OVERVIEW

Tailoring, Models, Methods, and Artifacts

Two parts. Tailoring is the deliberate adaptation of the project-management approach, governance and processes to the environment and the work: what can be tailored (life cycle, processes, engagement, tools, methods and artifacts), why (commitment, customer focus, efficient resources), and the four-step process (select an initial approach, tailor for the organization, tailor for the project, keep improving). The second part is the PMBOK toolbox: models (ways of thinking, such as situational leadership, Herzberg, ADKAR, Cynefin, Tuckman), methods (ways of doing, such as estimating and meetings) and artifacts (things produced, such as the business case, registers and plans).

Tailoring

Deliberate, continuous adaptation; more critical projects need more rigor. Steps: select → organization → project → improve.

What you tailor

Life cycle and approach, processes (add, modify, remove, blend, align), engagement, tools, methods and artifacts.

Model, method, artifact

Model = a way of thinking; method = a way of doing; artifact = a template, document or deliverable.

Models to know

Situational Leadership II, Herzberg's hygiene and motivators, Maslow, Theory X/Y/Z, ADKAR, Kotter's 8 steps, Cynefin, Stacey, Tuckman, salience.

HOW THE LECTURE IS ORGANIZED

Slides 1–12 Tailoring: definition, competing demands, why and what to tailor

Slides 13–22 The tailoring process: organization and project factors, ongoing improvement

Slides 23–27 Models, methods and artifacts: definitions and costs

Slides 28–34 Commonly used models

Slides 35–41 Commonly used methods and artifacts

EXAM FOCUS

The instructor said to understand these models rather than memorize them; expect scenarios such as "which model helps here?" or "is this a hygiene factor or a motivator?". Tuckman (Midterm 251 MCQ 7) is tested in Chapter 3, and Final 251 asked for a PM tool or technique for a complex software project.

HOW TO READ THIS PAGE

Every original slide is shown unchanged. Yellow marks on a slide point to a numbered note: hover or tap a mark to jump to its note, and hover a note to see its marks. Questions tagged Past exam appeared on a real paper; Prediction questions are likely angles, not confirmed. Pick an answer to each question: a wrong pick tells you why it is wrong, so you can try again.

SLIDE 1 / 41 **Slide 1**



Tailoring, Models, Methods, and Artifacts

SE423: Software Project Management

1

NOTES

1. **Tailoring** means fitting the project-management approach to the project. **Models, methods and artifacts** are the toolbox it picks from.
2. This finishes Chapter 1: principles (how to behave) and performance domains (what to manage) are applied through a tailored selection of tools.

SLIDE 2 / 41 **Outline**

Outline

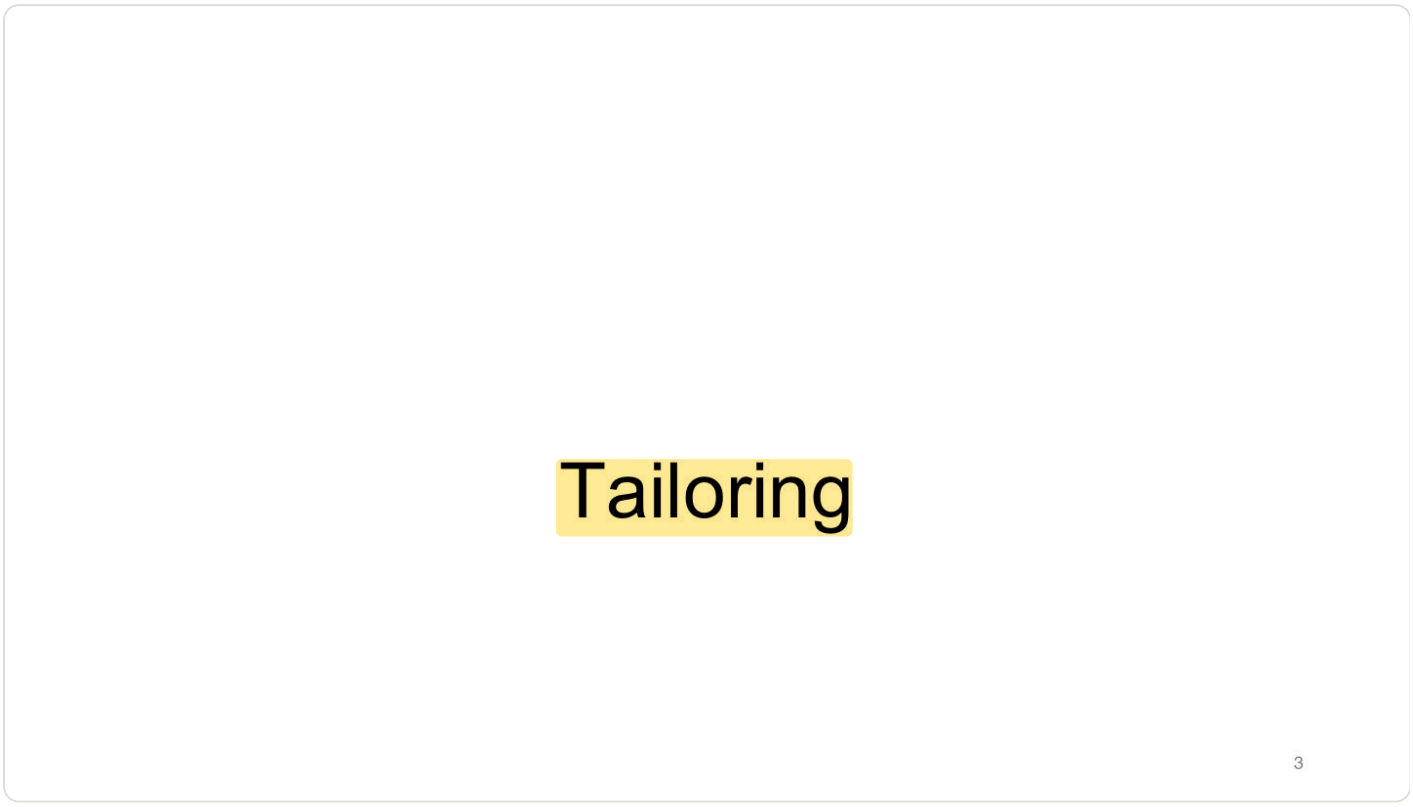
- Tailoring
- Models, Methods, and Artifacts

2

NOTES

1. The first half answers “how do we adjust our way of working to fit this project?”.
2. The second half is the toolbox you choose from once you’ve decided what fits.

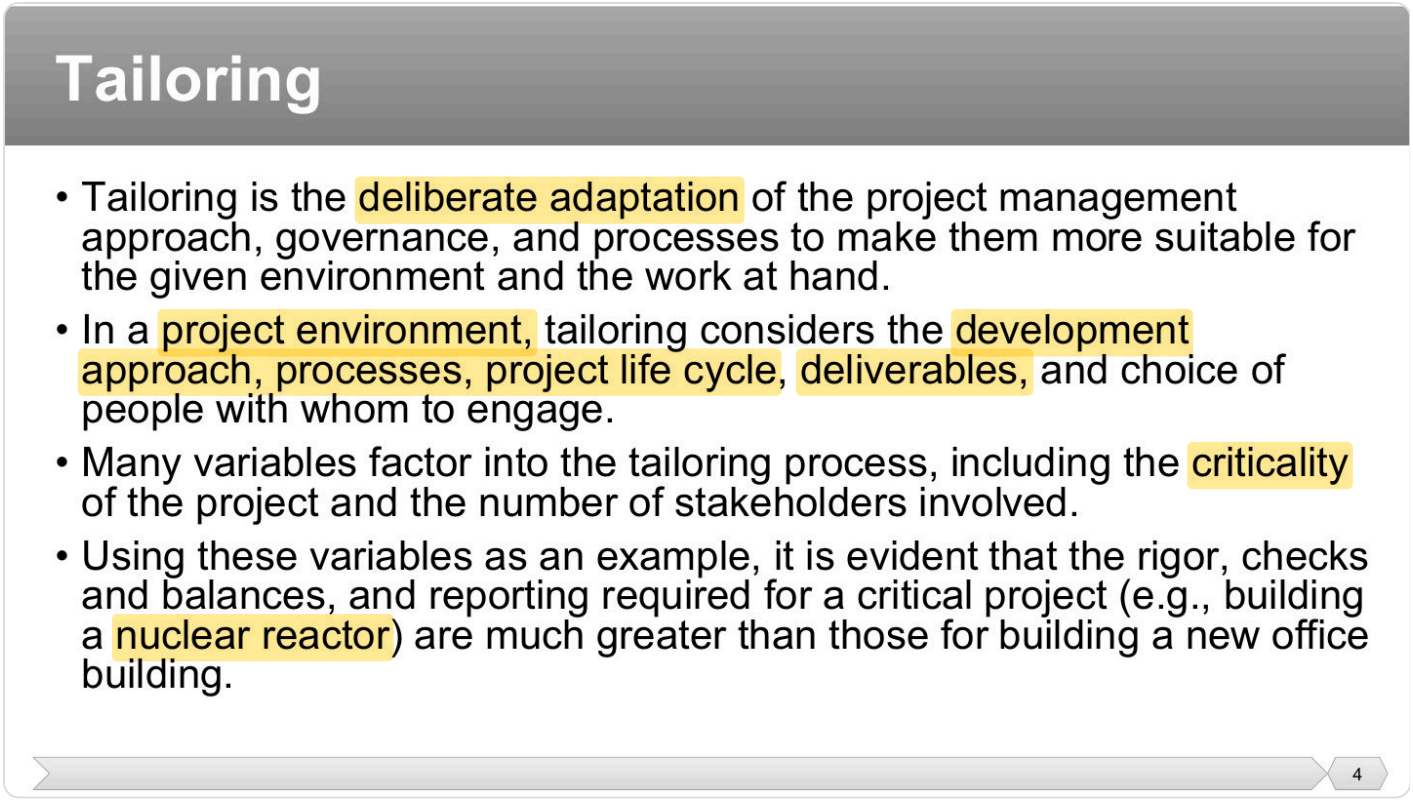
SLIDE 3 / 41 Tailoring (section)



NOTES

1. Section divider: tailoring.

 Tailoring



NOTES

1. Tailoring is a decision made for a reason. Skipping steps because you're in a hurry isn't **tailoring**, while dropping a step because you can show this project doesn't need it is. **Deliberate** is what separates the two.

2. Nearly everything about how a project runs can be adjusted. So when a question asks whether something can be tailored, the answer is usually yes, including the **development approach** and even who gets involved.

3. The higher the cost of a mistake, the more control you need. And with more people involved, there's more to coordinate. So **criticality** and the number of stakeholders push you toward more formality.

4. If a reactor fails, people can die, so every step is checked and recorded. An office building still needs care but not that level of rigor. Exam trap: more critical means more process, **never less**.

EXAM ANGLE

Prediction Q1

Which statement best defines tailoring?

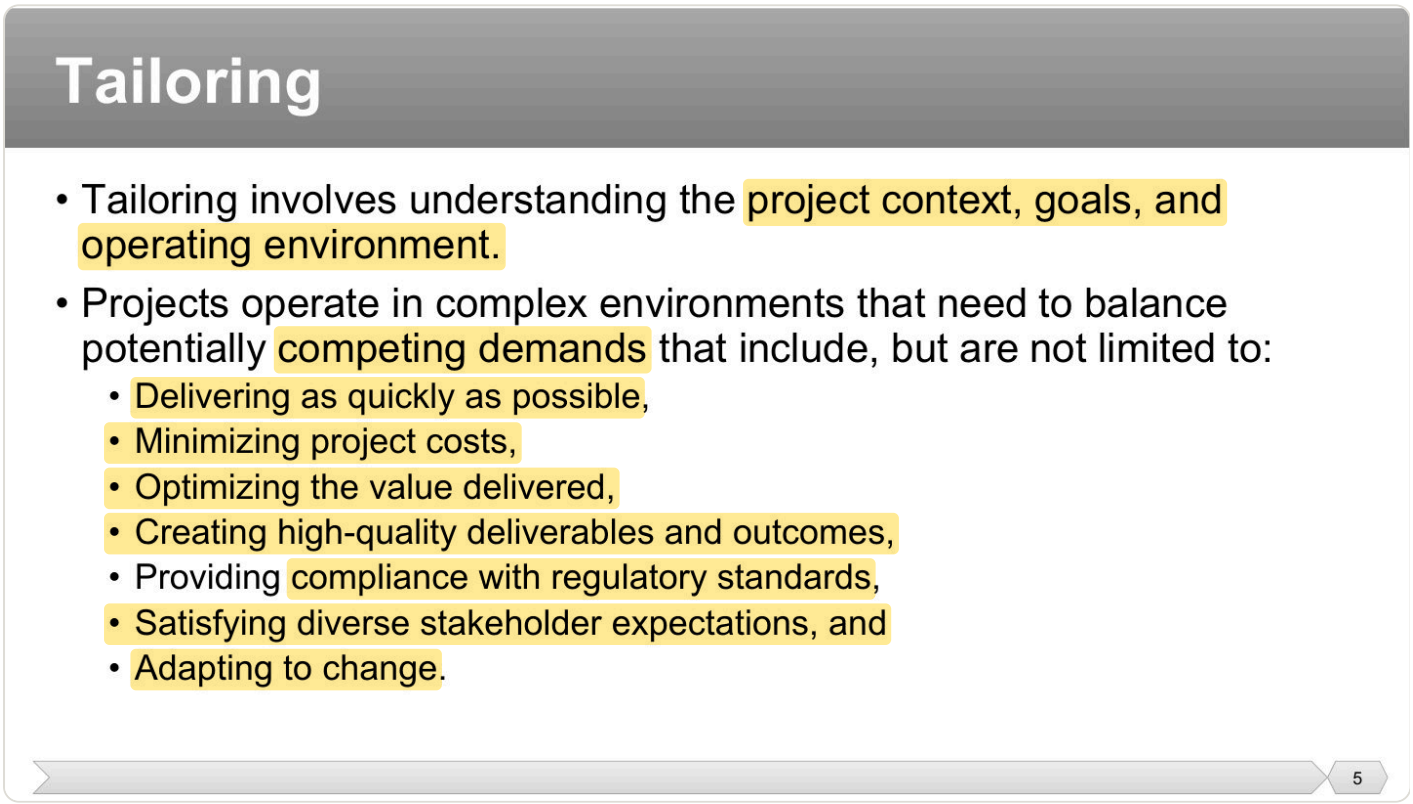
A Choosing the cheapest vendor for each task

B Removing all documentation to save time

C Following one standard methodology on every project

D **The deliberate adaptation of the project management approach, governance and processes to the environment and the work**

SLIDE 5 / 41 **Tailoring**



NOTES

1. You can't fit an approach to a project you don't understand. A student app and a banking system need different things, and only their **context and goals** reveal what.

2. Projects must balance **competing demands**: speed, low cost, value, quality, regulatory compliance, diverse stakeholder expectations, and adapting to change. No project can maximize all seven at once (the fastest delivery is rarely the cheapest or the most thoroughly checked), which is why the approach has to be tailored to what matters most here.

TIPS & TRICKS

- **COMPADreS**: Creating high-quality deliverables, Optimizing value, Minimizing costs, Providing compliance, Adapting to change, Delivering quickly, Satisfying stakeholders.

EXAM ANGLE

Prediction Q1

Why must an approach be tailored rather than simply maximizing speed, cost, quality and everything else?

A Regulations forbid speed

> Compliance is one demand among several.

B Only one demand ever applies

> The slide lists seven.

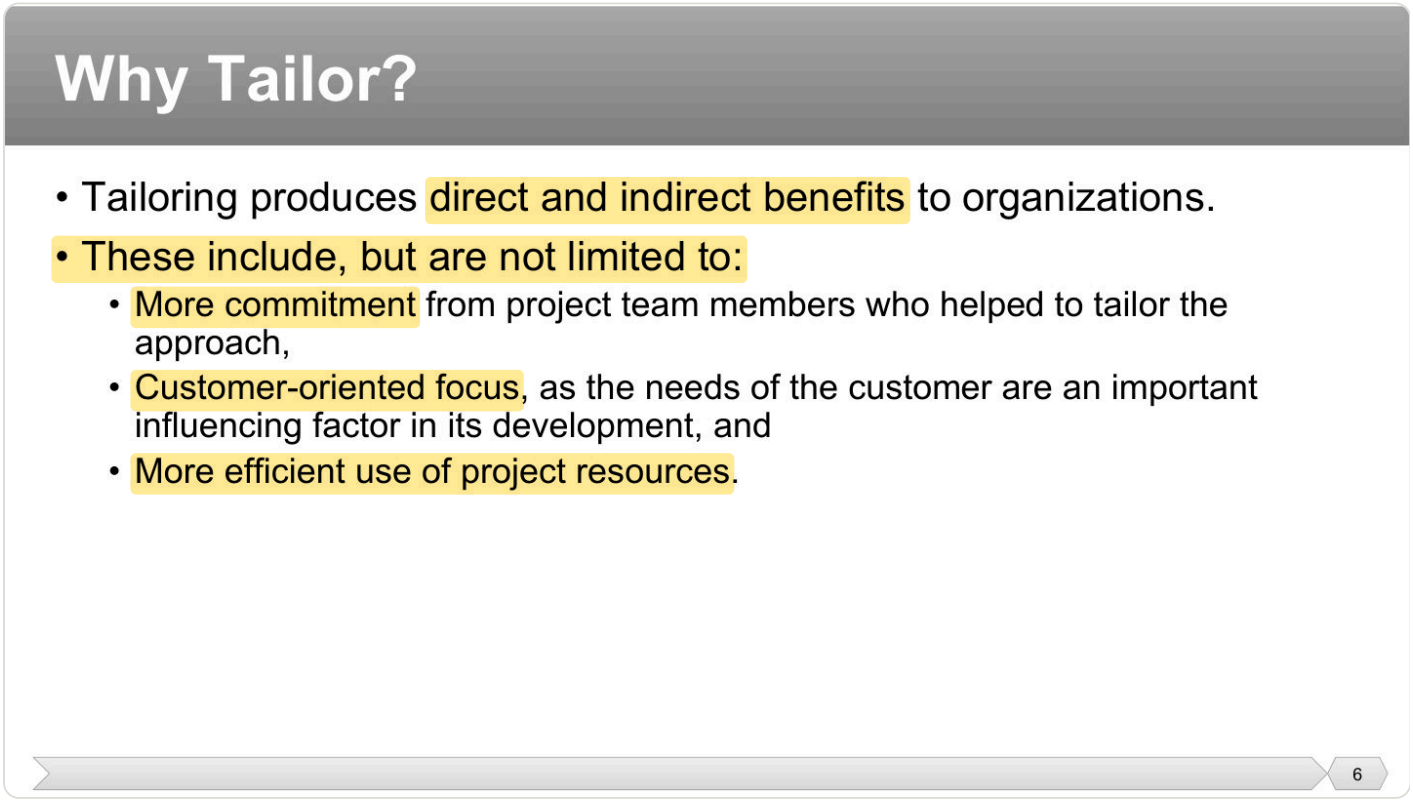
C Tailoring removes the need for trade-offs

> Tailoring is how you make those trade-offs.

