



PMI-ACP®

EXAM PREP

PMI Authorized Training Partner

BOOTCAMP

Session 8

- This course will assist learners in preparing for PMI's PMI-ACP Exam (2024 Update)

ATTENDENCE TRACKING

Percipio Users:
Name is based on your log in information in Percipio

Using Zoom:
Enter your first and last name

BREAKS



Yes! We will have periodic breaks

For attendance purposes, please stay logged in during all breaks.



CHAT vs Q & A

Please use the **Chat** for:

- **Greetings** before the session starts and during breaks
- Once the session starts , the chat may be closed or changed to *Hosts & Panelists Only* to minimize disruptions and focus on important information.
- The instructor may open the chat during the session for student **to respond to the instructor's questions** and create a group dialog.

CHAT vs Q & A

Please use the **Q&A** for:

- **Technical assistance** – Begin with: Percipio or Non-Percipio student
- Guidance on how to **access course material** – Begin with: Percipio or Non-Percipio
- Clarification and **questions on lecture points**, if not answered by instructor
- The Q&A may be open and closed throughout the session to allow us to address questions/issues in a timely manner.
- **Please be very patient, the support team responds to many inquiries per session**

IS LIVE ATTENDANCE REQUIRED?

- **YES**, if you are taking this training to register for the PMI-ACP exam
- You are **allowed to miss up to two sessions IF** you make up the sessions by **watching the video replays**.
- A **missed session means** you were disconnected for **more than a total of 15 mins** for the duration of the session.
- If you **miss three or more sessions**, you will need to make up the missed time by **attending live in another 8-day cohort**.
- *Please see the Bootcamp Calendar for information about upcoming sessions at: <http://calendar.skillsoft.com/>



ACCESSING THE

VIDEO REPLAYS

1. Go to: <https://github.com/Skillsoft-Content/PMI-ACP-Replay>
2. Replays will be available within 2 business days after the session ends.
3. Click on the Excel file for the year you attended the Bootcamp. You won't see a *file open* option, but it is selected.
4. Click the *Download raw file* button on the far left-hand side.
5. Open the downloaded file using this password: acpB00tcampReplay!

Those are zero's not the letter O. The password is case sensitive.



7. Locate and open the worksheet tab that corresponds with the bootcamp you attended
8. Make a note of the passcode.
9. Paste the provided link into your browser.
10. Complete the required registration steps
11. Input the passcode when prompted
The password to open the Excel file is NOT the passcode to access the replay.

Note: Replays will be available for 1 year.
They are not available for download.

No limit to watch replays to study

CERTIFICATE OF COMPLETION

Percipio Users:

- When attending live,..
always login through Percipio
 - even if you are simultaneously
logged in through Zoom.
- This helps ensure Percipio auto
generates the certificate at the
end.

To check your certificate auto-generated after the last session:

Log into Percipio

- > Select **My Learning** in the upper right corner
- > Select **Learning activity**
- > Select the "PMI PDU" tab
- > locate **PMI-ACP ATP Bootcamp**
- > Select the **three vertical dots** to the far right
- > Click **Download Certificate**.

CERTIFICATE OF COMPLETION

PERCIPIO USERS

- Your **certificate will not auto generate** after the last session ends **IF** the following situations happen:
 - 1. You didn't log into the Bootcamp through Percipio or the Percipio calendar link for one or more sessions.
 - 2. You missed too much time in one or more sessions.
 - 3. Your organization turned off certificates.

Then you will have to manually submit an application for the certificate of completion.

CERTIFICATE OF COMPLETION

**NON PERCIPPIO USERS and
PERCIPPIO USERS (who don't have their certificate auto-generated)**

- To manually request your official certificate:
Review the instructions in the Attendance Tracker file, which explains how to **manually request a certificate**. **DO NOT** manually request a certificate until **after the Bootcamp is over** and you have **made up any missed session(s)** if applicable.
- Attendance Tracker Word document file can be found at:
<https://github.com/Skillsoft-Content/PMI-ACP-Replay>
 1. Click <> Code
 2. Download Zip.
 3. Unzip the downloaded .zip file.
 4. Access the files in the folders.

PMI®-Authorized PMI Agile
Certified Practitioner (PMI-ACP)®
Exam Preparation Course

Lesson Four

Delivery

Version 1.0 | 2024 Release



During this session



Seek early
feedback



Manage
agile metrics



Manage
impediments
and risk



Recognize
and eliminate
waste



Perform
continuous
improvements



Engage
customers



Optimize
flow



Obtain metrics
and feedback
to drive
continuous
improvements



Implement
improvement
actions



Evaluate the
effectiveness
of process
improvement



Seek early
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Engage
customers

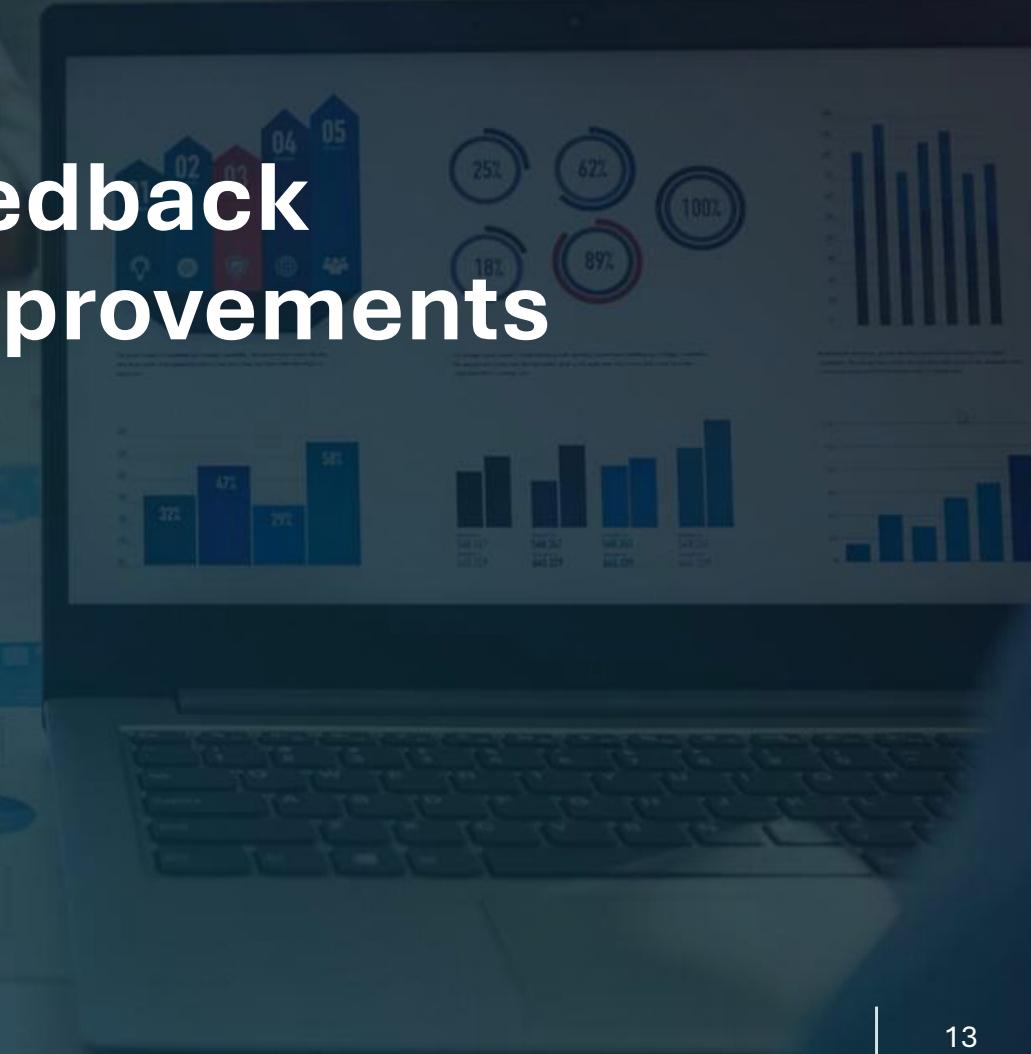


Optimize
flow



Obtain metrics and feedback to drive continuous improvements

Section 1 of 3



Are our process efficiency metrics improving?

Cycle time

Lead time



Improving lead time and cycle time



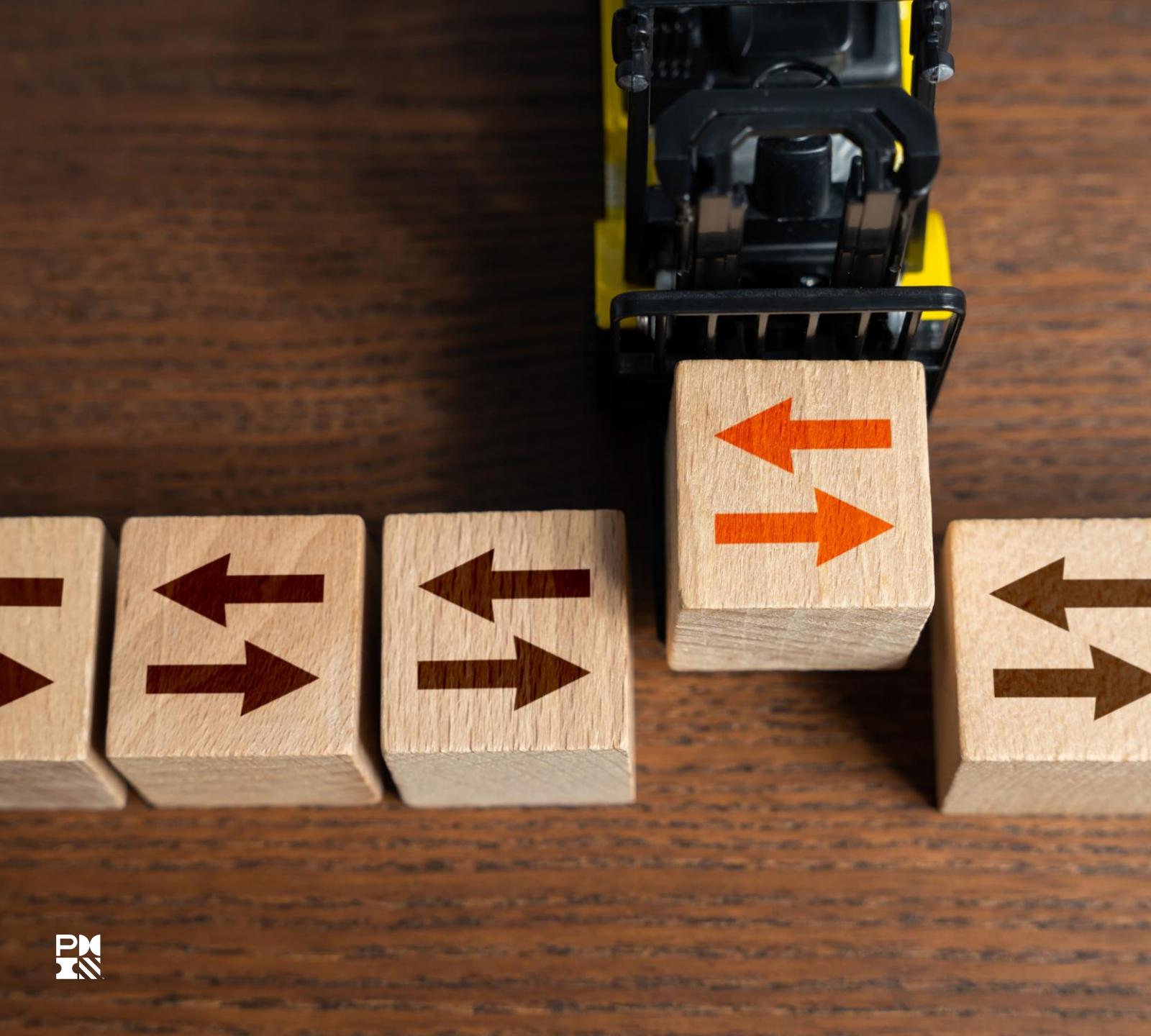
We want lead and cycle times to decrease

Are our throughput metrics improving?

