Root Cause Analysis in Auditing

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Late Breaking News

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SCATHING AG REPORT FINDS UNACCEPTABLE RISK TO PUBLIC HEALTH

EMERGENCY PLANNING NEEDS AN UPDATE

MAJOR FLAWS FOUND IN TEACHER MONITORING

AG FINDS HUNDREDS HAVE UNAUTHORIZED ACCESS TO GOVERNMENT SYSTEMS

SCANDAL BREAKS ALL THE RULES

AG EXPOSES HOLES IN BUSINESS CASE

Common Audit Findings

AND ON AND ON AND ON…

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The Burning Question is…

WHY?

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What is Root Cause Analysis?

- A suite of tools and techniques for understanding why something happened or how a situation developed
- Used to drive quality, achieve efficiency and eliminate waste, improve business processes, investigate accidents and other screw-ups
- Based in manufacturing and the private sector
- Adapted by CAAF for Public Sector Auditing

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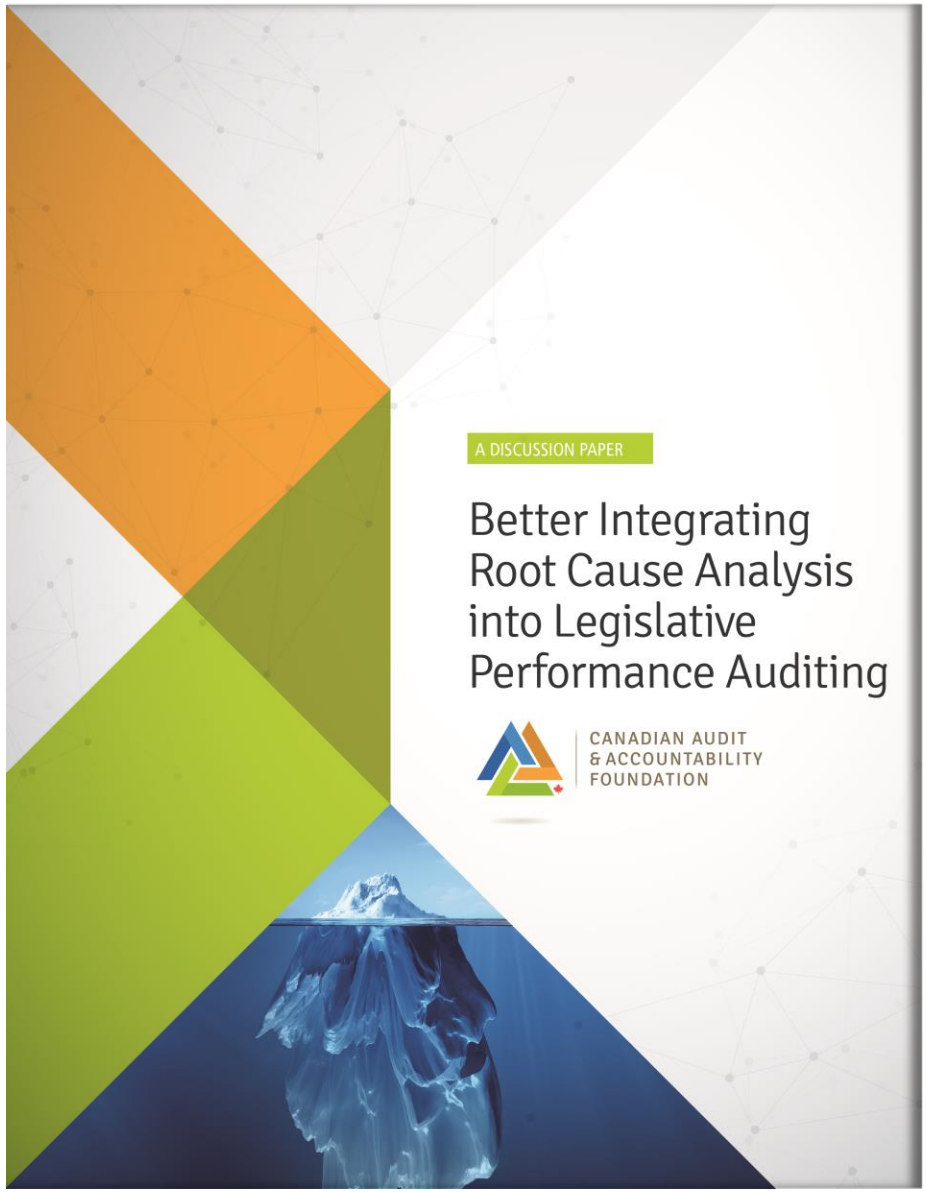

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Benefits

- Focused audit planning
- More insight to findings
- Improved rigor of analysis
- Better recommendations
- **More impactful audits**

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Today's Presentation

- RCA and the Audit Process
- Main Categories of Causes in the Public Sector
- 5 Whys Technique
- Visualization Tools (Fishbone Diagrams; Cause Mapping)
- Risks to consider