D **Demands compete, so a project can't maximize all of them at once**

> The fastest delivery is rarely the cheapest or the most thoroughly checked.

SLIDE 6 / 41 **Why Tailor?**



NOTES

1. **Direct** benefits show up on this project, while **indirect** ones build up over time, such as a team that gets better at choosing how to work. The next three items say what they are.
2. People follow rules they helped write more willingly than rules handed to them. So letting the team shape the approach is a way of earning **commitment**, not just a courtesy.
3. A standard process is built around the process. Tailoring asks “what does this customer need from us?”, which keeps a **customer-oriented focus** on things they actually value.
4. **More efficient use of resources**: effort goes where the project needs it, not into unneeded process.

EXAM ANGLE

Prediction Q1

Which is a stated benefit of tailoring?

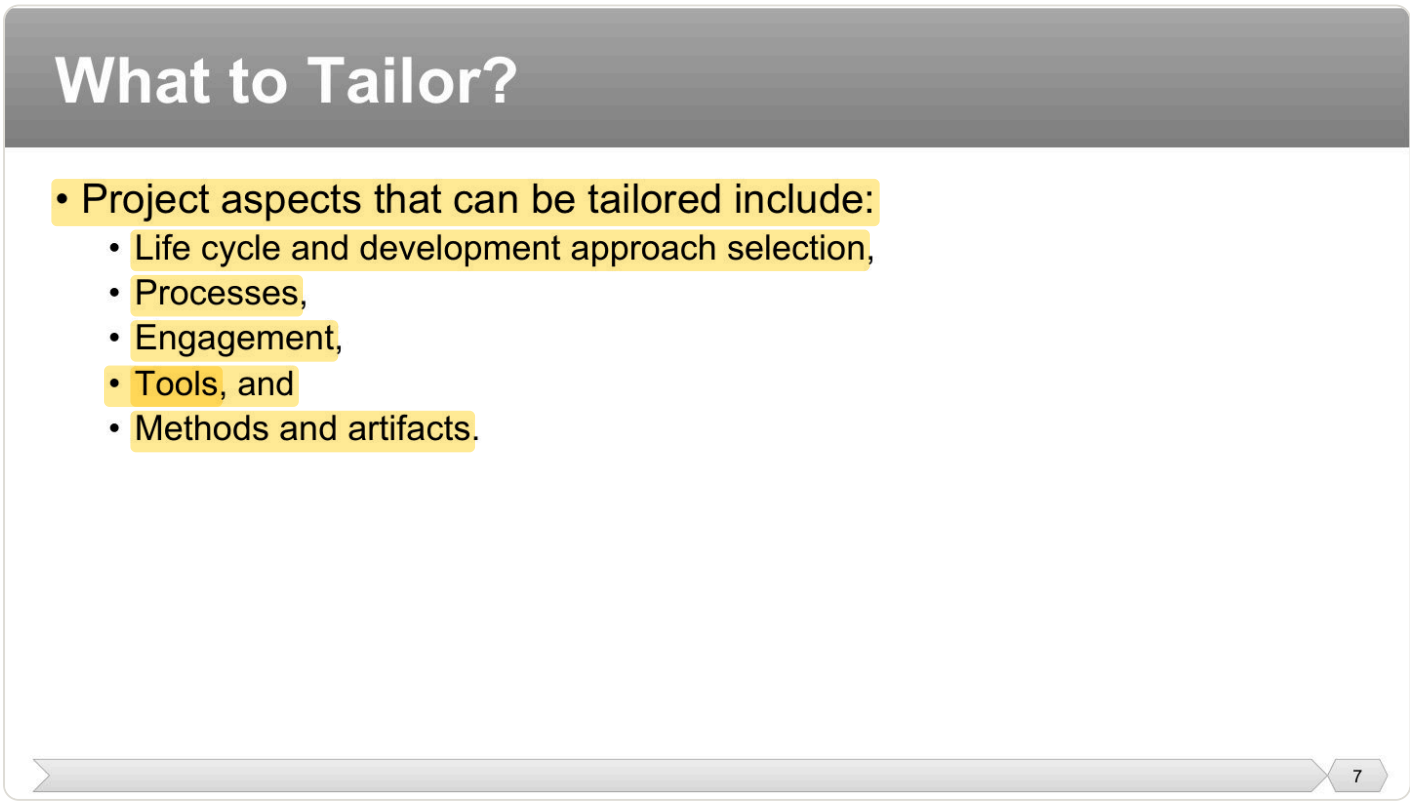
A **More commitment from team members who helped tailor the approach**

B A guaranteed fixed scope

C Eliminating the need for a project manager

D No further need for stakeholder input

SLIDE 7 / 41 **What to Tailor?**



NOTES

1. This is the biggest decision, the overall way the work is organized. Slide 8 explains the **life cycle and development approach**.
2. Slide 9 covers **processes**: the specific steps inside the approach, and which to keep.
3. Slide 10 covers **engagement**: who's involved and how much they can decide.
4. Slide 11 covers **tools**: what software or equipment the team uses.
5. Slide 12 covers **methods and artifacts**: techniques and documents, scaled to fit. Remember all five with **TEMPLe**.

TIPS & TRICKS

- **TEMPLe**: Tools, Engagement, Methods and artifacts, Processes, Life cycle and development approach.

EXAM ANGLE

Prediction Q1

Which is NOT one of the project aspects that can be tailored?

A Methods and artifacts

> This is on the list.

B **The organization's legal name**

> It isn't an aspect of how the project works.

C Engagement

> This is on the list.

D Processes

> This is on the list.

What to Tailor?

What to Tailor?

- Project aspects that can be tailored include:
  - Life cycle and development approach selection,
    - Deciding on a life cycle and the phases of the life cycle is an example of tailoring.
    - Additional tailoring can be done when selecting the development and delivery approach for the project.
    - For instance, building a new data center could involve
      - (a) the use of predictive approaches for the physical building construction and finishing and
      - (b) an iterative approach for understanding and establishing the computing capabilities required.
      - Viewed from a project level, this combination of approaches represents a hybrid approach, but the construction team and the computing team may only experience a predictive or iterative development approach.

NOTES

1. You aren't stuck with a standard set of phases. A research-heavy project might add a feasibility phase, for example, so picking the **phases** is itself tailoring.
2. The life cycle is the shape of the project, while the **delivery approach** is how the results reach people. Each is a separate choice you can adjust.
3. Why two approaches in one building? The walls can be fully specified up front, but the computing needs are still being discovered. Each part gets the approach that suits what's known about it.
4. Whether something is **hybrid** depends on where you're standing. No single team feels hybrid, since each follows its own approach, but the project as a whole mixes them.

EXAM ANGLE

Prediction Q1

A new data center is built in fixed construction phases, while its computing capabilities are worked out in iterations. What is the overall approach?

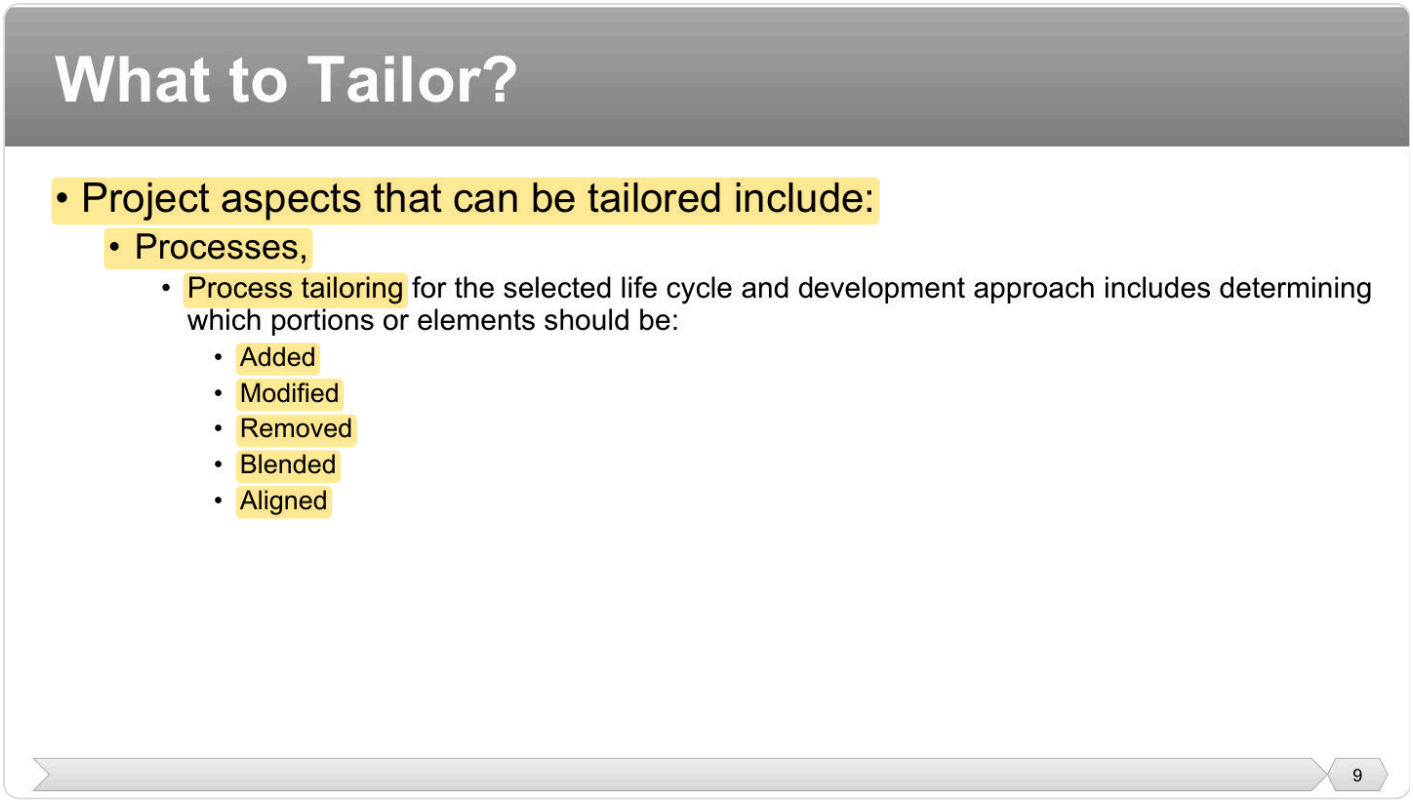
A **Hybrid**

B Incremental only

C Predictive

D Adaptive

What to Tailor?



NOTES

1. Choosing an approach doesn't mean accepting all of its steps. **Process tailoring** goes through them and asks about each one, using the five verbs below.

2. **Added** (extra rigor, e.g. a security review), **modified** (changed to fit, e.g. a lighter weekly report), **removed** (dropped as unnecessary), **blended** (elements from different methods combined into one, e.g. Scrum ceremonies with a predictive budget process) or **aligned** (harmonized so definitions and terms are consistent across teams).

TIPS & TRICKS

- **A RuMBA**: Aligned, Removed, Modified, Blended, Added.

EXAM ANGLE

Prediction Q1

Combining elements of two different methods into one process is which process-tailoring action?

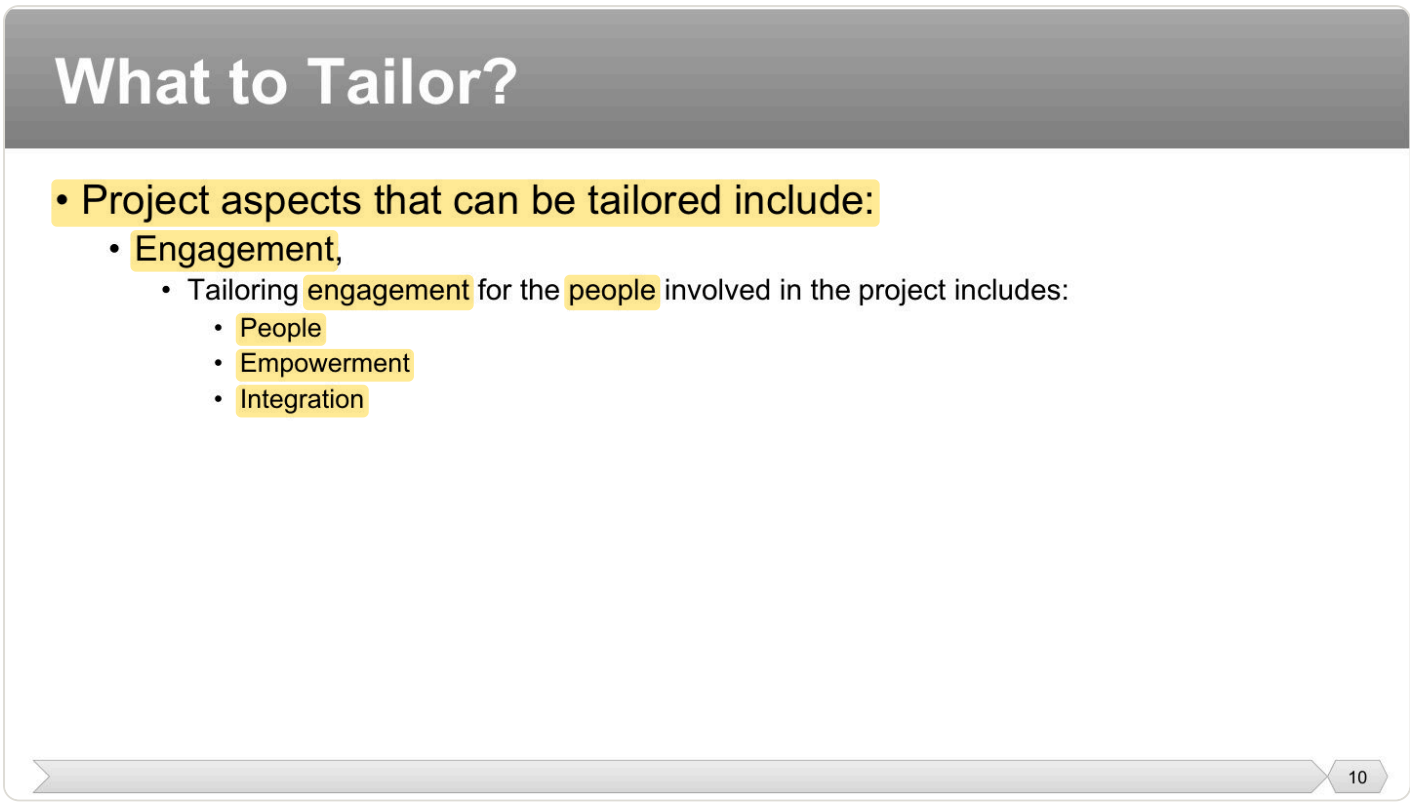
A Adding

B Aligning

C Removing

D **Blending**

 What to Tailor?



NOTES

1. A process only works if the right people are involved at the right level. **Engagement** tailoring settles that, and the next note gives the three things to decide.

2. **People**: who is on the team and with which skills and capabilities. **Empowerment**: how much responsibility and local decision-making the team gets (a mature team gets more). **Integration**: how contractors, partners and other organizations are brought into the team.

TIPS & TRICKS

- **PIE**: People, Integration, Empowerment.

EXAM ANGLE

Prediction Q1

A mature team is given more decision-making power. Which part of engagement tailoring is this?

A People

That’s about who is on the team and what skills they have.

B **Empowerment**

Empowerment is how much responsibility and local decision-making people get.

C Procurement

That’s buying from outside.

D Integration

Integration brings contractors and partners into the team.

Prediction Q2

Contractors from a partner company are brought into the team’s way of working. Which is this?

A Compliance

That’s about following regulations.

B Cadence

That’s a rhythm of activity.