Features complete versus
features remaining

Velocity





Improving features complete versus features remaining and velocity

We want the ratio of features complete to features remaining to increase

We want velocity to increase

Beyond efficiency and throughput

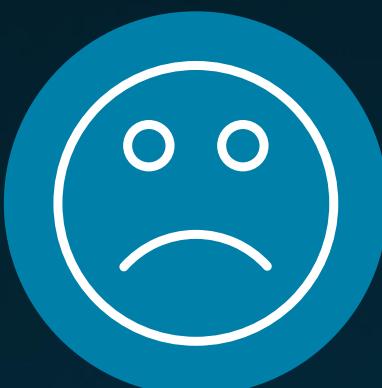


What metrics should we
use to measure these?
**Needs of our
customers**



**Needs of our team
members**

Customer satisfaction metrics



NPS[®]
Net Promoter Score[®]

Team satisfaction metric

Employee net promoter score®



**“How likely is it that you would recommend
our team as a place to work?”**

Knowledge check

Which of these metrics would be best for tracking process efficiency?

A. Features complete vs. features remaining

B. Customer satisfaction score

C. Net promoter score

D. Cycle time

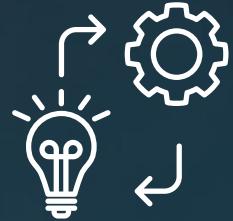
Of these metrics, **cycle time** would be the best for tracking process efficiency.

Knowledge check

Which of these metrics would be best for tracking throughput?

- A. Features complete versus features remaining
- B. Customer satisfaction score
- C. Net promoter score
- D. Cycle time

Of these metrics **features complete versus features remaining** would be the best for tracking throughput.



Implement improvement actions

Section 2 of 3

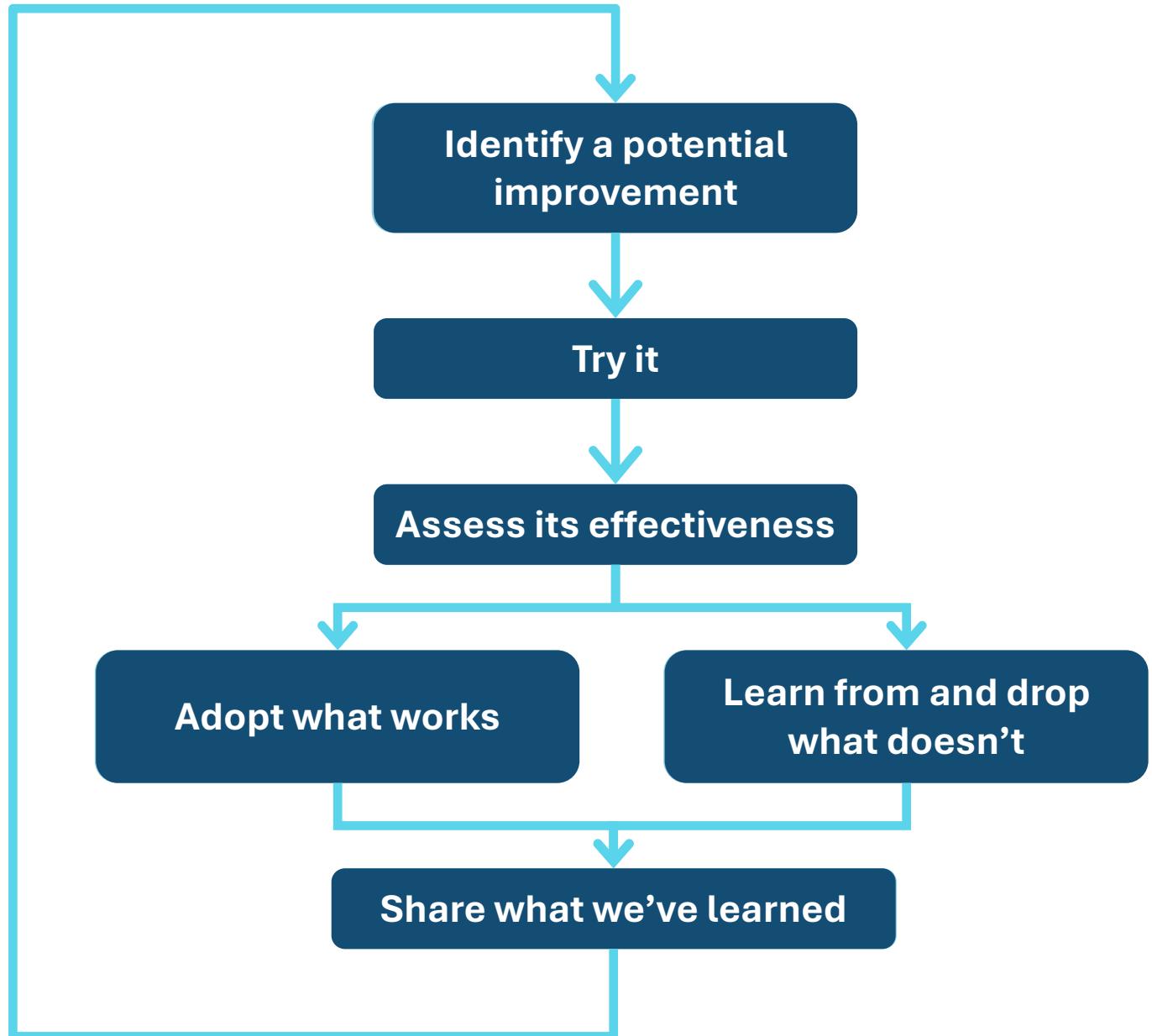


Run experiments

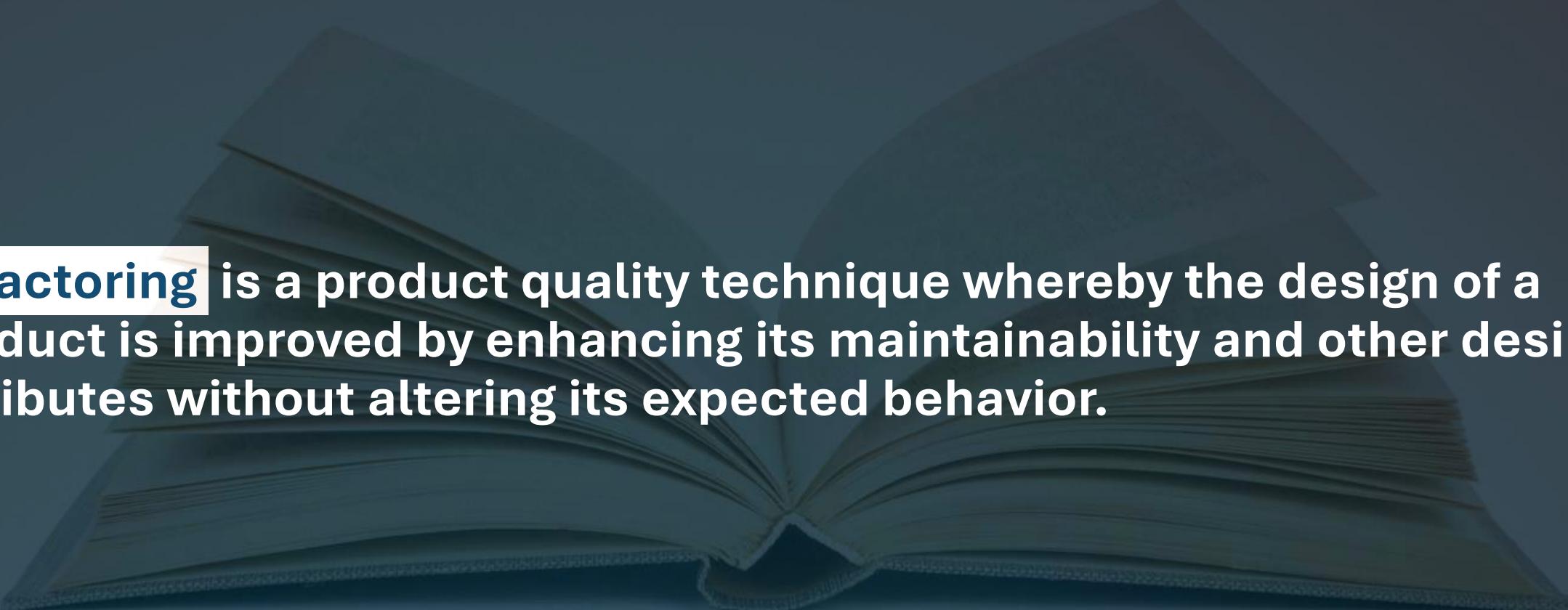
Don't do it randomly

You need a
systematic approach

A systematic approach for improving through experiments



Refactoring



Refactoring is a product quality technique whereby the design of a product is improved by enhancing its maintainability and other desired attributes without altering its expected behavior.

