

HRSA Ryan White HIV/AIDS Program

**CENTER FOR QUALITY
IMPROVEMENT & INNOVATION**

Constructing the Fishbone Diagram

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Amanda Norton

Quality Improvement Advisor

altn14@gmail.com



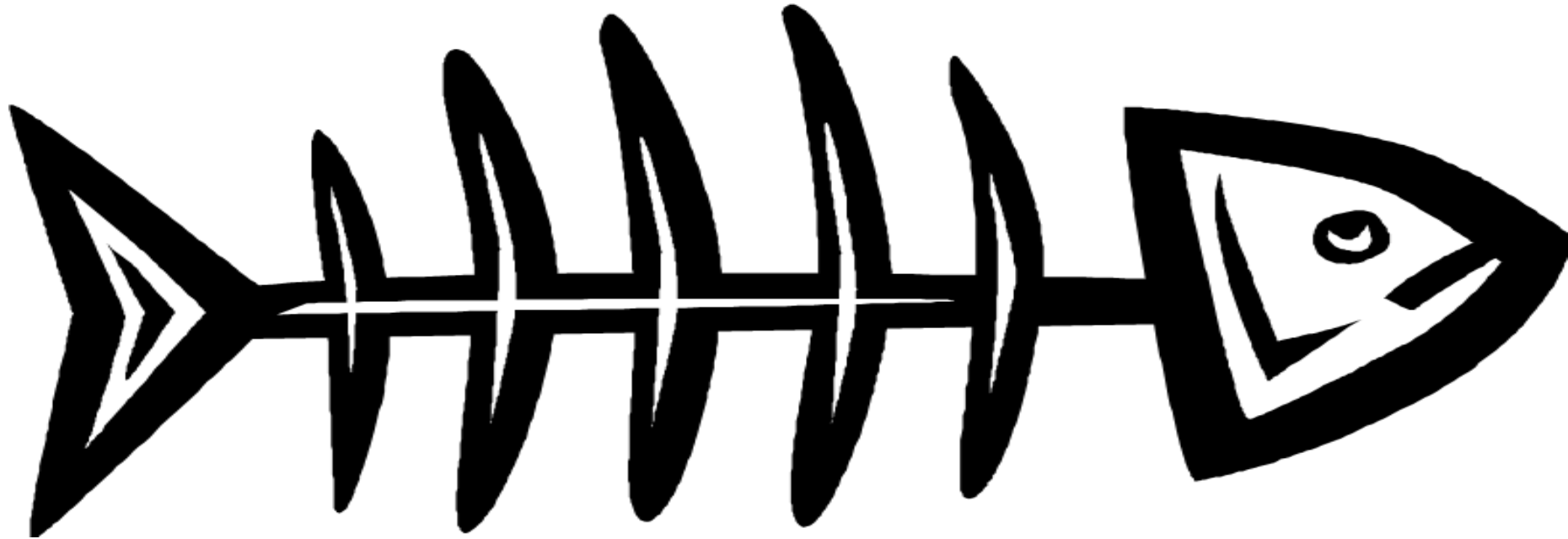
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Fishbone Diagrams/Ishikawa Diagram



Learning Objectives

- Discuss the benefits of constructing a Fishbone diagram to assess causes of a problem.
- Identify the steps in constructing a Fishbone diagram.
- Discuss how to successfully use a Fishbone diagram to identify and address causes.
- Build your own Fishbone diagram.

WILL THE REAL “..” PLEASE STAND UP....

