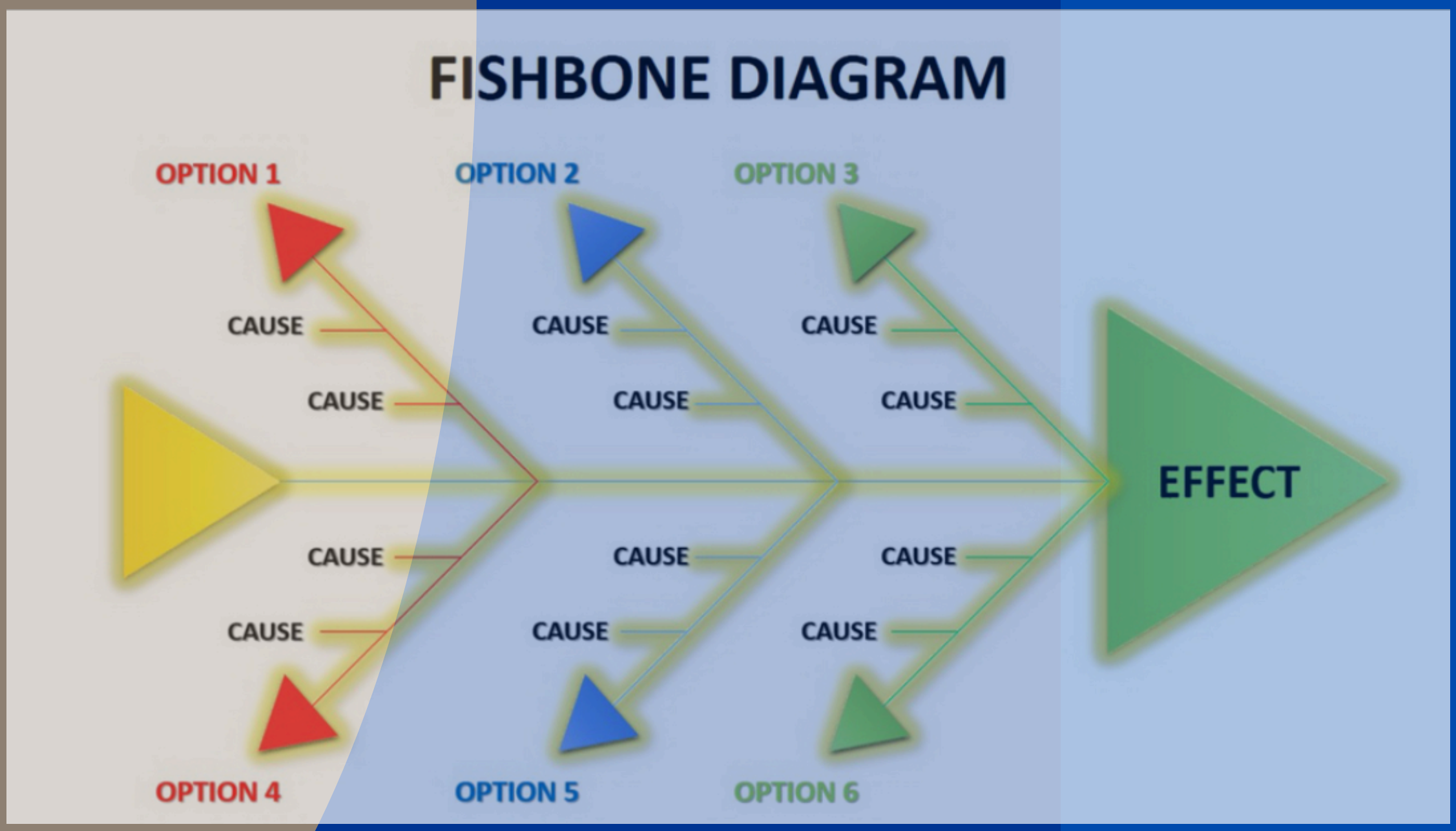
What is Fish Bone Diagram



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🐟 What is a Cause and Effect Chart in PMP?

A Cause and Effect Diagram is a visual tool used to identify, explore, and display potential causes of a specific problem or quality issue.

It’s shaped like a fishbone, where:

- The "head" is the effect (problem you're solving).
- The "bones" are categories of root causes.

It’s commonly used during Root Cause Analysis in quality and risk management.

✅ Where it fits in PMP?

PMP Process	Knowledge Area
Manage Quality	Quality Management
Control Quality	Quality Management
Identify Risks	Risk Management

🔁 Common Cause Categories in Projects:

- **People** (team skills, training)
- **Process** (methods, steps, workflow)
- **Equipment** (tools, software)
- **Materials** (input quality)
- **Environment** (office conditions, regulations)
- **Management** (policies, priorities)

Here are some example scenarios of how this diagram might be used:

1. Low Product Quality in a Manufacturing Process

Effect: Poor Product Quality

Causes:

Machines:
Equipment malfunction
Lack of maintenance

Methods:
Inefficient production processes
Inconsistent work instructions

Materials:
Poor-quality raw materials
Variability in materials

People:
Lack of training
Worker errors

Environment:
Poor lighting
Temperature fluctuations

Measurement:
Inaccurate measurements
Lack of proper testing tools

Another example

2. Customer Service Delays

Effect: Customer Service Delays

Causes:

People:
Lack of staffing
Inadequate training

Processes:
Slow approval procedures
Inefficient communication channels

Technology:
Outdated software systems
Slow website or app performance

Policy:
Strict service response policies
Lengthy escalation procedures

Environment:
High customer demand during peak times
Limited working hours

3.Employee Turnover

Effect: High Employee Turnover

Causes:

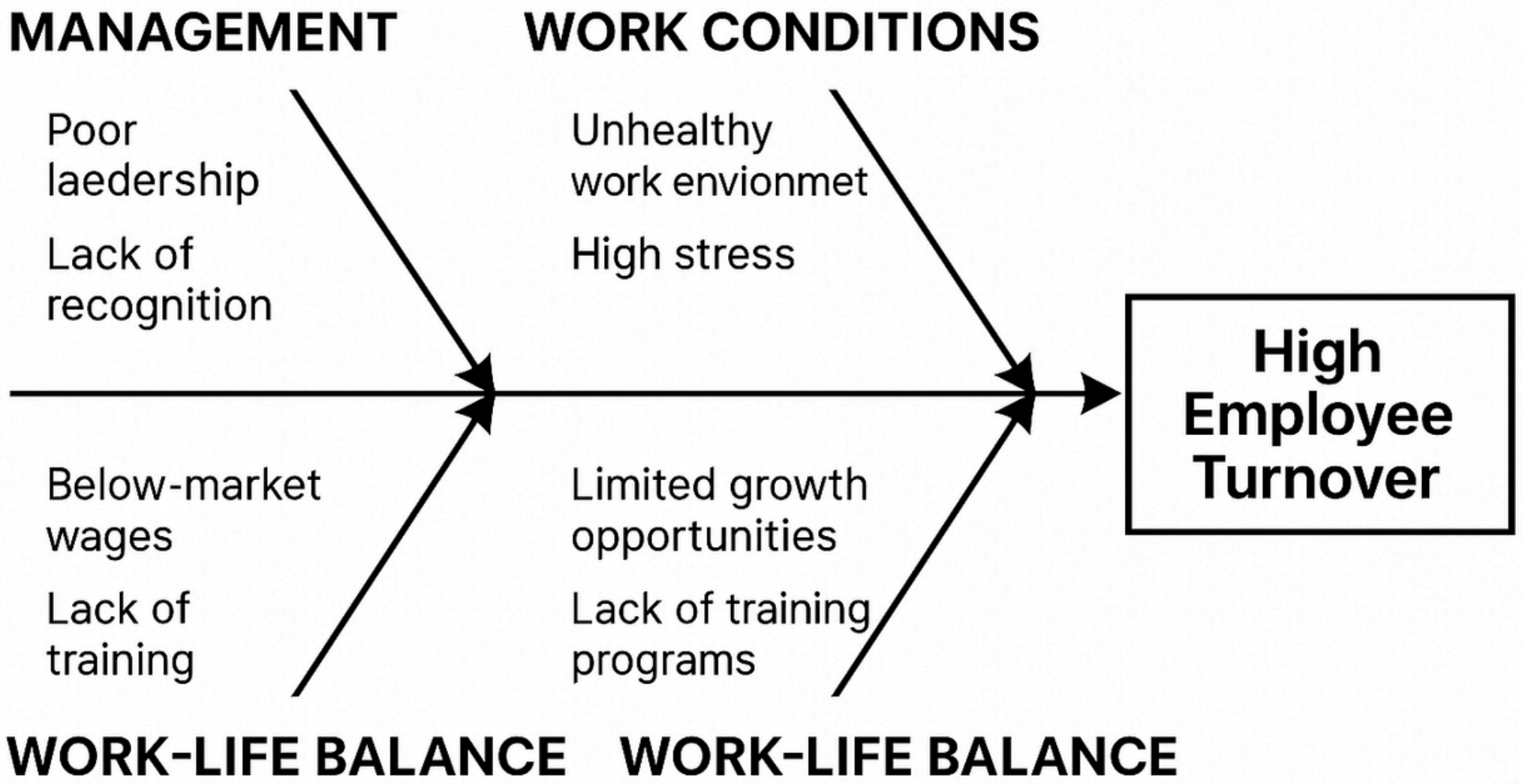
Management:
Poor leadership
Lack of recognition

Work Conditions:
Unhealthy work environment
High stress

Salary:
Below-market wages
Lack of benefits

Career Development:
Limited growth opportunities
Lack of training programs

Work-Life Balance:
Long hours
Inflexible schedules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These are just a few examples of how you might use a Cause and Effect Diagram in various industries or scenarios. The key is to categorize the causes under relevant headers (like People, Processes, Materials, etc.) to help pinpoint where improvements need to be made.

🔧 Steps to Create a Fishbone Diagram

1. Define the Problem (Effect)
Clearly identify and write down the main issue or effect you're trying to solve.
Place this at the head (right-hand side) of the "fish."

🧠 Tip: Use a clear, concise problem statement like “Late Deliveries” or “Low Sales Performance.”

2. Draw the Backbone and Main Branches

Draw a horizontal line (the fish’s spine) pointing to the problem (the head).

Add diagonal lines (the major ribs or bones) branching off the spine—these represent main categories of causes.

Common categories (you can adjust depending on your situation):

- People (human-related causes)
- Processes/Methods (how things are done)
- Machines (equipment/tools)
- Materials (inputs/resources)
- Measurements (data/reports)
- Environment (external/internal physical or social factors)

3. Brainstorm Possible Causes

- For each category, brainstorm specific causes that might contribute to the effect.
- Add these as smaller branches stemming from the main ribs.
- Example: Under “People,” a cause might be “insufficient training.”

4. Ask "5 Why?"
For each potential cause, ask 5 times “Why is this happening?” to drill down to the root cause.

You can add sub-branches to show layers of contributing factors.

5. Review and Analyze

- Examine the diagram with your team or stakeholders.
- Identify the most likely root causes.
- Prioritize which causes to investigate or address first.

6. Take Action

- Use the insights from your diagram to develop corrective actions or solutions.
- Implement, monitor, and adjust as needed.

THANKYOU

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