Add refactoring tasks to the backlog

Explain the impacts of the refactoring work to the product owner so they can prioritize it appropriately

Plan for continuing refactoring





Improving our process

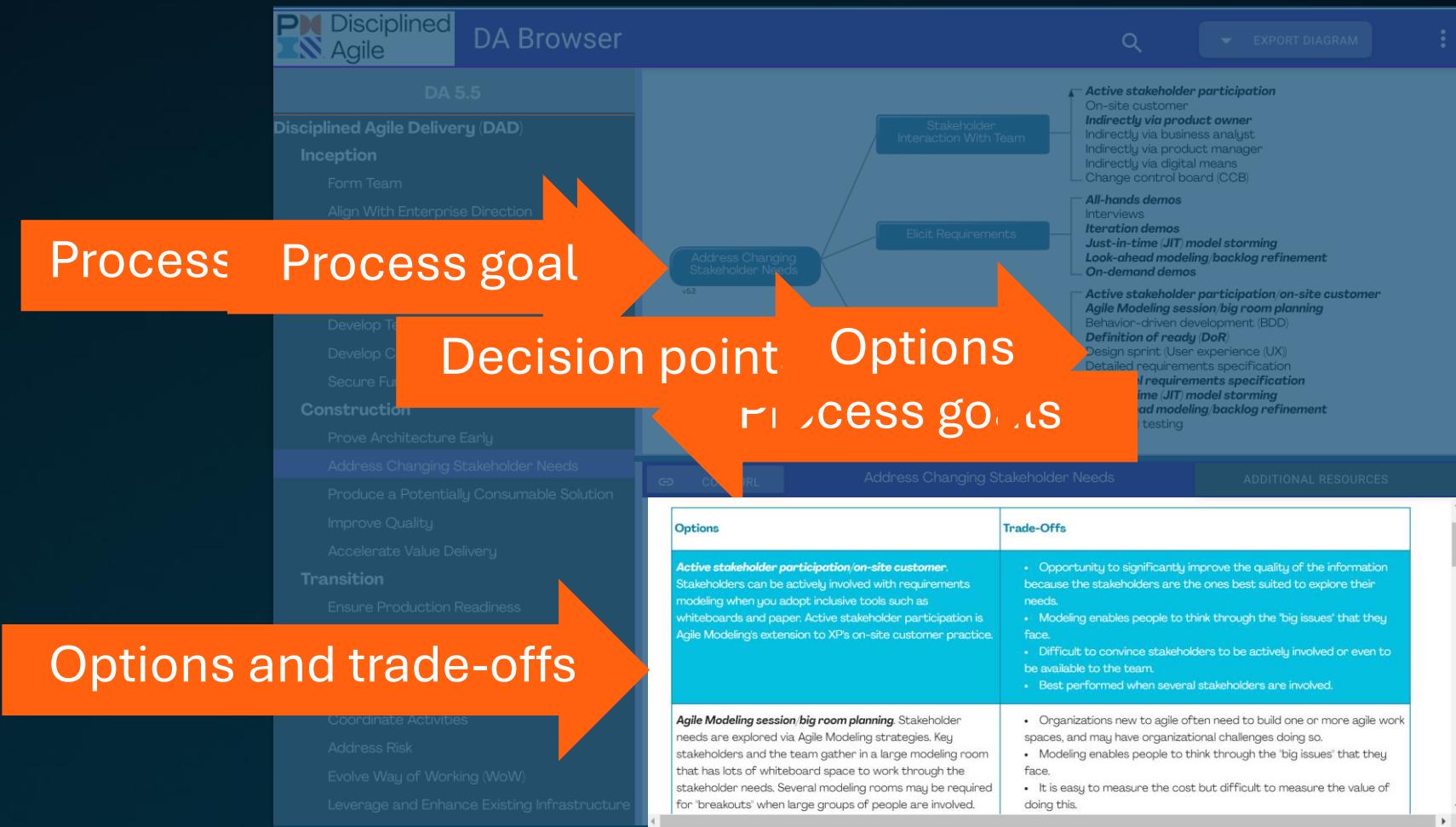
If we can be agile in the way
we implement agile,
the full range of agile
practices becomes a
powerful toolbox
That's the idea behind
Disciplined Agile® (DA®)

Kanban—A means to design, manage, and improve flow for knowledge work. It allows teams to start where they are to drive evolutionary change. This should always be initial-capped, except when referring to a kanban board.

You can choose the starting point for your team based on your context



DA Browser (<https://dabrowser.pmi.org/>)

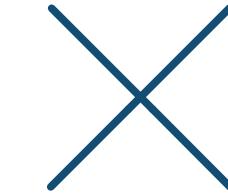


Knowledge check

True or false: Refactoring only applies to software projects



True



False

Knowledge check

True or false: If you want consistent and sustained improvement you need a systematic approach



True



False



Evaluate the effectiveness of process improvement

Section 3 of 3

Running experiments

Experiments
in the way you work

Experiments
in the work itself



**Following up on
these experiments at
the next
retrospective**



If it worked, share it

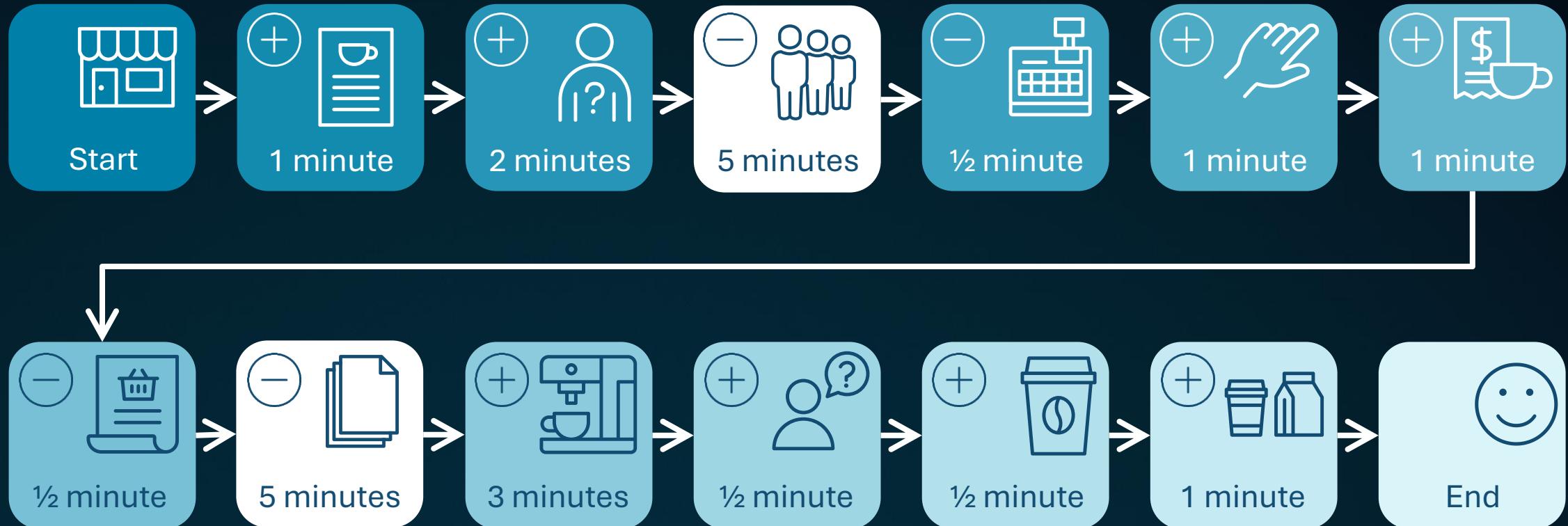
If it didn't work, learn from it

How do we know if it worked?

