



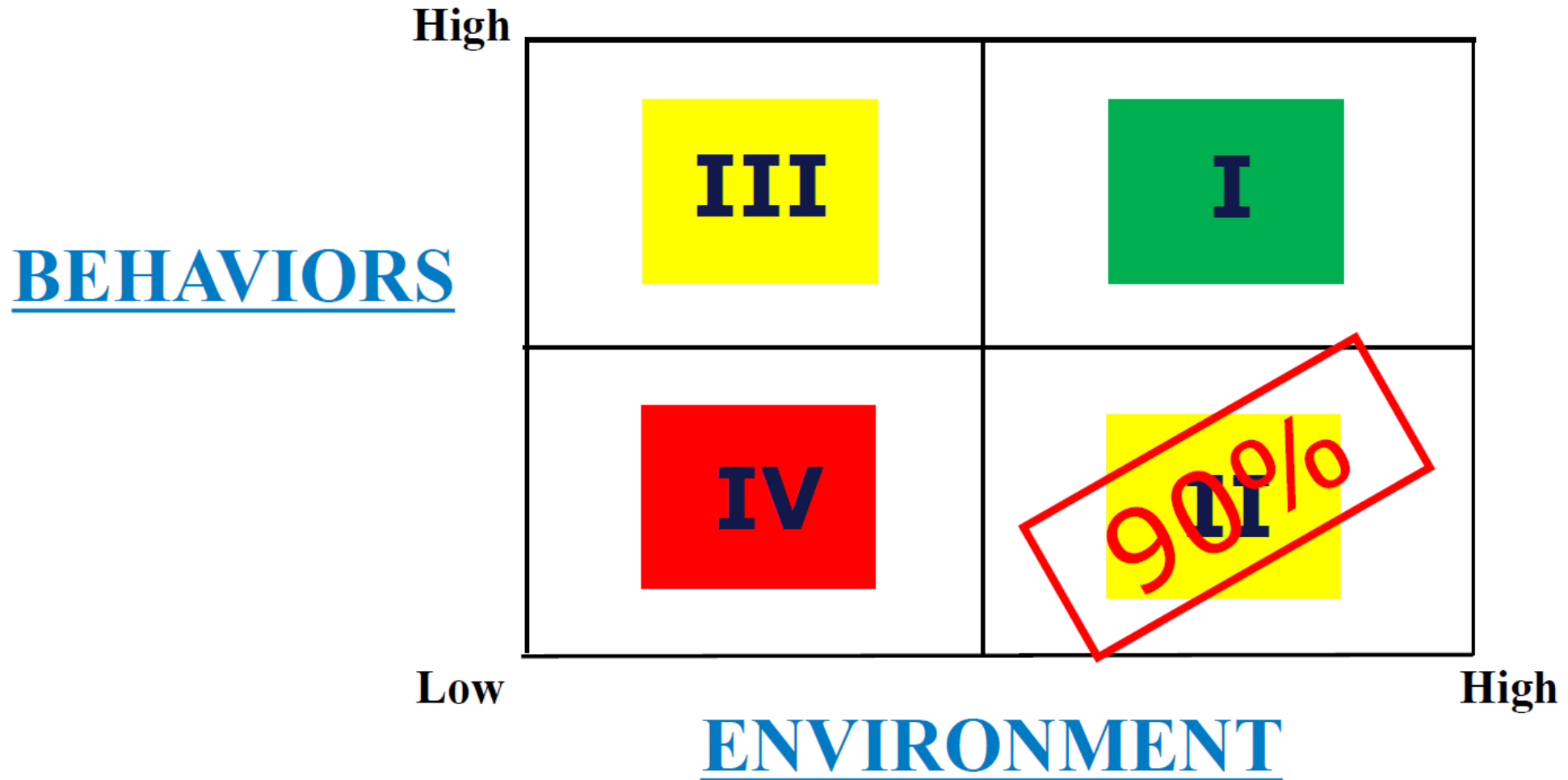
Root Cause Analysis



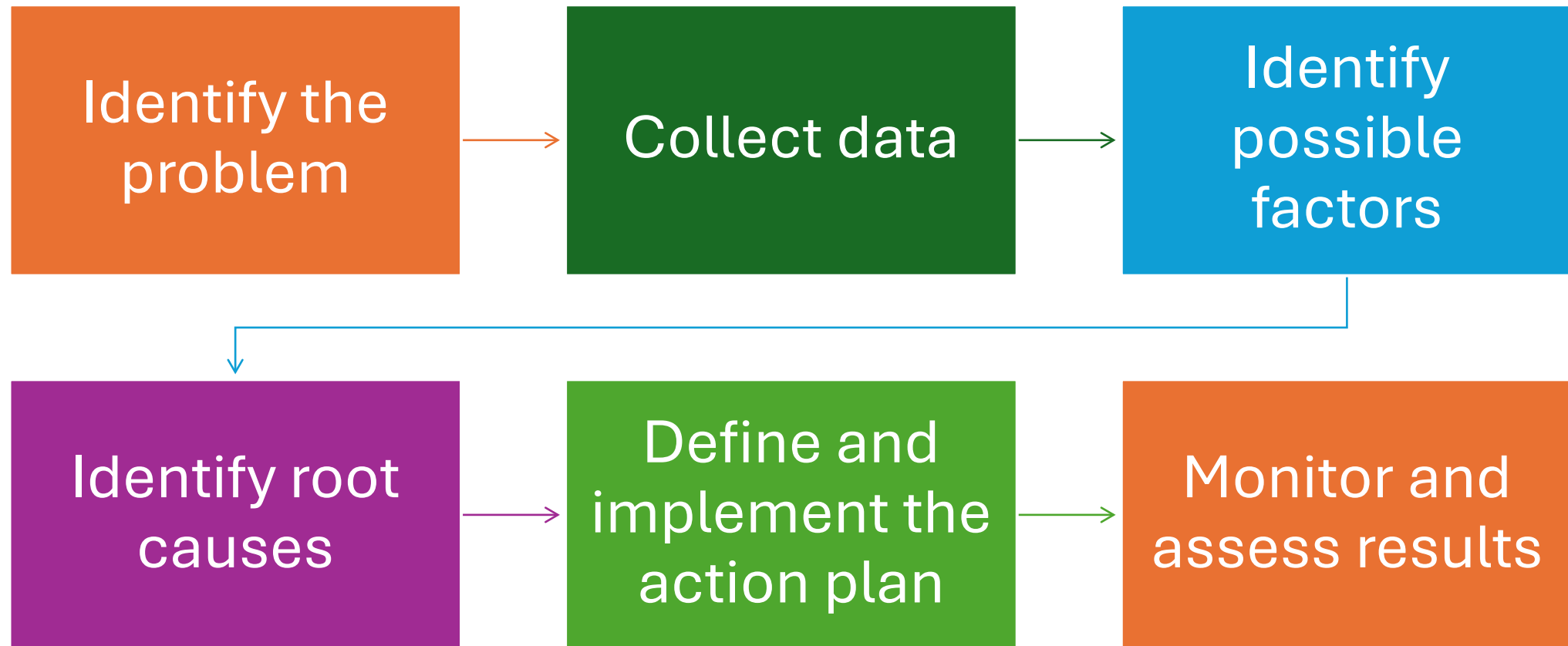
What is Root Cause Analysis?

- Root Cause Analysis is done to help solve business problems such as a failure to achieve a business goal, to identify cost overruns in a budget, or in response to an audit finding.
- Root Cause Analysis often requires brainstorming, collaboration, data collection, or inspection. The goal is to identify the true “root,” or cause, of the problem so it can be solved.
- When people jump right into solving problems and fail to do root cause analysis, they often just pluck the “leaves” off the problem, and then it recurs because the true source or sources of the issue were not attacked. This failure to get to the “root” of the issue causes wasted time and resources.