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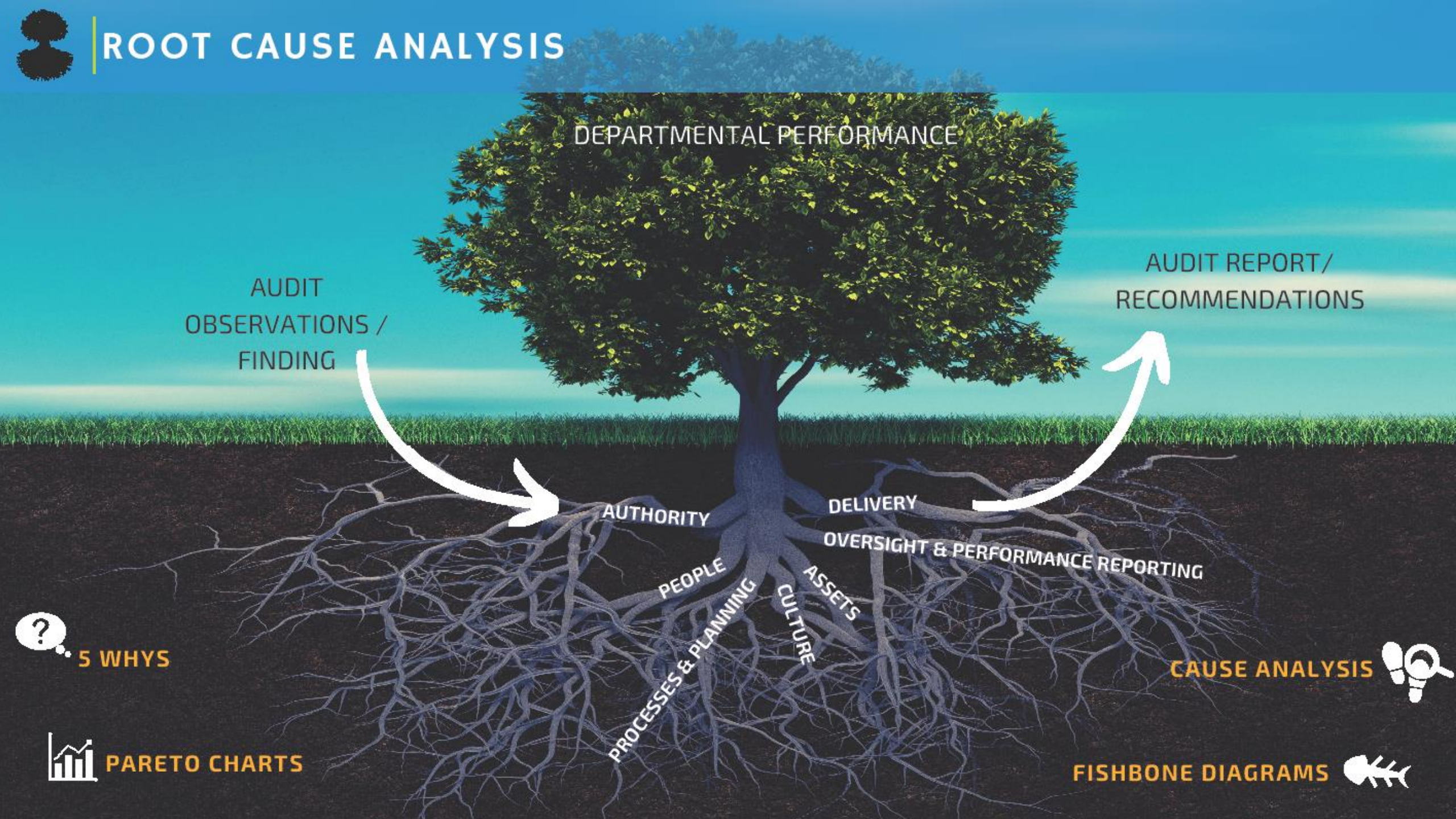
ROOT CAUSE ANALYSIS



RCA and the Audit Process

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The Root Cause MINDSET

- Adopt the root cause MINDSET throughout the audit phases
- Recognize that different audit phases require different depths and types of analysis
- Always need to be thinking about affecting real change