We measure the results



Measuring process efficiency using a value stream map



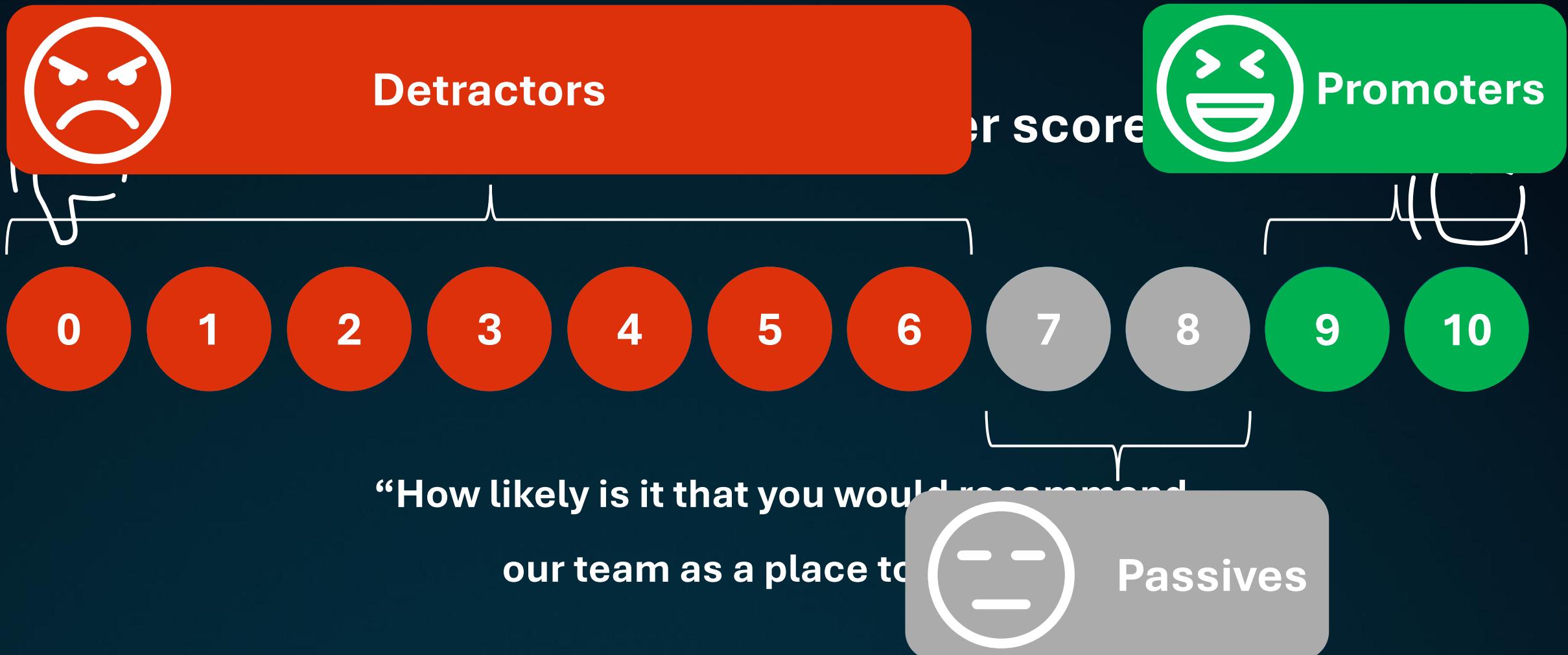
Formula for process efficiency



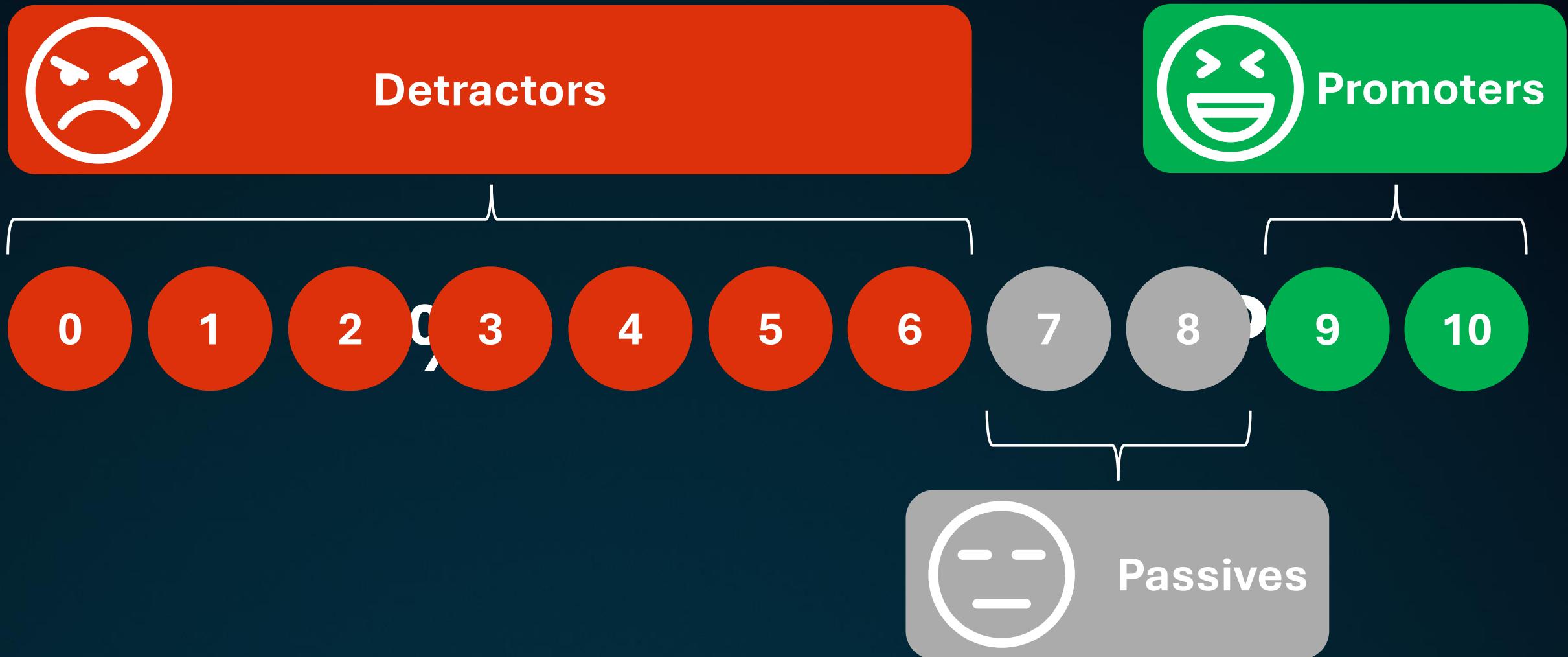
Process efficiency = ~~Total value-added time~~ ÷ ~~Total cycle time~~



Measuring team engagement



Calculating your net promoter score®





Asking for external reviews and audits

Clear objectives and scope

Confidentiality

Team buy-in

Actionable feedback

Implementation
and follow-up

Working with your PMO, VDO, or ATO

Clear goals and objectives

Stakeholder engagement

Assessment and analysis

Action plan





Using a community of practice

Relevant experience

Active and engaged

Communication
and collaboration

Ask other teams
about their most
valuable improvements

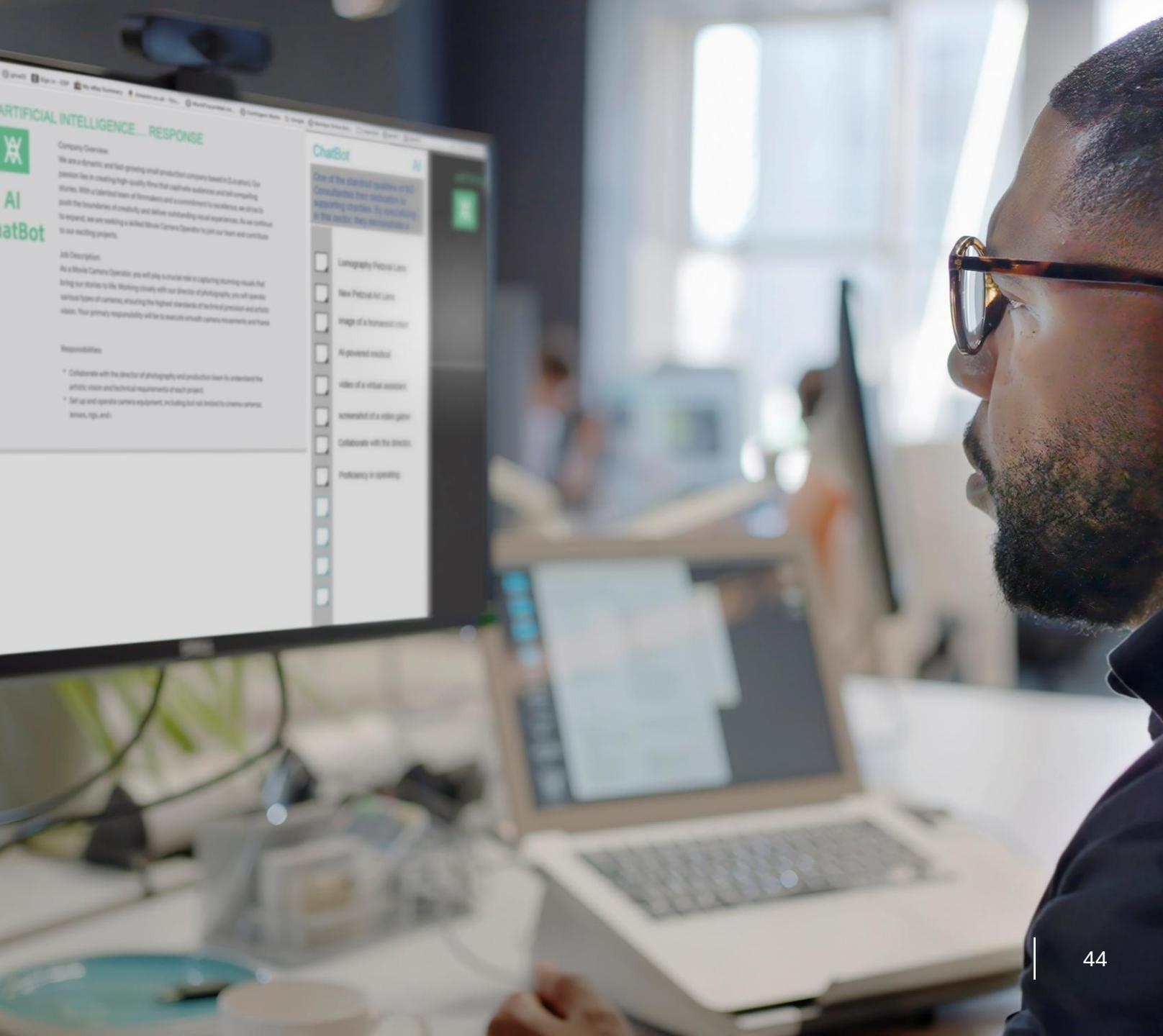
Using artificial intelligence

Targeted improvement suggestions

Understand the limitations

Ensure data privacy and security

Balance automation with human expertise



Knowledge check

When trying out a new way of working, where should the team evaluate whether it is working?

- A. During a daily coordination meeting
- B. With the project management office (PMO)
- C. After measuring team engagement
- D. At the next retrospective**

When trying out a new way of working, the team should evaluate whether it is working **at the next retrospective.**



Identify and analyze customer needs



Validate that iteration deliverables meet acceptance criteria



Encourage collaboration between customer and team



Seek early feedback



Manage agile metrics



Manage impediments and risk



Recognize and eliminate waste



Perform continuous improvements



Engage customers



Optimize flow



Identify and analyze customers and their needs

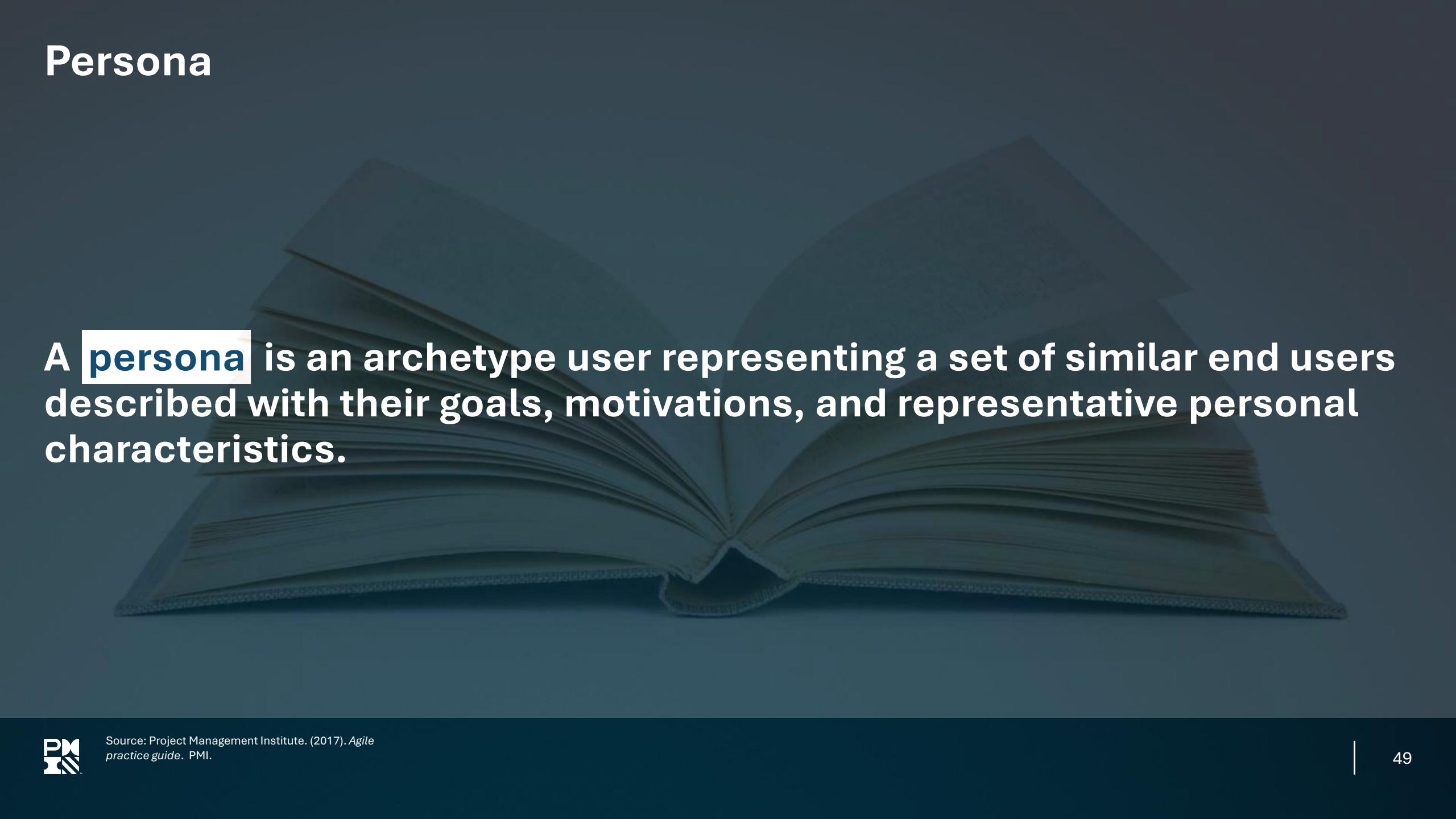
Section 1 of 3

Persona modeling

Doesn't replace
requirements—
it enhances them



Persona



A **persona** is an archetype user representing a set of similar end users described with their goals, motivations, and representative personal characteristics.