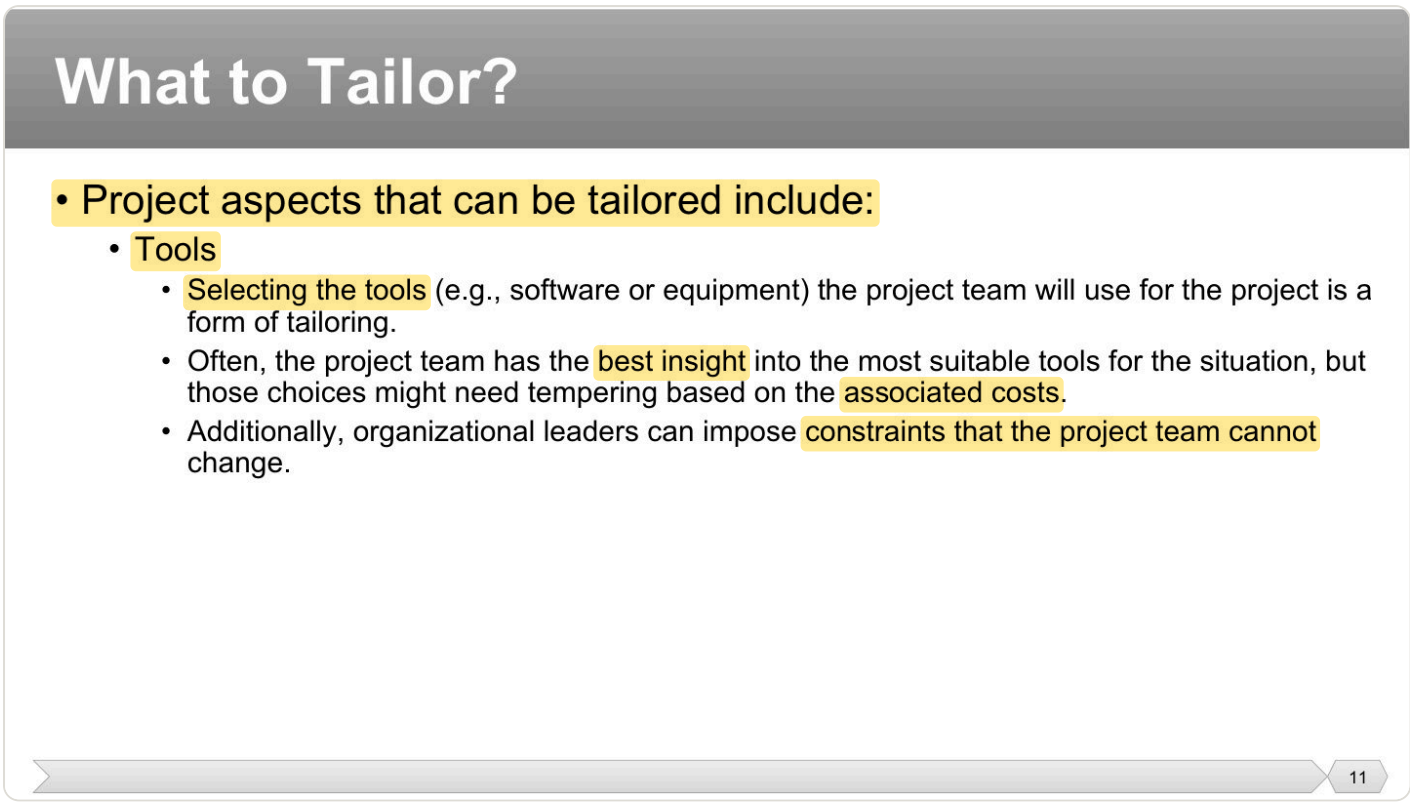
C **Integration**

Integration covers bringing others into the team.

D Empowerment

That’s about decision-making authority.

 What to Tailor?



NOTES

1. Tools shape how people work, so the choice matters. A distributed team may need a shared board where a small co-located one needs only a whiteboard, which is why picking **tools** counts as tailoring.
2. The people using a tool every day know what actually helps, so ask them. But the “best” tool may cost too much, so someone has to weigh the benefit against the **cost**.
3. A company may require one tool for security or licensing reasons, even if the team prefers another. Tailoring happens within such **constraints**, so the team works around them instead of ignoring them.

EXAM ANGLE

Prediction

Q1

Leadership requires a specific corporate tool that the team dislikes. What does the slide say about this?

A Tools can’t be tailored at all

> Choosing tools is a form of tailoring.

B The team can always overrule leadership

> Some constraints can’t be changed by the team.

C Leaders may impose constraints the team can’t change

> Tool choices happen within such limits.

D Cost is never considered

> Cost can temper the choice.

Prediction

Q2

The project team usually has the best insight into which tools suit the work.

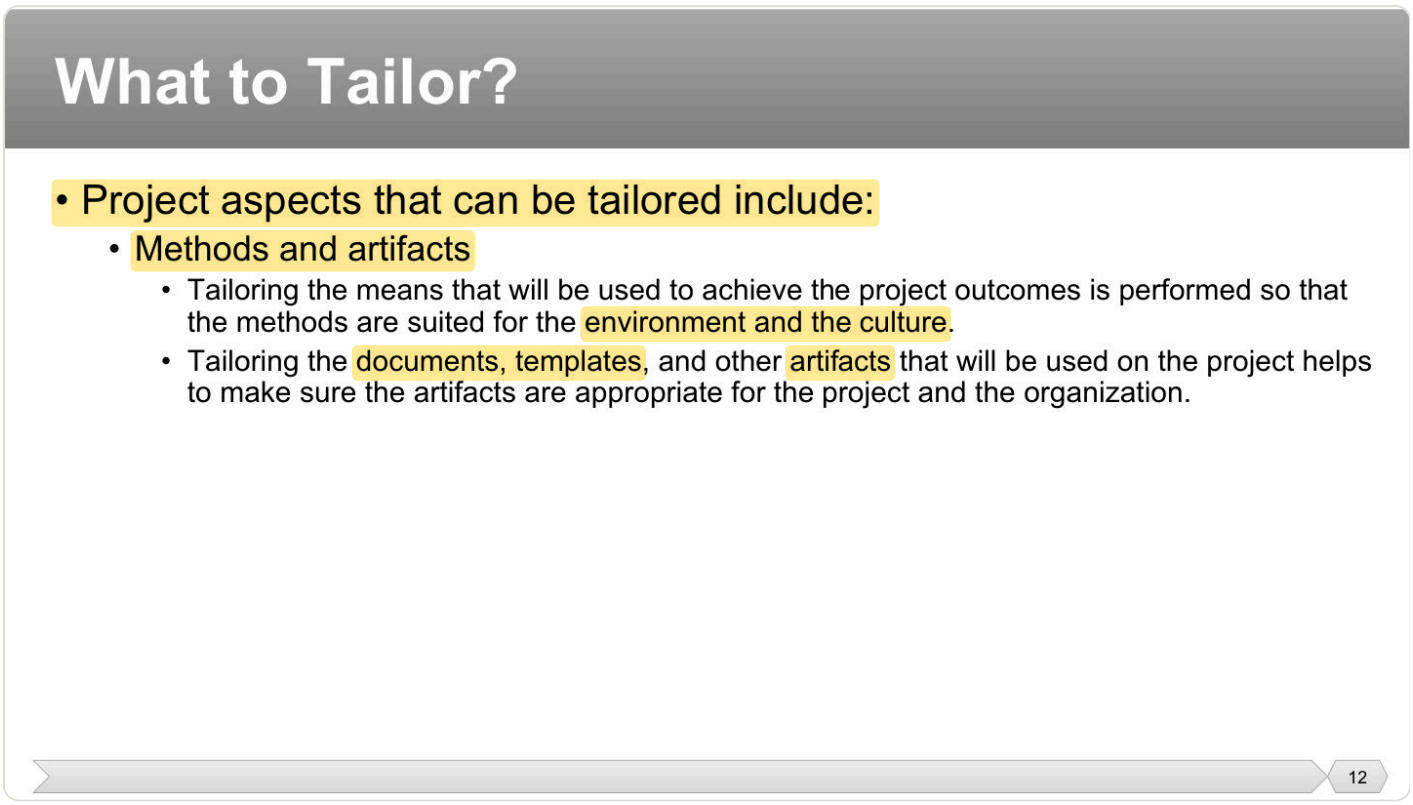
T True

> They use the tools, though choices may be tempered by cost.

F False

> The slide says so, while noting that cost can limit the choice.

 What to Tailor?



NOTES

1. A method that works in one place can fail in another. Open retrospectives suit a culture where people speak freely, but may need adjusting where criticizing others is uncomfortable. Hence fitting to **environment and culture**.

2. **Artifacts** (documents, templates) are tailored so they are appropriate for the project and organization: a two-page charter for a small internal project, a full one for a regulated contract.

EXAM ANGLE

Prediction Q1

A small internal project uses a two-page charter, while a regulated contract uses a full one. What is this?

A Ignoring governance

> The regulated project still gets its full version.

B **Tailoring artifacts**

> Artifacts should be appropriate to the project and the organization.

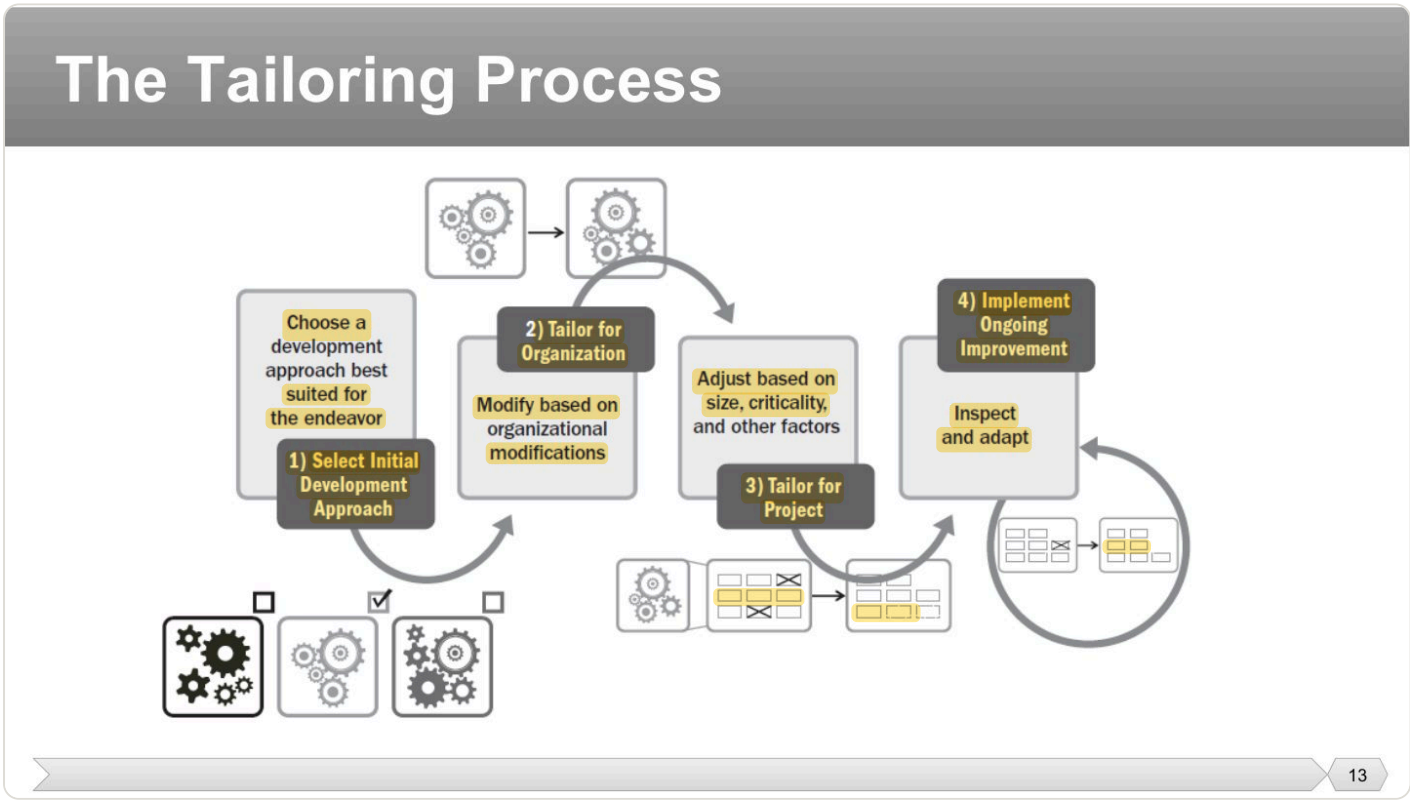
C Scope creep

> Nothing here adds scope.

D Fast-tracking

> That's a schedule technique.

SLIDE 13 / 41 **The Tailoring Process**



NOTES

1. The tailoring process, step **1**: **select the initial development approach**: choose the approach best suited to the endeavor (the ticked set of gears).

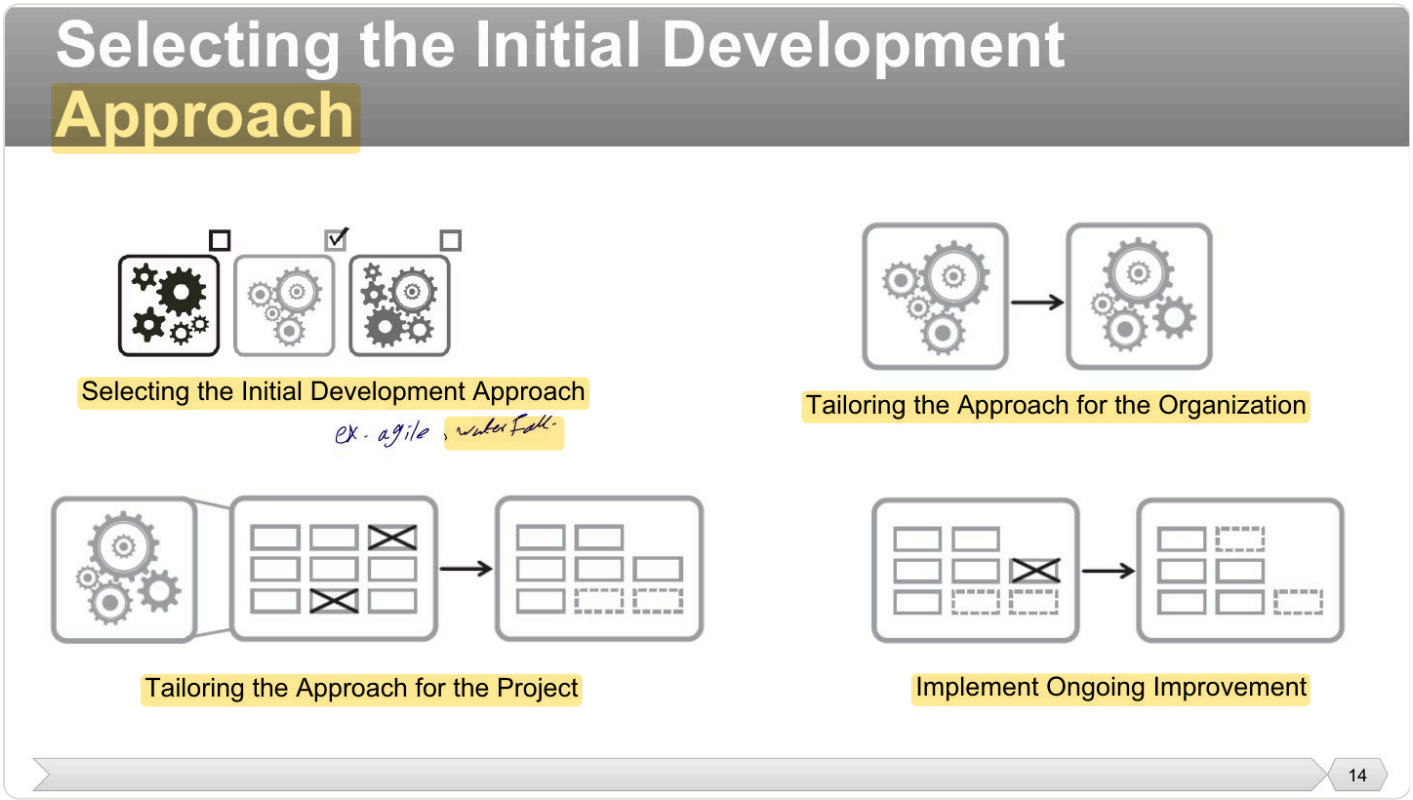
2. Step **2**: **tailor for the organization**: modify it to fit organizational requirements and constraints.
3. Step **4**: **implement ongoing improvement**: inspect and adapt; the loop arrow shows it never ends.

EXAM ANGLE

Prediction Q1

Put the four steps of the tailoring process in order.
Answer: (1) Select the initial development approach; (2) tailor the approach for the organization; (3) tailor it for the project; (4) implement ongoing improvement (inspect and adapt throughout the project).

SLIDE 14 / 41 **Selecting the Initial Development**



NOTES

1. Step 1 in pictures: choose the base approach, e.g. agile or waterfall (the handwritten note).
2. Step 2: one set of gears becomes the organization's adapted version.
3. Step 3: elements are removed (the crossed boxes) and adjusted for this project.
4. Step 4: the remaining process keeps being refined.

EXAM ANGLE

Prediction Q1

What is the first step in the tailoring process?

A Tailor for the organization

> That's step 2.

B Implement ongoing improvement

> That's step 4.

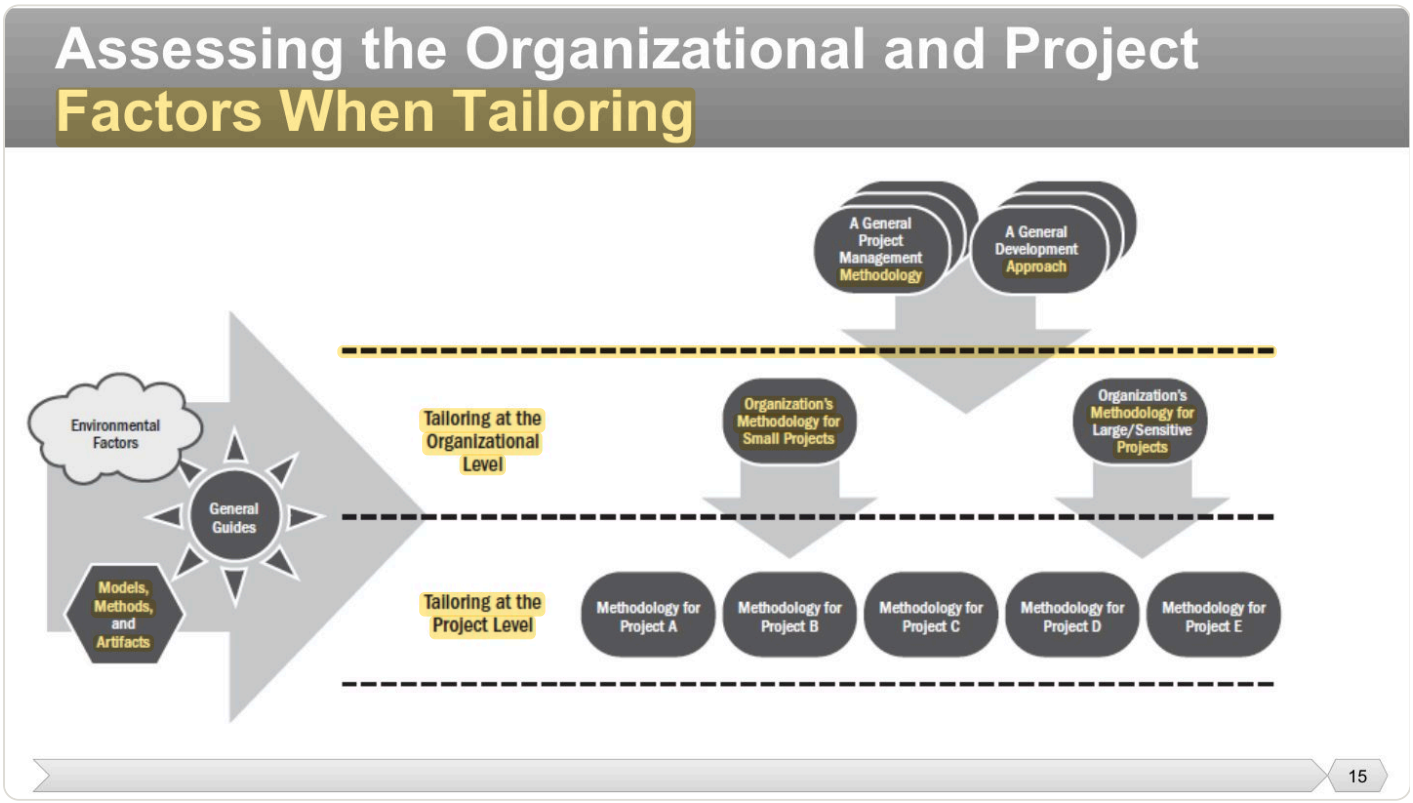
C **Select the initial development approach**

> You pick a base before adapting it.