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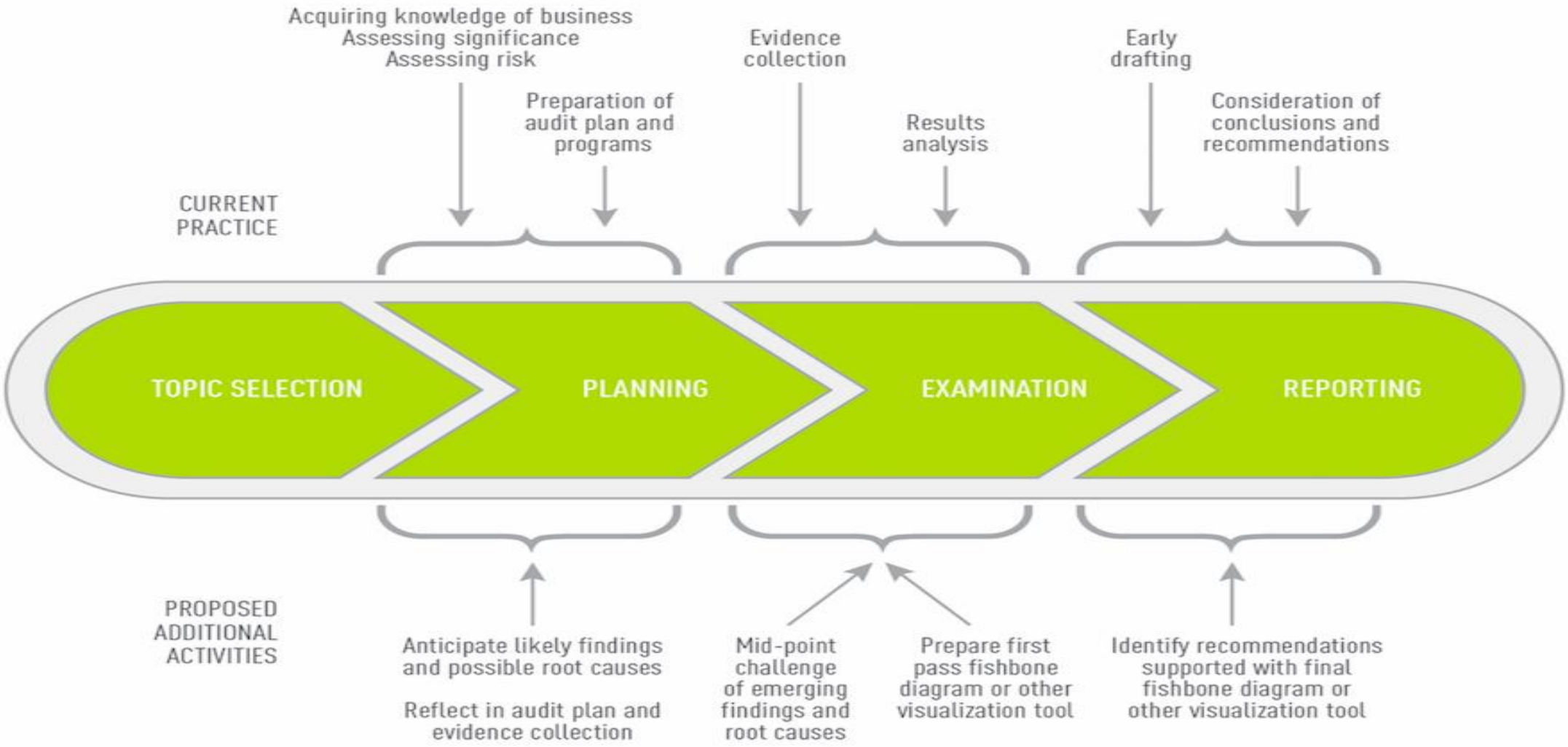
RCA and the Audit Process



Main Categories of Possible Root Causes

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The Main Categories of Possible Causes

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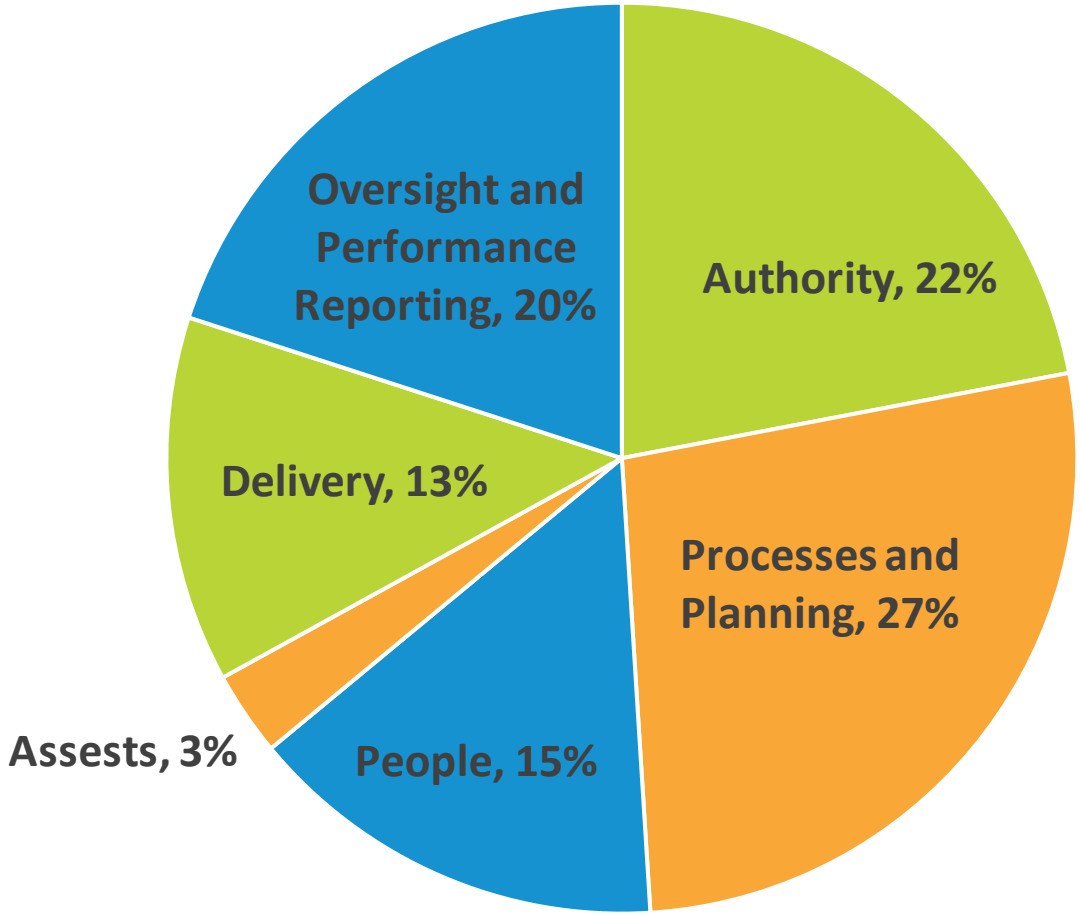
Governance-related

