

PMI®—Agile Certified Practitioner (PMI-ACP)®

Knowledge and Skills: Part 4



After completing this lesson, you will be able to:



- List the PMI code of ethics and professional conduct
- Identify the steps of process analysis techniques
- Identify the framework for conducting self-assessment
- Explain the various Agile contracting methods
- State the focus areas of Agile compliance (organization)
- Identify control limits for Agile projects and Agile failure modes

The PMI code of ethics and professional conduct describes the expectations from the practitioners in the global project management community. It also articulates the ideals and the behaviors that are mandatory in the professional and volunteer roles.

This code of ethics and professional conduct applies to:

- All PMI members
- Individuals who are not members of PMI but meet one or more of the following criteria:
 - Non-members who hold a PMI certification
 - Non-members who apply to commence a PMI certification process
 - Non-members who serve PMI in a volunteer capacity

The four broad categories of the code of ethics are as follows:

Responsibility

“Responsibility is our duty to take ownership for the decisions we make or fail to make, the actions we take or fail to take, and the consequences that result”.

Respect

“Respect is our duty to show a high regard for ourselves, others, and the resources entrusted to us. Resources entrusted to us may include people, money, reputation, the safety of others, and natural or environmental resources”.

Fairness

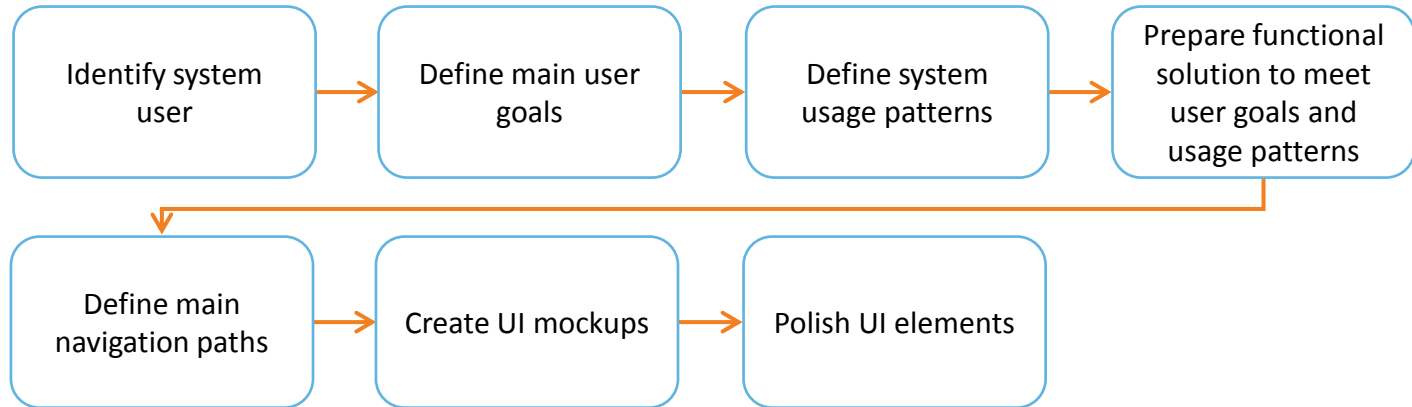
“Fairness is our duty to make decisions and act impartially and objectively. Our conduct must be free from competing self-interest, prejudice, and favoritism”.

Honesty

“Honesty is our duty to understand the truth and act in a truthful manner both in our communications and in our conduct”.

Process Analysis Techniques

Process analysis is an important part of an architect, a product owner, a business analyst, or anyone who works on understanding a system, defines or refines the requirements, provides a business, or process related solution. The steps involved are as follows:



Self-assessment is the process wherein an individual, an organization, or a team conducts a comprehensive review of oneself to understand the strengths, weaknesses, and opportunities to improve.

