



accenture

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Issue-Based Problem-Solving: Antidote to Mental Messing Around

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Today`s guestspeakers...

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- Supply Chain Management Consultants and Trainers for Accenture
- Main Industries:
 - Natural Resources
 - Chemicals & Pharmaceuticals
 - Products

- Global Strategic Sourcing
- Organizational Development & Performance Management
- Supply Chain Academy & Training Concepts
- Production Process Optimization
- Change Management



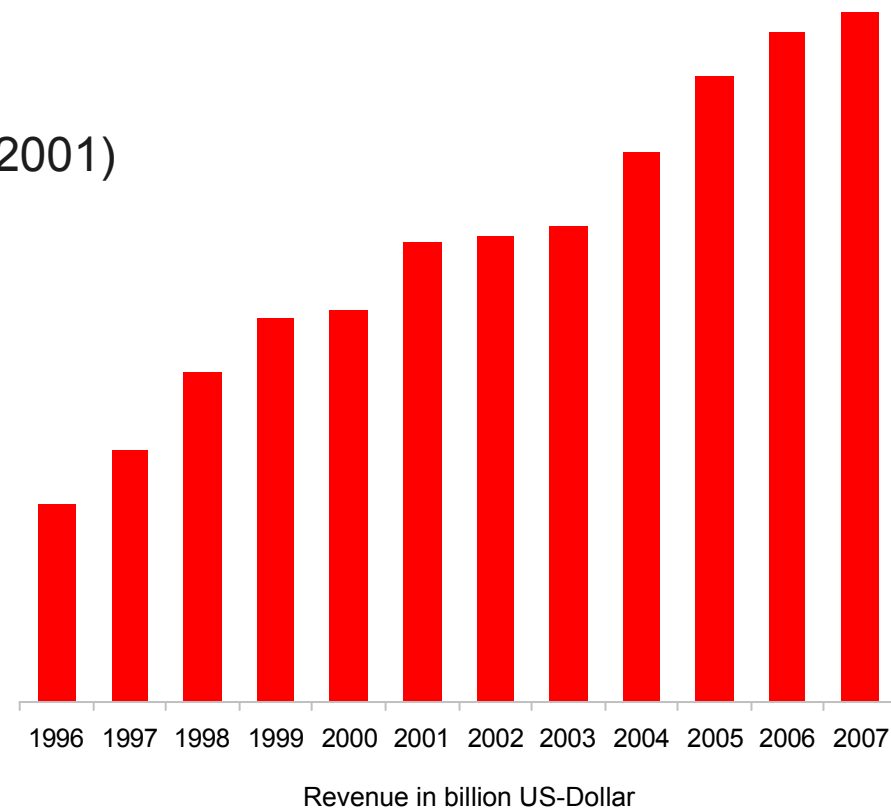
We're a Global Player...

Facts

- Founded in 1989
- Listed on NY stock exchange (07/2001)
- 170'000 employees worldwide
- 150 offices in 48 countries
- 19.7 billion \$ revenue in FY07

Clients

- 91 of Global Fortune 100
- over 2/3 of Global Fortune 500





And a Local Player...

Geographic Unit (ASG)

- Austria / Switzerland / Germany

5'000 Employees in ASG

- 270 in Austria (75 MC, 12 SCM)

Most clients are market leaders in their industry





SCM Procurement Practice

Global Reach

- More than 1'000 procurement projects
- Working for over 350 leading clients on transformational Global Sourcing programs
- 48 countries
- One Global Network
- Indian Analytics Centre

Alliances

- Leading SRM solution - System Integrator for Oracle, SAP, Ariba
- Category specific alliances
- All of our consultants come equipped with eSourcing tools (Emptoris)
- eSourcing alliances



Purchasing & Industry Expertise

- 450 billion EUR spend volume sourced, 30 billion spend volume sourced p.a.
- 7'500 experienced SCM consultants
- More than 1'850 sourcing & purchasing experts
- 175 people in LCC

Services Depth and Breadth

- Purchasing Transformation
- Purchasing Outsourcing
- Global Sourcing (Low Cost Country Sourcing - Strategic sourcing)
- Purchasing Performance Optimization (Organization, People, KPI-Supply Chain intelligence)
- Training – Supply Chain Academy eLearning



This guest lecture will focus on...

- Issue-based problem solving – a must-have skill in management
- Some ways you can use Issue-based problem solving effectively
- How to address the right problems as efficiently as possible



This will going to be a long season...