D Tailor for the project

> That's step 3.

SLIDE 15 / 41 **Assessing the Organizational and Project**



NOTES

1. Tailoring happens at **two levels**. At the **organizational** level, a general PM methodology and development approach are adapted into the organization's own methodologies, e.g. one for small projects and one for large or sensitive projects.

2 Both levels are guided by **environmental factors**, general guides, and the available models, methods and artifacts.

EXAM ANGLE

Prediction Q1

A company creates one methodology for small projects and another for large, sensitive ones. At what level is this tailoring?

A Individual task

> This covers whole kinds of project.

B Vendor

> This isn't about a vendor.

C Sprint

> This isn't about a single sprint.

D Organizational

> The organization adapts a general approach into its own methodologies.

Prediction Q2

Tailoring can happen at both the organizational level and the project level.

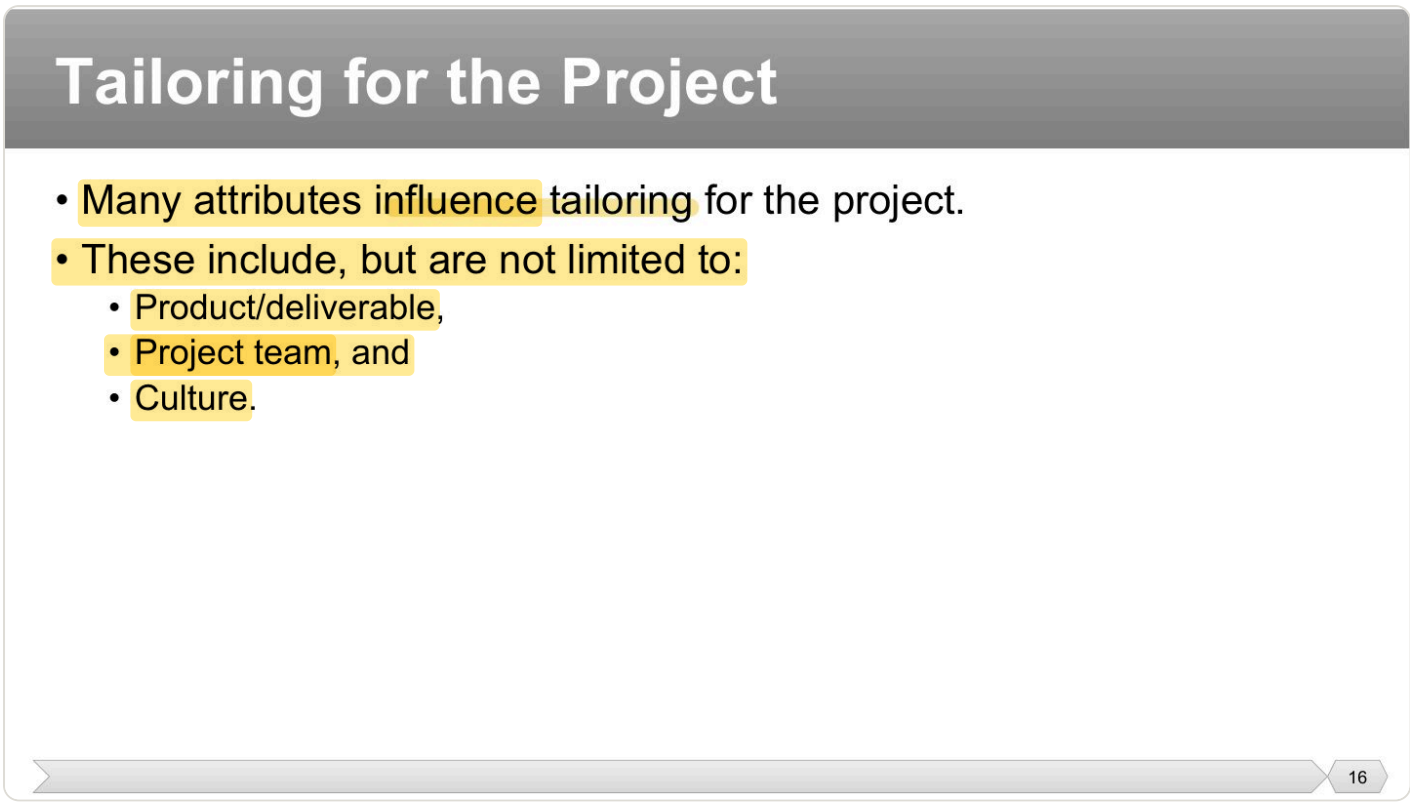
T True

> The organization adapts first, and each project tailors further.

F False

> The slide shows both levels.

 Tailoring for the Project



NOTES

1. Knowing the project's features tells you how far to adjust. Rather than a long list, the slide groups them into three questions: what are we making, who's making it, and in what kind of workplace?
2. Each one has its own slide next. Remember them as what (**product/deliverable**), who (**project team**) and where (**culture**).

TIPS & TRICKS

- **CoPPer**: Culture, Project team, Product or deliverable.

EXAM ANGLE

Prediction Q1

Which three groups of attributes influence tailoring for the project?

A Threats, opportunities and issues

> Those belong to risk.

B **Product or deliverable, project team and culture**

> Each one has its own slide.

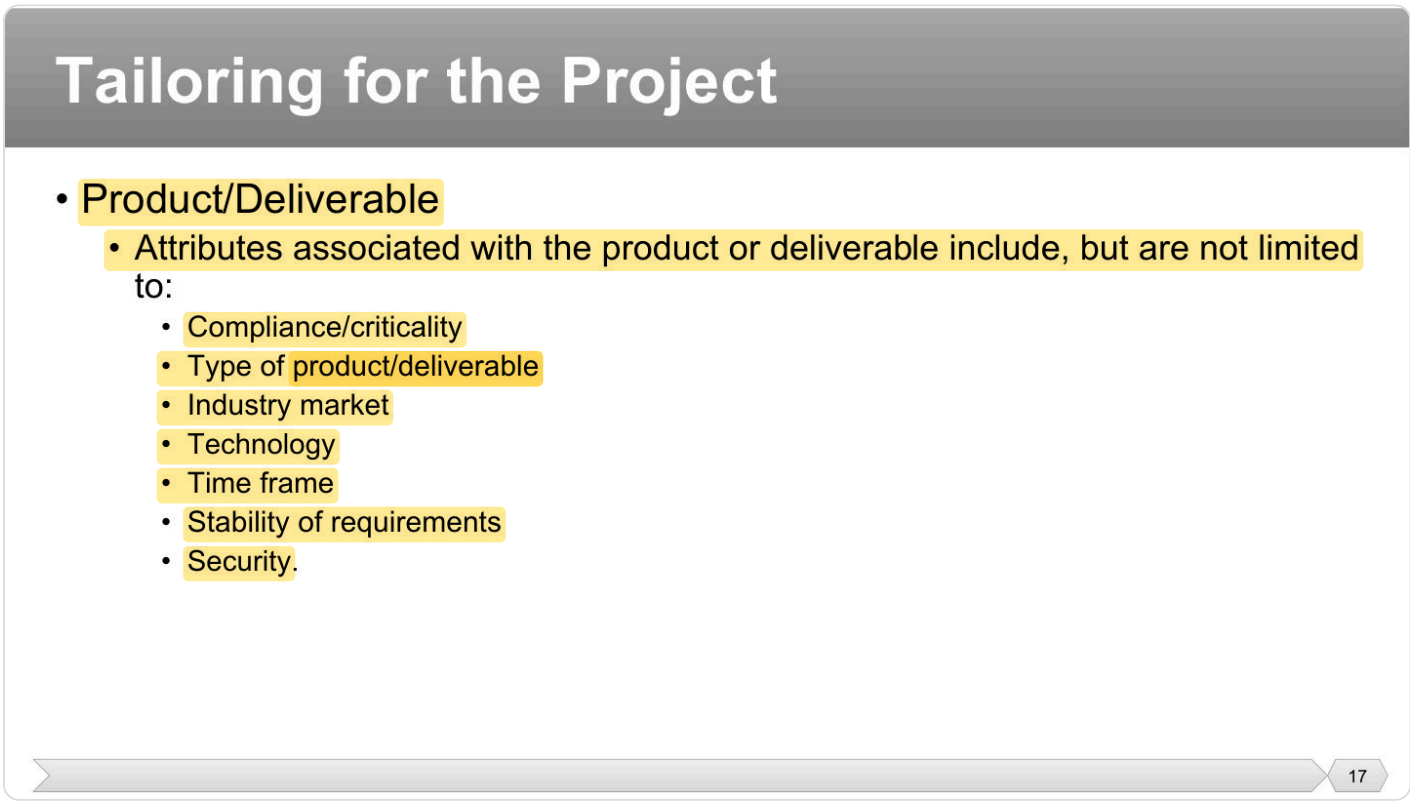
C People, process and profit

> That isn't this slide's grouping.

D Budget, schedule and scope

> Those are constraints.

SLIDE 17 / 41 **Tailoring for the Project**



NOTES

1 The thing you're producing limits your choices. A heart monitor and a game can't follow the same process, even with the same team, which is why **product/deliverable** comes first.

2. **Compliance and criticality** decide how much proof and checking you need. A medical product needs a paper trail, so a short time frame or new technology can't remove that need; it only makes planning harder.
3. **Stability of requirements** (stable favours predictive, volatile favours adaptive) and **security** needs.

TIPS & TRICKS

- Sentence, in slide order: **C**ats **T**ake **I**n **T**oo **T**iny **S**nacks, **S**adly. Compliance, Type of product, Industry market, Technology, Time frame, Stability of requirements, Security.

EXAM ANGLE

Prediction

Q1

A heart monitor needs strong evidence of safety. Which attribute drives this?

A Buy-in

> That's a culture consideration.

B Team geography

> That's a team consideration.

C Time frame

> Time doesn't explain the need for evidence.

D Compliance and criticality

> This decides how much rigor and assurance are needed.

Prediction

Q2

Very unstable requirements usually favor which kind of approach?

A Adaptive

> Volatile requirements favor adaptive.

B Purely sequential

> That's the predictive style.

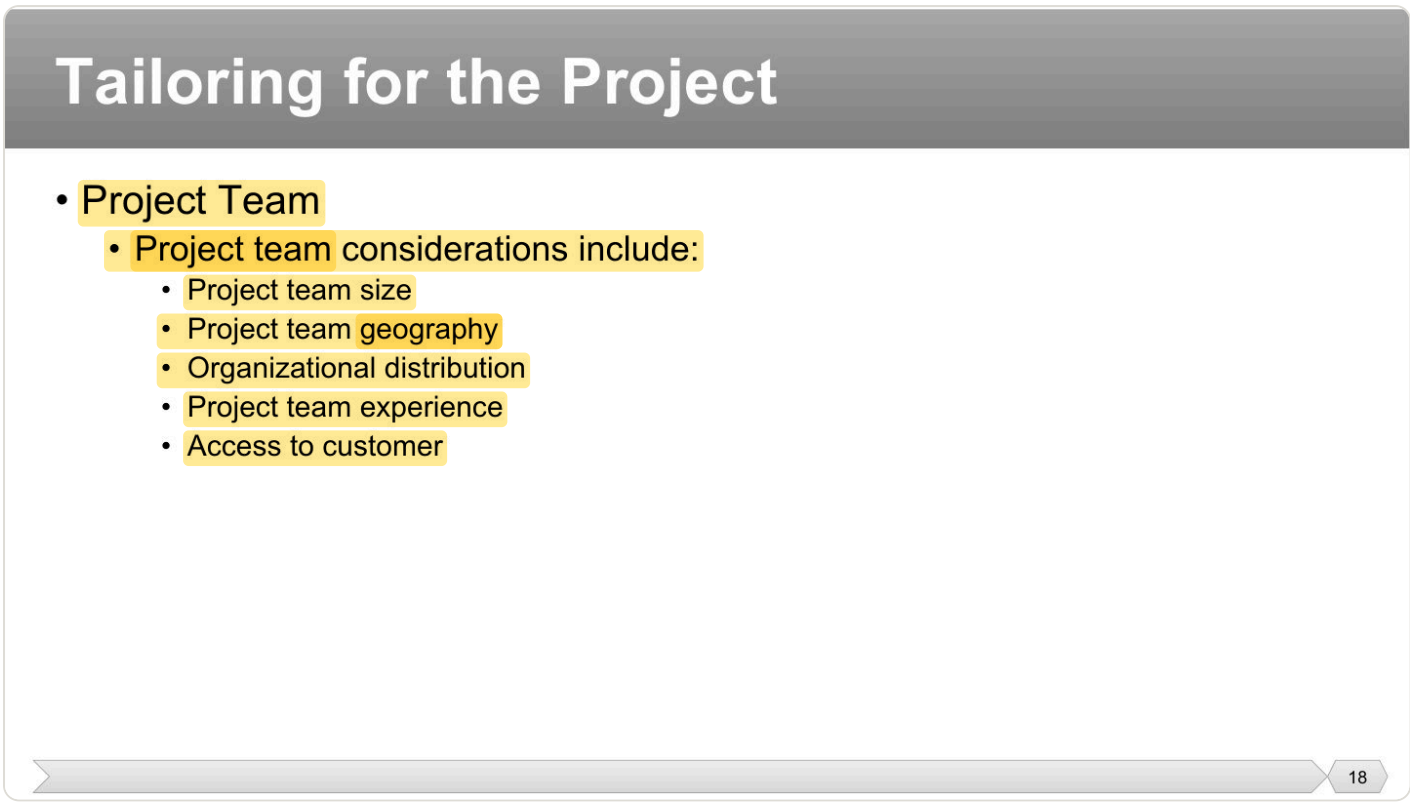
C Predictive

> Predictive favors stable requirements.

D Code and fix

> That's ad hoc, not a tailoring outcome.

 Tailoring for the Project



NOTES

1. The same process can work for one team and fail for another. So look at who's doing the work before deciding how much structure they need. These are the **project team** factors.
2. Five people in a room can just talk. Fifty people across time zones need written decisions and scheduled meetings, so **size** and **geography** raise the amount of formal communication needed.
3. Team **experience** (an experienced team needs less prescribed process) and **access to the customer** (adaptive approaches need frequent customer input).

TIPS & TRICKS

- **SAGE O**wl: Size of the team, Access to customer, Geography, Experience, Organizational distribution.

EXAM ANGLE

Prediction Q1

An adaptive approach needs frequent input, but the customer is hard to reach. Which consideration does this raise?

A Time frame

> That's a product attribute.

B **Access to customer**

> Adaptive work depends on it.

C Security

> That's a product attribute.

D Team size

> The issue isn't the number of people.

Prediction Q2

Why might an experienced team need less prescribed process?

A **They already know how to do the work well**

> Experience replaces some detailed instruction.

B They aren't allowed to follow processes

> Nothing forbids process.

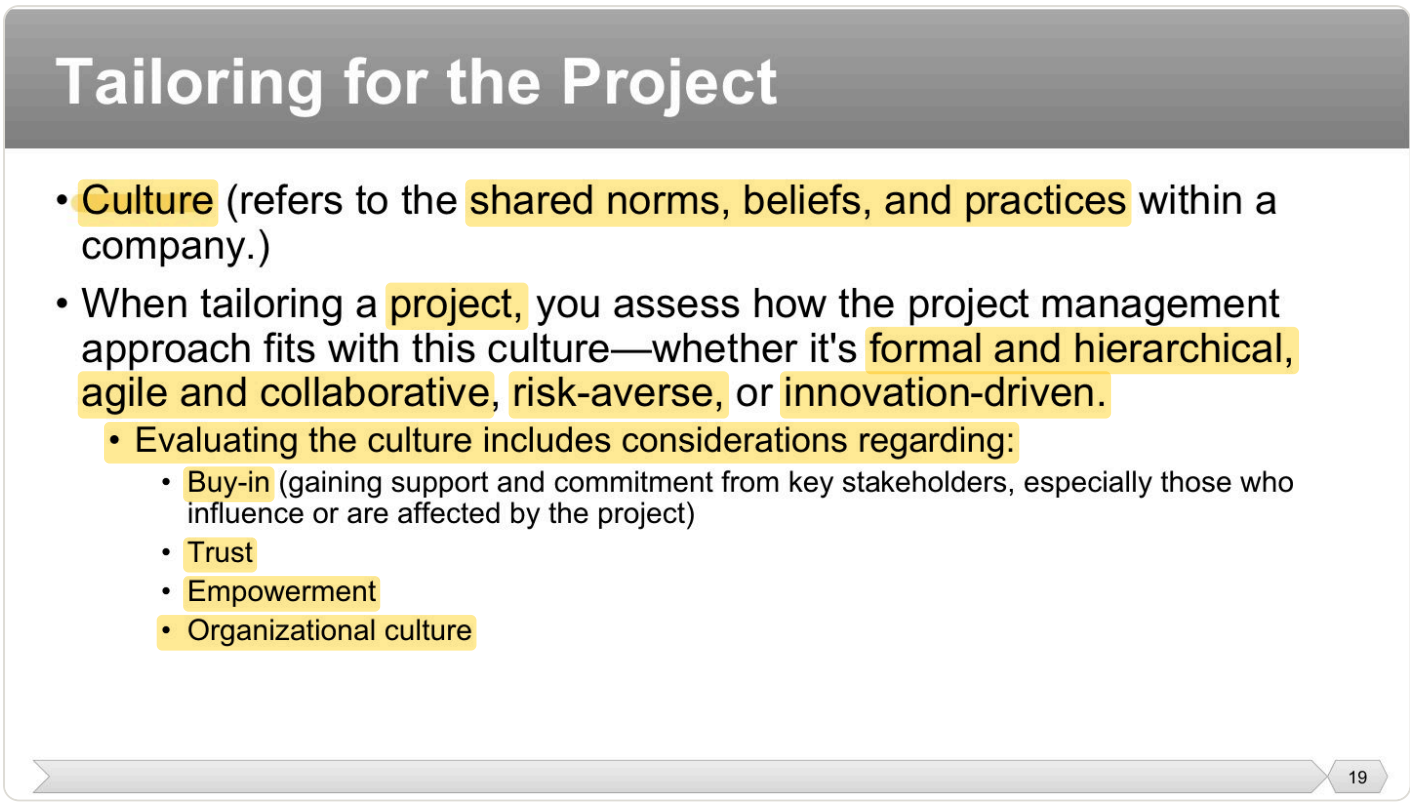
C Experience removes all risk

> Risk remains.