- The purpose of self-assessment is to stimulate learning and change, as well as enthusiasm for the application of Agile techniques.
- Self-assessment should highlight learning areas for improving Agile techniques.
- The goal of self-assessment is to identify development needs. Various prevailing ideas and opinions are identified and also the people's commitment to specific tasks are captured. Further, this is used to create a development plan.

Organizations perform self-assessments with the purpose of triggering change.

Peter Drucker has identified the following five questions as a framework for conducting self-assessment. These form the inputs into Agile projects to increase their success.



What is our Mission?



What are our Results?



Who is our Customer?



What is our Plan?



What does the Customer Value?

Agile contract contains the Agile nature of the project. An Agile contract must contain the following:

Objectives

Objectives of the project and of the cooperation between the companies.

Project Structure

Scrum process, key roles, and any differences from Scrum which apply.

Key Personnel

Personnel responsible at the operational and escalation levels and their requirements.

Payment Terms

Payment and billing, including any bonus and penalty clauses.

Termination Clause

Clauses governing the normal and early termination of the project.

Legal Details

Civil liability limit, venue, severability, etc., based on local law and legal customs.

Agile methodologies can work with any form of contracts.

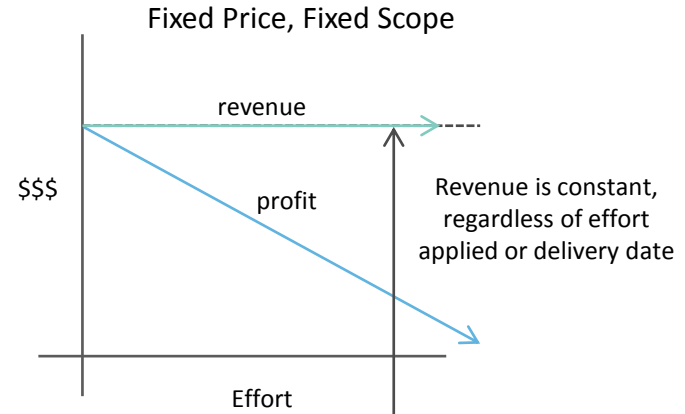
Some of the contract types are as follows:

- Fixed Price or Fixed Scope
- Time and Materials (T & M)
- Time and Material with Fixed Scope and a Cost Ceiling
- Time and Material with Variable Scope and a Cost Ceiling
- Bonus or Penalty Clauses
- Fixed Profit

Fixed Price or Fixed Scope Contract

The relationship between the effort and the revenue or profit for a fixed price with a fixed scope contract is given.

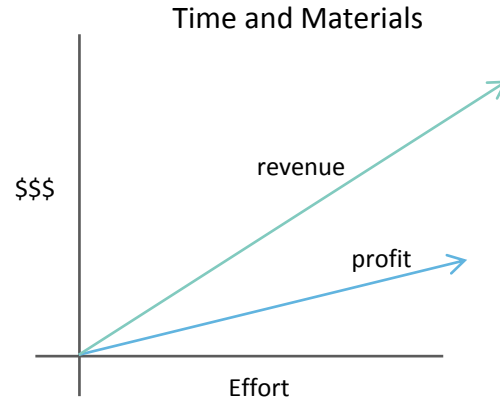
- In fixed price or fixed scope contracts, the amount charged by the vendor is fixed, so the revenue is fixed.
- The profit decreases as the effort on the project increases, so in this type of contract the risk of cost escalation is borne by the seller.



T and M Contract

The relationship between the effort and the revenue and profit for time and materials contract is given.