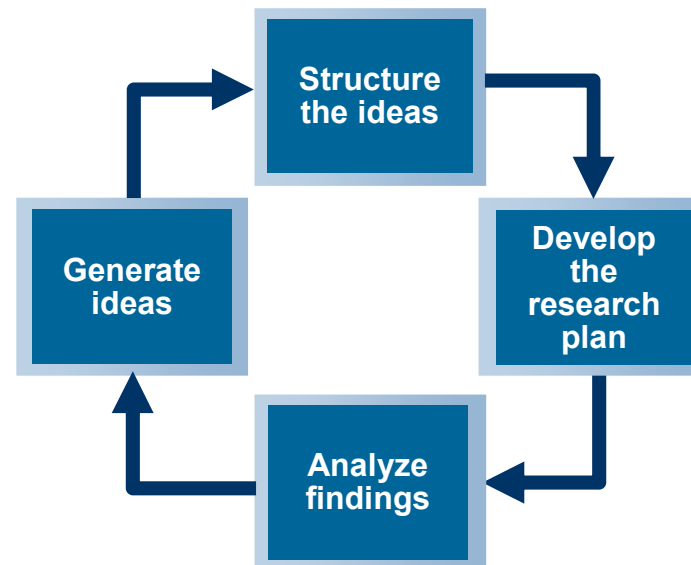
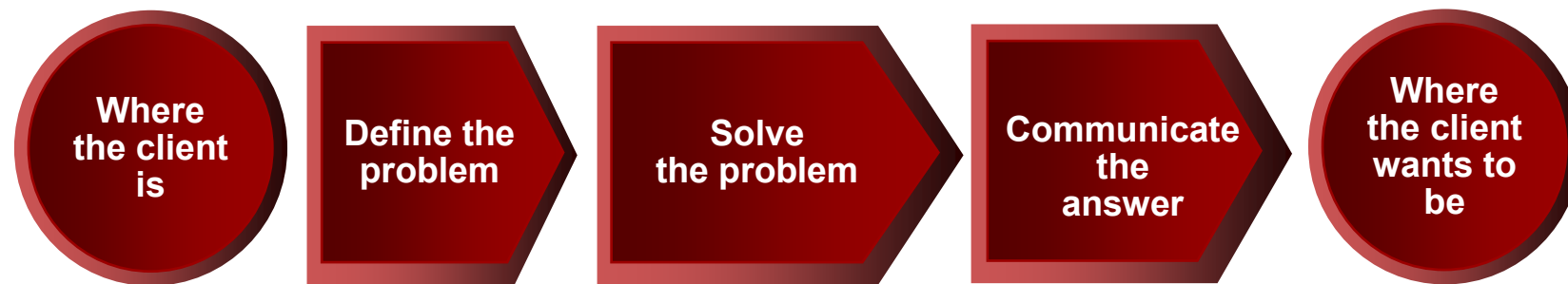


Effectiveness means...

- Understanding and articulating the client problem that the project will solve
- Thinking creatively about innovative, value-adding ways to solve the client problem
- Decomposing the problem into key issues to analyze and hypotheses to test



This approach to solving client problems emphasizes attention to the issues involved



Issue-based problem-solving is intended to clarify and simplify the problem-solving process



Actual Problem-Solving





Be sure to address the right problem

- Review client problem definition
- Check if it is a symptom or a problem is real, but less urgent
- Common problem definition pitfalls
- Involve client in preparing the problem definition worksheet
- Review completed worksheet with client before beginning any analyses



The first step is to define the problem that will focus and set boundaries for the client engagement

Problem Definition Worksheet

Client: _____

C O N T E X T	Key Facts: Relevant information about the client's situation
	Need for Change: Why the client needs to change now—implications, burning platforms, etc.