D Their projects have no stakeholders

> They still do.

 Tailoring for the Project



NOTES

1. **Culture** is how things really get done, which may differ from official policy. If everyone knows that bad news gets punished, that's culture, even if no document says so.
2. A process only works if the workplace accepts it. Daily self-organizing meetings can fall flat where people wait for orders, so check the fit first: is it **formal and hierarchical**, or **agile and collaborative**? An agile process forced onto a strictly hierarchical culture struggles.
3. These tell you how much change people will accept. Without **buy-in**, people quietly ignore the new way of working. Without **trust** and **empowerment**, they won't make decisions on their own.

TIPS & TRICKS

- **TO BE**: Trust, Organizational culture, Buy-in, Empowerment.

EXAM ANGLE

Prediction Q1

An agile process is forced onto a strictly hierarchical company and struggles. What was not considered?

A Bidder conferences

> Those are about procurement.

B How the approach fits the culture

> Tailoring checks this fit.

C The product's color

> That's not relevant.

D The cost baseline

> The issue here is culture.

Prediction Q2

Which is a culture consideration?

A Stability of requirements

> That's a product attribute.

B Team geography

> That's a team consideration.

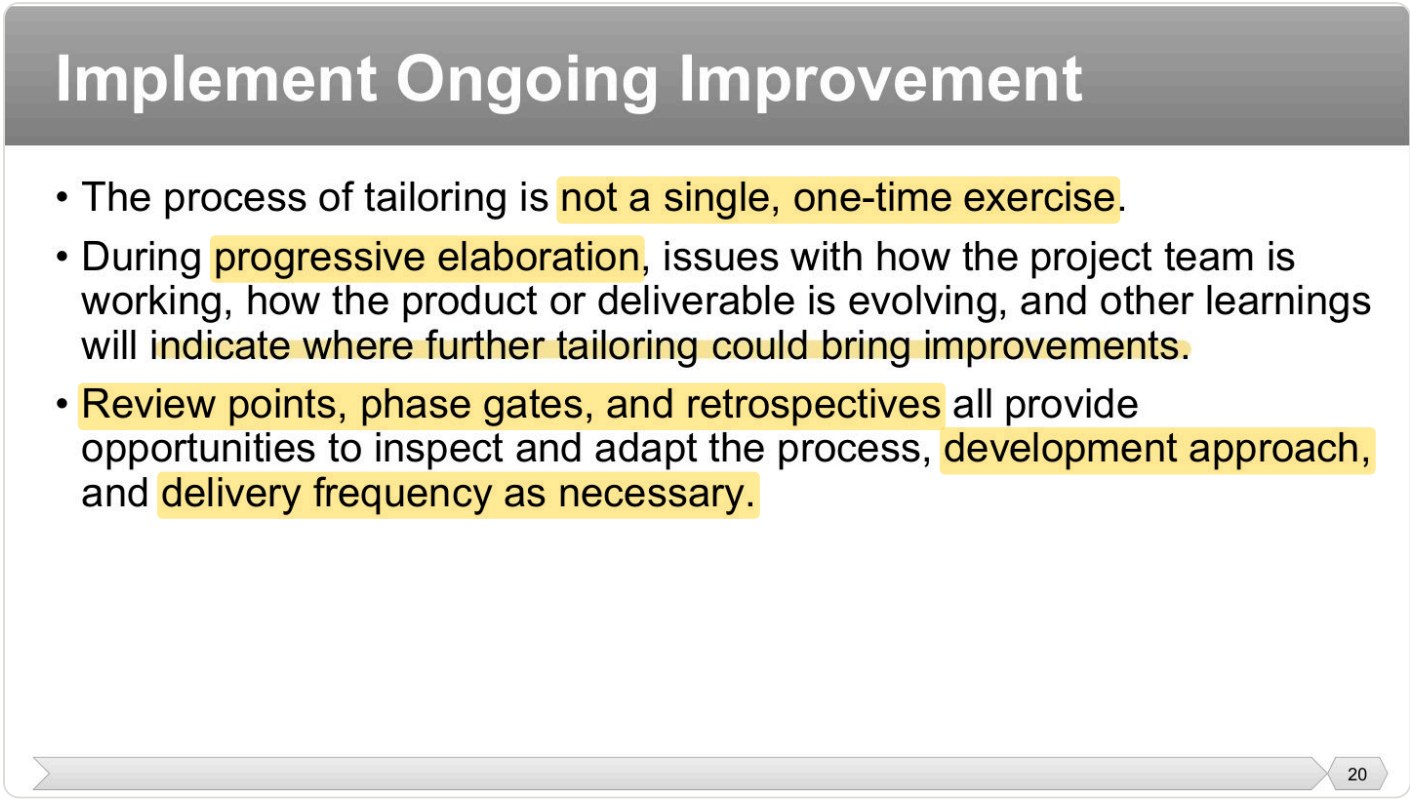
C Buy-in

> It's listed along with trust, empowerment and organizational culture.

D Industry market

> That's a product attribute.

 Implement Ongoing Improvement



NOTES

1. The first version is a best guess about what will work, and you'll know more later. So treat tailoring as **not a one-time exercise**, or you'll keep following a process that stopped fitting.
2. **Progressive elaboration** means details get clearer as you go. As they do, so do the problems: if reviews keep catching the same errors, you've found where the process needs adjusting.
3. You don't need extra meetings to improve. **Retrospectives** and **phase gates** are already scheduled pauses, so use them to ask "is the way we work still right?".

EXAM ANGLE

Prediction Q1

True or false: tailoring is done once, when the project is initiated.

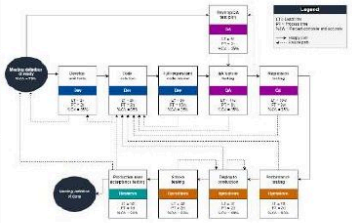
T True

F False

> It continues throughout the project; reviews, phase gates and retrospectives are chances to adapt.

Situations and Tailoring Suggestions

Situation	Tailoring Suggestion
Poor quality deliverables	Add more feedback verification loops and quality assurance steps.
Team members unsure of how to proceed or undertake their work	Add more guidance, training, and verification steps.
Long delays waiting for approvals	Try streamlining approval decisions through fewer people authorized to make decisions up to certain value thresholds.
Too much work in progress or high rates of scrap	Use techniques like value stream mapping and kanban boards to visualize the work, identify the issues, and propose solutions.
Stakeholders are not engaged or share negative feedback	Evaluate whether sufficient information is being shared with stakeholders; feedback loops are present and working; and deeper engagement may work better than simply communicating.
Lack of visibility and understanding of project progress	Check to ensure appropriate measures are being collected, analyzed, shared, and discussed during team and stakeholder meetings; validate agreement with the measures within the team and with stakeholders.
Issues and/or risks for which the team is unprepared continue to surface, requiring the team to react rather than progress work	Explore root causes to identify whether there are related gaps in project processes or activities.



21

NOTES

1. The pattern in this table: name the problem, then tailor in the missing control. **Poor quality deliverables** → add feedback, verification loops and quality-assurance steps. Members unsure how to proceed → add guidance, training and verification.
2. **Too much work in progress or scrap** → value-stream mapping and kanban boards to visualize the work and find the problems. Disengaged stakeholders → check information sharing and feedback loops; deeper engagement may work better than simply communicating.
3. **Lack of visibility of progress** → make sure the right measures are collected, analysed and discussed, and validated with the team and stakeholders. Recurring surprises → root-cause analysis of gaps in the process.

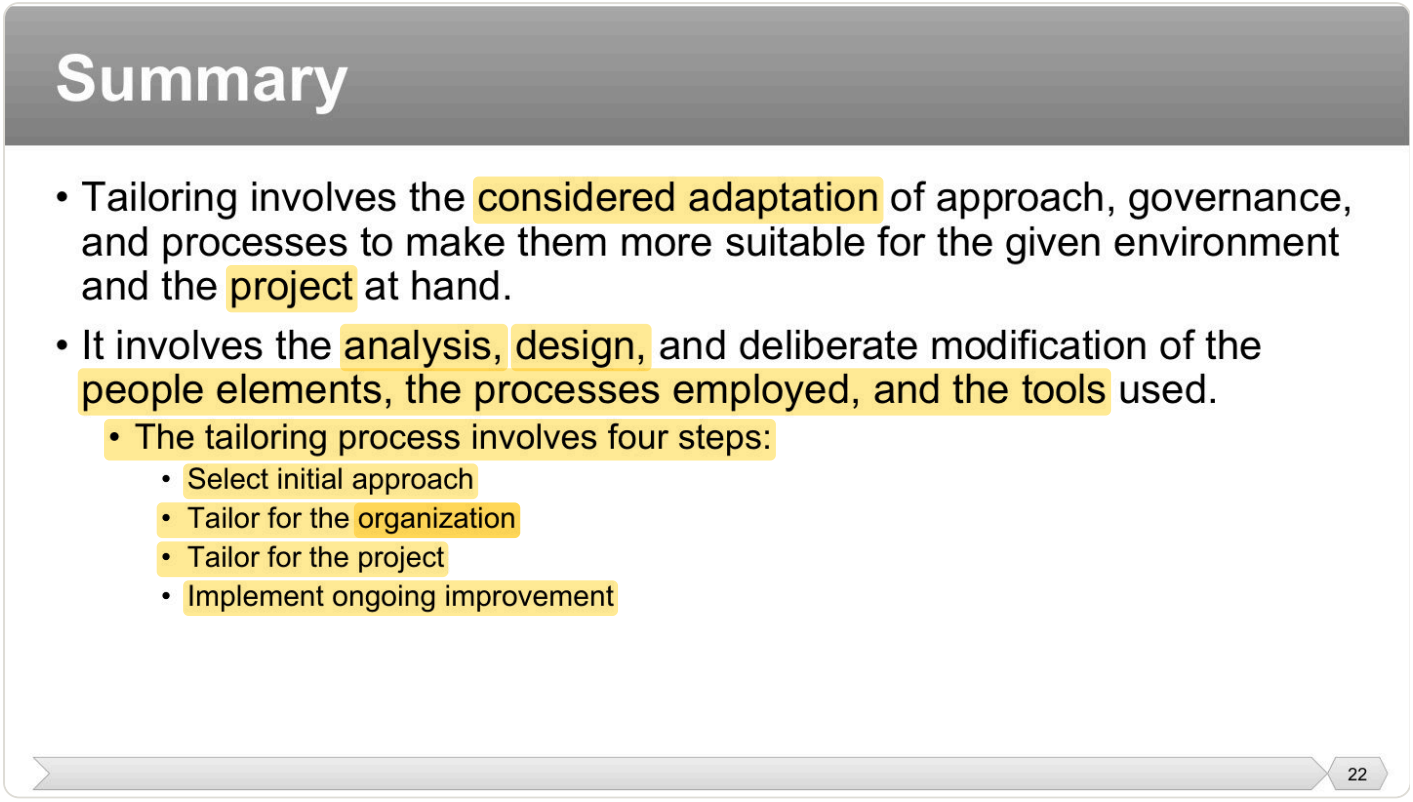
EXAM ANGLE

Prediction Q1

A team keeps waiting several days for approvals before it can proceed. What tailoring change does the table suggest?

Answer: Streamline approval decisions: authorize fewer people to make decisions, up to certain value thresholds, so routine approvals don't queue.

 Summary



NOTES

1. **Considered** is the same point as “deliberate” on slide 4: you adapt for a reason you can state. That’s the idea to carry into a written answer.
2. This tells you what can be changed, so a good answer names all three: **people, processes and tools**. Changing only the paperwork isn’t enough if the team and tools stay wrong.
3. The order runs from general to specific and then keeps going. Remember “**Smart Teams Tailor Iteratively**”: **select** a base, fit it to the **organization**, fit it to the **project**, then keep **improving**.

TIPS & TRICKS

- The order matters here: **S**mart **T**eams **T**ailor **I**teratively. Select the initial approach, Tailor for the organization, Tailor for the project, Implement ongoing improvement.

EXAM ANGLE

Prediction

Q1

What is the correct order of the tailoring process?

A Tailor for project → select → improve → tailor for organization

> You can’t tailor before selecting.

B Select → tailor for organization → tailor for project → improve

> It goes from general to specific, and then continues.

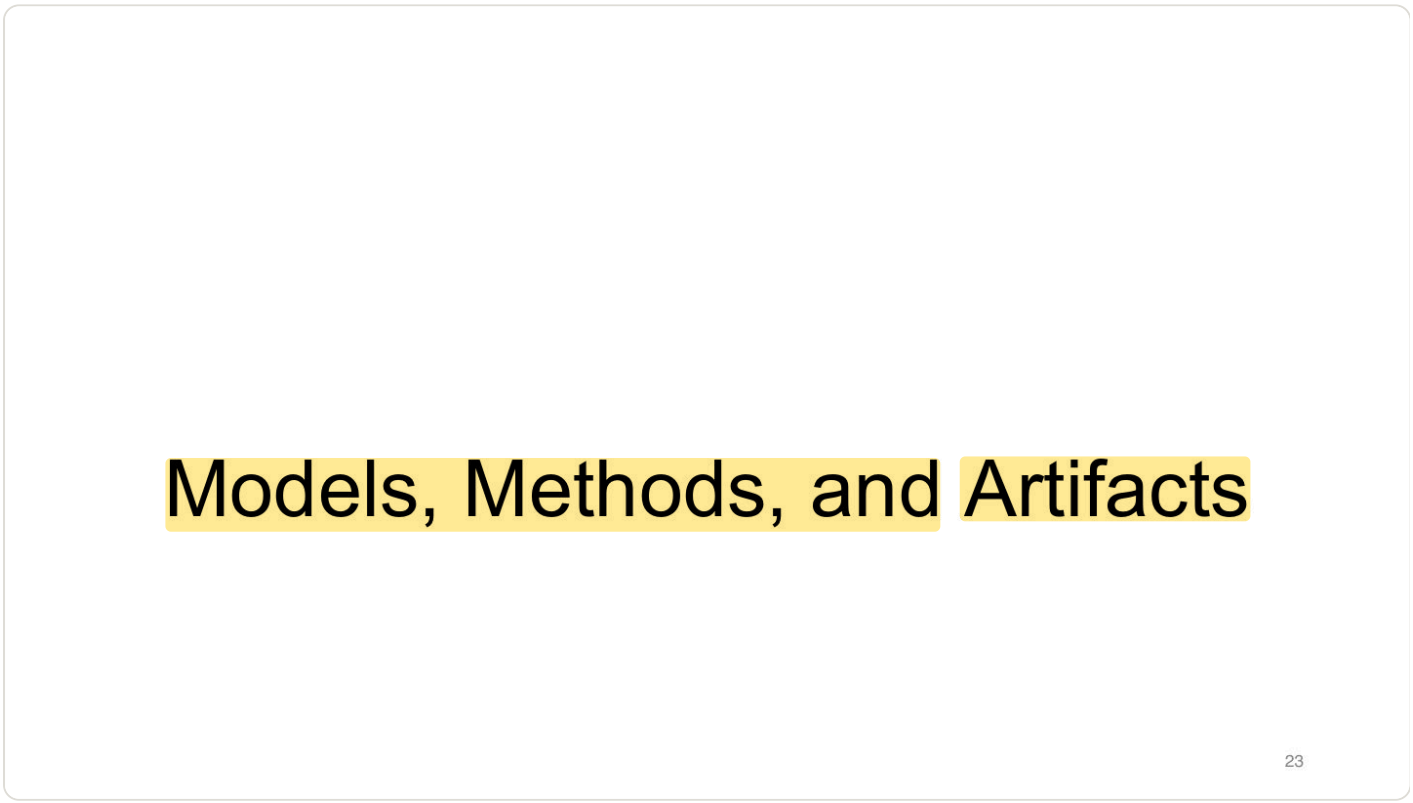
C Improve → select → tailor for project → tailor for organization

> Improvement comes last, and it’s ongoing.