Main Category	Possible Causes
Authority	• Authority for the program, activity or function absent • Clear direction for planning, delivery, or reporting not provided • Mandate not understood • Government structures weak, inappropriate, or non-existent
Processes and planning	• Rules and processes, including for decision-making, not established or unclear • Strategic and operational plans not developed, not approved, or not SMART (Specific, Measurable, Attainable, Realistic, Time-bound)
Oversight and performance reporting	• Oversight bodies not carrying out assigned functions • Performance measures and intended outcomes not established • Performance not measured or reported • Information required not defined or not provided

Operations-related

Main Category	Possible Causes
People	• The right people, at the right time and place, doing what they are supposed to do • People did something they shouldn't • Weak hiring, retention, and/or compensation practices • Roles and responsibilities unclear • People with the necessary skills and competencies not in place • Adequate supervision and performance appraisal process not in place
Assets	• The right type and right amount of assets not available • The financial and operational skills needed to properly use and apply the assets not available
Delivery	• Assets, people, and planning not brought together to deliver and implement the activity • Delivery and implementation of goods and services poorly coordinated or not achieved • Absence of monitoring and control of inputs, activities, outputs, and outcomes • Absence of continuous improvement or corrective measures • Strategic and operational plans not implemented

OAG Alberta's Analysis Against CAAF Main Categories



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Defining the Main Categories: Adding Culture

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Culture as a Main Category

- In the last 5 years, there has been a lot of emphasis put on auditing culture in the internal audit world.
- This trend is a reaction to a succession of high-profile frauds and financial scandals in well-known corporations
- The profession is evolving and developing ways to “take a hard look at the soft stuff”
- **The new imperative**