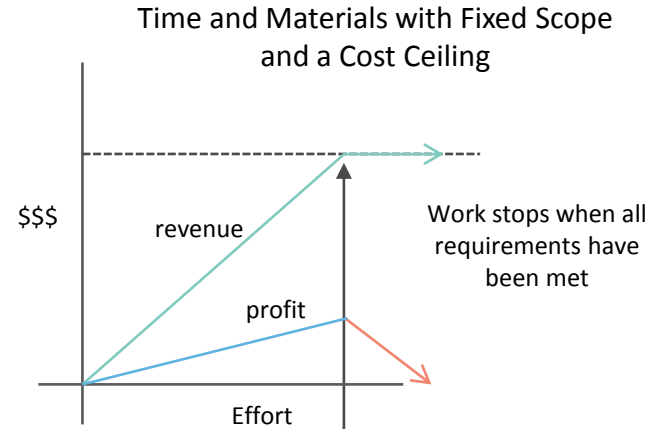
- In a time and materials contract, the seller's revenue is directly proportional to the effort.
- Each unit of effort includes a profit margin, the profit also increases linearly with the effort.
- The risk of cost (and effort) escalation is borne by the buyer.



T and M with Fixed Scope and Cost Ceiling

Time and Materials contract with a fixed scope is given. The amount that the seller is allowed to bill for it is capped at a certain ceiling.

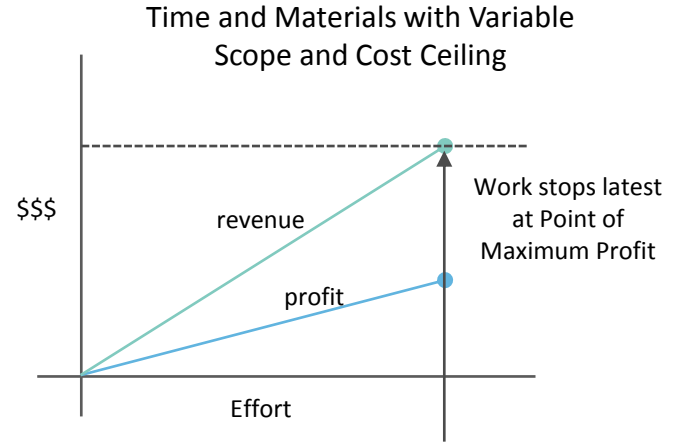
- The seller's revenue and profit goes on increasing until the cost ceiling is reached, beyond which the profits start diminishing.
- The buyer is warranted against indefinite extension of the project and a penalty is imposed on the seller if there is an extension beyond the agreed point.



T and M with Variable Scope and Cost Ceiling

Time and Materials contract with a variable scope is given. The amount that the seller is allowed to bill for it is capped at a certain ceiling.

- The seller's revenue and profit goes on increasing until the cost ceiling is reached. The project basically stops at this point as no more billing is allowed.
- The seller tries to restrict the costs and is willing to limit the scope when the budget is exhausted.



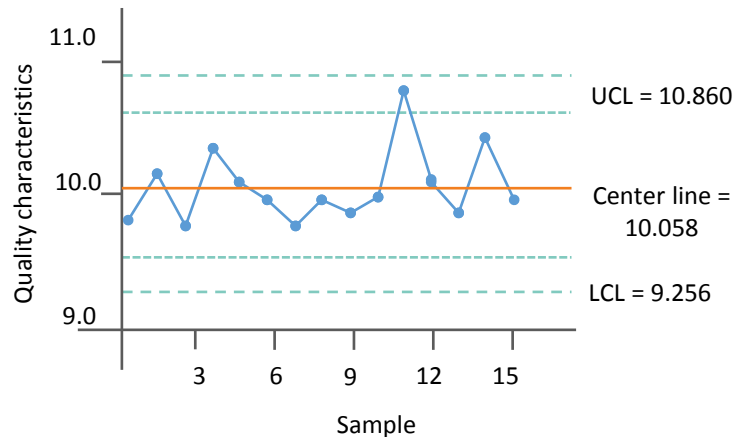
Agile compliance is a concept which necessitates the Agile projects to adhere to the prescribed regulations or rules. The major focus of Agile compliance is as follows:

- Map agility requirements to corporate and governance requirements.
- Discover the optimal level of security and compliance without compromising business agility or violating legal and moral responsibilities.
- Manage human and organizational factors that impede agility and compliance.
- Ensure compliance is fully supported, Agile is not a license to avoid compliance requirements.
- Find the correct path to ensure agile compliance in your organization.