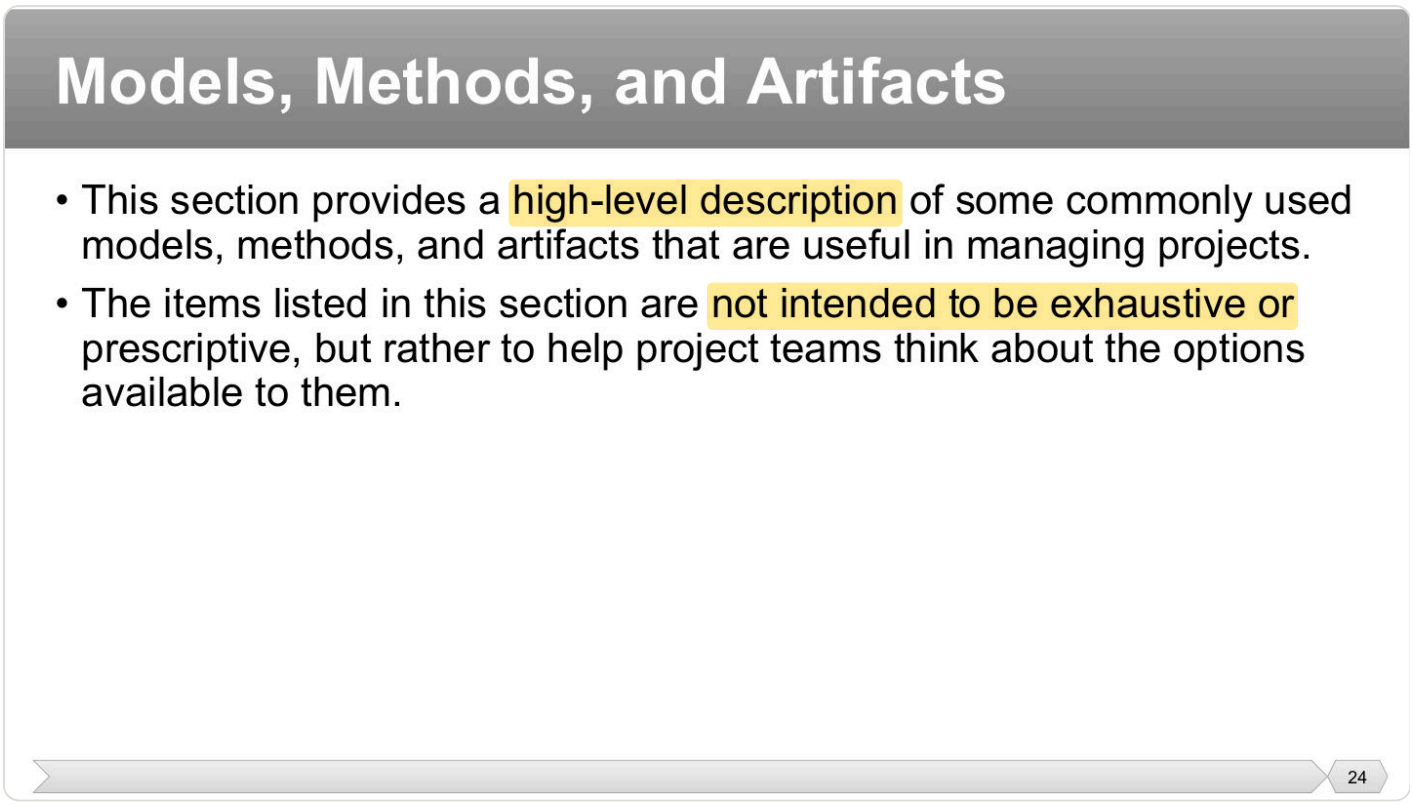
D Select → improve → tailor for organization → tailor for project

> Improvement isn’t second.

SLIDE 23 / 41 **Models, Methods, and Artifacts (section)**



 Models, Methods, and Artifacts



NOTES

1. You only need to know what each one is for, not how to run each in detail. A **high-level** view helps you recognize which tool fits a situation.
2. It is **not exhaustive or prescriptive**: a menu of options to tailor from, not a checklist to use every time.

EXAM ANGLE

Prediction Q1

Teams must use every model, method and artifact in this section.

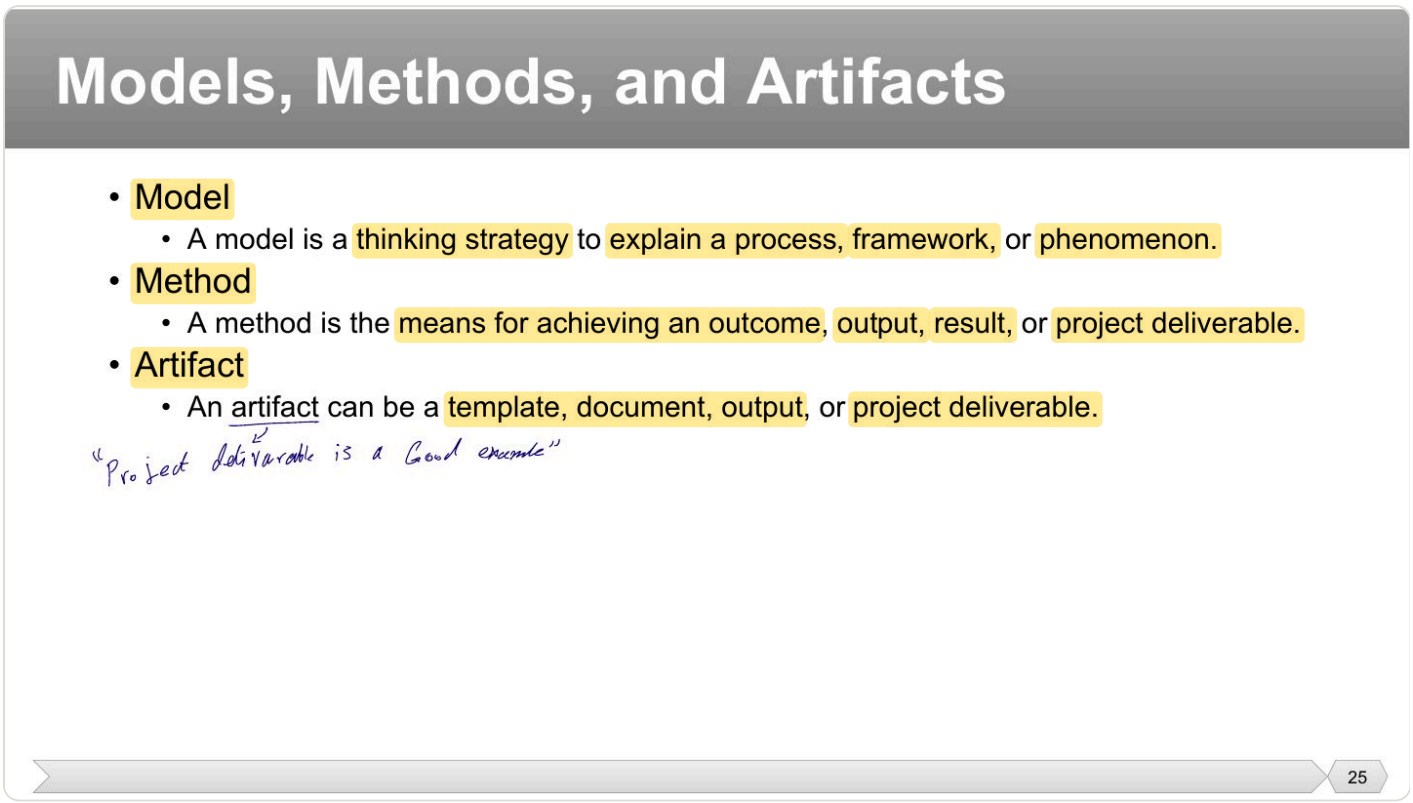
T True

> The slide says it only helps teams think about the options.

F False

> The list is neither exhaustive nor prescriptive. It's a menu of options.

 Models, Methods, and Artifacts



NOTES

1. A model helps you make sense of what you see. It doesn't tell you what to do step by step: Tuckman explains why a new team is arguing, so **thinking** is its job.
2. A method is something you carry out, like running a retrospective. If you could schedule it and do it, it's a **means for achieving** something.
3. An artifact is something you can hold or file, like a risk register. **Model = think, method = do, artifact = thing** answers most "which one is this?" questions.

TIPS & TRICKS

- **MaMA**: Model, Method, Artifact.

EXAM ANGLE

Prediction

Q1

A risk register is best classified as a:

A Model

B Method

C Principle

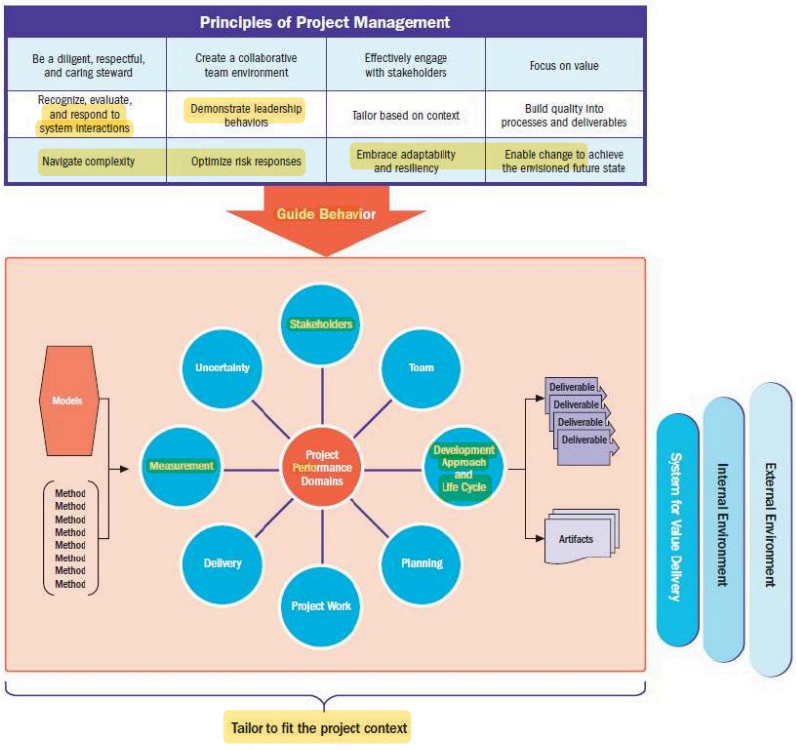
D **Artifact**

Past exam · Final 251 · Q1.4

Q2

Give an example of a project management tool or technique that you might use to manage a complex software development project, and explain how it could help you ensure project success.
Answer: A Work Breakdown Structure: it decomposes the complex system into smaller deliverables and work packages that can be estimated, assigned and tracked. Nothing is forgotten, ownership is clear, and the WBS is the base for the schedule, budget and risk analysis, so problems show up early and progress is measurable. (Other valid answers: Gantt chart, CPM, risk register, Scrum board with a burndown chart, each with its benefit explained.)

SLIDE 26 / 41 Principles, domains and the toolbox together



26

NOTES

1. The whole PMBOK 7 picture in one diagram. At the top, the **12 principles**...
2. ...the **8 performance domains** (the circle), which are carried out with **models, methods and artifacts** (left and right) to produce deliverables. Everything sits inside the system for value delivery and the internal and external environments, and is **tailored to fit the project context** (bottom).

EXAM ANGLE

Prediction

Q1

According to the diagram, what do the 12 principles do?

A Replace the performance domains

> They work together.

B Act as deliverables

> They guide work, rather than being outputs.

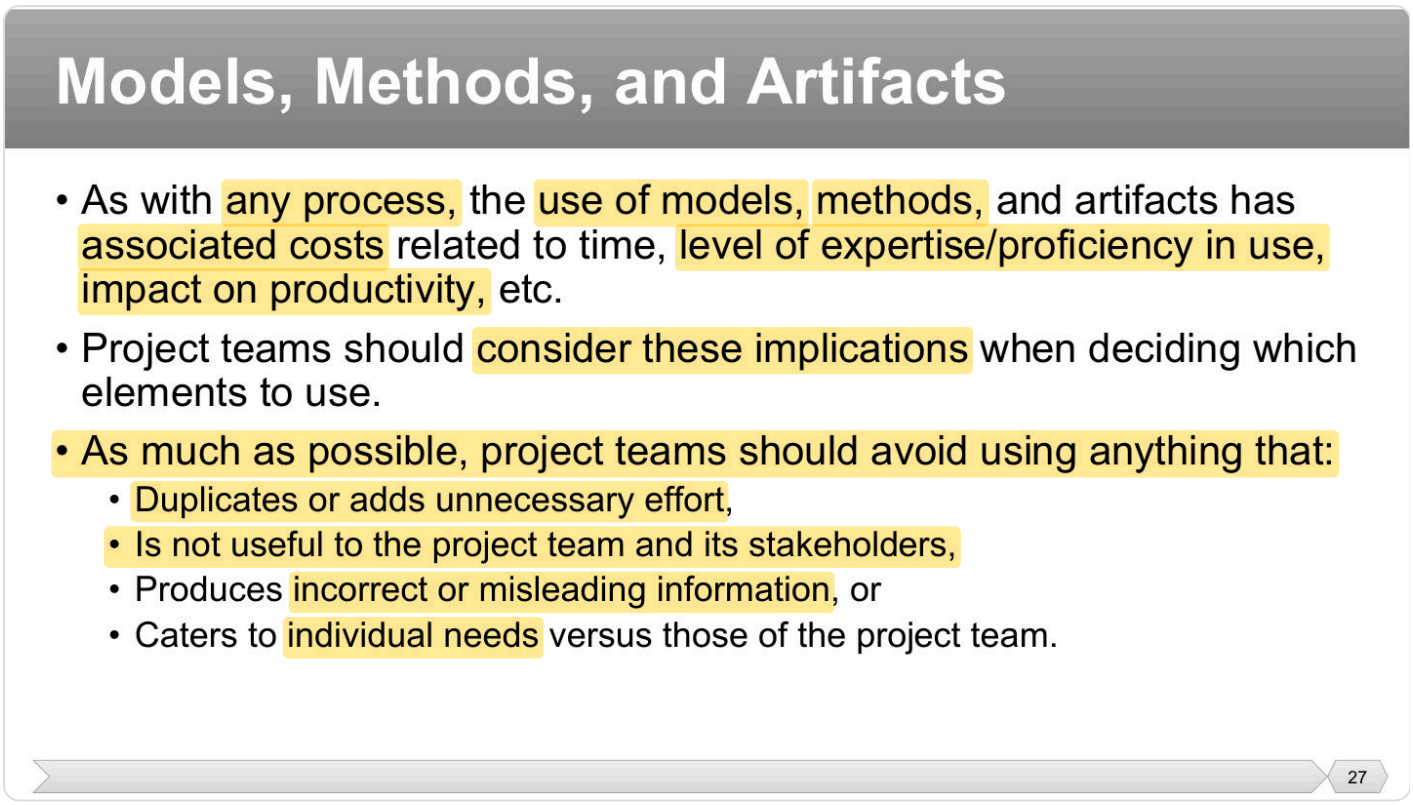
C **Guide behavior in the performance domains**

> Principles guide how the domains are carried out.

D Set the project budget

> That's planning.

 Models, Methods, and Artifacts



NOTES

1. No tool is free. Even a simple template takes time to fill in and learn. So “this tool is useful” isn’t enough: the benefit has to beat its **costs**.
2. Teams should **weigh these** before adopting one.
3. Avoid anything that **duplicates** work or adds unnecessary effort, isn’t useful to the team and stakeholders, produces **incorrect or misleading** information, or serves one **individual’s** needs rather than the team’s (a report one manager likes but nobody reads).

EXAM ANGLE

Prediction Q1

A manager wants a weekly report that nobody else reads. What should the team do, according to the slide?

A Avoid it, because it caters to individual needs over the team's

This is one of the things to avoid.

B Add two more reports

That adds unnecessary effort.

C Move it to the risk register

That doesn't address the waste.

D Always produce it

The slide warns against this.

Prediction Q2

Why do models, methods and artifacts need weighing before use?

A They replace the team

They support the team.

B They're banned on small projects

Nothing says so.

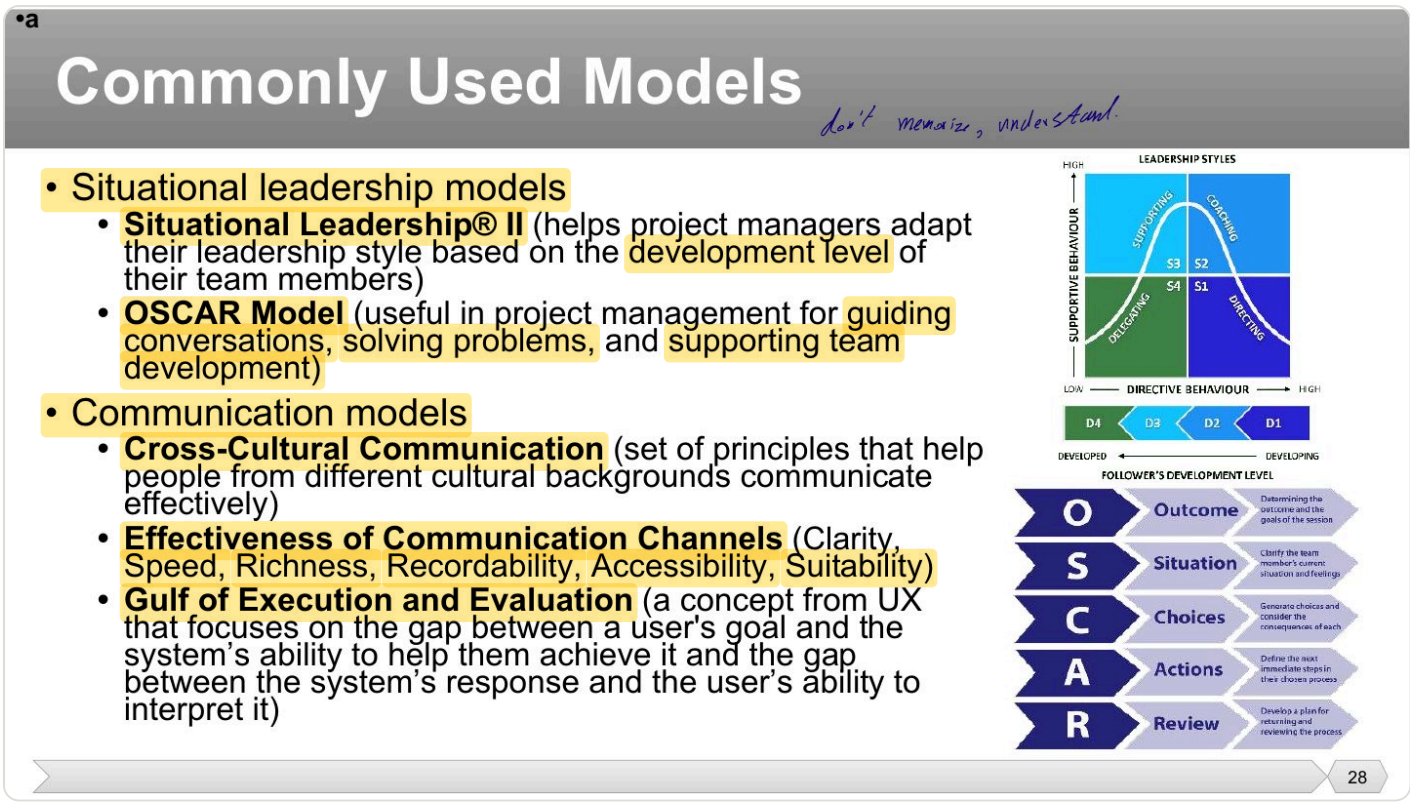
C They all have costs in time, expertise and productivity

A tool's benefit has to beat its cost.

