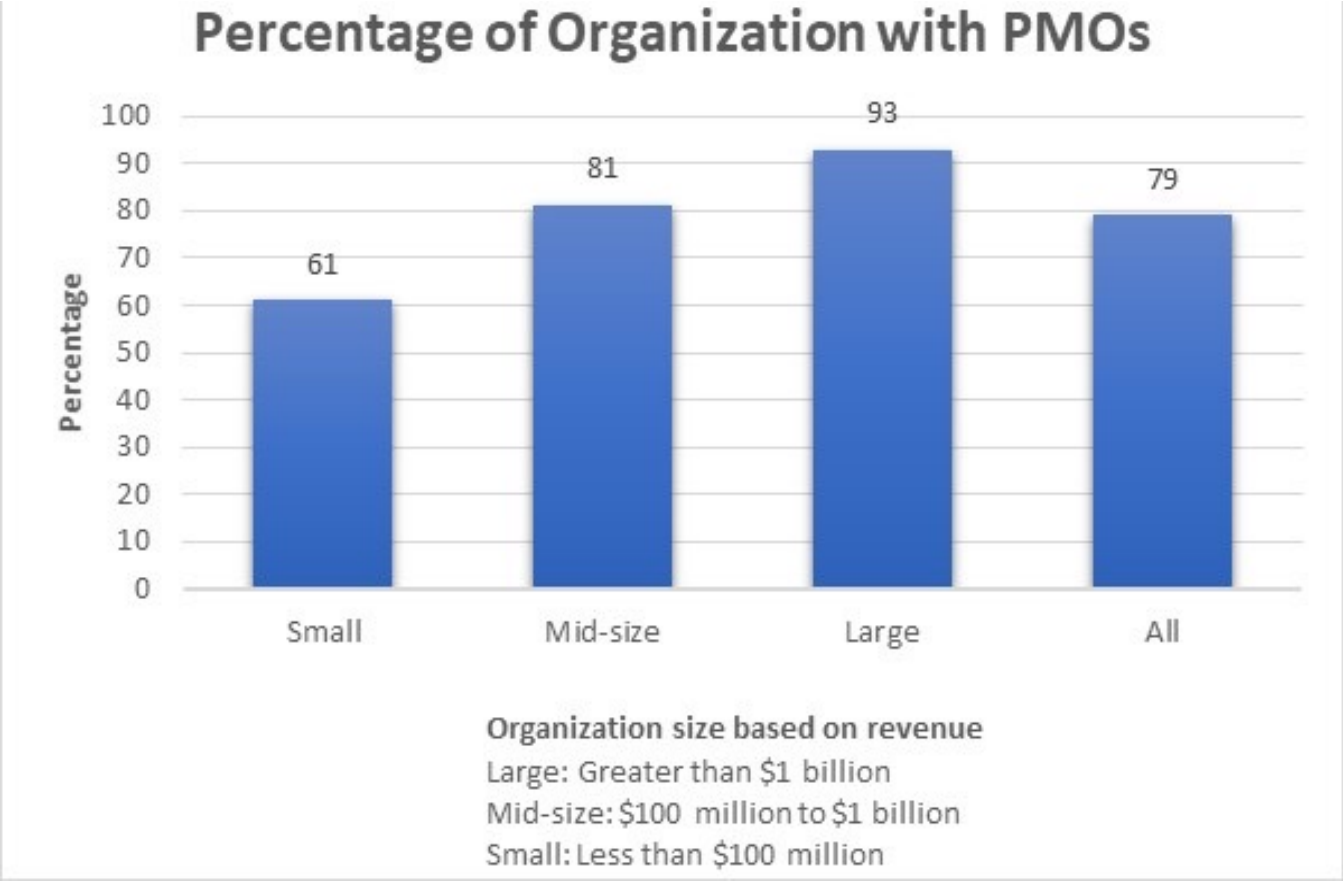
How Top Managers Can Help Project Managers Succeed

- Provide adequate resources
- Approve unique project needs in a timely manner
- Encourage cooperation from people in other parts of the organization and deal with political issues
- Mentor and coach them on leadership issues
- Develop and enforce organizational standards
- Support a **project management office (PMO)**

Project Management Office (PMO)

- A **project management office (PMO)** is an organizational entity created to assist project managers in achieving project goals
  - The average age of the PMO is 6 years.
  - The average annual budget is $1.5 million, and staff size is 8.
  - The average capability maturity rating for PMOs is 2.5 on a scale of 1 to 5.
  - PMOs in high performing organizations have a capability maturity rating of 2.9 and were 10 years old on average with a budget of $3 million.