Control Limits for Agile Projects

Control limits are used to detect signals that indicate when a process is not in control and therefore not operating predictably.

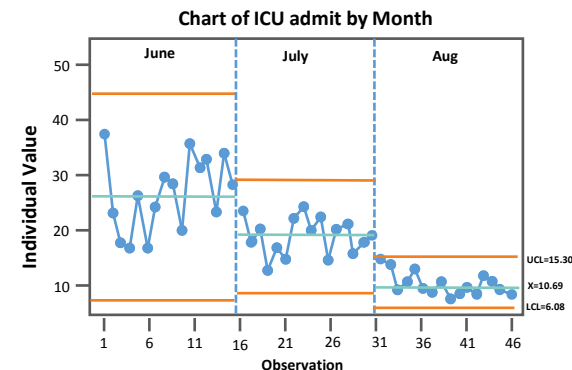
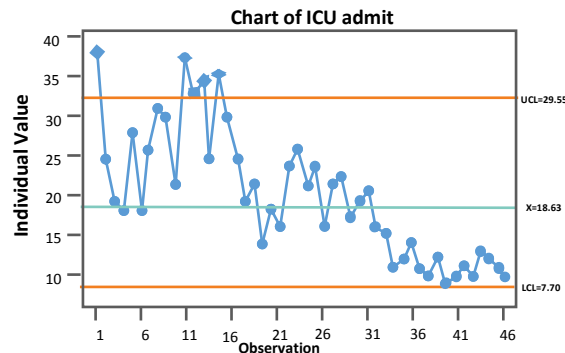
- A signal is defined as any single point outside of the control limits.
- A process is also considered out of control if there are seven consecutive points, on either side of the mean.
- The upper and lower bounds show the ranges where a data point will fall within six sigma (or 99.9997% of the time).



Control Limits for Agile Projects (contd.)

Projects will see different velocities between iterations and varying amounts of defects. To understand if these variations are within normal ranges, it is necessary to understand the mean, and upper and lower control limits of a process.

- If there are measurement points outside the upper and lower control limits, the development process is out of statistical control and the outlier should be examined to understand what contributed to the problem.
- Upper and lower control limits that are closer to the mean indicate the process is more predictable.
- Control charts can show productivity improvements.



In Scrum, the term 'ScrumBut(t)' refers to the maxim, "Agile practices don't fail - rather the variations on Agile adoption fail".

Failure of Agile projects is most often due to the following reasons:

- Culture doesn't support change.
- Lack of reward plan, and existence of a static and prescriptive standard of work.
- Lack of retrospectives.
- Actions which come out of the retrospective get ignored or written off.
- Lack of collaboration in planning.
- Bad Scrum Master who uses a command and control style to speed up the things, but in reality slows things down.

Lyssa Atkins has identified seven types of Agile Coach failure modes:



The spy spends most of the time observing the team to pick up topics for the next retrospective.



The seagull jumps in with criticisms on teams' techniques, but doesn't give constructive ideas to address these.



The opinionator gets attached to their opinion and lose the objectivity needed to help the team have fruitful discussions.



The admin undermines the team ownership by becoming an unnecessary middle-man for meeting logistics, access requests, and other jobs.



The hub acts as the center for communication between team members and for task-level coordination.



The butterfly spends enough time to impart a pearl of wisdom or pose a question, just before leaving for another meeting or issue that needs attention.



Experts are so involved in the details of the team that they don't see the broader goals of the projects, but focus on the details of implementing stories.



QUIZ

1

Who does the PMI code of ethics and professional conduct apply to?

- a. Non-members who hold a PMI certification
- b. Non-members who apply to commence a PMI certification process
- c. Non-members who serve PMI in a volunteer capacity
- d. Anyone with the title of Project Manager



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Who does the PMI code of ethics and professional conduct apply to?