D They're always free

The slide says they have costs.

SLIDE 28 / 41 Commonly Used Models



NOTES

1. **Situational Leadership II**: the PM adapts style to each member's **development level** (competence and commitment): directing a beginner, coaching, supporting, then delegating to an expert. The instructor's note: understand these models, don't memorize them.

2. Coaching works by asking, not telling. **OSCAR** walks through the goal, where things stand now, what the options are, what to do next, and how it went, so the person solves their own problem.

3. Not every message suits every channel. A sensitive problem needs a conversation, while a date change suits an email you can refer back to. **Channels** differ in clarity, speed and recordability, so pick the one the message needs.

4. Execution asks "how do I do what I want here?" and evaluation asks "did it work?". When users can't answer them, you have a **gulf**. It's from UX, but it fits any process people find confusing.

EXAM ANGLE

Prediction

Q1

Which model helps a project manager adapt leadership style to each team member's development level?

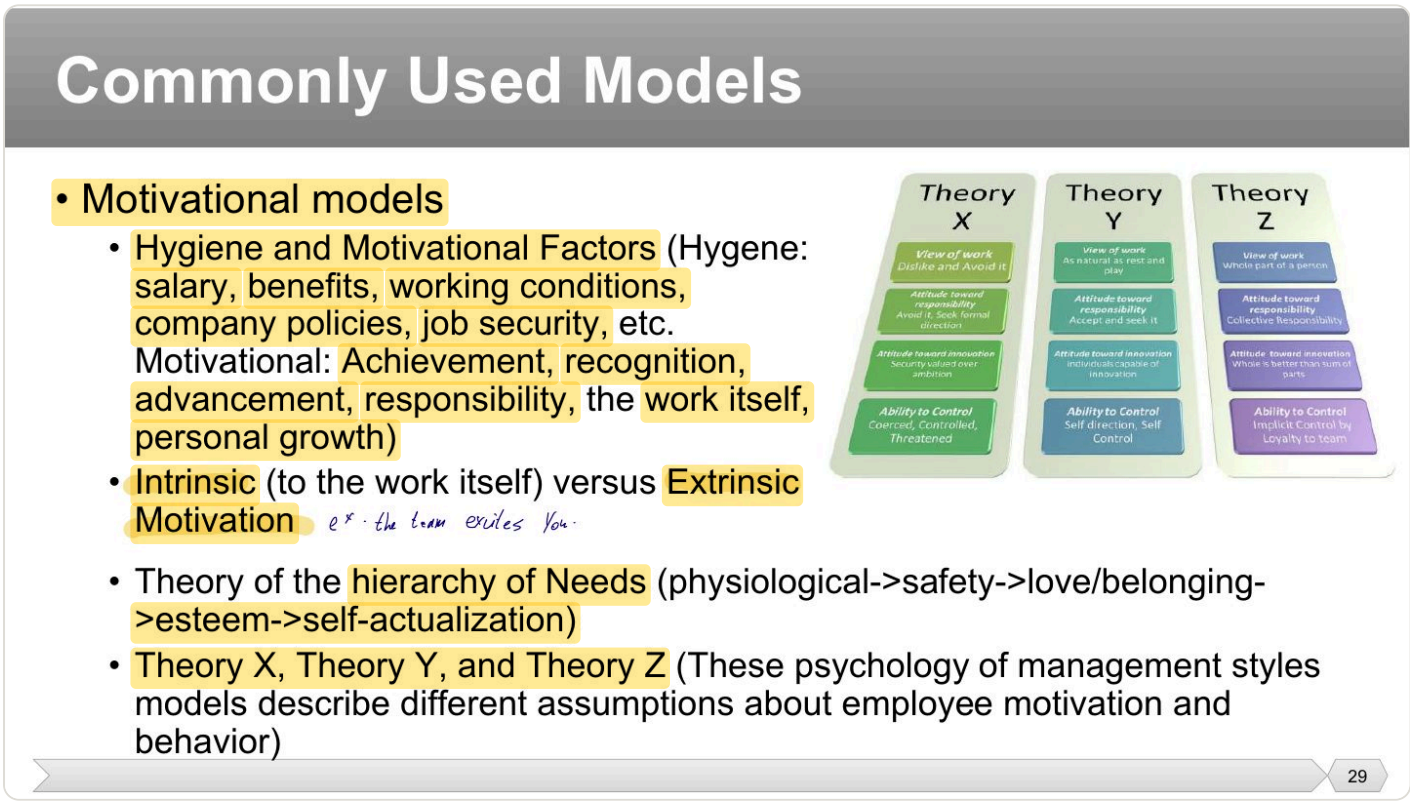
A ADKAR

B Cynefin framework

C **Situational Leadership II**

D Salience model

SLIDE 29 / 41 **Commonly Used Models**



NOTES

1. Good pay stops people being unhappy but doesn't make them excited. That's the key insight: fixing **hygiene** only gets you to neutral, while **motivators** like recognition produce real effort. A pay rise is hygiene, not a motivator.

2. **Intrinsic** motivation comes from the work itself (it excites you); **extrinsic** from outside rewards (pay, grades).

3. People can't care about growth while worried about their job or safety. So if a teammate is struggling with a basic need, inspiring talk won't help until that's dealt with. That's **Maslow's** order: lower needs first.

4 **Theory X**: people dislike work and must be controlled. **Theory Y**: people want to work and should be empowered. **Theory Z**: long-term employment, loyalty and involvement.

EXAM ANGLE

Prediction Q1

In Herzberg's model, which of these is a motivator rather than a hygiene factor?

A Job security

B Working conditions

C **Recognition**

D Salary

Prediction Q2

A manager assumes employees dislike work and must be closely supervised. Which theory does this reflect?

A **Theory X**

B Theory Y

C Theory Z

D Situational Leadership

 Commonly Used Models

Commonly Used Models

h

- Change models
  - ADKAR® Model (focuses on **individual transformation**)
  - The 8-Step Process for Leading Change (Create a Sense of Urgency -> Build a Guiding Coalition -> Form a Strategic Vision and Initiatives -> Enlist a Volunteer Army -> Enable Action by Removing Barriers -> Generate Short-Term Wins -> Sustain Acceleration -> Institute Change)
  - Virginia Satir Change Model (is a psychologically grounded framework that explains how individuals and organizations emotionally respond to change.)
  - Transition Model (a powerful framework for understanding the **emotional and psychological journey** people go through during change)



30

NOTES

1. **ADKAR** explains why one person isn't changing, by finding the step they're stuck on. Someone who knows how but doesn't want to needs Desire, not more training.
2. People resist unless they feel a reason to change, so urgency comes first. **Kotter** is about moving a whole organization, and the order matters: visible short-term wins come before making the change permanent.
3. Performance usually gets worse before it gets better. If you know that's normal under the **Satir** model, you won't panic and abandon a change during the dip.
4. **Bridges** points out that people must let go of the old way before accepting the new one. Announcing a change isn't the same as people having moved through the **transition**.

EXAM ANGLE

Prediction Q1

Which change model focuses on the individual, through awareness, desire, knowledge, ability and reinforcement?

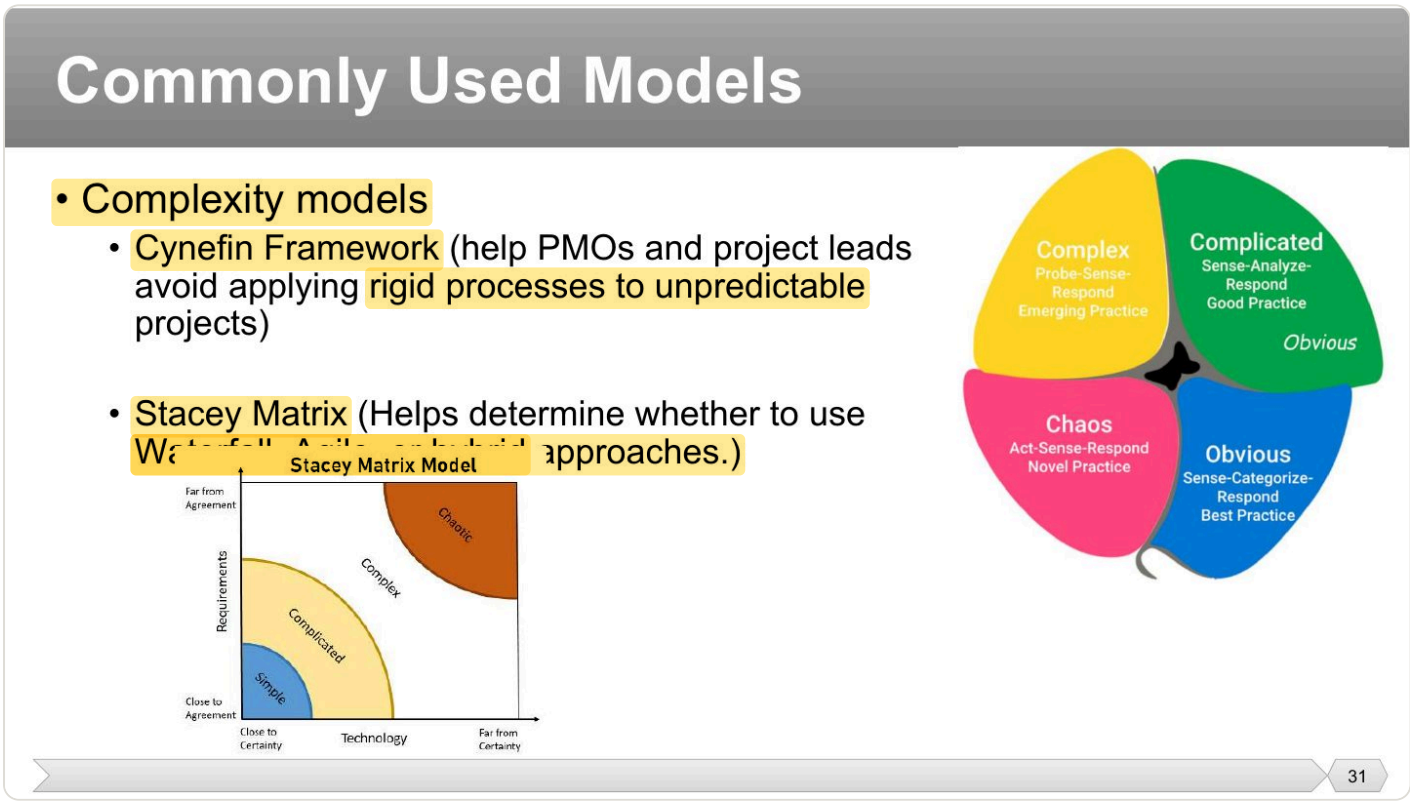
A Tuckman ladder

B **ADKAR**

C Stacey matrix

D Kotter's 8-step process

SLIDE 31 / 41 **Commonly Used Models**



NOTES

1. **Cynefin** sorts situations into obvious (apply best practice), complicated (analyse with experts), complex (probe and experiment) and chaotic (act first). It stops teams applying rigid processes to unpredictable projects.

2. Ask two questions: how sure are we about what's needed, and about how to build it? Sure about both suggests waterfall, and unsure about both suggests agile. That's all the **Stacey matrix** is doing.

EXAM ANGLE

Prediction

Q1

Which model helps decide between waterfall, agile and hybrid approaches based on how uncertain the requirements and technology are?

A OSCAR

B ADKAR

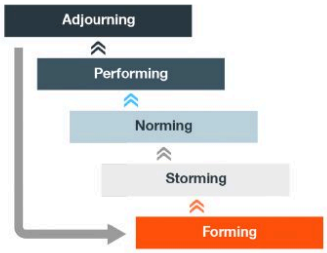
C Salience model

D **Stacey matrix**

SLIDE 32 / 41 **Commonly Used Models**

Commonly Used Models

- Project team development models
  - Tuckman Ladder (a classic model for understanding how project teams evolve over time.)



  - Drexler/Sibbet Team Performance Model (is a comprehensive framework that maps out the **seven predictable stages** teams go through: orientation -> trust building -> goal clarification -> commitment -> implementation -> high performance -> renewal)

32

NOTES

1. **Tuckman ladder**: forming → storming → norming → performing → adjourning. Chapter 3 covers each stage, and the midterm asked which stage has members competing for leadership (storming).
2. Compare it with Tuckman: both describe stages, but **Drexler/Sibbet** starts with “why am I here?” and “who are you?”, and ends with renewal, because a team has to keep re-committing. Its seven stages suit a long-running team.

EXAM ANGLE

Past exam · Midterm 251 · V1 · MCQ 7 Q1

According to Tuckman's model of team development, which stage is characterized by members competing for leadership and struggling with group processes?

A Storming

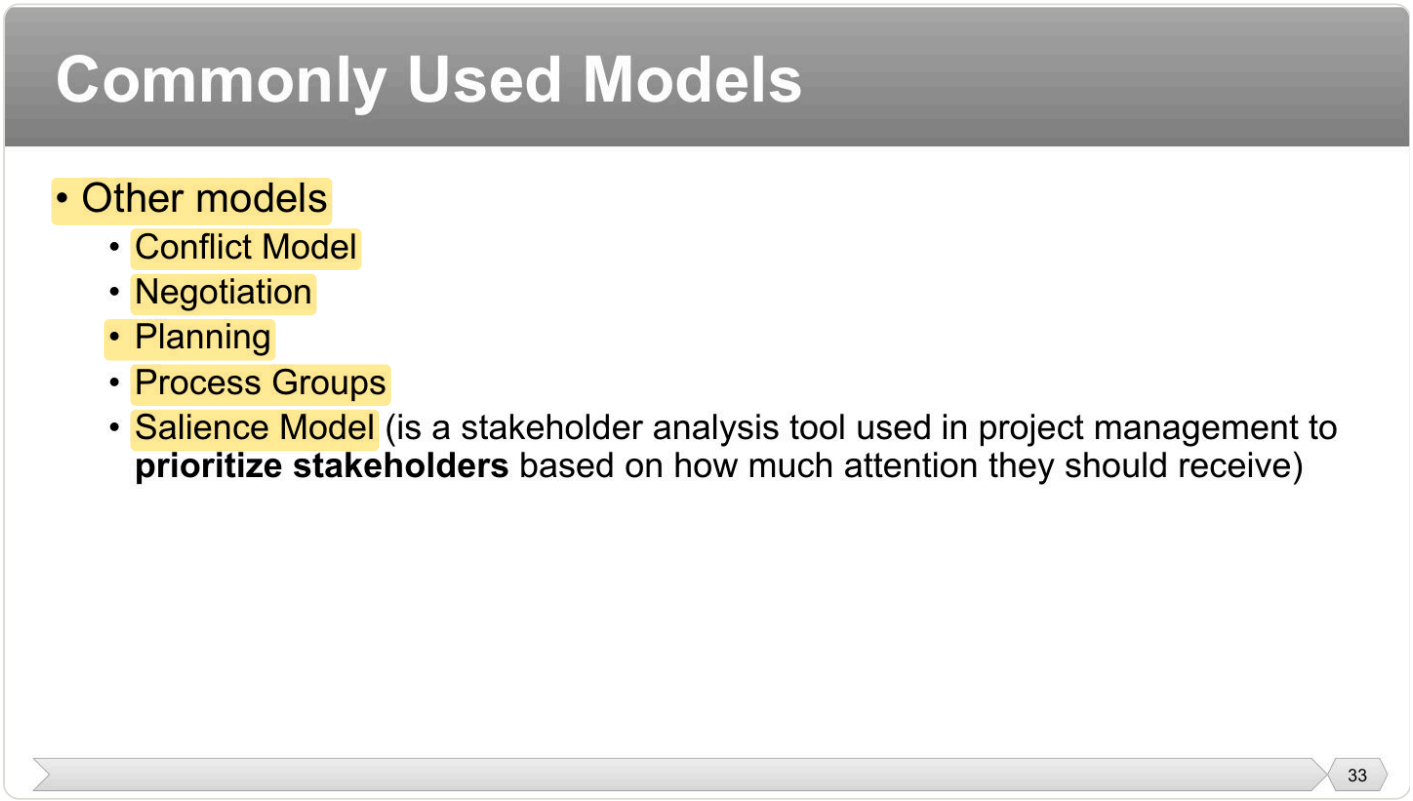
> Storming is when members compete for leadership and test group processes; norming comes after, when agreement is reached. (Also Midterm 251 V2 MCQ 7.)

B Norming

C Adjourning

D Performing

SLIDE 33 / 41 **Commonly Used Models**



NOTES

1. Other models: conflict (styles of handling conflict, Chapter 3), negotiation, planning, and process groups (initiating, planning, executing, monitoring and controlling, closing).
2. The **salience model** prioritizes stakeholders by **power, legitimacy and urgency** to decide how much attention each needs (Chapter 8).

EXAM ANGLE

Past exam · Final 251 · Q3.2 — Q1

How can project managers identify and prioritize stakeholders, and what strategies can they use to communicate effectively with each stakeholder group?

Answer: Identify stakeholders by brainstorming with the team, reading the charter and contracts, and interviewing key people, then record them in a stakeholder register. Prioritize them with a power/interest grid (or the salience model: power, legitimacy, urgency). Then tailor communication: high power and high interest → manage closely with interactive meetings; high power, low interest → keep satisfied with concise push reports; low power, high interest → keep informed with push updates or pull (portal); low/low → monitor. Chapter 8 develops stakeholder management.

