

Apollo Root Cause Analysis – A New Way of Thinking

Table of Contents

Introduction.....	1
What This Book Is About	1
How to Read This Book	3
About the Author.....	4
Chapter 1: Set Up to Fail	5
Problem Solving	6
Typical Problem-Solving Practices.....	8
Stopping Too Soon.....	9
The Need to Place Blame.....	11
The Root Cause Myth.....	15
The Illusion of Common Sense and a Single Reality	17
Groovenation.....	21
Storytelling	24
Categorical Thinking.....	28
Causes of Ineffective Problem Solving.....	31
Incomplete Problem Definition.....	31
Unknown Causal Relationships	32
A Focus on Solutions.....	32
Set Up To Fail.....	33
References	34
Chapter 2: Understanding the Cause and Effect Principle	35
Characteristics of Cause and Effect.....	37
Cause and Effect Are the Same Thing.....	38
Cause and Effects Are Part of an Infinite Continuum of Causes	39
Each Effect Has at Least Two Causes in the Form of Actions and Conditions.....	40
An Effect Exists Only If Its Causes Exist at the Same Point in Time and Space	45
Inside the Cause and Effect Principle: Baby Steps	48

Linear Language, Linear Thinking.....	51
Stories Start in the Past.....	51
Stories are Linear	52
Stories Use Inference to Communicate	
Causes	52
Understanding the Cause and Effect Principle.....	54
Chapter 3: Solving Problems Effectively Using	
Apollo Tools.....	55
Effective Problem Solving.....	58
Appreciative Understanding.....	58
Effective Tool Set	60
Define the Problem.....	61
Complete Problem Definition	63
What the Problem Definition Is Not.....	65
Create an Apollo Cause and Effect Chart	67
Principles of Creating an Apollo Cause and	
Effect Chart	67
Putting Together an Apollo Cause and Effect	
Chart	81
Solving Problems Effectively Using Apollo Tools	88
Chapter 4: Identifying Effective Solutions.....	89
Problem-Solving Process.....	91
Solution Criteria	93
Effective Solutions from Apollo Charts.....	95
Solution Guidelines.....	99
Solution Killers.....	101
Creative Solutions	103
Listen for the Laughter.....	104
Rapid Response Method	104
The Gano Rule	105
Yes-Anding.....	107
Creative Solutions Example.....	107
Identifying Effective Solutions	109
References	110

Chapter 5: Implementing Solutions	111
Commitment to Continuous Improvement.....	113
Institutionalizing the Process: The Key Is Training.....	116
When To Perform an Analysis	119
Threshold Criteria.....	119
Evidence Preservation Policy	120
Responsibilities Defined	121
Simple Reporting Scheme	121
Corrective Actions Tracking Program	125
Trending Causes	125
Implementing Solutions	127
Chapter 6: Facilitating Groups	129
Facilitation Guidelines.....	130
Gather Information.....	131
Define the Problem.....	133
Create an Apollo Cause and Effect Chart.....	134
Identify Solutions	137
Conducting Interviews	138
Pre-Requisites for Interviewing.....	139
Starting the Interview.....	141
Aspects of the Interview	142
Closing the Interview	143
Dealing with Personnel Performance Issues.....	144
Common Traps.....	146
Consensus	146
Groupthink.....	147
Experts	148
Parochial Mindset.....	149
Programmatic Barrier	150
Denial.....	151
Time As a Cause.....	152
Dealing with Group Interaction.....	153
The Proverbial Storyteller	153
The Analytic.....	153

The Nonparticipant	154
The Participant	155
Facilitation Guidelines: Some Q&A	155
Facilitating Groups.....	160
References	160
Chapter 7: A New Way of Thinking	161
A Simple Structured Approach.....	163
Effective Solutions for Everyday Problems	
Every Time	164
Appendix: Comparison of Common Root Cause Analysis	
Methods.....	167
Categorization Schemes.....	167
Causal Relationship Methods	170
Combinations.....	171
Other Methods.....	172
References	173
Glossary	175
Index.....	179
Acknowledgments.....	183