About Problems Generally



Steps in Root Cause Analysis



Methods of Root Cause Analysis

The Ishikawa Fishbone Diagram (IFD)

Pareto Chart

5 Why's

Failure Mode and Effects Analysis (FMEA)

Fault Tree Analysis (FTA)

Affinity Diagrams

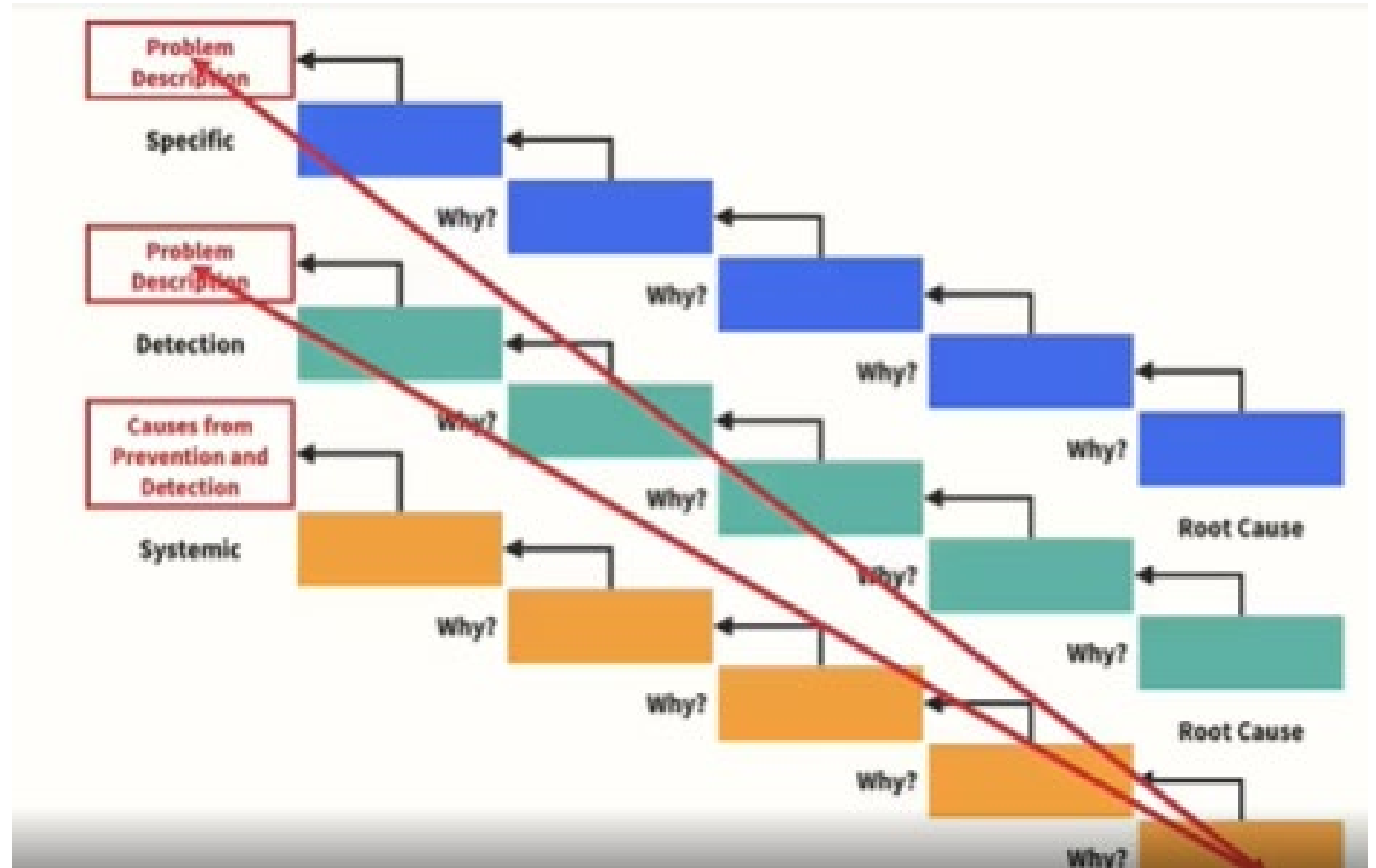


5 Why's

State the problem.