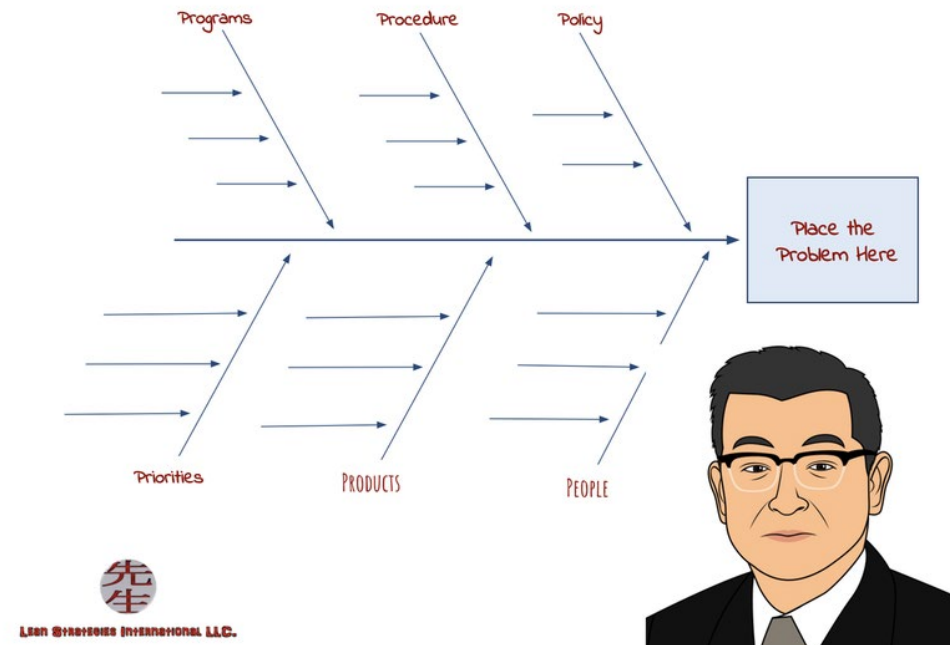
- Ishikawa diagram
- Fishbone diagram
- Cause and effect

Ishikawa Diagram

The Ishikawa Diagram was created by Kaoru Ishikawa, an organizational theorist professor at the University of Tokyo.

Ishikawa believed that **increased internal cooperation and coordination positively affects a customer's needs and ultimately leads to process efficiency and better quality of products and services.** He expressed the need for the top-level management to support the teams which were under their control all the time.

Kaoru Ishikawa 1915-1989



BENEFITS AND IMPORTANCE OF ISHIKAWA DIAGRAM

- Displays **all the possible causes** of a particular problem in a simple, easy to read graphical way.
- **Captures the relationships** between the potential causes and shows them in the chart.
- A great tool **for solving complex problems** where many factors have to be taken into consideration.
- **Stimulates an in-depth analysis** and evaluation because it allows you to explore possible causes in detail.



BENEFITS AND IMPORTANCE OF FISHBONE DIAGRAM

- Gives you a bigger picture and better understanding of the problem.
- **Boosts and frameworks** brainstorming about the possible reasons.
- Stimulates in-depth discussion among team members about the problem.
- Helps in maintaining team focus.
- Identify where a process isn't working.



THE 5 WHYS

- Five is not mandatory, sometime there are only three reasons
- Aims improvement at root cause
- Avoids addressing symptoms
- Performed systematically
- Continuous improvement tool
- Systems focused
- The “5 Why’s” not the “5 Who’s”



THE 5 WHY'S: EXAMPLE

Example: My computer shuts down hourly

Why: Its seven years old

Why: We never bought new ones

Why: It has not been in the budget

Why: There is no central person to control IT

Why: They retired and were never replaced



GROUP EXERCISE ON 5 WHY'S

Why am I always late to work?

- 1.
- 2.
- 3.
- 4.
- 5.