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- b. Non-members who apply to commence a PMI certification process
- c. Non-members who serve PMI in a volunteer capacity
- d. Anyone with the title of Project Manager



Answer: d.

Explanation: PMI code of ethics and professional conduct applies to anyone with the title of Project Manager. Not all Project Managers are PMI members or have completed the other criteria listed above.



QUIZ
2

A company has a high risk project that needs to complete, they have decided to outsource the development. What would be the best contracting model?

- a. Time and Material
- b. Firm Fixed Fee
- c. Time and Material with a Bonus clause
- d. Cost plus



QUIZ 2

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- a. Time and Material
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- c. Time and Material with a Bonus clause
- d. Cost plus



Answer: b.

Explanation: Firm fixed fee is the best way to manage the risk of this type of project.



QUIZ

3

What best describes the Agile failure mode known described as the butterfly?

- a. The coach becomes an unnecessary middle-man for meeting logistics, access requests, and other administrator-type jobs.
- b. The coach is only present long enough to share a pearl of wisdom or pose a philosophical question.
- c. The coach spends just enough time observing the team to pick up topics for the next retrospective.
- d. The coach is so involved in the details of the team's work that only the trees are visible.



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- d. The coach is so involved in the details of the team's work that only the trees are visible.



Answer: b.

Explanation: The butterfly flies around from team to team, landing just long enough to impart a pearl of wisdom or pose a philosophical question.



QUIZ
4

If a data point on a control chart exceeds the upper or lower control limits what does that indicate?

- a. The process is out of control and the data should be examined to understand what contributed to this exception.
- b. Only one data point is considered an outlier but more than one would be a pattern.
- c. Nothing. There is always a chance that a data point will be outside of one of the control limits.
- d. The control limits need to be adjusted to accommodate the exception.



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- c. Nothing. There is always a chance that a data point will be outside of one of the control limits.
- d. The control limits need to be adjusted to accommodate the exception.



Answer: a.

Explanation: Data points outside of the upper or lower control limits should be investigated to understand what contributed to them and either prevent them or understand how to repeat them.



QUIZ
5

What are the five questions that Peter Drucker recommends to ask while performing an organizational self-assessment?

- a. What is our Mission, Who is our Customer, What does the Customer Value, What are our Results, What is our Plan.
- b. Plan, Do, Check, Act, Measure.
- c. What is our Vision, What is our Mission, What does the Customer Value, What are our Results, What is our Plan.
- d. What is our Vision, What is our Mission, Who is our Customer, What does the Customer Value, What are our Results .



QUIZ

5

What are the five questions that Peter Drucker recommends to ask while performing an organizational self-assessment?

- What is our Mission, Who is our Customer, What does the Customer Value, What are our Results, What is our Plan.
- Plan, Do, Check, Act, Measure.
- What is our Vision, What is our Mission, What does the Customer Value, What are our Results, What is our Plan.
- What is our Vision, What is our Mission, Who is our Customer, What does the Customer Value, What are our Results .



Answer: a.

Explanation: Drucker recommends five questions that all organizations should answer when conducting a self-assessment, “What is our Mission, Who is our Customer, What does the Customer Value, What are our Results, and What is our Plan.”



Here is a quick recap of what was covered in this lesson:



- Responsibility, respect, fairness, and honesty are the four major code of ethics that have to be followed by every professional of the project management community.
- Process analysis is an important part of an architect, a product owner, a business analyst, or anyone who works on understanding a system, defines or refines the requirements, provides a business, or process related solution.
- The five question self-assessment framework provides the inputs into Agile projects to increase their success.
- An Agile contract defines the Agile nature of the project.
- Agile compliance necessitates the Agile projects to adhere to the prescribed regulations or rules.
- Control limits are used to detect signals that indicate when a process is not in control and therefore not operating predictably.



THANK YOU

Image References

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