Mastering Root Cause Analysis for Effective Philanthropy

I. Introduction

–Workshop objectives

- to help participants understand and master the concept of root cause analysis, which is a powerful tool for addressing complex social issues in an effective and sustainable manner.

–Workshop structure

- RCA: Definition, theoretical framework, principles and benefits.
- The RCA Process for an Ishikawa Diagram using 5 Whys techniques
- An example of practical application – Covid
- Interactive small group workings on 2 or 4 key issues (group dependent)

– The importance of root cause analysis in philanthropy

- RCA is particularly relevant for philanthropic organisations as it allows them to go beyond merely addressing symptoms and instead focus on identifying and addressing the underlying causes of social problems.
- Often, philanthropic efforts are focused on treating the symptoms rather than addressing the root causes of social issues.
- AN RCA can help us understand not only the systemic and interconnected nature of social problems, but also build collaboration across silos and sector to develop more comprehensive and effective solutions.

II. About Root Cause Analysis

Root Cause Analysis: Definition

- A systematic and methodical process aimed at identifying the true underlying causes of a problem, rather than merely addressing its symptoms.
- Recognises that multiple causes can exist and aims to go beyond the immediate or obvious causes to uncover the deeper, fundamental reasons for a problem's existence.
- A problem-solving technique that relies on data, analysis, and a thorough understanding of the problem's context and contributing factors in order to identify effective and long-lasting ‘solutions’.
- Not a one-time event but rather an ongoing process that involves continuous learning and improvement.
- Originated as a business management tool for performance and efficiency improvement. Emphasises how and why something happens instead of who caused it, and uses a methodical approach to find evidence-supported causes.

- A rigorous and structure process that strives to minimise the influence of personal biases, preconceptions, and assumptions to ensure the analysis is objective, data-driven, and accurately identifies the true underlying causes of a situation.

Key Principles and benefits of a Root Cause Analysis?

- Fosters a proactive approach to problem-solving, rather than a reactive one – thus emphasis is on prevention rather than correction.
- Drives data driven decision making that is based on identifying underlying systemic factors. Helps map the web of relationships so that solutions can be more comprehensive and holistic.
- Promotes collaboration and a shared understanding amongst stakeholders, enhancing the potential for comprehensive solutions that consider multiple perspectives and expertise.
- Leverages effective resource allocation, saves costs, improve quality and reliability of products and processes and provide durable solutions.
- Encourages sustainable solutions and continuous improvement focused on addressing underlying issues, reducing the likelihood or severity of recurring or escalating problems.

In a time of polycrisis, most especially, an RCA helps with

Systemic Understanding: Polycrisis situations involve multiple interconnected problems occurring simultaneously, creating complex and dynamic environments. RCA allows us to analyse issue beneath the surface and understand the systemic factors driving these crises. By identifying root causes, we can address underlying issues that contribute to the interconnected web of challenges, rather than treating each crisis in isolation.

Resource Optimisation: During polycrisis, resources are often stretched thin as they are diverted to address immediate needs. RCA helps optimise resource allocation by focusing efforts on addressing root causes that have far-reaching impacts across multiple crises. This approach maximises the efficiency and effectiveness of interventions, ensuring that resources are utilised where they can have the greatest long-term impact.

Prevention and Resilience: Polycrisis situations are characterised by their unpredictability and recurrence. By conducting RCA, we can proactively identify vulnerabilities and risk factors that contribute to the onset and exacerbation of crises. Implementing solutions based on root cause analysis enhances resilience by mitigating risks and preventing future crises from occurring or minimising their severity.

III. Understanding the Root Cause Analysis Process

RCA strives to ensure accuracy, objectivity, and systemic understanding. It distinguishes between symptoms and root causes and seek to guide a structure investigation and is based on factual data and logical analysis.