What's in a useful persona?

Grounded in reality

Goal-oriented, specific,
and relevant

Tangible and actionable

Generate focus

Group exercise: Develop a persona

Create a persona for a user of
the Cultivate Connect app



155-
156



Interviewing

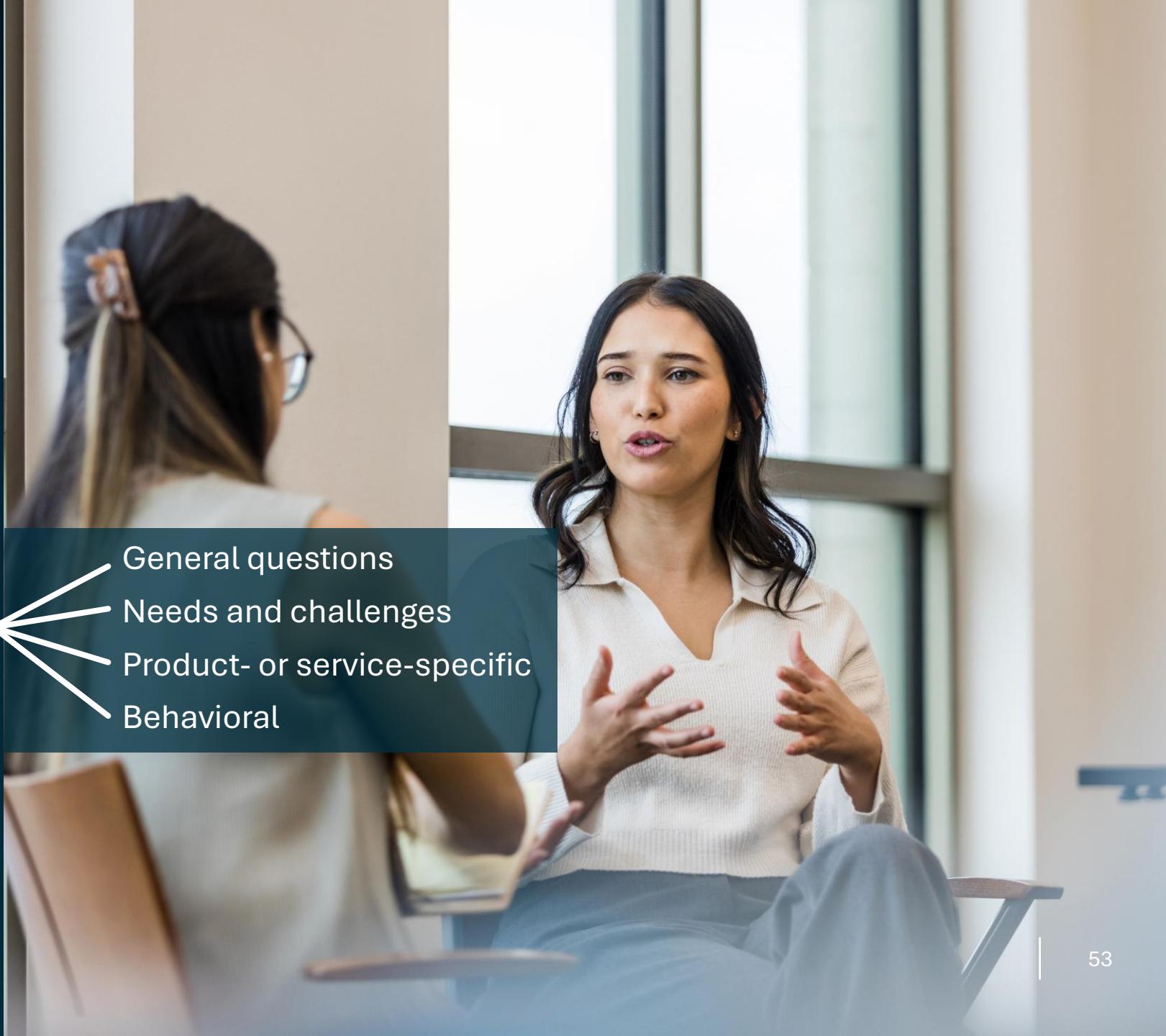
Define your objectives

Identify and
select participants

Develop interview questions

Conduct the interviews

- General questions
- Needs and challenges
- Product- or service-specific
- Behavioral



A close-up photograph of a mechanical watch movement. The image shows various metallic gears of different sizes meshed together. Some gears have small red jewels set into them. The movement is made of dark metal, and some parts are polished to a bright finish. The background is dark, making the metallic components stand out.

Systems thinking

Consider how your customers fit into the larger system in which your project resides

Lean Startup

Emphasizes learning through build-measure-learn feedback loops

Clarify user needs without the risk of large-scale failures



Borrowing techniques from product management



Market analysis



Market segmentation



Needs analysis



Sentiment analysis



Surveys



Usage statistics



A/B testing

Knowledge check

True or false: You can use Lean Startup techniques to clarify user needs without the risk of large-scale failures



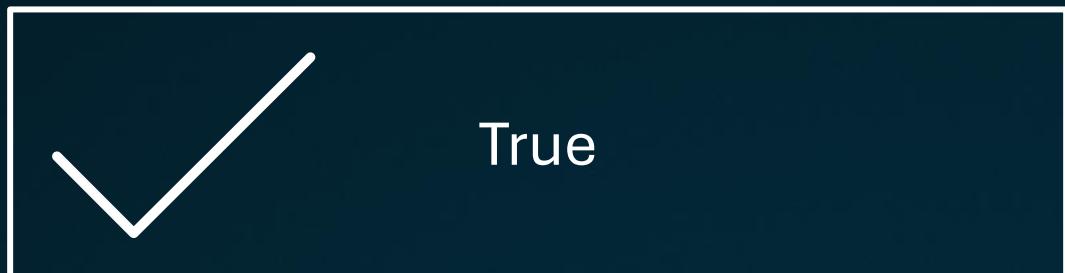
True



False

Knowledge check

True or false: Personas are developed as an alternative to requirements



True



False



**Validate that iteration deliverables
meet acceptance criteria**

Section 2 of 3

Frequent verification and validation

Agile approaches were developed to resolve problems as early as possible





Test your work

Test it yourself

Get a customer to test it

Does this do what the
customer wants it to do?

Don't assume no feedback = no problems

More likely it means
no testing or evaluation has
happened



Testing Types

165



Unit
testing



Integration
testing



System
testing



Acceptance
testing



Performance
testing

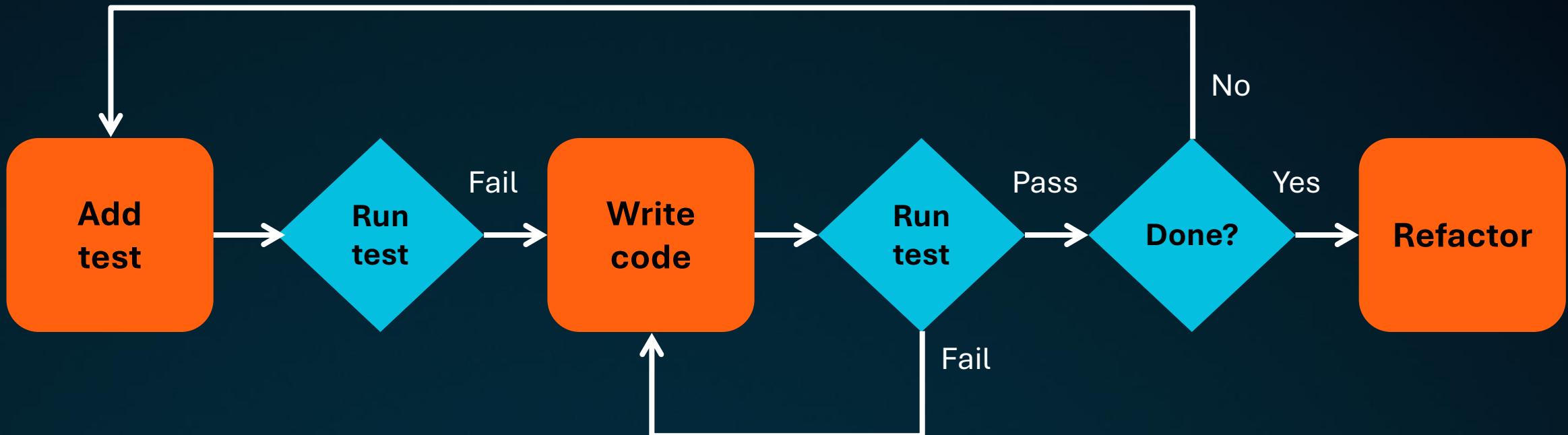


Security
testing



Usability
testing

Test-driven development (TDD) and test-first development (TFD)



Pros and cons of test-driven development



How will the functionality be used?