CONSTRUCTING A FISHBONE DIAGRAM

Establish what the problem (effect) is:

- State in clear, concise terms, agreed by everyone

Write the effect on the head of the fish

- Main causes and related causes are identified by the team under categories

Brainstorm

- Use standard categories
- Use major steps in the process if the effect is resulted from a recognizable process
- Continue to ask “why?” until you’ve reached a useful level of detail
- When ideas run low, ask for “just one more” Check for logic, completeness and balance



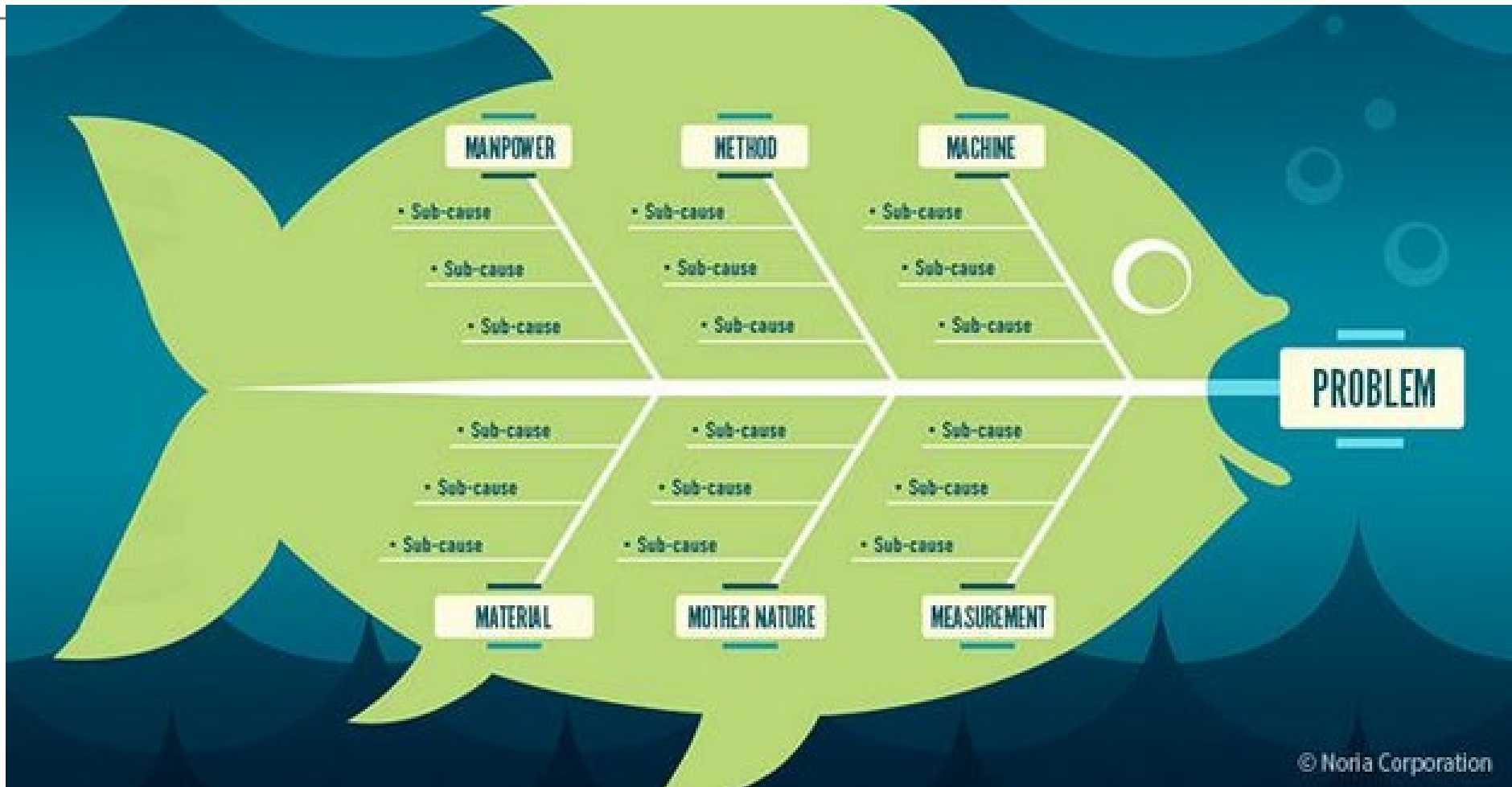
COMMON CATEGORIES USED

People: Anyone involved with the process

Methods: How the process is performed and the specific requirements for doing it, such as **systems, policies, procedures**, rules and regulations