Figure 3-8 Percentage of Organizations with PMOs

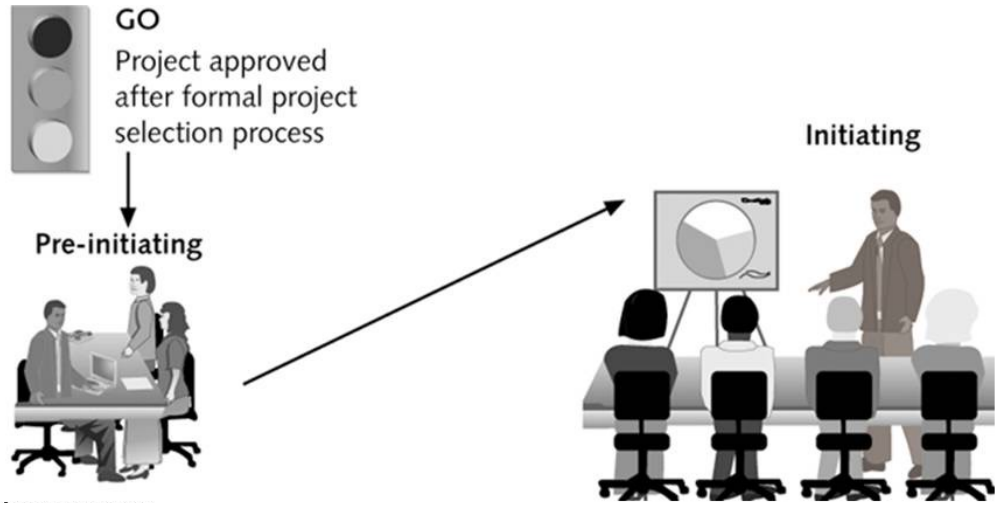


Source: PM Solutions, "The State of Project Management 2020," 2020.

Possible Goals of a PMO

- Collect, organize, and integrate project data for the entire organization
- Research, develop, and share best practices in project management
- Develop and maintain templates, tools, standards, and methodologies
- Develop or coordinate training in various project management topics
- Develop and provide a formal career path for project managers
- Provide project management consulting services
- Provide a structure to house project managers while they are acting in those roles or are between projects

Figure 3-9. Initiating Process Summary



Senior management work together to:

- **Determine scope, time, and cost constraints**
- **Identify the project sponsor**
- **Select the project manager**
- **Develop a business case for the project**
- **Review processes/expectations**
- **Determine if the project should be divided into two or more smaller projects**

Project managers lead efforts to:

- **Identify and understand project stakeholders**
- **Create the project charter and assumption log**
- **Hold a kick-off meeting**

Pre-initiating Processes

- It is good practice to lay the groundwork for a project before it officially starts
- After a project is approved, senior managers should meet to accomplish the following tasks:
  - Determine the scope, time, and cost constraints for the project
  - Identify the project sponsor
  - Select the project manager
  - Meet with the project manager to review the process and expectations for managing the project
  - Determine if the project should be divided into two or more smaller projects (like the Just-In-Time Training Project was) because it is easier to manage smaller projects than larger ones

Figure 3-10. Summary Information for the Just-In-Time Training Phase I Project

Scope Goals

•Investigate and document the training taken in the last two years by all internal employees.

•Determine what courses were taken, the cost of all training, the process for approving/assigning training, and the evaluation of the training by participants, if available.

•Survey employees to get their input on what training they believe they'll need in the next two years, how they'd like to take the training (i.e., instructor-led in-house, instructor-led through a local college, university, or training company, Web-based, DVD, etc.). Also hold focus groups to determine training needs.

•Recommend how to provide the most valuable training for Global Construction employees in the next two years.

•Determine the scope, time, and cost goals for the development and implementation of the Just-In-Time Training Phase II project.

Figure 3-11. Summary Information for the Just-In-Time Training Phase I Project (continued)

Time Goals: Three months
Cost Goals: $**50,000**
Approach/Assumptions:
•All of the costs would be for internal labor.
•All managers and employees would receive information about this study project.
•A response rate of 30% would be acceptable for the survey.
•The project team would do extensive research to back up their recommendations.
•The team would also provide detailed monthly reports and presentations to a steering committee.
•The final deliverables would include a one-hour final presentation and a comprehensive project report documenting all of the information and recommendations.