Tests in place

Catch defects early

More modular system



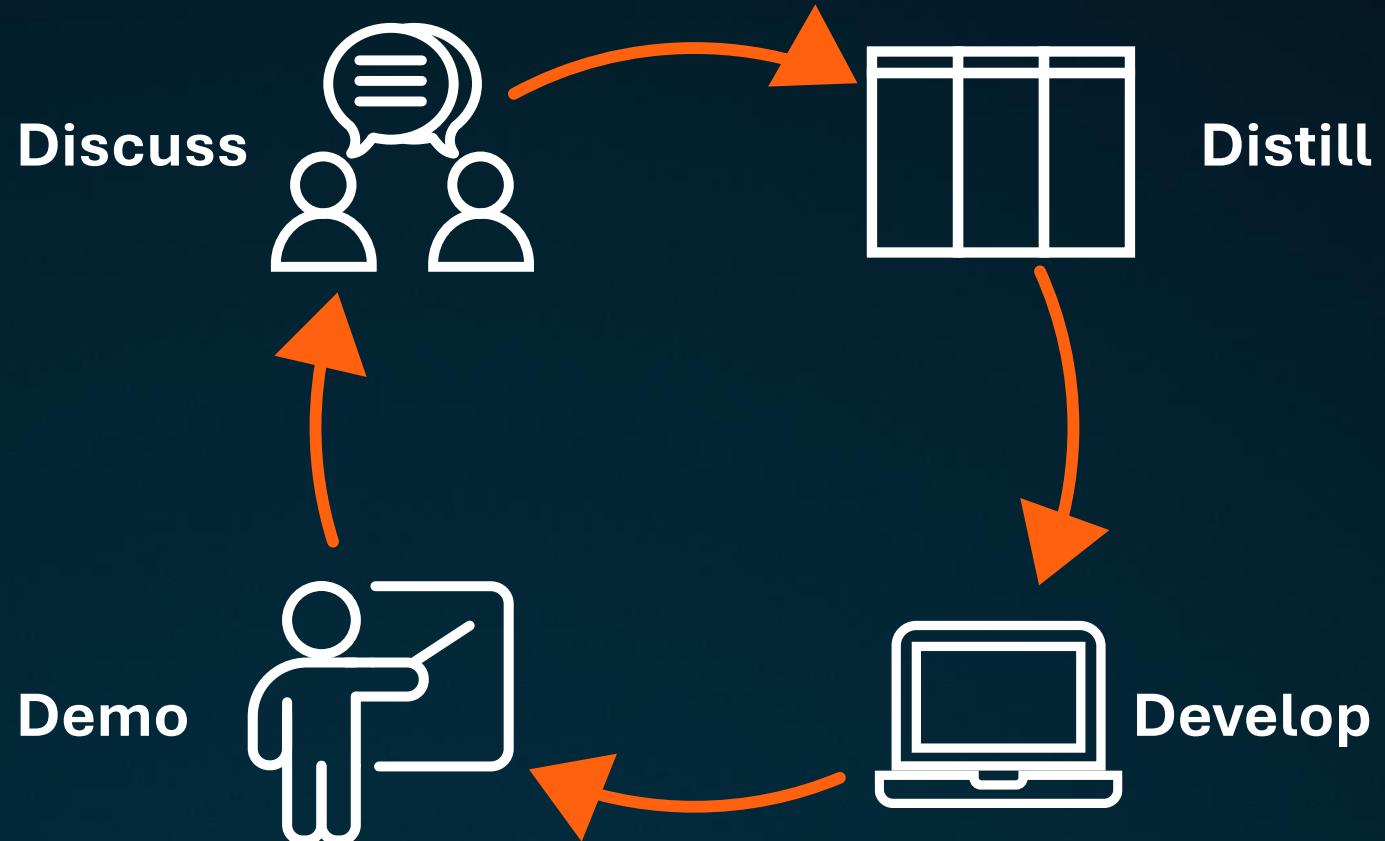
Tests written by same developer

Some things are difficult to test

Tests must be maintained

False sense of security

Acceptance test-driven development



Behavior-driven development

Encourages a conversation between the team and the user

Includes a commonly accepted syntax:
given-when-then



Using test-driven development for non-software projects



**Break down
the work**



**Consider how
to test-drive
the work**



**Write the tests
before doing the
work**

Knowledge check

Which of these tests would you perform to see how well your product or service performs under real-world conditions?

A. Usability test

B. Security test

C. Acceptance test

D. Integration test

When you test how well your product or service performs under real-world conditions, you are performing a [usability test](#).

Knowledge check

Your team has sent a piece of work for testing. The deadline for testing has passed with no comment from the testers. What can you assume?

- A. The piece of work passed the test
- B. There are no problems with the piece of work
- C. Nothing**
- D. The piece of work failed the test

No feedback does not mean no problems.



Encourage collaboration between customer and team

Section 3 of 3

Principles of the *Agile Manifesto* (1–4)



1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.



2 Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.



3 Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.



4 Business people and developers must work together daily throughout the project.

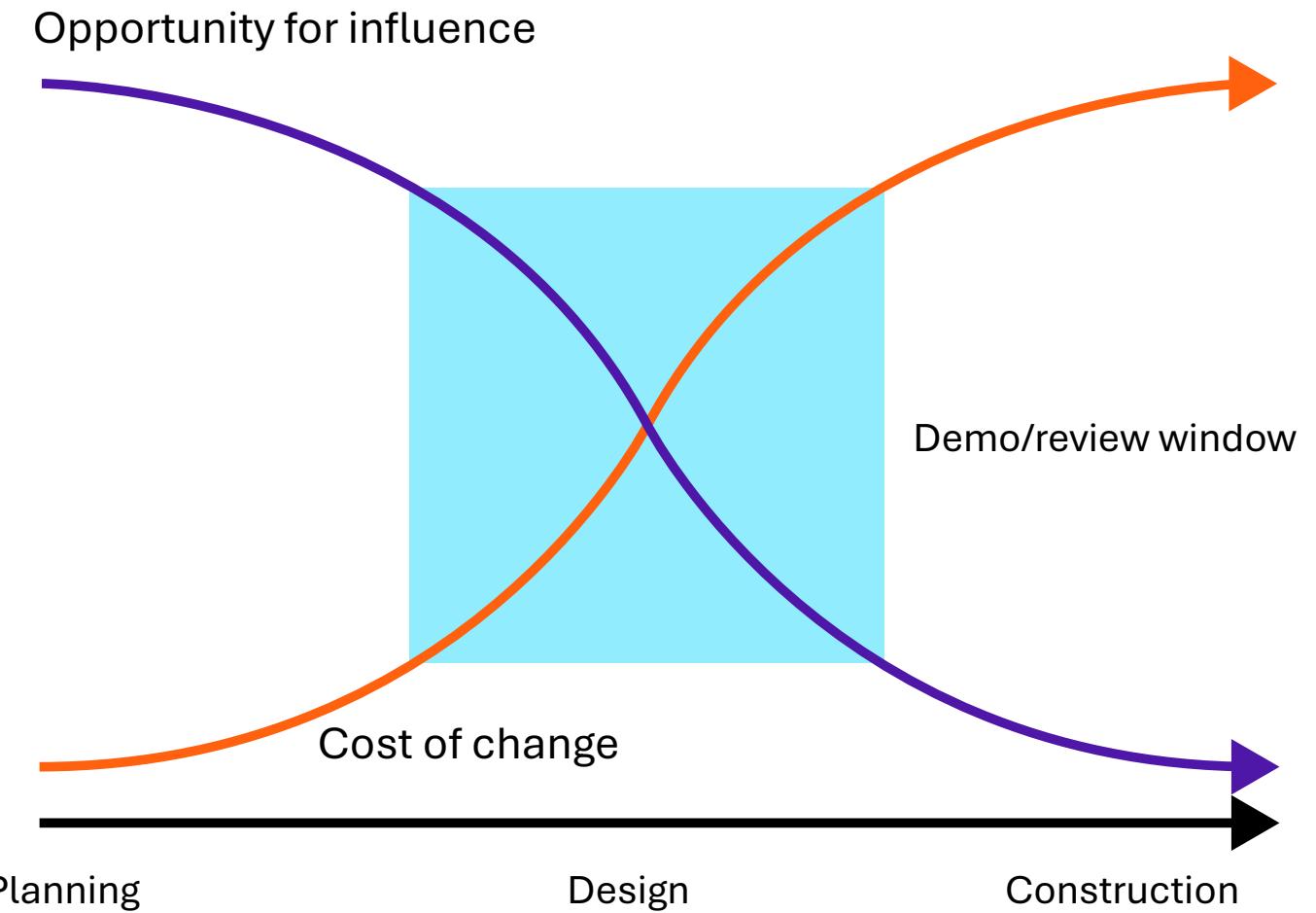
Agile is built on a synergy of

Reviewing at the most efficient point

Initial demos will show incomplete solutions

There will be errors, omissions, and shortcomings

We are reviewing at the most efficient point



Collaboration ensures our team is building what the customer needs

How do you establish a culture of collaboration?