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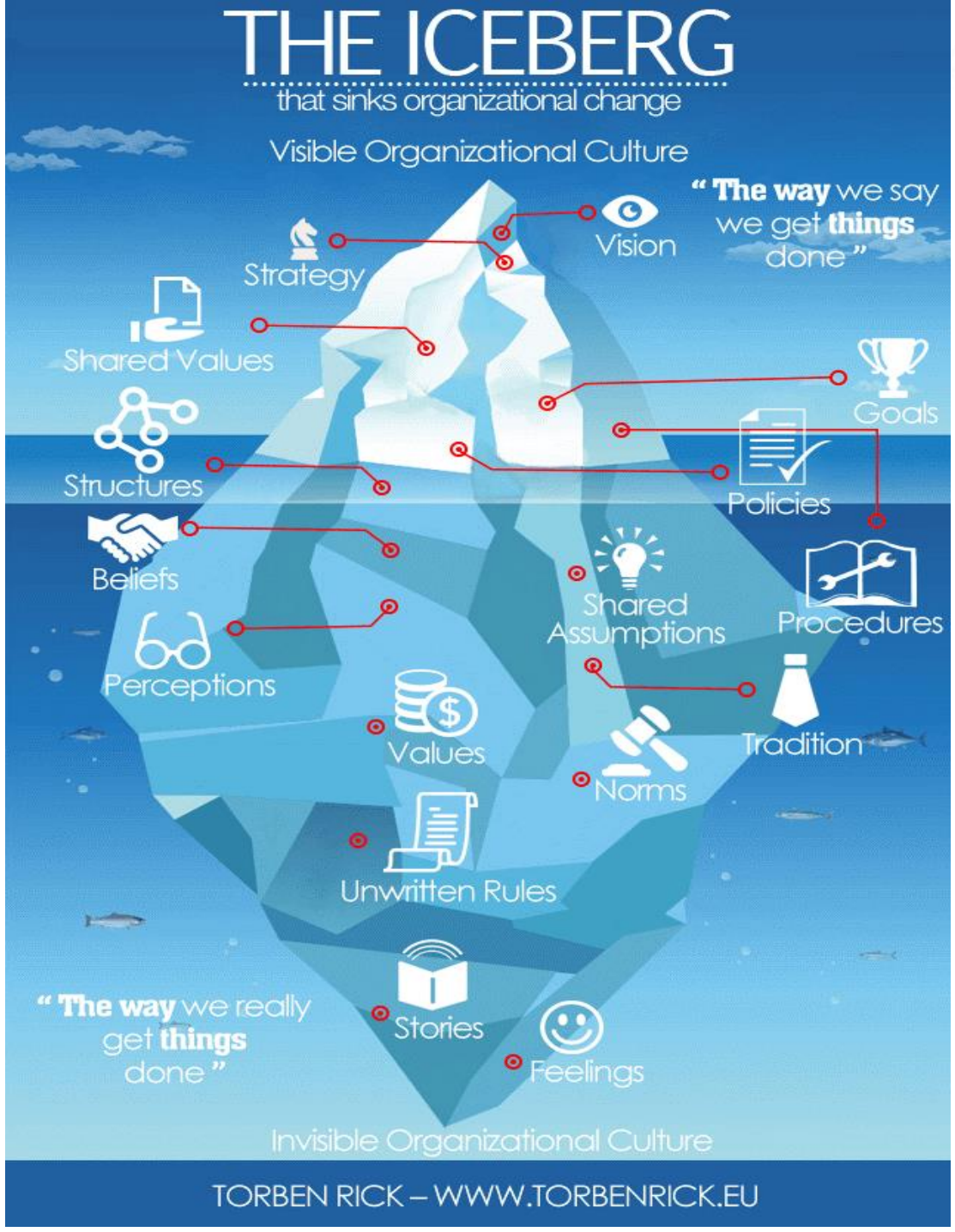
“Culture is not what is said; it’s what is done.”

— Richard F. Chambers



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Culture-related

Main Category	Possible Causes
Culture	• Inconsistent or inappropriate tone at the top • Absence of policies that define expected behaviors • Biases in recruitment practices • Lack of training to help staff adopt expected behaviors • Lack of incentives (to promote expected behaviors) or disincentives (to discourage violations of policies) • Lack of monitoring and enforcement of policies / wrong behaviors tolerated by managers • Existence of sub-cultures misaligned with expected corporate culture

RESEARCH HIGHLIGHTS

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Polling Question #1

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Polling Question #2

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The Five Whys Technique

The “Five Whys” Technique

- Involves asking the question “Why?” five times about a given event, problem, or significant performance audit finding
- Invented in the 1930s and made popular in the 1970s by the Toyota Production System
- Separates the symptoms from the causes of a problem
- The theory suggests that the answer to the fifth “Why?” is pretty close to the root cause

Benefits

- Simple and easy to use
- Adaptable and flexible
- Benefits from professional judgement
- Challenges and engages team members
- Can be combined with visualization techniques

The “Five Whys” Technique - Example

- **Significant Finding**: the fleet of vehicles did not meet the availability target
- ***Why?*** The vehicles were often not available due to mechanical problems
  - ***Why?*** Not enough technicians are on site to do all the necessary maintenance and repairs
    - ***Why?*** Too few technicians have completed the training program in recent years.
      - ***Why?*** Not enough instructors to provide the required training
        - ***Why?*** Many instructors retired the same year and there was no succession plan or recruitment strategy
- **Recommendation** (*aimed at symptom*): The entity should ensure that the fleet of vehicles meets availability targets.
- **Recommendation** (*aimed at cause*): the entity should establish a succession plan and recruitment strategy for instructors and technicians to support maintenance activities

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Limitations of the “Five Whys” Technique

- Answers may not be repeatable
- Might miss multiple and independent causes
- Easy to fall back on guesswork, or stop at symptoms
- Susceptible to cognitive biases
- Doesn’t provide a structure for organizing possible root causes