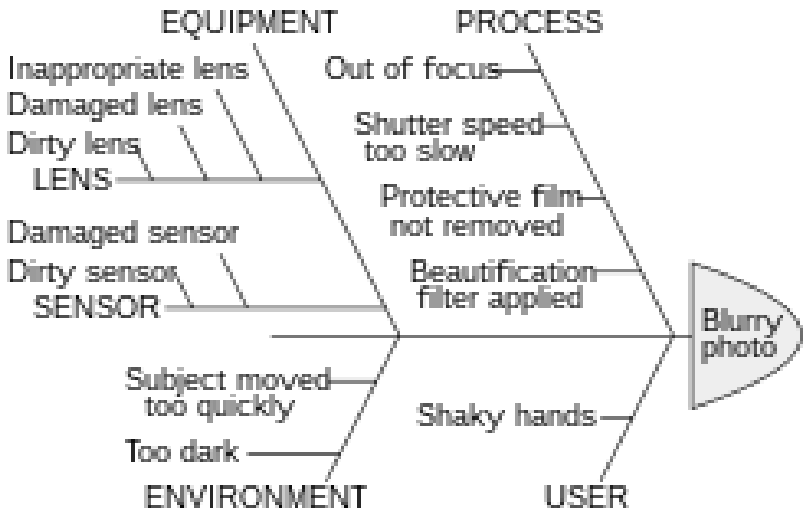
The RCA process follows six key steps. These are iterative and dynamic. It is important to emphasise the need to continually revisit and revise an RCA as responses reflect in impacts or results or suggest different or additional causal relationships.

1. **Problem Identification**: Define the problem clearly and specifically. A well-defined problem statement helps in focusing the analysis and determines the scope of the investigation.
2. **Data Collection**: Gather detailed, quantitative, and qualitative data about the problem. This data can include logs, error reports, and witness accounts.
3. **Cause Identification**: Develop a comprehensive list of potential causes that could explain why the problem occurred. Techniques like brainstorming or the Ishikawa diagram can be useful here.
4. **Root Cause Analysis**: Analyse the identified causes to determine which ones are contributing to the problem. Tools like the 5 Whys and Fault Tree Analysis can help in drilling down to the root causes.
5. **Response implementation**: Develop and implement solutions that address the root causes. Solutions should be innovative, effective, and viable in the long term.
6. **Evaluate Effectiveness**: Monitor the solutions to ensure they are effective in preventing recurrence. Adjust as necessary based on feedback and new data.

IV. Tools and Techniques

Ishikawa (Fishbone) Diagram for Root Cause Analysis

- A visual tool that categorises potential causes into different categories to help identify and analyse the various factors contributing to a specific event and analyse the relationship between them in an organised manner.
- The problem to be solved is show as the fish's head/backbone with major causes extending as fishbones and sub-branches for root causes to as many levels as required. Major causes could be social, economic, geopolitical, environmental etc. Sub-branches might be issues like job scarcity, poor governance systems, political repression, drought etc.



Example: An Ishikawa diagram breaking down possible root causes of a blurry photo

The 5 Whys Technique:

- An iterative questioning technique that involves repeatedly asking "why" to uncover the root cause of a problem.
- For example, if the problem is "high dropout rates in a school district," the five whys might go like this:
    - Why are dropout rates high? Because students are not motivated to attend school.
    - Why are students not motivated? Because the curriculum is not engaging or relevant.
    - Why is the curriculum not engaging? Because it doesn't align with students' interests or future goals.
    - Why doesn't it align? Because there is a lack of input from students and the community in curriculum development.
    - Why is there a lack of input? Because the school district doesn't have a process for stakeholder engagement.

V. Practical Application: Real-World Examples (Covid, Famine)

Case Study Scenario: Covid 19

Biological Factors

- Virus Origin: The zoonotic transmission of the SARS-CoV-2 virus from animals to humans, possibly through intermediate hosts such as bats or pangolins.
- Viral Characteristics: The high transmissibility, asymptomatic spread, and mutations of the virus contribute to its rapid spread and challenges in containment.
- Immune Response: Variations in immune responses among individuals impact susceptibility, severity of illness, and effectiveness of vaccines.
    - Virus Origin → Zoonotic Transmission → Animal Reservoirs and hosts
    - Viral Characteristics → High Transmissibility → Rapid Spread
    - Immune Response → Variations in Immunity → Vaccine Effectiveness

Healthcare Infrastructure

- Healthcare Preparedness: Insufficient pandemic preparedness, including limited stockpiles of medical supplies, inadequate healthcare facilities, and shortages of healthcare workers.
- Testing and Surveillance: Delays and deficiencies in testing capacity, contact tracing efforts, and surveillance systems hinder early detection and control of outbreaks.
- Healthcare Access: Disparities in access to healthcare services, including testing, treatment, and vaccines, exacerbate health inequities and undermine pandemic response efforts.
    - Healthcare Preparedness → Limited Stockpiles → Shortages of Medical Supplies
    - Testing and Surveillance → Testing Delays → Underreporting of Cases
    - Healthcare Access → Disparities in Access → Inequitable Vaccine Distribution