Business Case for a Project

- A **business case** is a document that provides financial justification for investing in a project
- Typical contents:
  - Introduction/Background
  - Business Objective
  - Current Situation and Problem/Opportunity Statement
  - Critical Assumptions and Constraints
  - Analysis of Options and Recommendations
  - Preliminary Project Requirements
  - Budget Estimate and Financial Analysis
  - Schedule Estimate
  - Potential Risks
  - Exhibits
- See Figure 3-11 in the text for a sample

Initiating Processes

- Identifying project stakeholders
- Creating the project charter
- Creating the assumption log
- Holding a kick-off meeting

Figure 3-12. Initiating Processes and Outputs (*PMBOK® Guide – Sixth Edition*)

Knowledge area	Initiating process	Outputs
Project integration management	Develop project charter	Project charter Assumption log
Project stakeholder management	Identify stakeholders	Stakeholder register Change requests Project management plan updates Project documents updates

Identifying Stakeholders

- **Project stakeholders** are the people involved in or affected by project activities
  - Internal project stakeholders generally include the project sponsor, project team, support staff, and internal customers for the project. Other internal stakeholders include top management, other functional managers, and other project managers
  - External project stakeholders include the project's customers (if they are external to the organization), competitors, suppliers, and other external groups that are potentially involved in or affected by the project, such as government officials and concerned citizens

Media Snapshot

- How would you like to have Mick Jagger, Keith Richards, Charlie Watts, and Ronnie Woods (the Rolling Stones) as your product owners? You might think differently about the song, “I can’t get no satisfaction” in a different light!
- Australia’s International Entertainment Consulting (iEC) team executed a three-year, US$5.7 million project to produce a 20,000 square-foot exhibit called “Exhibitionism—The Rolling Stones.”
- The following quote is from Mick Jagger: “We changed a lot of the ideas that were originally presented and substituted them. So it’s been pretty hands-on…To make the decisions about what goes in and what doesn’t is really difficult.”

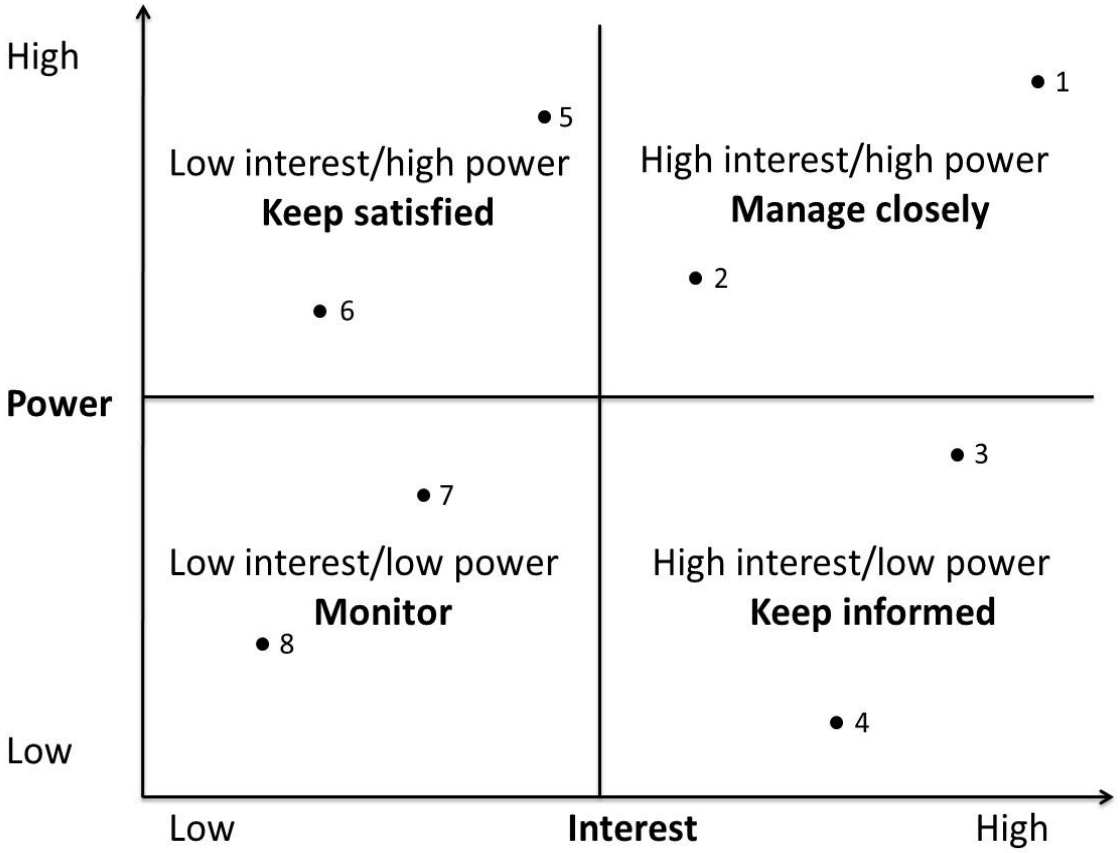
Stakeholder Register and Stakeholder Analysis