Fishbone Diagrams

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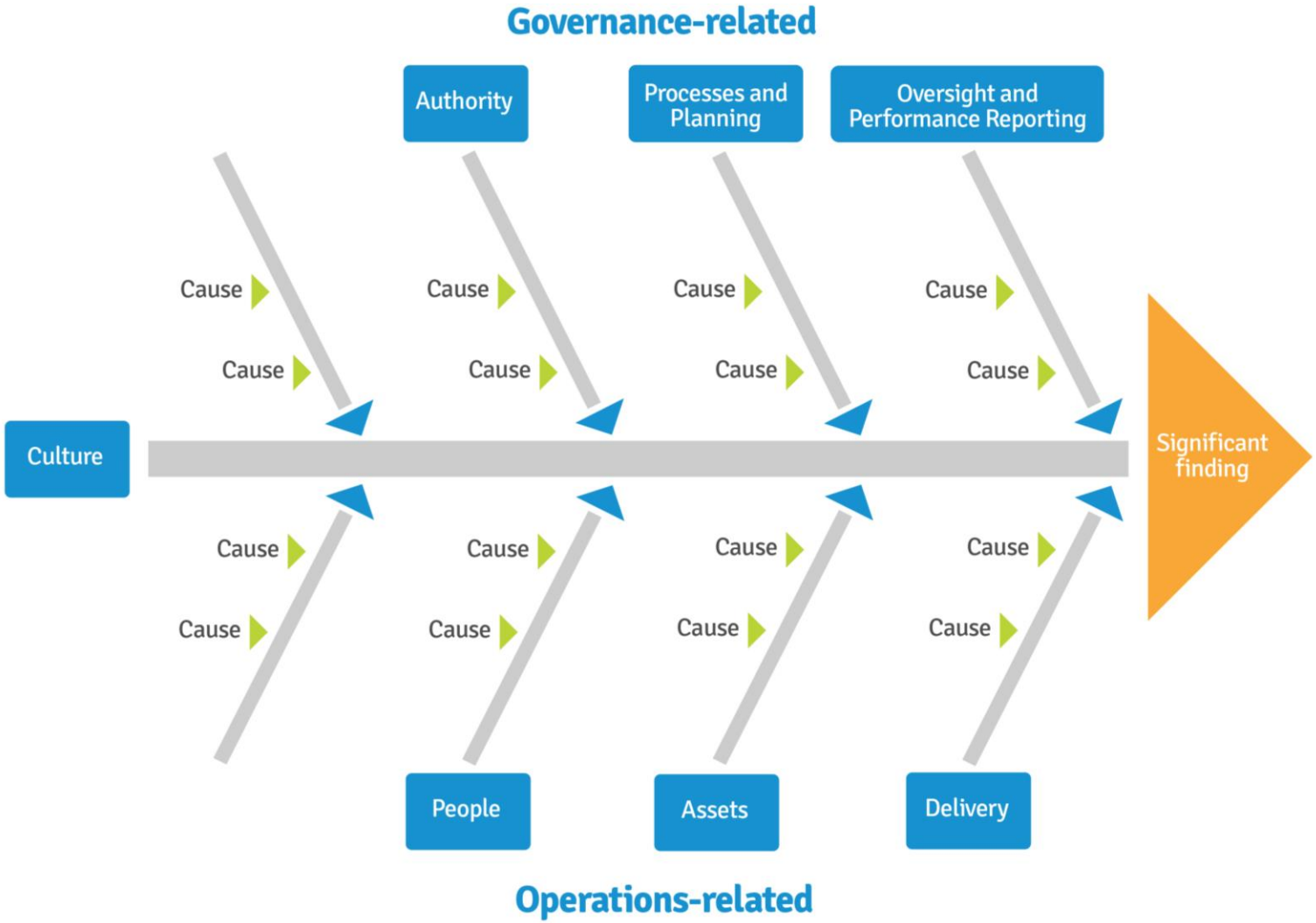
Fishbone Diagrams

- Fishbone Diagrams break down show the causes of a specific event, or in our case audit finding
- Make extensive use of “why” questions
- Visually, Fishbone Diagrams put problem at the “head” of the fish and the main categories of root causes at the end of the “bones.”
- Secondary or minor causes are then placed under the main categories