Key Question: The business question to answer

B U Y E R S	Sponsors: Who brought us (Accenture) in	Criteria for Quality: The client's criteria for a quality product or result
	Key Decision Makers: Who will resolve critical issues	

S C O P E	Desired Outcomes: What the client would like to have at the end of the project	Out of Scope: Issues, effort beyond project boundaries
	In Scope: Deliverables, target dates, and issues	

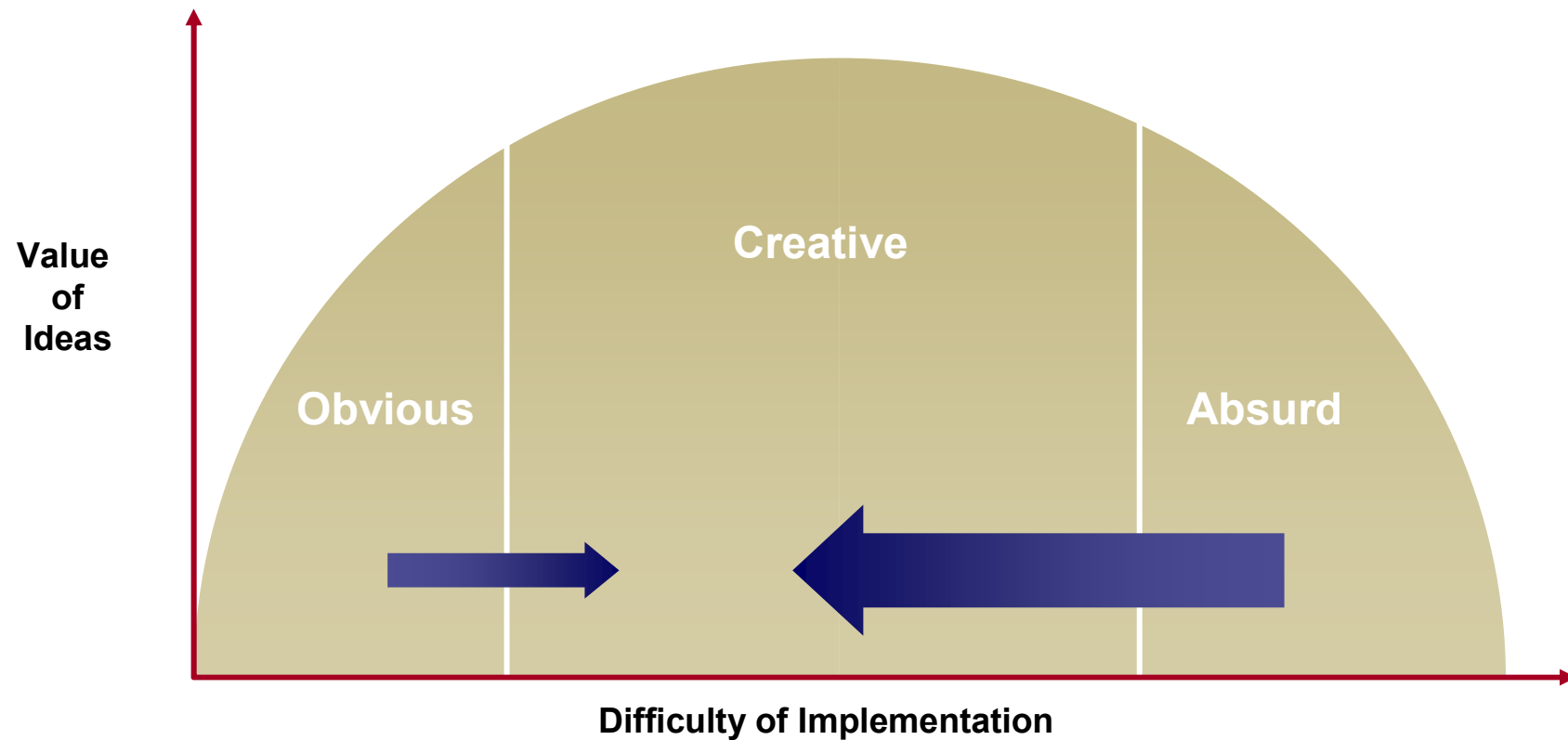


Guidelines to help make brainstorming effective

- Encourage creative, even absurd ideas. Generating creative ideas from obvious ideas is almost impossible
- To move to the other end of the spectrum, short brainstorming exercises on an unrelated subject help, like name 20 birds
- Aim for quantity, not quality. The goal is to generate as many ideas as possible, quickly
- Often setting a goal — say, 20 ideas in 15 minutes — can help. Clustering ideas helps seeing new possibilities



Finding creative solutions to a problem often begins with brainstorming seemingly absurd ideas



Decomposition of the key question into its component issues is the essence of issue mapping