- A **stakeholder register** is a document that includes details related to the identified project stakeholders -usually available to many people, so it should not include sensitive information
- A **stakeholder analysis** is a technique for analyzing information to determine which stakeholders' interests to focus on and how to increase stakeholder support throughout the project

Figure 3-13. Sample Stakeholder Register

Name	Position	Internal/ External	Project Role	Contact Information
Mike Sundby	VP of HR	Internal	Project champion	msundy@globalconstruction.com
Lucy Camerena	Training Director	Internal	Project sponsor	lcamerena@globalconstruction.com
Ron Ryan	Senior HR staff member	Internal	Led the Phase I project	rryan@globalconstruction.com

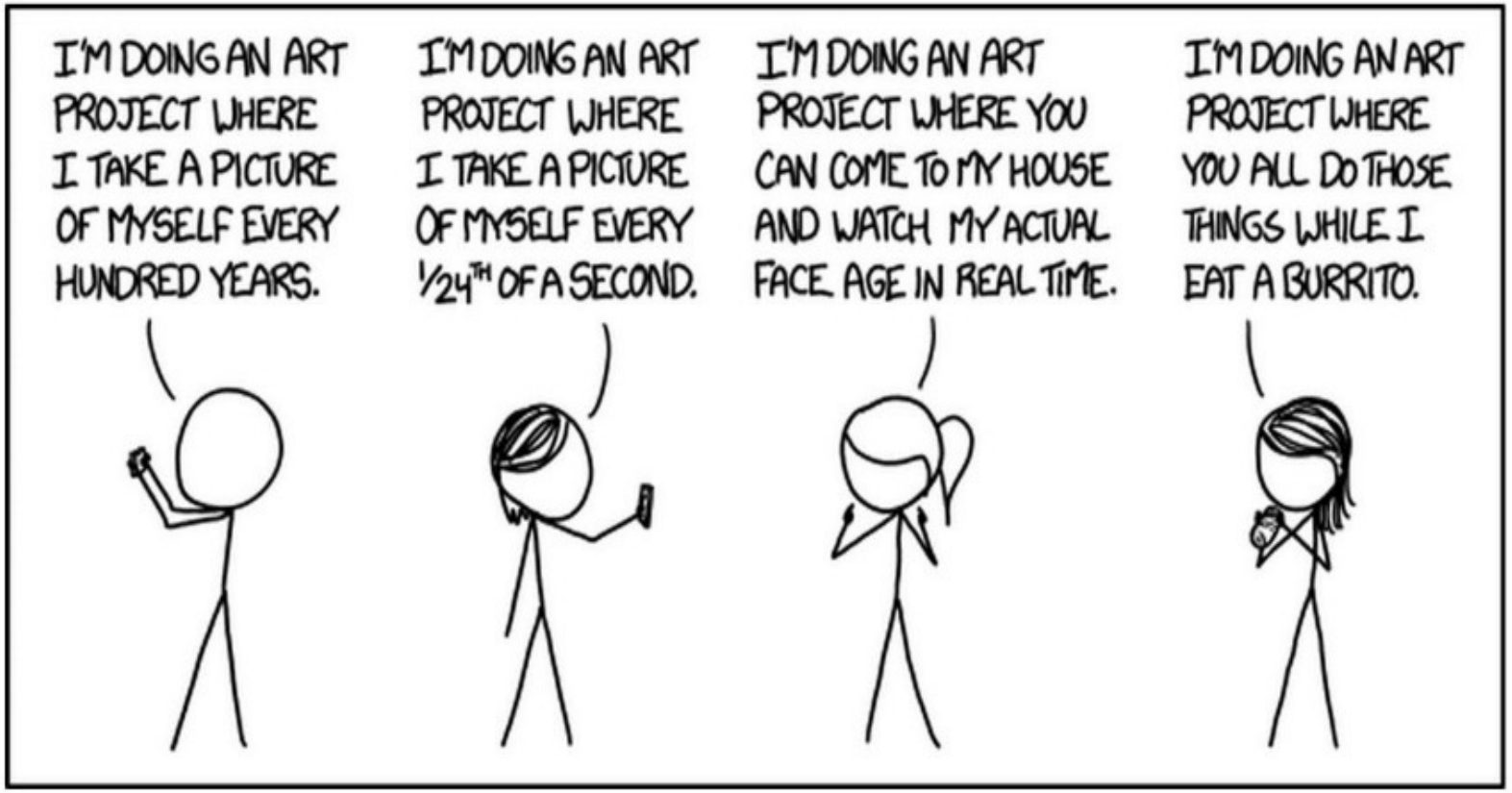
Figure 3-14. Sample Stakeholder Analysis Power/Interest Grid