Fishbone Diagram with Main Categories



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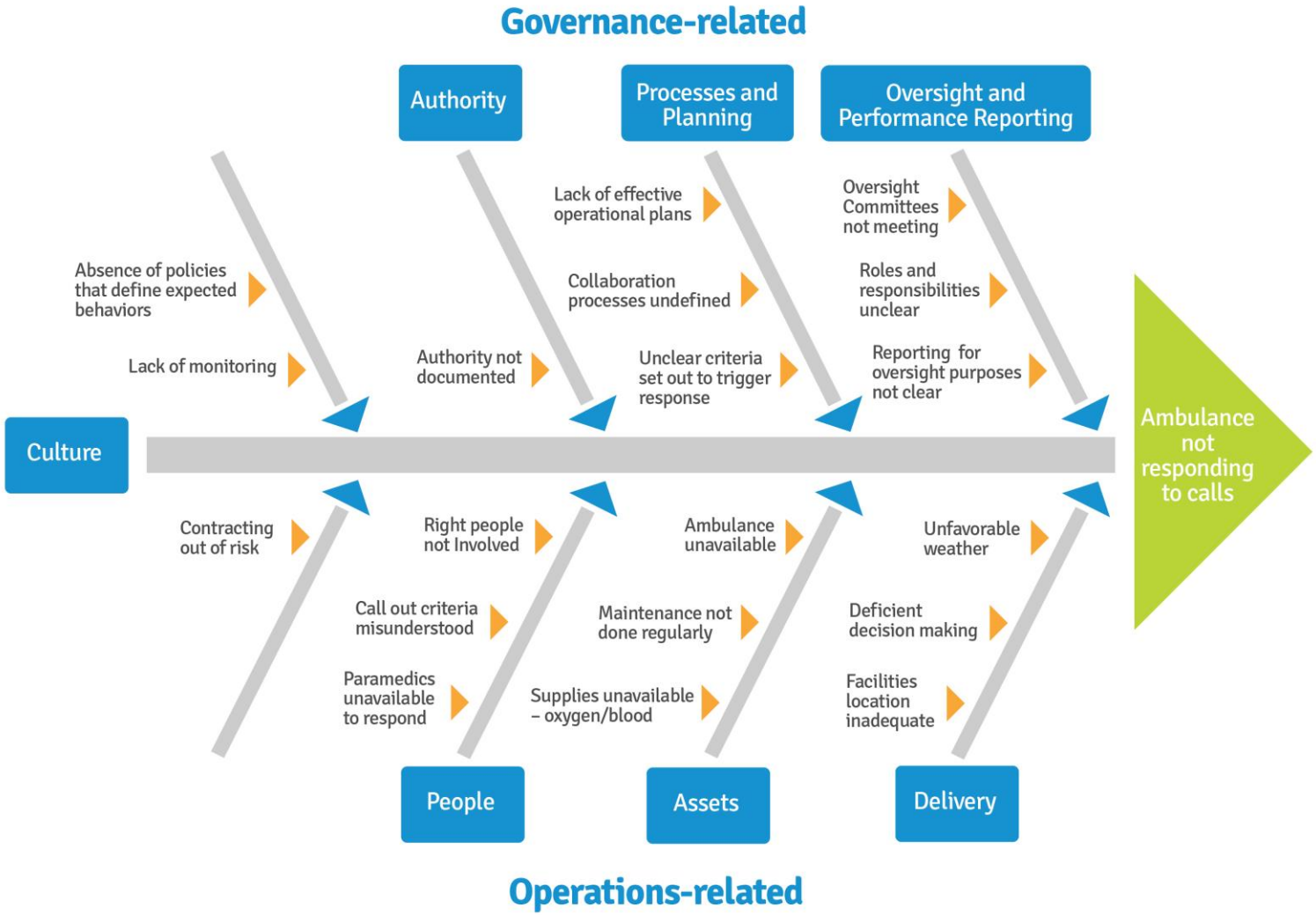
Fishbone Diagram – Example



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Cause Mapping

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Cause Mapping

- A Cause Map provides a visual explanation of why an incident occurred. It connects individual cause-and-effect relationships to reveal the system of causes within an issue.

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Cause Mapping Progression

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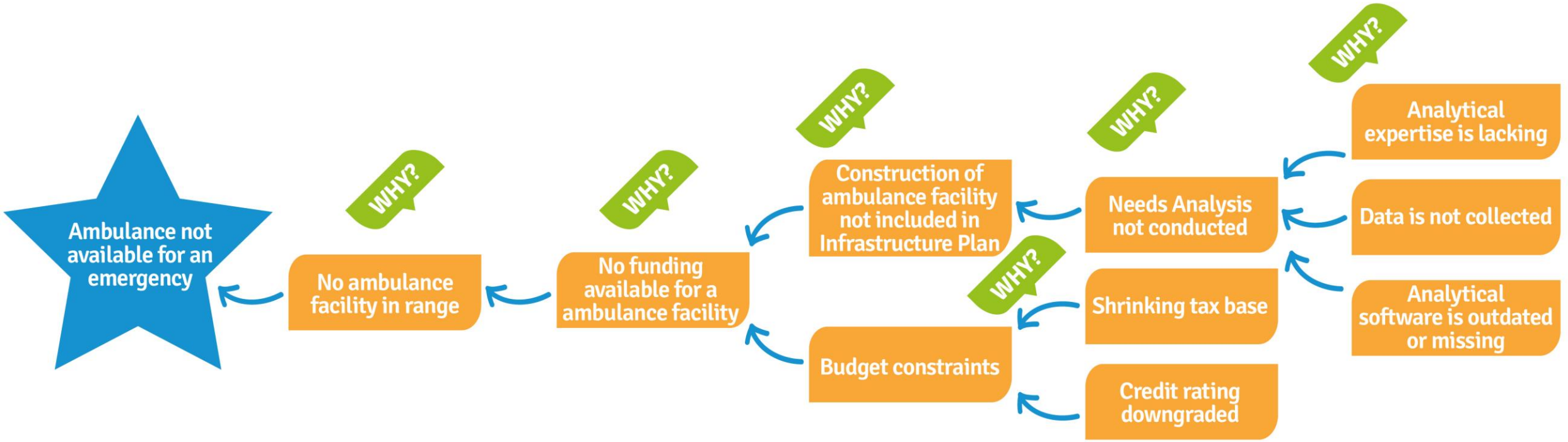
Cause Mapping - Example



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Risks and Cognitive Bias

Root Cause Analysis – Some Risks

- Challenging to demonstrate causation vs. correlation
- Careful in the planning phase not to prejudge causation – need evidence in examination.
- If RCA applied late and audit focus shifts, findings may not align with initial objective
- RCA involves thinking and judgement, making our analyses susceptible to **cognitive biases**

What are “Cognitive Biases”?