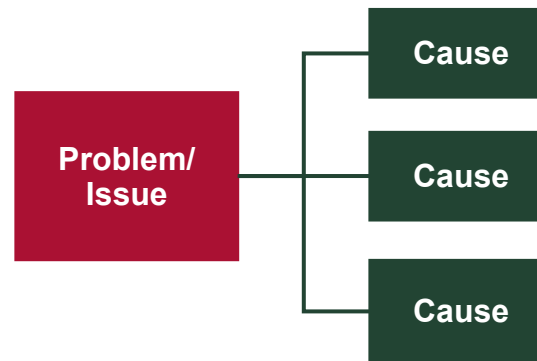
- Critical, and usually time-consuming, step of issue-based problem-solving
- Decomposes the overall problem into issues that the team can address by conducting specific analyses
- Make sure no time is wasted on tangential or irrelevant issues and no essential issue is ignored
- Problem decomposition should continue until the questions are specific enough to match with analyses



Issue trees may be rooted in data or hypotheses

Data-Driven - “Why?”

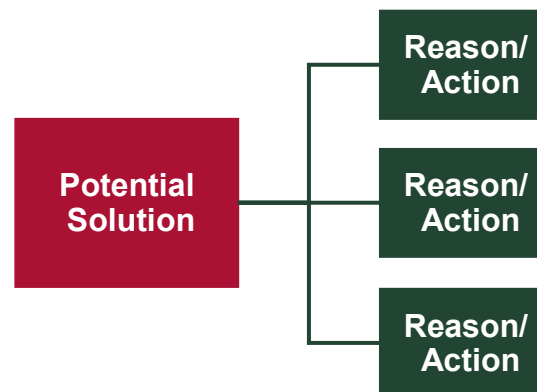
Starts with the problem and decomposes it to arrive at a solution



Makes no initial assumption about the most likely outcome

Hypothesis-Driven - “How?”

Starts with a potential solution and develops a rationale to validate or disprove it