Societal and Behavioural Factors

- Public Awareness & Compliance: Variations in public awareness, understanding of preventive measures, compliance with guidelines influence transmission rates and community spread.
- Socioeconomic Impact: Disruptions to livelihoods, economic instability, and disparities in social support systems exacerbate vulnerabilities and increase risk factors for infection.
- Misinformation and Stigma: Spread of misinformation, conspiracy theories, and stigma towards affected individuals or groups undermine trust in public health interventions and hinder cooperation.
    - Public Awareness & Compliance → Misinformation → Non-compliance with Guidelines
    - Socioeconomic Impact → Economic Instability → Mental Health Challenges
    - Misinformation and Stigma → Stigma Towards Infected → Hindrance to Contact Tracing
    - Vaccine Development & Acceptance → efficacy, safety, distribution
    - Globalisation and travel → human migration, tourism and mobility → rapid spread
    - Global trade and wildlife consumption → zoonotic spillover

Government and Policy Responses

- Policy Implementation: Variations in government responses, including lockdown measures, travel restrictions, and vaccination strategies, impact the effectiveness of containment and mitigation efforts.
- Communication Strategies: Effectiveness of government communication strategies, transparency, and public trust influence public compliance with guidelines and adherence to preventive measures.
- International Cooperation: Collaboration among countries, sharing of data, resources, and expertise, and coordination of response efforts enhance global preparedness and response to the pandemic.
    - Policy Implementation → Lockdown Measures → Economic Disruption
    - Communication Strategies → Transparency → Trust in Government
    - International Cooperation → Sharing Data → Vaccine Equity