SLIDE 34 / 41 Models by performance domain

Model	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainly
Situational Leadership Models:								
Situational Leadership® II	X				X			
OSCAR	X				X			
Communication Models:								
Cross-cultural communication	X	X		X	X			
Effectiveness of communication channels	X	X		X	X			
Gulf of execution and evaluation		X				X		
Motivation Models:								
Hygiene and motivation factors	X			X	X			
Intrinsic versus extrinsic motivation	X			X	X			
Theory of needs	X			X	X			
Theory X, Theory Y, and Theory Z	X			X	X			
Change Models:								
Managing Change in Organizations		X		X	X			
ADKAR®		X		X	X			
8-Step Process for Leading Change		X		X	X			
Transition		X		X	X			
Complexity Models:								
Cynefin framework			X	X	X	X		X
Stacey matrix			X	X	X	X		X
Project Team Development Models:								
Tuckman Ladder	X				X			
Drexler/Sibbet Team Performance	X				X			
Other Models:								
Conflict	X	X			X			
Negotiation		X		X	X	X		
Planning			X	X	X			
Process Groups				X	X	X	X	
Salience		X		X	X			

34

NOTES

1. A reference table showing which performance domains each item is useful in (an X per domain). Don't memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Models: e.g. situational leadership and OSCAR help the team and project-work domains; the Stacey matrix helps choose the development approach and handle uncertainty.

EXAM ANGLE

Prediction Q1

How should you use the table of models and domains?

A To pick a suitable tool when a situation calls for one, without memorizing it

> It's a reference, not something to learn by heart.

B Memorize each X

> The instruction is not to memorize it.

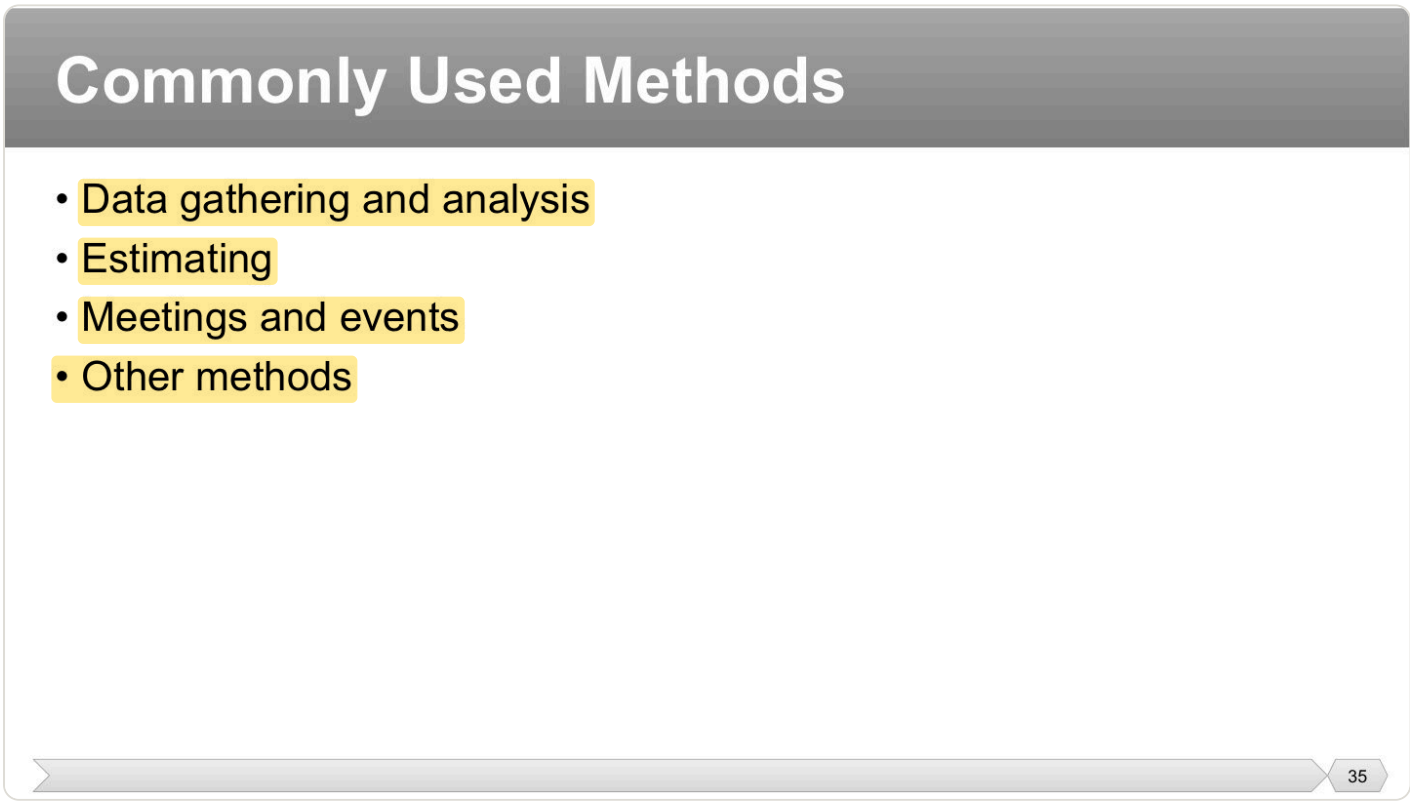
C Use each model in each domain

> Only some are useful in each.

D Ignore it entirely

> It's useful for choosing tools.

SLIDE 35 / 41 **Commonly Used Methods**



NOTES

1. Method families: **data gathering and analysis** (alternatives analysis, root-cause analysis, cost of quality, earned value, SWOT...).
2. **Estimating** (affinity grouping, function points, story points, Delphi...).

3 **Meetings and events** (kickoff, stand-up, retrospective, review, steering committee...), and other methods.

TIPS & TRICKS

- **DEMO**: Data gathering and analysis, Estimating, Meetings and events, Other methods.

EXAM ANGLE

Prediction Q1

Stand-ups, kickoffs and retrospectives belong to which family of methods?

A Artifacts

Artifacts are things, not methods.

B Data gathering and analysis

That includes SWOT and root-cause analysis.

C Estimating

That includes story points and Delphi.

D **Meetings and events**

That's the family they're listed under.

Prediction Q2

A team uses story points. Which family is this?

A Meetings and events

That covers kickoffs and reviews.

B Baselines

Baselines are artifacts.

C **Estimating**

Story points are an estimating method.

D Models

A model is a thinking strategy.

Methods by performance domain

Method	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainly
Data Gathering and Analysis Methods:								
Alternatives analysis				X	X	X		X
Assumptions and constraints analysis				X		X		X
Benchmarking						X	X	
Business justification analysis				X			X	
Payback period			X	X			X	
Internal rate of return				X			X	
Return on investment				X			X	
Net present value			X	X		X	X	
Cost-benefit ratio				X			X	
Check sheet						X	X	
Cost of quality				X		X	X	
Decision tree analysis				X				
Earned value analysis				X			X	
Expected monetary value				X				
Forecasting							X	
Influence diagram				X				
Life cycle assessment				X				
Make-or-buy analysis				X	X			
Probability and impact matrix				X				X
Process analysis				X	X	X	X	
Regression analysis				X			X	
Root cause analysis					X	X		
Sensitivity analysis				X	X	X		
Simulation				X			X	
Stakeholder analysis		X		X	X			
SWOT analysis				X				X
Trend analysis							X	
Value stream mapping				X	X	X		
Variance analysis							X	
What-if scenario analysis				X				X

36

NOTES

1 A reference table showing which performance domains each item is useful in (an X per domain). Don't memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Data methods: e.g. make-or-buy analysis serves planning and project work; probability-and-impact matrices serve uncertainty.

EXAM ANGLE

Prediction Q1

Which domain would a probability-and-impact matrix most help with?

A Uncertainty

It's a risk tool.

B Stakeholder

It assesses risks rather than people.

C Delivery

It isn't about releasing deliverables.

D Team

It doesn't address team development.

Methods by performance domain (cont.)

Method	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainty
Estimating Methods:								
Affinity grouping				X				
Analogous estimating				X				
Function points				X				
Multipoint estimating				X				
Parametric estimating				X				
Relative estimating				X				
Single-point estimating				X				
Story point estimation				X				
Wideband Delphi				X				
Meeting and Event Methods:								
Backlog refinement		X		X	X	X		
Bidder conference		X		X	X			
Change control board					X	X		
Daily standup				X	X			
Iteration review		X			X	X		
Iteration planning		X		X	X	X		
Kickoff	X	X			X			
Lessons learned		X		X	X	X		
Planning				X				
Project closeout	X	X			X			
Project review		X			X	X	X	
Release planning		X		X				
Retrospective	X			X				
Risk review					X			X
Status					X		X	
Steering committee		X			X			
Other Methods:								
Impact mapping	X	X		X		X	X	
Modeling						X		
Net Promoter Score®		X					X	
Prioritization schema		X			X			
Timebox			X	X	X	X	X	

37

NOTES

1 A reference table showing which performance domains each item is useful in (an X per domain). Don’t memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Estimating methods and meetings (e.g. retrospectives serve team and project work; risk reviews serve uncertainty).

EXAM ANGLE

Prediction Q1

Which domain does a retrospective mostly help?

A None of them

> It clearly helps some.

B Team and project work

> The table lists these for retrospectives.

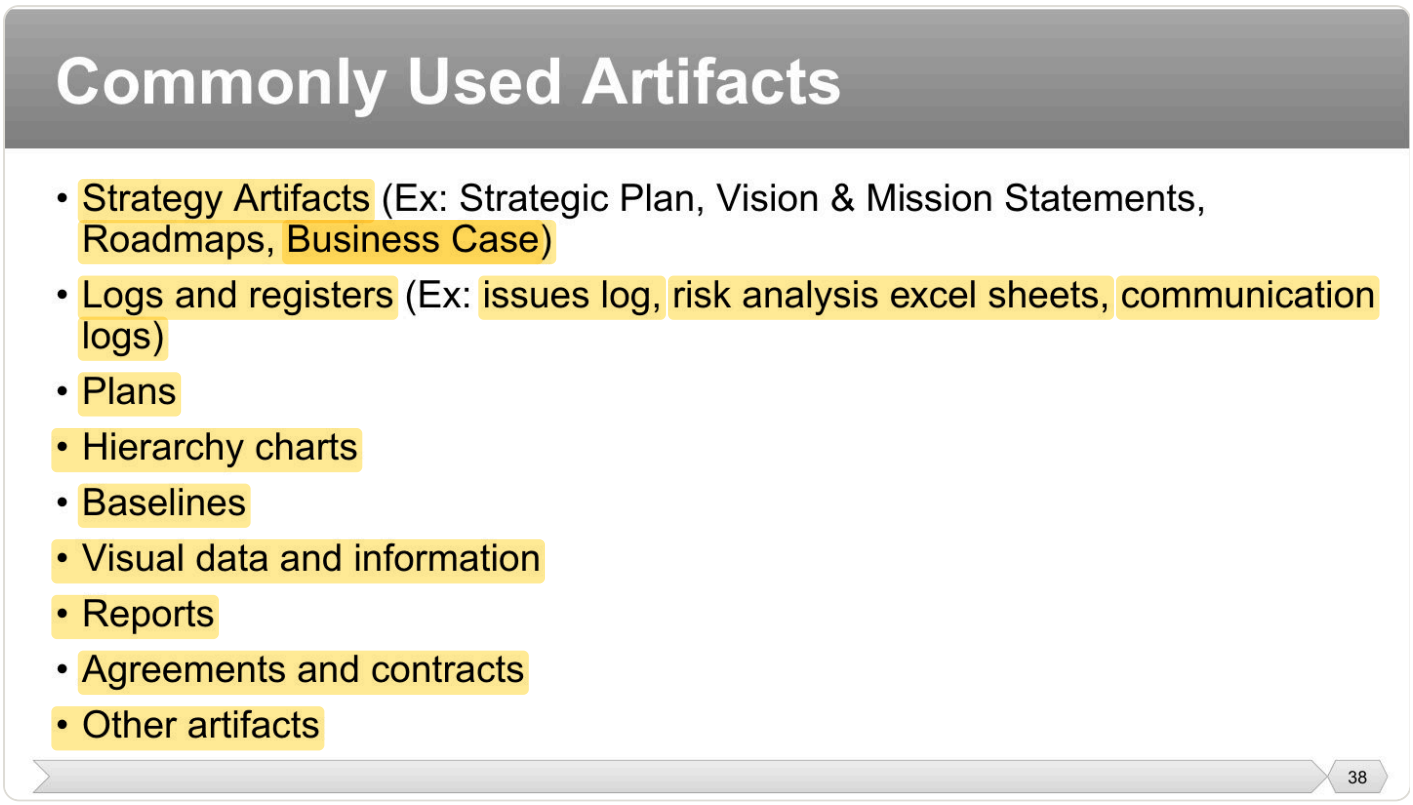
C Only procurement

> A retrospective isn’t about buying things.

D Only the budget

> It’s broader than money.

 Commonly Used Artifacts



NOTES

1. These answer "why are we doing this?" and they're set before detailed work starts. A **business case** is the one you're most likely to be asked about, since it justifies the project.
2. These are running records, updated as things happen. Ask "does this list keep growing during the project?"; if yes, it's one of the **logs and registers**, like an issue log.
3. Tell them apart by purpose: **plans** say what we intend, **baselines** are the approved version we compare against, reports say what happened, and **agreements and contracts** bind people to it.

TIPS & TRICKS

- Sentence, in slide order: **S**tudents **L**ove **P**izza, **H**ot **B**urgers, **V**anilla **R**olls **A**nd **O**reos. Strategy, Logs and registers, Plans, Hierarchy charts, Baselines, Visual data, Reports, Agreements, Other.

EXAM ANGLE

Prediction

Q1

A business case belongs to which category of artifacts?

A Reports

B Logs and registers

C **Strategy artifacts**

D Baselines

SLIDE 39 / 41 **Artifacts by performance domain**

Artifact	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainty
Strategy Artifacts:								
Business case		X		X				
Project brief		X		X				
Project charter		X		X				
Project vision statement		X		X				
Roadmap		X	X	X				
Log and Register Artifacts:								
Assumption log				X	X	X		X
Backlog				X	X	X		
Change log					X	X		
Issue log					X			
Lessons learned register					X			
Risk-adjusted backlog				X				X
Risk register				X	X	X		X
Stakeholder register		X		X				
Plan Artifacts:								
Change control plan				X	X	X		
Communications management plan		X		X	X			
Cost management plan				X				
Iteration plan				X				
Procurement management plan				X	X			
Project management plan		X		X	X			
Quality management plan				X	X	X		
Release plan				X		X		
Requirements management plan				X		X		
Resource management plan				X	X			
Risk management plan				X	X			X
Scope management plan				X		X		

39

NOTES

1 A reference table showing which performance domains each item is useful in (an X per domain). Don’t memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Artifacts: e.g. the business case and charter serve stakeholders and planning; the risk register serves planning, project work, delivery and uncertainty.

EXAM ANGLE

Prediction

Q1

A risk register is most useful in which domain?

A Team culture only

> It's not about culture.

B Vision only

> It isn't a vision document.

C It's not useful in any domain

> It's a commonly used artifact.

D **Uncertainty**

> It records risks and responses.

SLIDE 40 / 41

Artifacts by performance domain (cont.)

Artifact	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainty
Schedule management plan				X	X	X		
Stakeholder engagement plan		X		X				
Test plan				X	X	X	X	
Hierarchy Chart Artifacts:								
Organizational breakdown structure	X	X		X				
Product breakdown structure				X		X		
Resource breakdown structure	X			X	X		X	
Risk breakdown structure					X			X
Work breakdown structure				X		X	X	
Baseline Artifacts:								
Budget				X	X		X	
Milestone schedule			X	X	X		X	
Performance measurement baseline				X	X	X	X	
Project schedule				X	X		X	
Scope baseline				X	X	X	X	
Visual Data and Information Artifacts:								
Affinity diagram				X	X			
Burn chart				X		X	X	
Cause-and-effect diagram					X	X		X
Cycle time chart						X	X	
Cumulative flow diagram						X	X	
Dashboard					X		X	
Flow chart				X	X	X		
Gantt chart				X	X		X	
Histogram							X	
Information radiator					X		X	
Lead time chart						X	X	
Prioritization matrix		X			X	X		

40

NOTES

1. A reference table showing which performance domains each item is useful in (an X per domain). Don't memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Hierarchy charts, baselines and visual data (e.g. burn charts serve measurement).

EXAM ANGLE

Prediction Q1

Burn charts mostly serve which domain?

A Bid selection

That's procurement.

B Team formation

They don't form teams.

C **Measurement**

They show work against time.

D Stakeholder identification

That needs a register.

SLIDE 41 / 41 **Artifacts by performance domain (cont.)**

Artifact	Performance Domain							
	Team	Stakeholders	Dev Approach and Life Cycle	Planning	Project Work	Delivery	Measurement	Uncertainty
Project schedule network diagram				X	X			
Requirements traceability matrix				X		X	X	
Responsibility assignment matrix				X	X			
Scatter diagram					X	X	X	
S-curve				X			X	
Stakeholder engagement assessment matrix		X		X	X			
Story map				X		X		
Throughput chart						X	X	
Use case				X		X		
Value stream map					X	X	X	
Velocity chart						X	X	
Report Artifacts:								
Quality report					X	X	X	
Risk report					X			X
Status report					X			
Agreements and Contracts:								
Fixed-price		X		X	X	X	X	X
Cost-reimbursable		X		X	X	X	X	X
Time and materials		X		X	X	X	X	X
Indefinite time indefinite quantity (IDIQ)		X		X	X	X	X	X
Other agreements		X		X	X	X	X	X
Other Artifacts:								
Activity list	X	X		X	X			
Bid documents		X		X	X			
Metrics				X		X	X	
Project calendars	X			X	X			
Requirements documentation		X		X		X	X	
Project team charter	X				X			
User story		X		X		X		

41

NOTES

1 A reference table showing which performance domains each item is useful in (an X per domain). Don't memorize it; use it to pick a suitable tool when a scenario asks which method or artifact would help. Reports, agreements and contracts.

EXAM ANGLE

Prediction

Q1

Contracts and agreements are artifacts that are especially relevant to:

A **Procurement in the project work domain**

> They formalize work with vendors.

B Writing user stories

> That’s backlog work.

C Conflict norms

> Those are team rules.

D Choosing a team’s mood chart

> That’s a stakeholder metric.

Original slides from the SE423 lecture deck, with study notes. Check exact wording against the original deck.
Notes and questions are study aids. Made by Shoug Alomran.