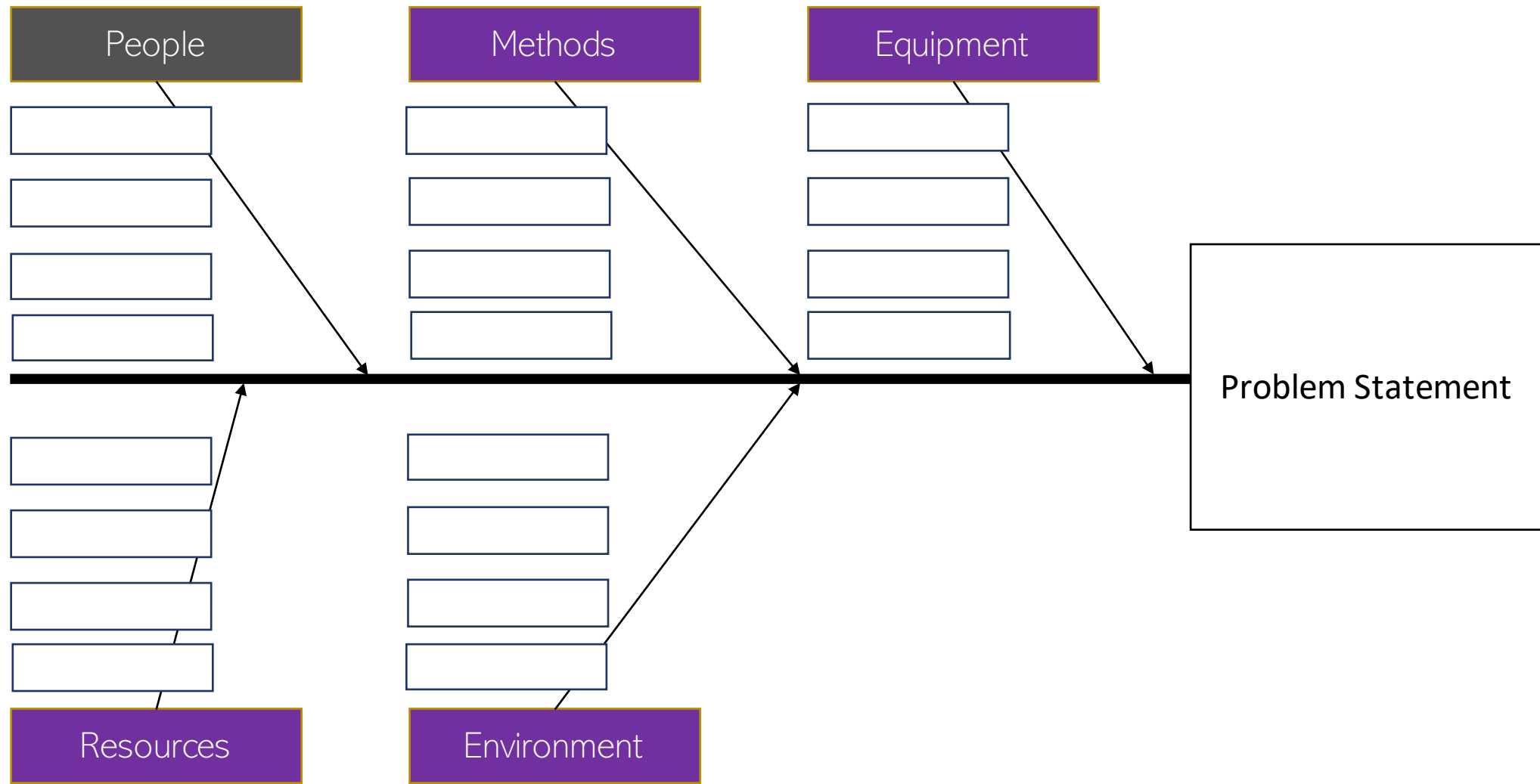
Equipment/Resources: Computers, tools, bus pass, car, childcare "etc."- things required to accomplish the job/task