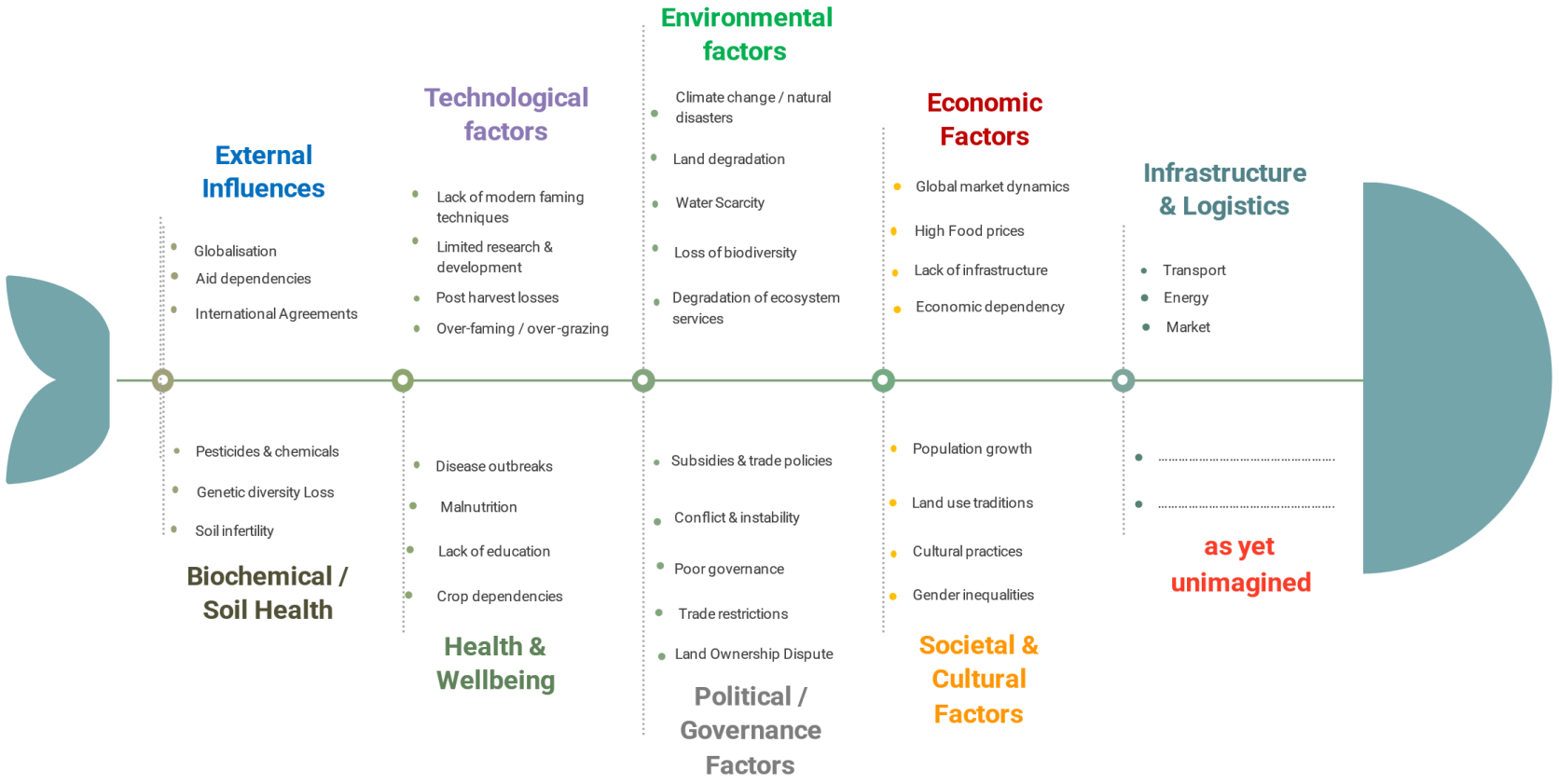
Environmental and Ecological Factors

- Urbanization and Population Density: Concentrations of population in urban areas, overcrowded living conditions, and high population density contribute to the rapid spread of the virus.
- Environmental Conditions: Environmental factors such as temperature, humidity, and air quality may impact virus survival, transmission rates, and seasonal patterns of infection.
- Wildlife and Biodiversity: Interactions between humans, wildlife, and ecosystems increase the risk of zoonotic spillover events and emergence of novel pathogens.
    - Urbanization and Population Density → Habitat destruction → Urban Crowding → Increased Transmission
    - Industrial livestock farming practices → antibiotic use → overcrowding & poor sanitation → spread of zoonotic pathogens
    - Environmental Conditions → Seasonal Variations → Impact on Transmission

- Deforestation & habitat destruction → loss of wildlife and biodiversity → Climate Change → Ecosystem degradation → Zoonotic Spillover → Emerging Pathogens
- Wildlife Reservoirs and Hosts

VI. Interactive Exercise …. In workshop

Famine / food insecurity Ishikawa



Frequently Asked Questions and Resources

Frequently Asked Questions:

Why is Root Cause Analysis important?

Root Cause Analysis (RCA) is crucial because it allows organisations to go beyond merely addressing symptoms and instead identify and resolve the underlying, fundamental causes of problems or issues. By addressing root causes, organisations can develop effective and sustainable solutions that prevent the recurrence of the problem in the future. RCA promotes a proactive and preventive approach to problem-solving, leading to more efficient resource allocation and maximised impact.

What is the difference between a root cause and a symptom?

A symptom is the visible or obvious manifestation of a problem, often the immediate consequence or effect that is easily recognisable. On the other hand, a root cause is the underlying, systemic, or fundamental reason that led to the occurrence of the problem or issue in the first place. Root causes are often hidden or less apparent, and they may involve multiple contributing factors or causal relationships. Addressing only the symptoms provides temporary relief but fails to prevent the problem from recurring, while addressing the root causes leads to lasting solutions.

How do I choose the appropriate RCA tool for my situation?

The selection of the appropriate RCA tool depends on the complexity and nature of the problem you are trying to solve. The 5 Whys technique is suitable for simple or moderately difficult problems, as it involves iterative questioning to identify causal relationships. The Fishbone Diagram (Ishikawa Diagram) is helpful for organising and visualising multiple potential causes, making it useful for more complex problems. Failure Mode and Effects Analysis (FMEA) is recommended for analysing and mitigating risks associated with implementing solutions, especially in critical situations or when addressing complex problems with potential severe consequences.

Can RCA be used for positive outcomes or successes?

RCA can be applied not only to problem-solving but also to understanding the root causes of positive outcomes or successes. By identifying the fundamental factors that contributed to a successful initiative or event, organisations can replicate or reinforce those factors in future endeavours. This approach promotes a culture of continuous improvement and learning from successes, rather than solely focusing on addressing failures or problems.

How do I ensure objectivity and accuracy during the RCA process?