Categorizing Engagement Levels of Stakeholders

- *Unaware:* Unaware of the project and its potential impacts on them
- *Resistant:* Aware of the project yet resistant to change
- *Neutral:* Aware of the project yet neither supportive nor resistant
- *Supportive:* Aware of the project and supportive of change
- *Leading:* Aware of the project and its potential impacts and actively engaged in helping it succeed

Figure 3-15. Analyzing Stakeholder Interests (www.xkcd.com)



Creating a Project Charter and Assumptions Log

- A **project charter** is a document that formally recognizes the existence of a project and provides a summary of the project's objectives and management
- It authorizes the project manager to use organizational resources to complete the project
- Ideally, the project manager will play a major role in developing the project charter
- Instead of project charters, some organizations initiate projects using a simple letter of agreement or formal contracts
- *A crucial part of the project charter is the sign-off section*

Contents of a Project Charter

- The project's title and date of authorization
- The project manager's name and contact information
- A summary schedule or timeline, including the planned start and finish dates; if a summary milestone schedule is available, it should also be included or referenced
- A summary of the project's estimated cost and budget allocation
- A brief description of the project objectives, including the business need or other justification for authorizing the project
- Project success criteria or approval requirements, including project approval requirements and who signs off on the project (Some people use the term **landing** the project to refer to measuring how well the delivered project met the success criteria.)

Contents of a Project Charter (continued)

- A summary of the planned approach for managing the project, which should describe stakeholder needs and expectations, overall project risk, important assumptions and constraints, and should refer to related documents, such as a communications management plan, as available
- A roles and responsibilities matrix
- A sign-off section for signatures of key project stakeholders
- A comments section in which stakeholders can provide important comments related to the project

Figure 3-16. Sample Project Charter

Project Title: Just-In-Time Training Project **Project Start Date:** July 1 **Projected Finish Date:** June 30 (one year later)
Budget Information: The firm has allocated $1,000,000 for this project. Approximately half of these costs will be for internal labor, while the other half will be for outsourced labor and training programs.
Project Manager: Kristin Maur, (610) 752-4896, kmaur@globalconstruction.com
Project Objectives: Develop a new training program that provides just-in-time training to employees on key topics, including supplier management, negotiating skills, project management, and software applications (spreadsheets and Web development). Develop an approach for measuring productivity improvements from this approach to training on an annual basis.
Success Criteria: This project will be successful if it reduces training cost per employee by 10% or $100/employee/year. It should also be completed on time, be run professionally, and meet all of the requirements. The project sponsor will fill out a customer acceptance/project completion form at the end of the project and give the project at least a 7 out of 10 overall rating.

Figure 3-16. Sample Project Charter (continued)

- Approach section (partial)
  - Terminate all internal training courses except the Six Sigma training once new courses are developed
  - Communicate to all employees the plans to improve internal training and let them know that tuition reimbursement will continue as is.
- Roles and Responsibilities
- Comments (partial)
  - "I want to review all of the information related to providing the supplier management training. We need to make something available quickly." Tim

Contents of An Assumptions Log

- An assumption log is a document used to record and track assumptions and constraints throughout the project life cycle.
- It aids in communicating information to key stakeholders and avoids potential confusion.
- Most projects include several assumptions that affect the scope, time, cost, risk, and other knowledge areas.
- It is important to document and validate these assumptions.

Figure 3-17. Sample Assumptions Log

ID	Assumption Description	Category	Owner	Due Date	Status	Actions
108	Shipping of materials will only take 2 days	Time	Kristin	Sep. 1	Closed	Require 2-day shipping
122	Employees will take some of the training during non-work hours	Human resources	Lucy	Nov. 1	Open	Meet with dept. heads to discuss

Holding a Project Kick-off Meeting

- Experienced project managers know that it is crucial to get projects off to a great start.
- A **kick-off meeting** is a meeting held at the beginning of a project so that stakeholders can meet each other, review the goals of the project, and discuss future plans. Note that *the PMBOK® Guide – Sixth Edition*, suggests that the kick-off meeting be held during the end of the planning or start of the executing process group. In the author's experience, it is best hold it earlier.
- The project champion should speak first and introduce the project sponsor and project manager
- There is often a fair amount of work is done to prepare for the meeting.
- If it cannot be held face-to-face, try to include audio and/or video to engage and understand participants.