Environment: The conditions, such as location, time, temperature, and culture in which the process operates

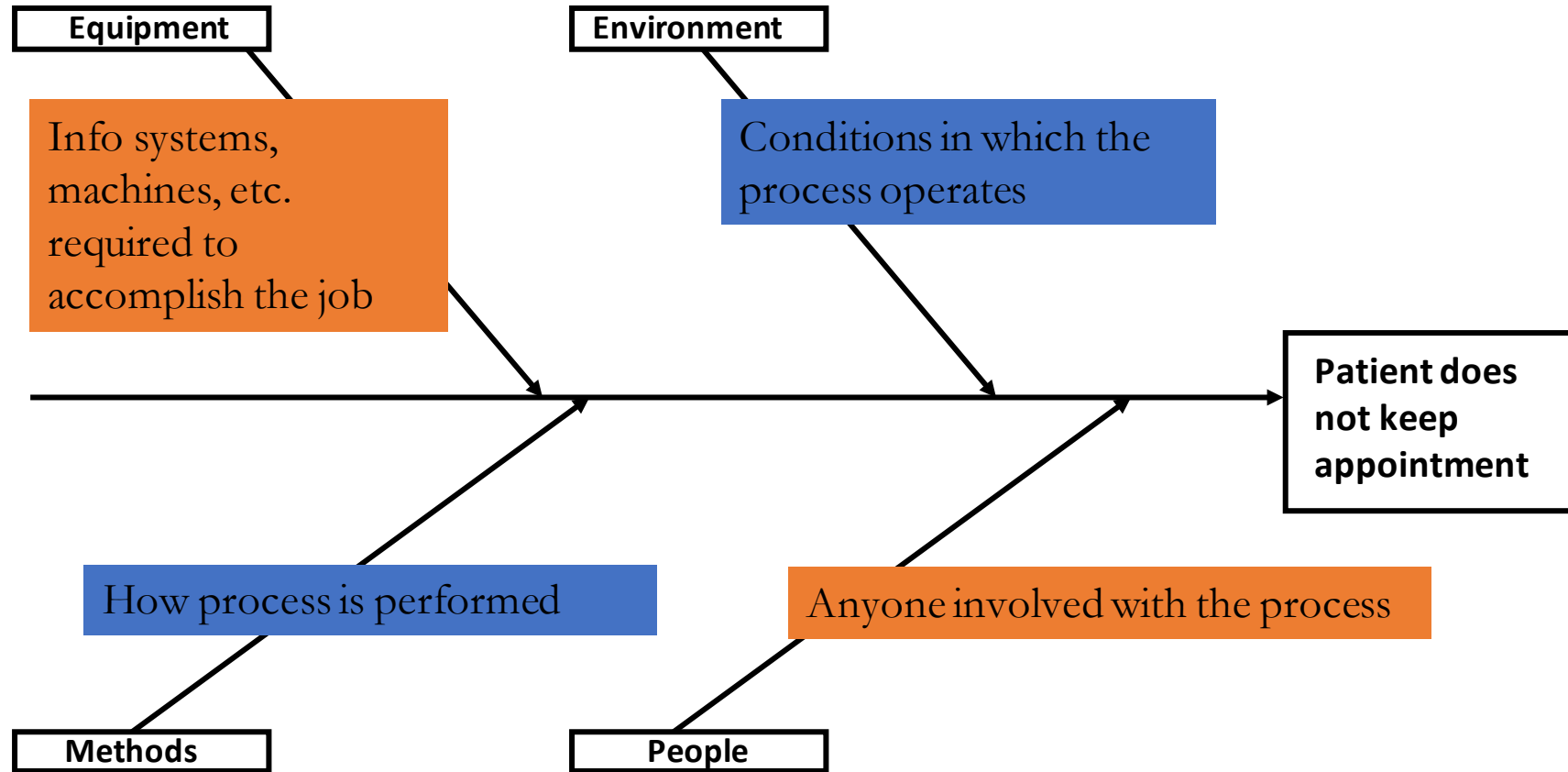


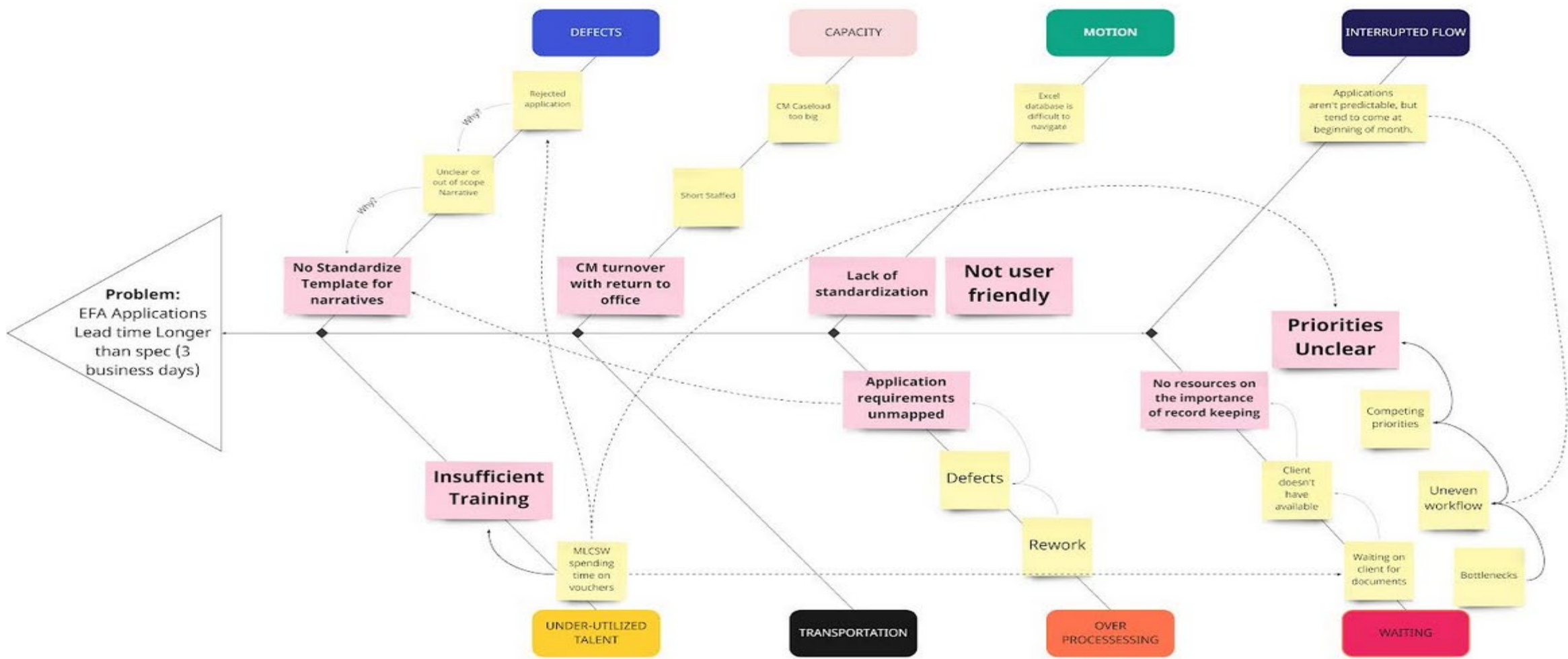