Regular communication

Frequent meetings

Iterative feedback

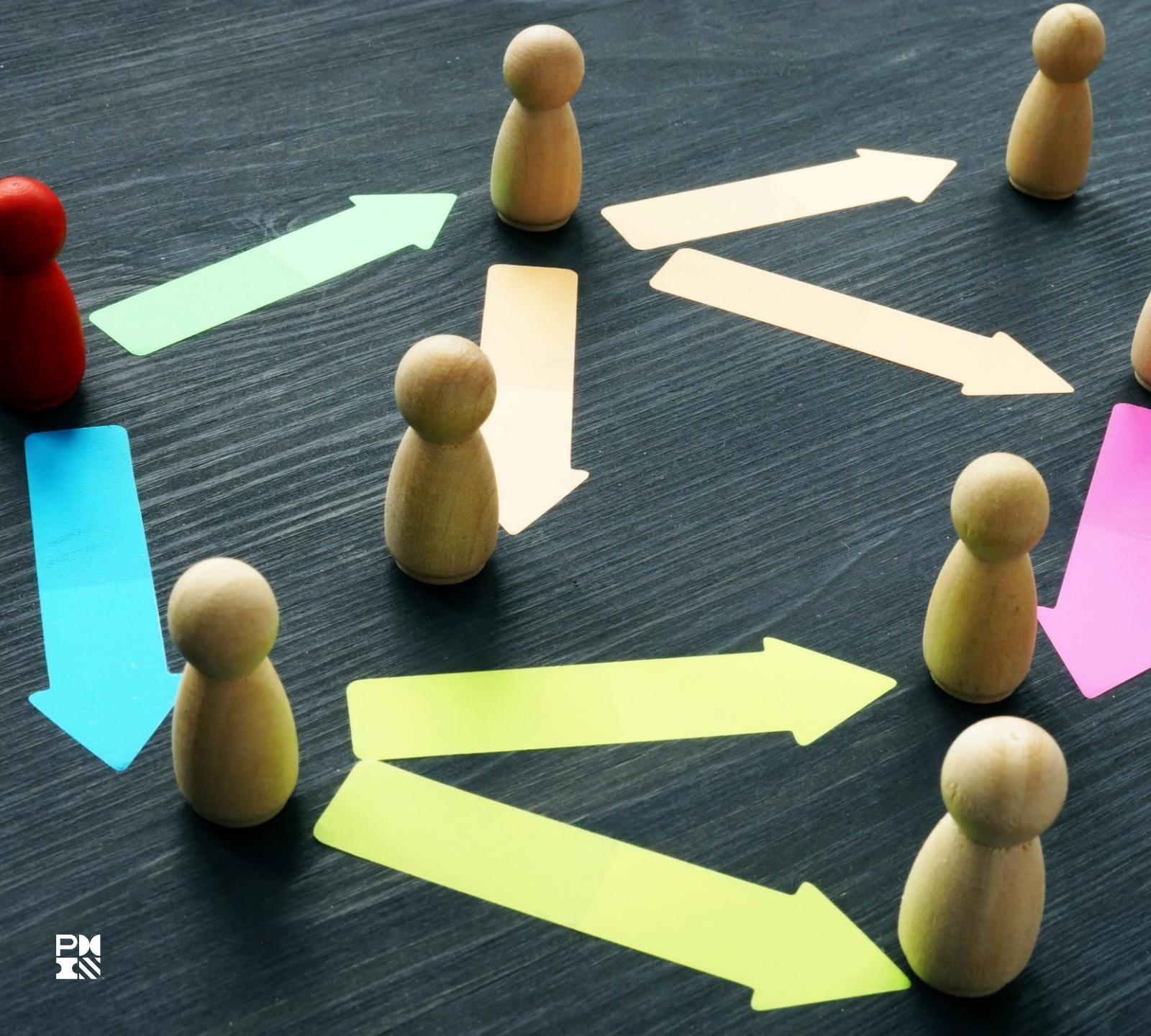
Use collaboration tools

Transparent process

Share progress

Open backlog





Define clear roles and responsibilities

Client representative

Agile roles

Plan collaboratively

Joint planning sessions

User stories

Test criteria



A professional photograph of a woman with long, wavy brown hair, wearing a teal button-down shirt. She is smiling and gesturing with her hands while speaking to a man whose back is to the camera, wearing a dark suit jacket. They appear to be in an office setting at night, with blurred city lights visible through large windows in the background.

Build trust and rapport

Create a collaborative environment where the team and client work together effectively



Limit work in progress at all levels



Shield team members from interruptions



Use metrics to analyze and improve flow



Seek early feedback



Manage agile metrics



Manage impediments and risk



Recognize and eliminate waste



Perform continuous improvements



Engage customers



Optimize flow



Limit work in progress at all levels

Section 1 of 3



Why should we limit work in progress?

Reducing work in progress
reveals the underlying
problems in our process



Source:
Goldratt, E. M., & Cox, J. (1992). *The goal: A process of ongoing improvement*. Goldratt Consulting



Other reasons to limit work in progress



Reduced
multitasking



Enhanced
quality



Improved
collaboration



Faster
feedback loops



Better
management

Limiting work in progress at different levels of the organization

Organization level

Department level

Team level

Individual level

Enterprise agility and value stream consulting focus on optimizing value delivery

Less competition for specialized roles, higher throughput

Have limits on functions (e.g., testing) often indicated on kanban boards

Work on only one or two projects at a time

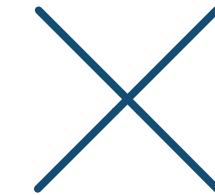
Knowledge check

True or false:

Reducing work in progress can obscure underlying problems in our process



True



False

Knowledge check

True or false:

One advantage of reducing work in progress is that it reduces multitasking



True



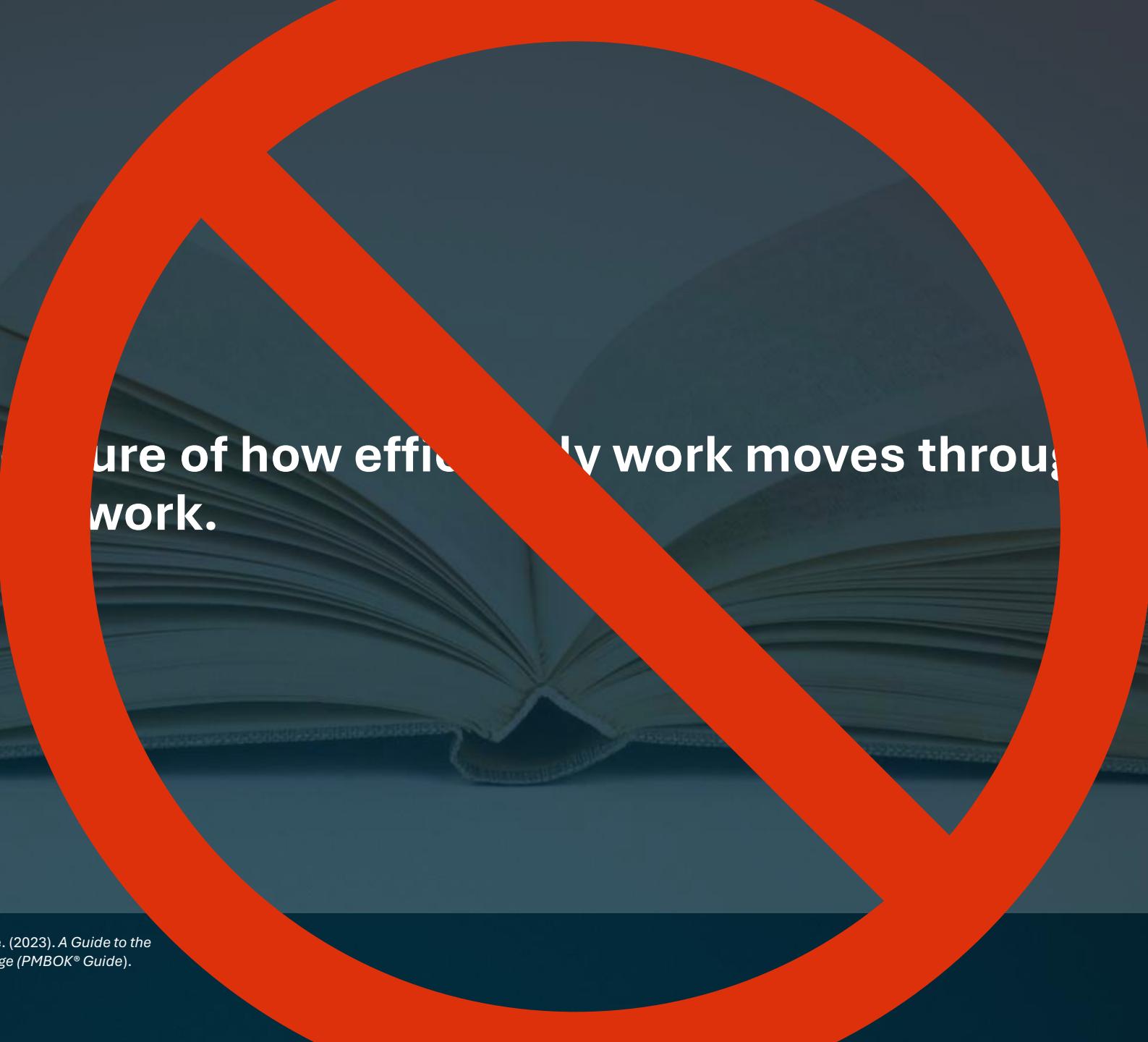
False



Shield team members from interruptions

Section 2 of 3

Flow



Flow is the measure of how efficiently work moves through a given process or framework.



What is flow?

The mental state in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment of the activity



How long does it take to recover from an interruption?

It takes an average of 23 minutes and 15 seconds to get back to the task on which you were working



Source: Mark, G., Gudith, D., & Klocke, U. (2008). The cost of interrupted work. *Proceedings of The 26th Annual CHI Conference on Human Factors In Computing Systems*. <https://doi.org/10.1145/1357054.1357072>

Interruptions increase error rates

Interruptions of as little as
3 seconds doubled the
error rate



Source: Altmann, E. M., Trafton, G., & Hambrick, Z. (2014).
Momentary interruptions can derail the train of thought. *Journal of Experimental Psychology: General*, 143(1), 215–226.



“What about multitasking ...”

Multitaskers don't pay attention, control their memory, or switch from one especially vulnerable to job to another as well as irrelevant content those who prefer to complete one task at a time



**That's why we want
to shield our team
from interruptions**

We want our team
to be dependent on what?
as much as possible



A professional portrait of a young man with short dark hair, smiling warmly at the camera. He is wearing a light grey blazer over a white button-down shirt. His arms are crossed in front of him. The background is a bright office environment with large windows and other people visible in the distance.

Deflection shield

They can act as a deflection
shield, protecting the team
from interruptions and ineffective
interruptions



Sacrifice one

This is a rotating role

Knowledge check

To shield team members from interruptions, who should respond to requests for external work?

A. Team members

B. Human resources

C. Stakeholders

D. Team lead

The **team lead** acts as a deflection shield, protecting the team from all outside interruptions.

Knowledge check

On agile teams that don't have an effective team lead, a team member steps up to handle requests. How does the team decide who fills this role?

A. It falls to whoever is still standing when the music ends

B. It is decided with a game of rock, scissors, paper

C. It rotates among team members

D. It falls to the most efficient team member

Different members step up to fill the role at different times.