Figure 3-18. Sample Kick-Off Meeting Agenda

Just-In-Time Training Project
Kick-off Meeting
July 16

Meeting Objective: Get the project off to an effective start by introducing key stakeholders, reviewing project goals, and discussing future plans

Agenda:

- Introductions of attendees
- Review of the project background
- Review of project-related documents (i.e., business case, project charter, assumptions log)
- Discussion of project organizational structure
- Discussion of project scope, time, and cost goals
- Discussion of other important topics
- List of action items from meeting

Action Item	Assigned To	Due Date

Date and time of next meeting:

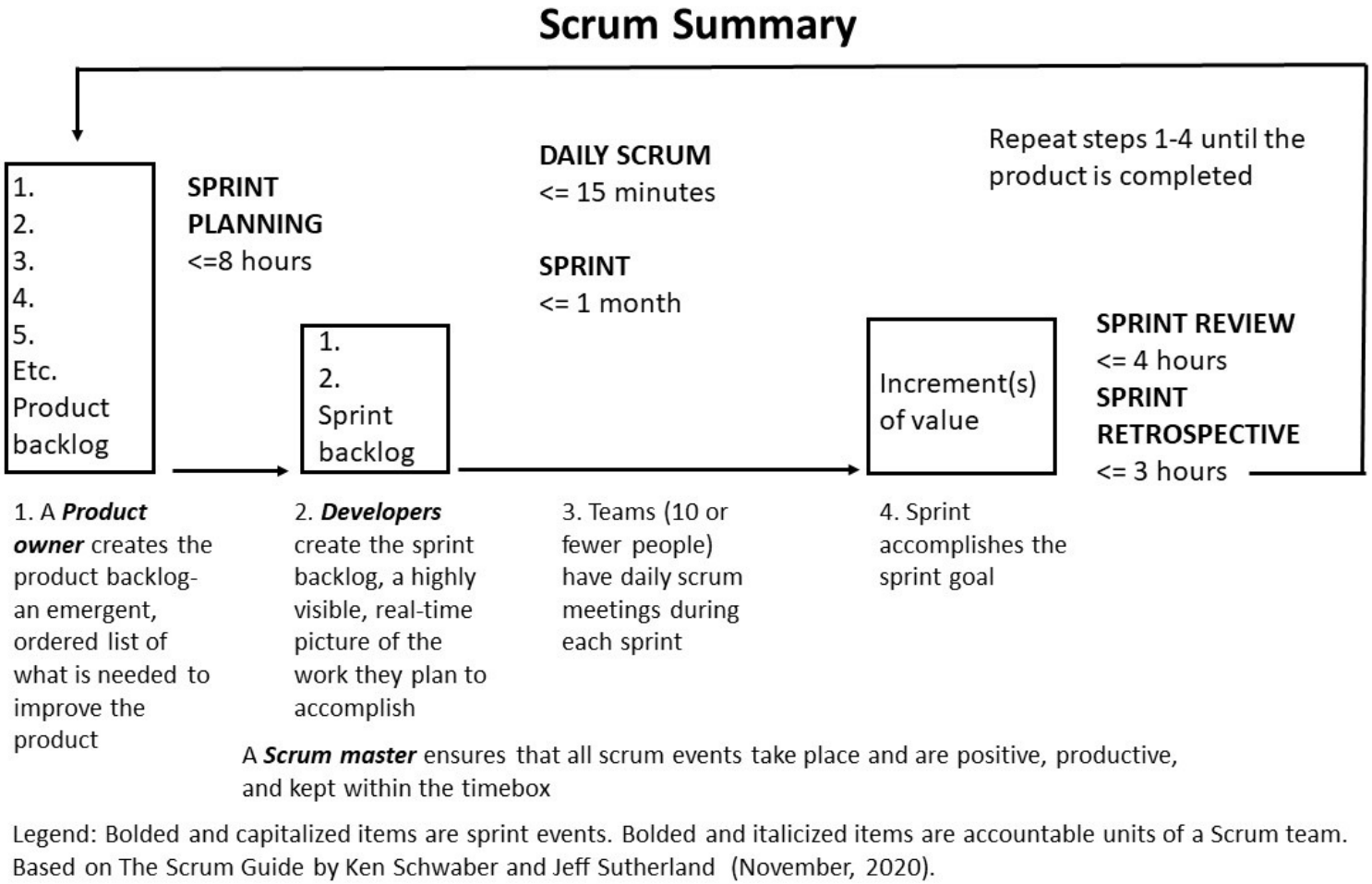
Pre-initiating and Initiating an Agile/Hybrid Project