To minimise the influence of personal biases, preconceptions, and assumptions and ensure that your root cause analysis is objective, data-driven, and accurately identifies the true underlying causes of a situation, it is essential to seek to maintain objectivity. Here are some strategies to help:

- Involve a diverse team: Gather a team with different perspectives, expertise, and backgrounds to minimise biases and blind spots.

- Rely on data and facts: Base your analysis on factual data, evidence, and observable patterns rather than assumptions or subjective opinions.
- Use structured techniques: Follow established RCA techniques, such as the 5 Whys, Fishbone Diagrams, or FMEA, to maintain a systematic and rigorous approach.
- Encourage open communication: Create an environment where team members feel comfortable sharing their insights and challenging assumptions without fear of blame or criticism.
- Validate findings: Cross-check your findings with subject matter experts, historical data, or other relevant sources to ensure accuracy and completeness.
- Remain open to new information: Be willing to revisit and refine your analysis as new information or perspectives emerge.

Online Resources:

- Root Cause Analysis: What is it and how to perform one
- What is Root Cause Analysis?
- Root Cause Analysis: Advantages and Disadvantages
- Lost Causal: Debunking myths about Causal Analysis in Philanthropy
- Root Cause Analysis (with tool template)
- Root Cause Analysis Explained with examples and methods
- Root Cause Analysis: Concept, Definition, Tool
- What exactly do we mean by systems?
- The Relational Work of Systems Change
- The Science of What Makes People Care
- Leading together for systems change