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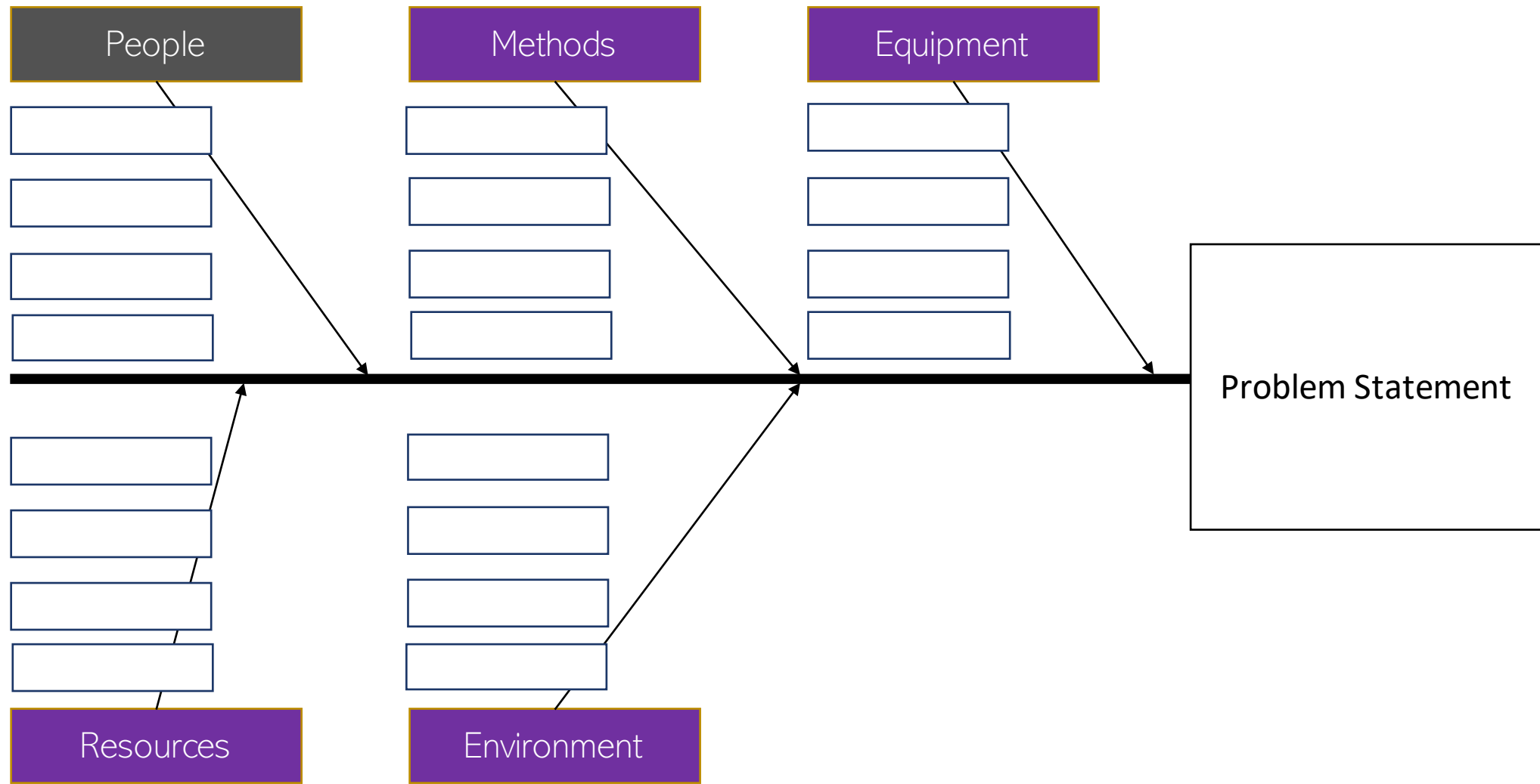
Fishbone (aka Ishikawa or Cause & Effect) Diagram





LET'S
PRACTICE







Thank You



Contact Information



Amanda Norton

Quality Improvement Advisor

altn14@gmail.com

Learn More

212-417-4730 (phone)

212-417-4684 (fax)

Info@CQII.org

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