Use metrics to analyze and improve flow

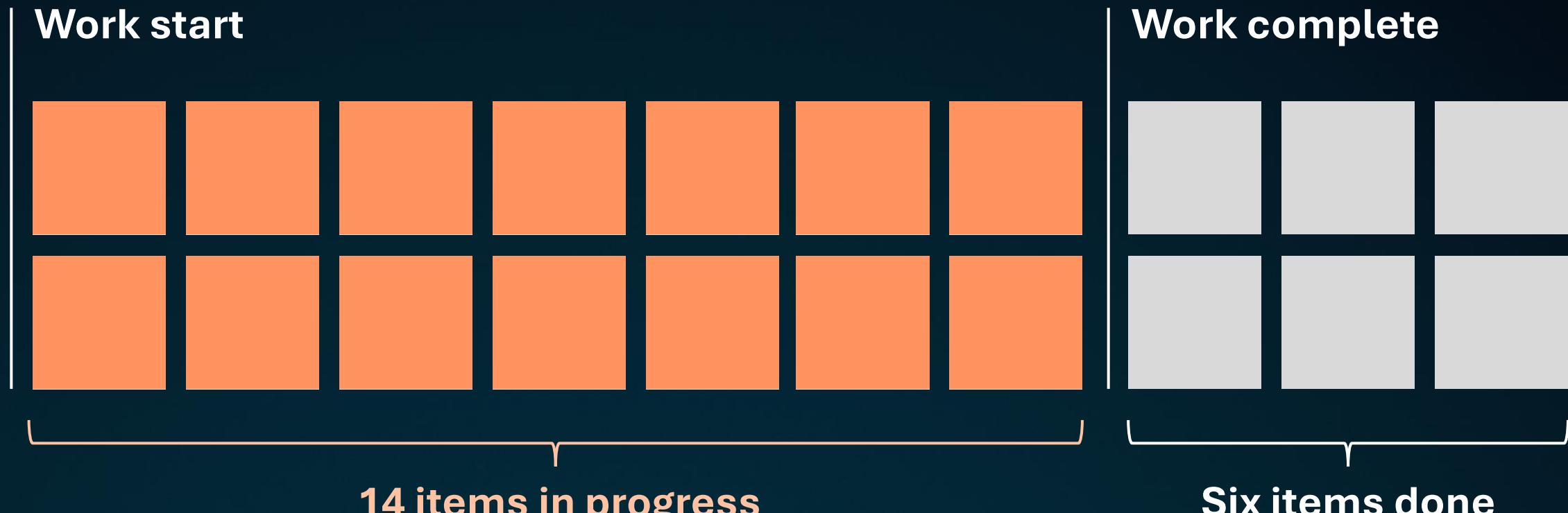
Section 3 of 3

Limiting work in progress

If we're going to limit work in progress, we should track it



What is work in progress



The amount of work that is currently being processed but not yet completed



Considerations

High work in progress can indicate bottlenecks and inefficiencies

Managing work in progress is crucial for maintaining a smooth workflow

Kanban boards with work in progress limits

This is a strategic decision
by the team



Kanban metrics

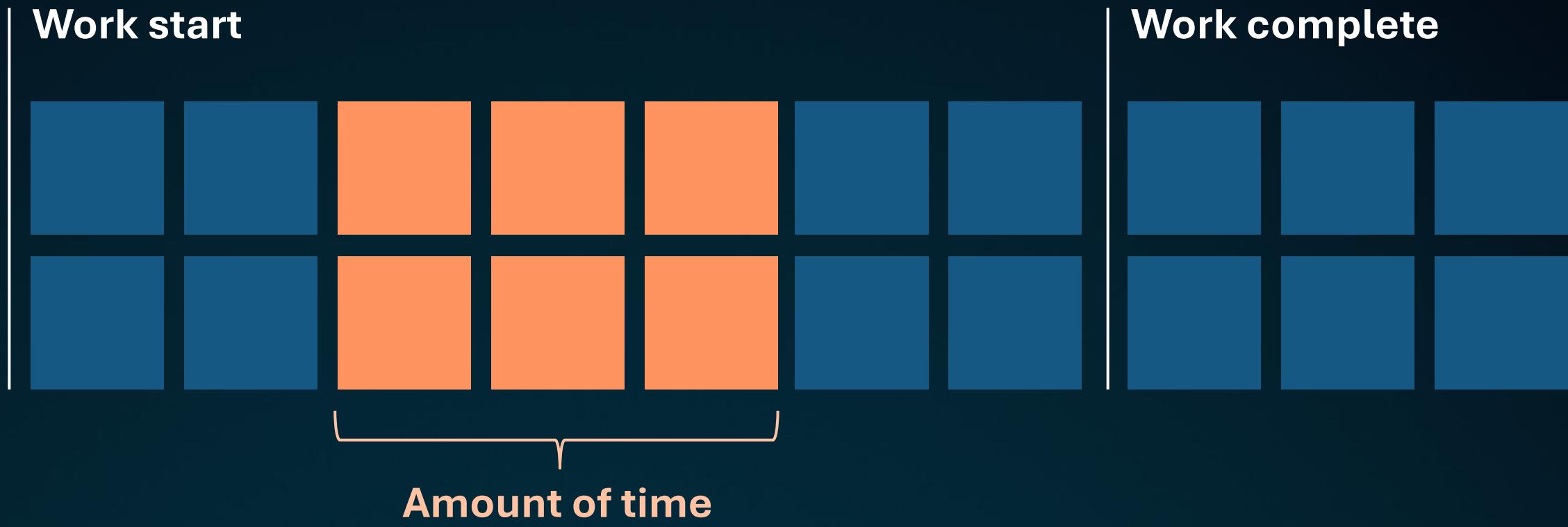


Lead time



The time between a customer request and the actual delivery

Cycle time

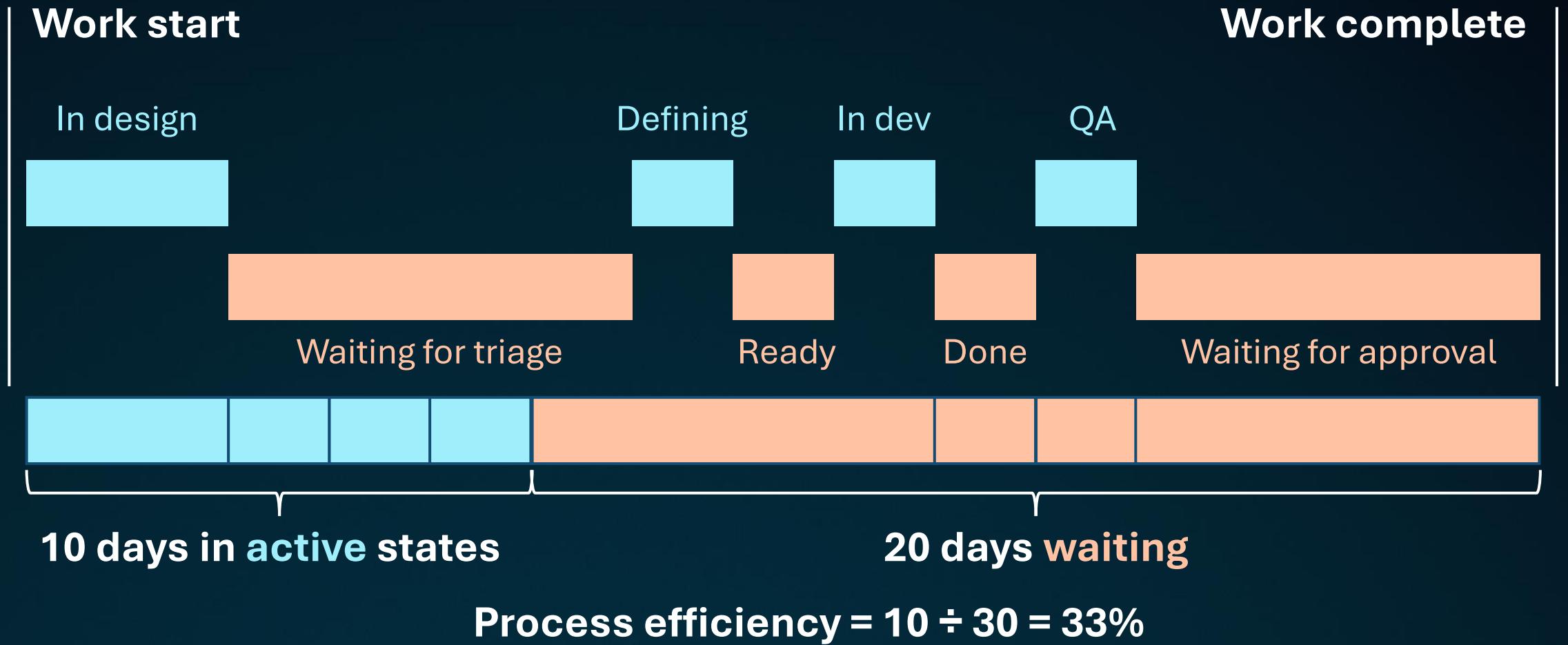


The time it takes to complete a specific task from start to finish

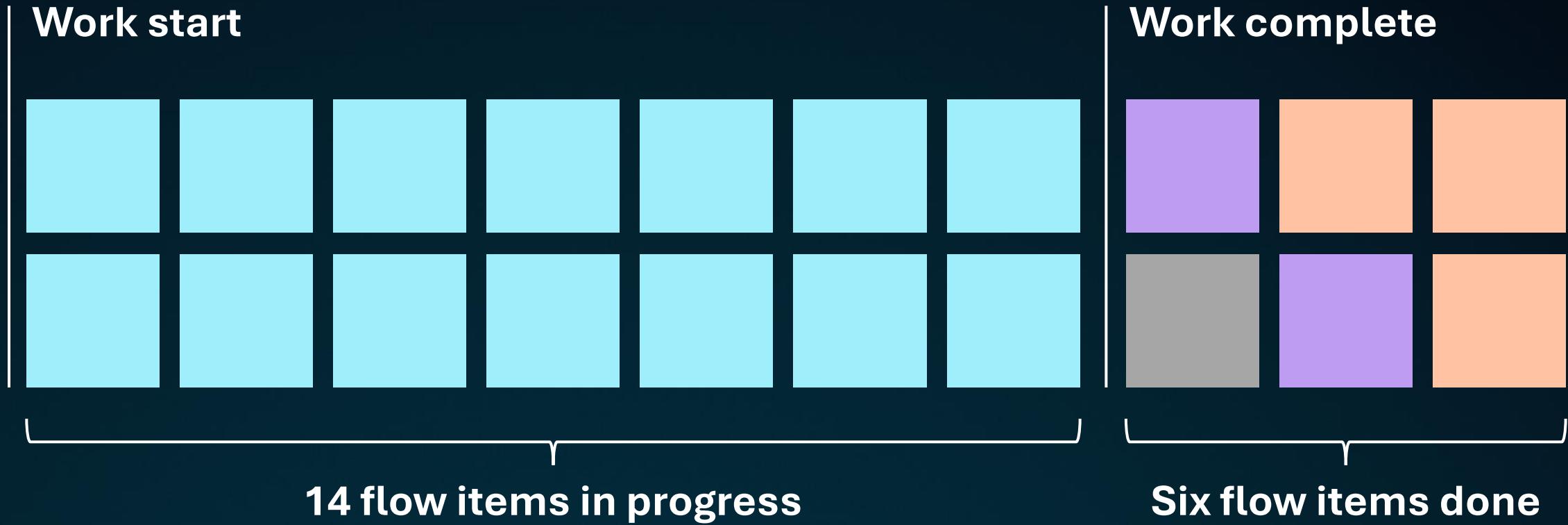
Velocity



Process efficiency



Flow distribution®



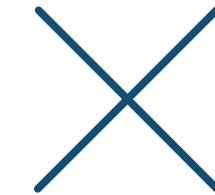
**Flow distribution = 50% new features •
33% defect fixes • 17% task to address debt • 0% risks**

Knowledge check

True or false: Work in progress is the time it takes to complete a specific task from start to finish



True



False

Knowledge check

True or false: Process efficiency is the ratio of active time versus wait time



True



False

DAILY PMP BOOTCAMP SURVEY



LOOK FOR THE SURVEY LINK IN THE CHAT

- Our goal is to provide the best possible Bootcamp experience for a live streaming webinar, with hundreds of participants.
- For each Bootcamp session,
 - Let us know **what you liked** about the experience – your comments really matter.
 - Please include a thank you **to the mentor(s)** working off camera.
 - If you have **recommendations**, share those too!

We sincerely value your opinion!

Survey Scale

- This Scale: 0 not at all likely- 10 extremely likely



On a scale of 0-10, how likely are you to recommend this bootcamp to someone else?

This Scale: 0 not at all likely - 10 extremely likely

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>										