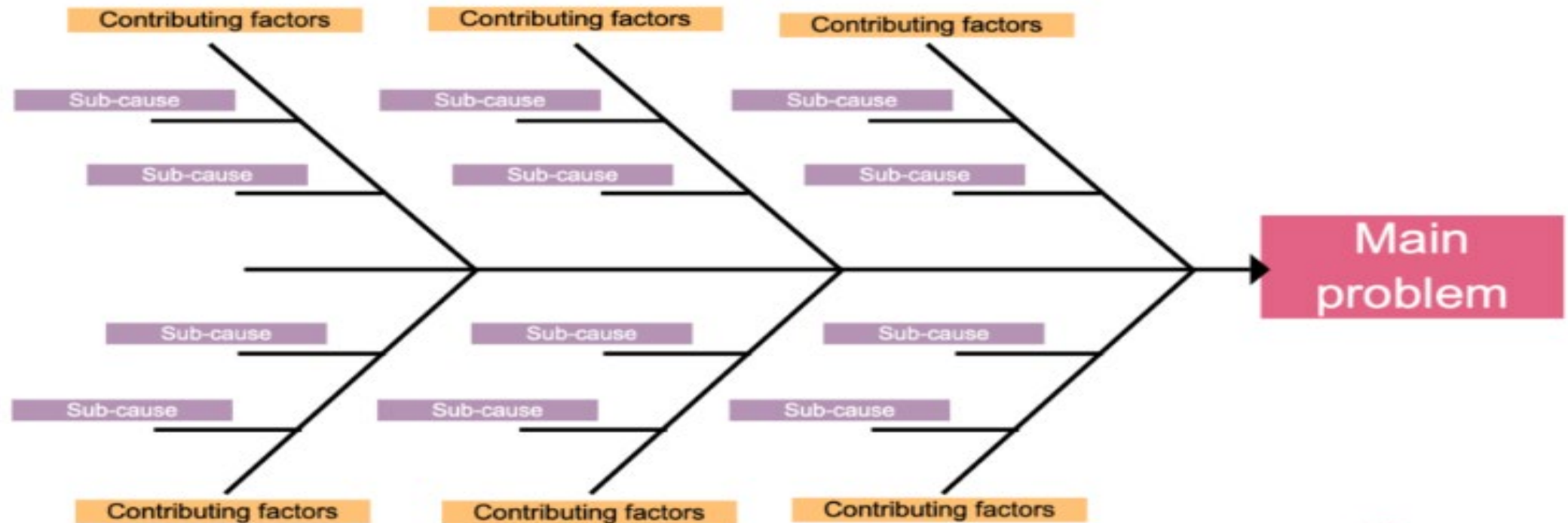
1. Why did the problem occur?
2. Why did the item in #1 occur?
3. Why did the item in #2 occur?
4. Why did the item in #3 occur?
5. Why did the item in #4 occur?

3x5 Why Analysis



Fishbone Diagram

Fishbone Diagram Template



The Problem-Solving Process in Action

	Questions	Is	Is Not	Data
Who	Who is experiencing the problem?			
	Who noticed?			
What	What item is affected?			
	What is the nonconformance?			
Where	Where is the problem seen within the item?			
	Where is it first observed?			
	Where is it repeated?			
When	When was it first seen?			
	Is there a pattern of occurrence?			
Size	What is the quantity affected?			
	What is the percentage of the total?			
	Are there any patterns or trends?			

	Is	Is Not
Who	Customers C, D, and E	Customers A and B
What	Damaged packaging of skin rash lotions	No damage reported on other products
Where	On the shipping boxes at the customer's receiving dock	On the raw plastic tubes in our shipping department
When	After October 15th	Before October 15th
How Much/Many	30% of shipped units	70% of shipped units