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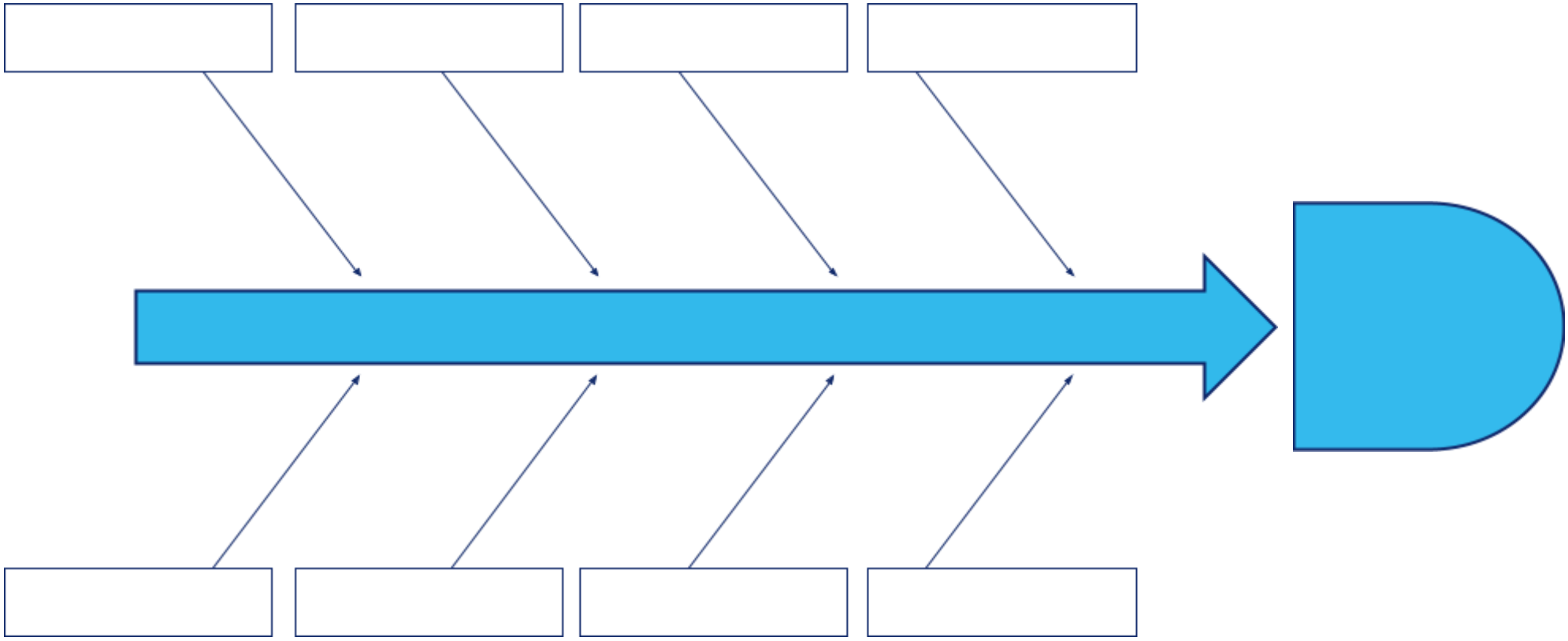
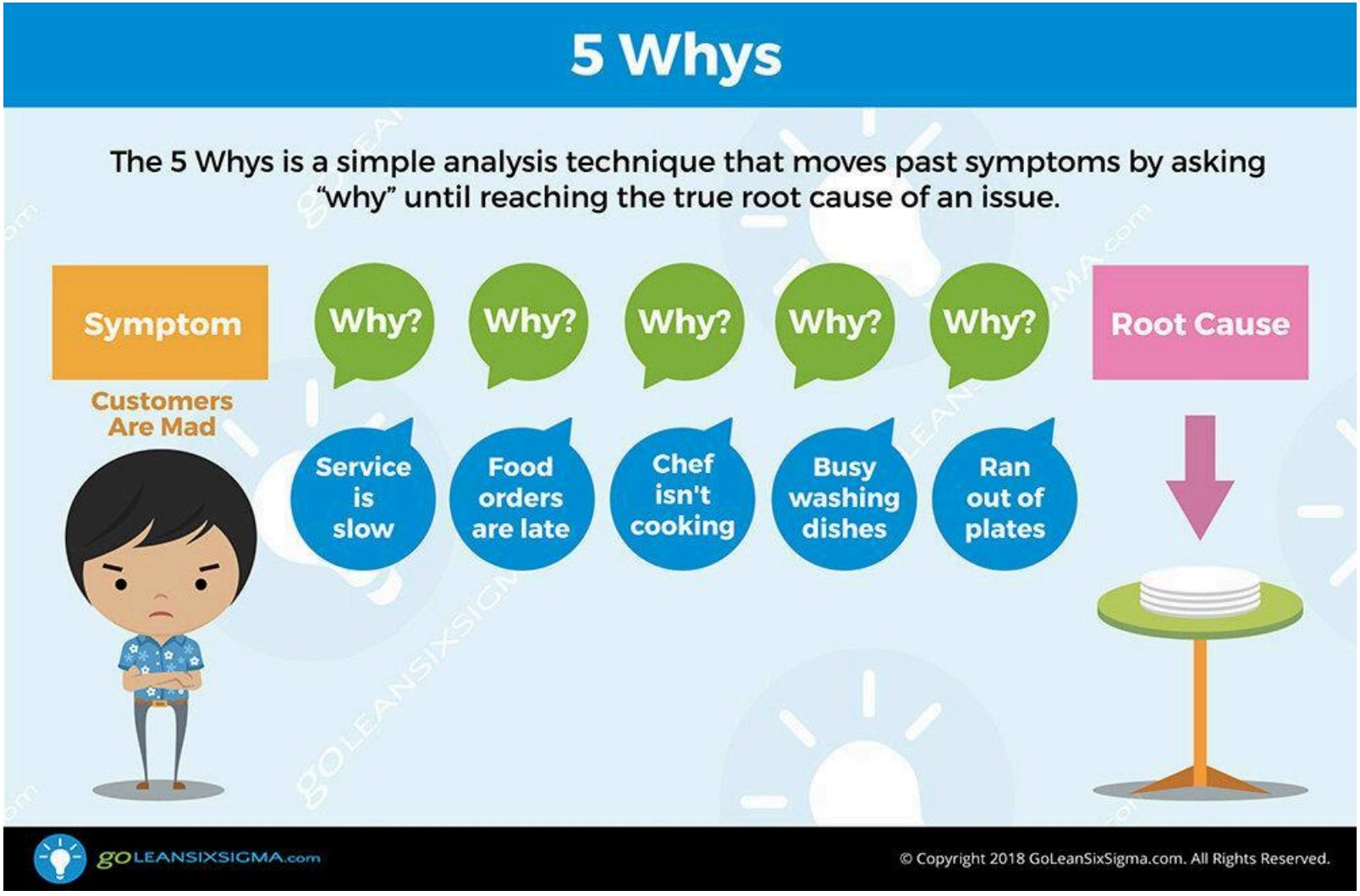
CAUSE AND EFFECT (FISHBONE) TEMPLATE





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