- Are a feature of human nature
- Relate to the everyday “mental shortcuts” or “algorithms” the brain uses to process information
- Are unconscious and can’t be stopped
- Can result in predictable and systematic errors in judgments and decisions

Four Thinking Problems

- We can’t pay attention to everything, so we filter
- We need to interpret information to make it meaningful
- We need to act fast in the face of uncertainty
- We can’t remember everything

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Cognitive Biases and RCA

- Human mind is hard-wired for causal thinking and pattern-seeking
- We create “causal narratives” to make sense of our experiences and observations
- Especially relevant biases include:
  - Availability
  - Anchoring
  - Recency
  - Confirmation

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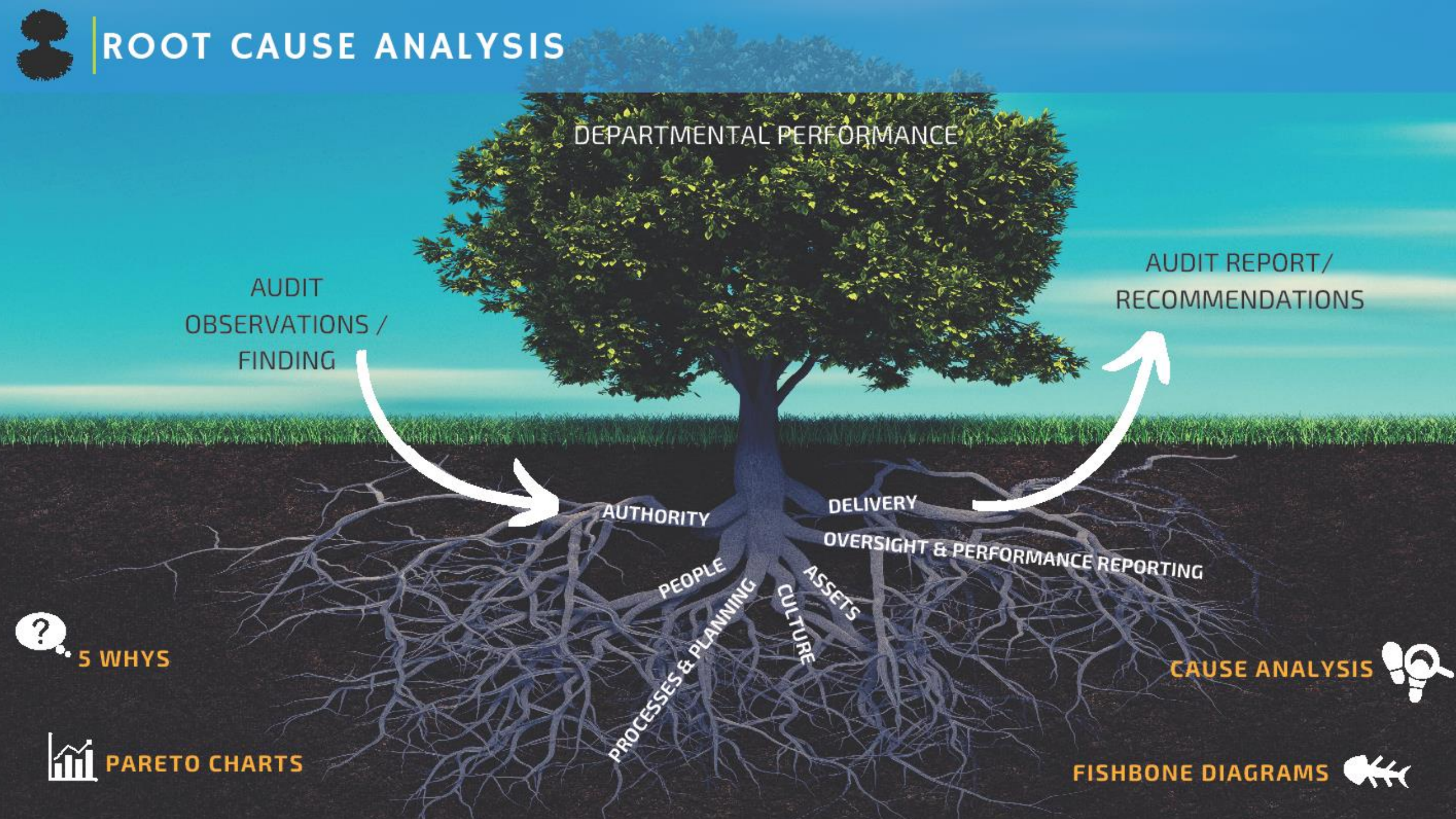

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