- Global Construction decided to initiate the Global Construction Human Capital (GCHC) project to provide additional training to not only their own employees, but to future employees as well. They also wanted to provide incentives for people to come to work for their company and stick with them.
- They decided to use an agile/hybrid approach for managing this project because the scope was unclear, they wanted incremental deliveries of valuable products, they expected many changes along the way, and they wanted to use whatever practices would work best to achieve the best outcome. They did not want to be tied to one particular approach, but they would use a lot of practices from Scrum, some from Kanban, some predictive, etc.

GCHC Project

- Unlike the Just-In-Time Training project, there was no need for a business case for the GCHC, affectionately pronounced the “goochy,” slang for great or cool. The company knew it was a good investment and decided to initially fund three Scrum teams of 3-5 people each. More funding would be provided as needed.
- They would follow the Scrum framework to some extent but use other ways of working as needed. Most of the team members would be working virtually.

Figure 3-19. The Scrum Framework



Legend: Bolded and capitalized items are sprint events. Bolded and italicized items are accountable units of a Scrum team. Based on The Scrum Guide by Ken Schwaber and Jeff Sutherland (November, 2020).

Scrum Pillar and Values

- According to The Scrum Guide (2020), Scrum theory is based on three pillars:
  1. Transparency
  2. Inspection
  3. Adaptation
- It also emphasizes five values:
  1. Commitment
  2. Focus
  3. Openness
  4. Respect
  5. Courage

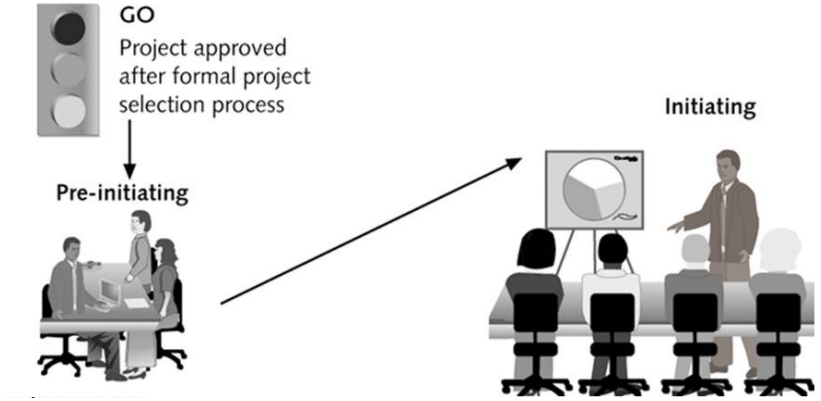
Video Highlights

- In the Axosoft video "Scrum in 10 Minutes," Hamid Shojaee briefly explains key concepts like product backlogs, team roles, sprints, and burndown charts.
- Mike Cohn of Mountain Goat Software provides short videos on Scrum Foundations
- You can also see how agile techniques can be applied to manufacturing projects like building cars. Joe Justice, a consultant for Scrum, Inc. gave a TEDx talk called Wikispeed describing this process.

Hybrid Aspects of GCHC

- Still created a project charter, kick-off meeting, stakeholder register, and stakeholder analysis
- They did have a project manager, Debra, who also served as the product owner and Scrum master

Figure 3-20. Agile/Hybrid Project Initiating Process Summary



Senior management work together to:	Project team work together to:
• Identify the product owner, project manager, Scrum master, and development team • Create a product vision and product strategy	• Create a project charter, stakeholder register, stakeholder analysis, and hold a kick-off meeting (predictive practices) • Create the initial product backlog • Estimate the implementation effort by sizing the product backlog items • Create a high-level product release plan

Identify Key Stakeholders

- The **product owner** is responsible for maximizing the value of the product created by the development team by managing the product backlog.
- The **Scrum master** is responsible for promoting and supporting the Scrum process as defined in the Scrum Guide.
- The **development team** or developers are professionals who do the work of delivering a potentially releasable increment of a product at the end of each sprint.

Product Vision Statement

- A product vision describes the desired future state that would be achieved by developing and deploying a product.
- Format: For (target customer) who (statement of need or opportunity), the (product name) is a (product category) that (key benefit, reason to buy). Unlike (primary competitive alternative), our product (statement of primary differentiation).

Figure 3-21. Sample Product Vision Statement

Product Vision Statement

For current and future employees who desire to work for and advance in our company, the Global Construction Human Capital project is an incentive and learning program that helps people develop new skills that lead to employment and advancement with our company. Unlike other programs, our product assesses people's interests and abilities, provides multiple options for incentives and learning, and leads to specific opportunities with our company.

Product Strategy

- A **product strategy** is a high-level plan describing what the organization hopes to accomplish with its product and how it plans to do so.
- The strategy is depicted in a product roadmap
- Business goals, in priority order:
  - Hiring: Increase hiring of skilled and high potential workers by 20% within a year
  - Retention: Reduce employee turnover by 25% within a year
  - Course Content: Develop several high-need courses in-house and partner with another organization to provide several learning opportunities for potential and existing workers within 6 months
  - Adoption: Have at least 2,000 potential new hires complete assessments or free course within 3 months and at least 5,000 current workers complete at least one course within 6 months

Figure 3-22. Sample product roadmap

Products	Q1			Q2		
	January	February	March	April	May	June
Global Construction Human Capital						
Retention						
Hiring						
Course Content						
Adoption						

Creating an Initial Product Backlog and Estimating Size

- The product owner, in collaboration with the team and other key stakeholders, creates an initial **product backlog**, which is an emergent, ordered list of what is needed to improve the product.
- Contents of the product backlog usually include a priority number, ID, description (often in the form of a user story), and an estimate.
  - A **user story** is a description of what a customer or user would want from a product or solution.
  - It often follows the format: As a < type of user >, I want < some goal > so that < some reason >.
- Agile approaches to estimating are often done in terms of relative size.

Figure 3-23. Sample Product Backlog

Priority	ID	Description/User Story	Estimate (T- shirt size)
1	1	As a hiring manager, I want to hold a "hiring days" event both face-to-face and virtual, so that I can meet, review, and hire people quickly.	XL
2	7	As a senior manager, I want to see results of recent literature on hiring and retention strategies, so that I can make good decisions.	M
3	12	As a potential employee, I want to take a quick assessment, so that I can see what jobs I might be interested in.	S

Product Release Plan

- A **product release plan** is a tactical document that spans only a few months and is used internally for the development teams.
- Product release plans evolve based on the initial sprints and feedback from the teams and other stakeholders.
- **Features** are services that fulfill user needs.
- Features for the retention work included an internal survey, survey analysis, a summary of external research on retention, hiring days events, and new policies for retention (such as retention bonuses, daycare assistance, mentorship programs, educational opportunities, etc.).

Figure 3-24 Sample Product Release Plan

Team	Sprint 1 Features	Sprint 2 Features	
A. Incentives	New hire assessment quiz content Hiring days event plan Hiring and retention survey and analysis Hiring and retention research summary New hiring and retention policies draft	Hiring days event New retention policies communications Retention policies plan	
	Release 1		**Release 2**
B. Education	Course 1 for potential new hires Course 2 for potential new hires Education partner research summary	Education partner selection Educational opportunities plan	
	Release 1		**Release 2**
C. Adoption		Website for hiring Website for Course 1 and Course 2 Advertising for hiring days event Website for educational opportunities	
			Release 1

Best Practice

- Organizations know that they need a well-educated workforce. The education can include traditional high school or university education, technical school or on-the-job training, and continuous learning through a variety of methods.
- Waste Management's "Your Tomorrow" program provides a great example of providing educational opportunities to current and potential workers. The program, in partnership with Guild Education, provides employees and their eligible dependents with the opportunity to choose from a full range of education options at no cost. "Your Tomorrow" offers nearly 36,000 full-time employees and over 34,000 children and spouses with access to more than 170 programs, including undergraduate and graduate degrees, technology and business certificate programs, and high school completion

Chapter Summary

- Before initiating projects, it is important to determine the development approach and consider the project and product life cycle.
- It is also important to understand the importance of top management commitment, organizational standards, and Project Management Offices to helping projects succeed.
- The five project management process groups are initiating, planning, executing, monitoring and controlling, and closing. Mapping the main activities of each project management process group into the ten project management knowledge areas provides a big picture of what activities are involved in project management

Chapter Summary (continued)

- Global Construction's Just-In-Time Training project demonstrates the process of initiating a predictive project, including the following:
  - Identifying and stakeholders
  - Creating the project charter and assumptions log
  - Holding a kick-off meeting
- The GCHC project used an agile/hybrid approach. In addition to the above, they also created:
  - An initial product backlog
  - Relative size estimates for user stories
  - A high-level product release plan