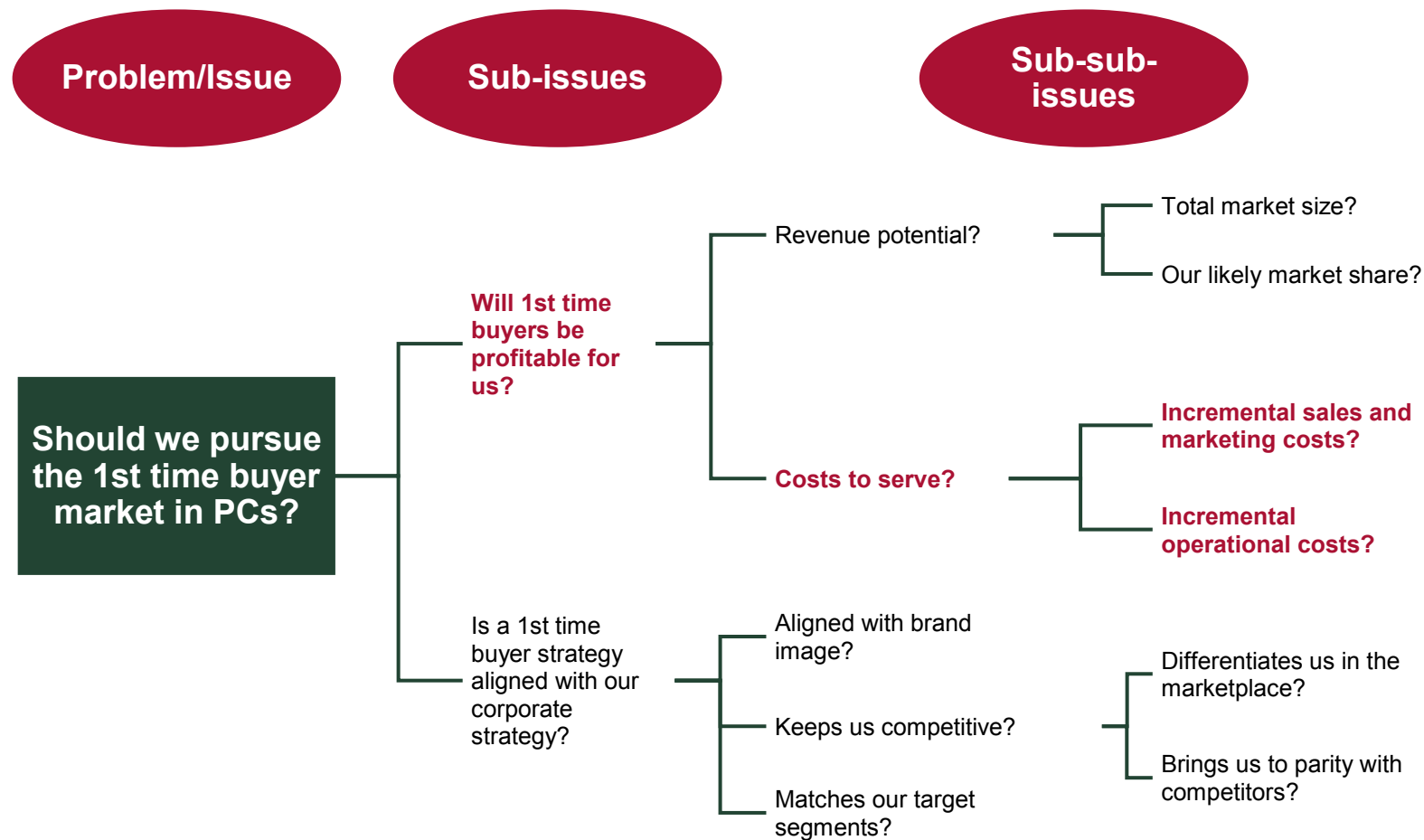


Assumes an answer and creates a structure to test it



Mapping issues on a tree ensures thoroughness and focus

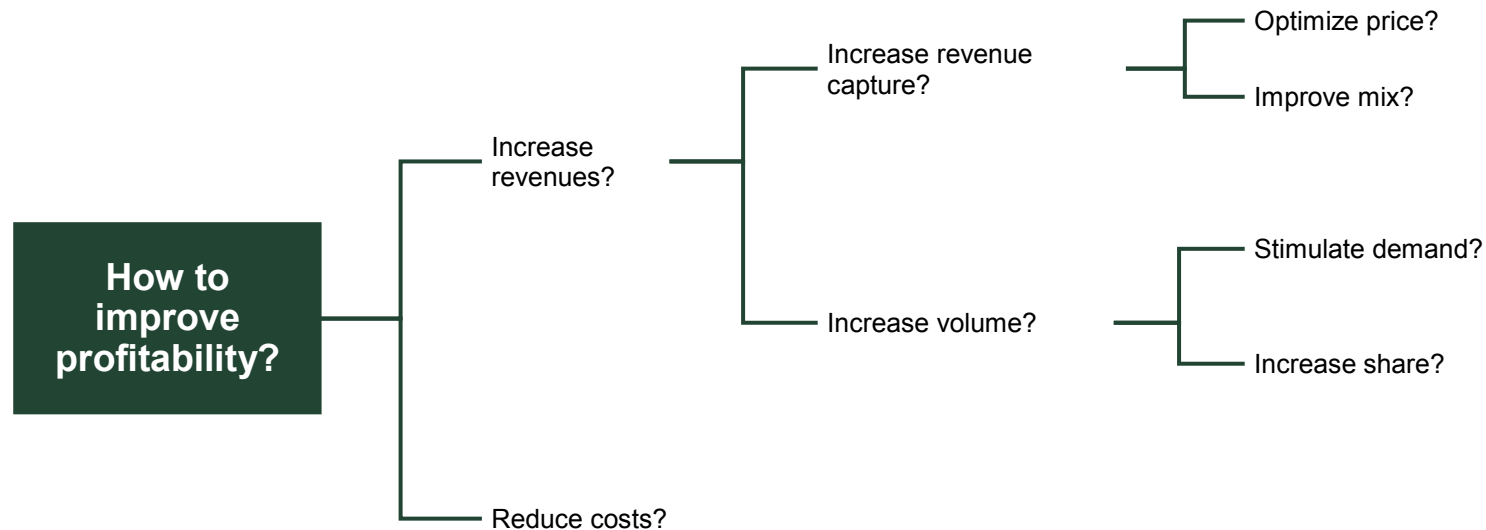
CLIENT EXAMPLE



The challenge lies in finding a meaningful basis of decomposition



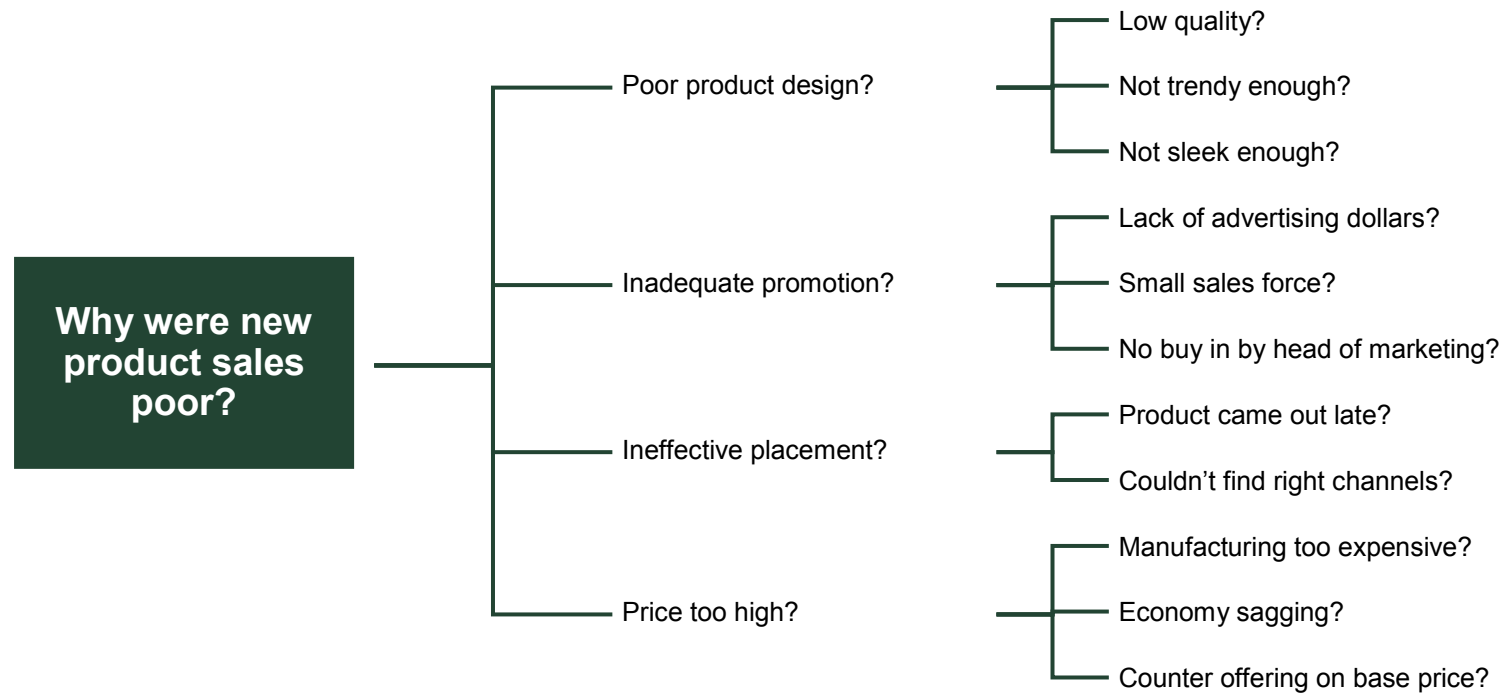
CLIENT EXAMPLE





The challenge lies in finding a meaningful basis of decomposition

CLIENT EXAMPLE



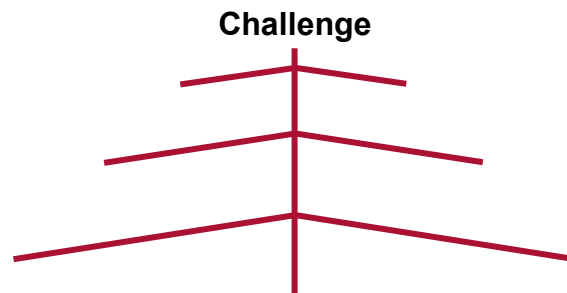


The challenge lies in finding a meaningful basis of decomposition

Obstacle Tree

What are the major obstacles to overcoming this challenge?

- List the obstacles
- Order the obstacles by difficulty of overcoming
- Write the obstacles on the tree branches, with the easiest to overcome at the bottom and the hardest on top



- How could we remove each obstacle? Write the key action above the obstacle on the tree

Source: Thinkertoys

Direct Analogy



- Crumble packed tightly
- Occupy too much space packed loosely

- Natural analogy
- Dried vs. pressed

- Flatten
- Press moist

Source: 101 Creative Problem Solving Techniques

To be logically sound, every grouping must be mutually exclusive and collectively exhaustive (MECE).



- No duplication or overlap of elements
- Elements at a given level are logically part of the level above
- All possible elements at a level above are included at the level below
- Same type of elements within any branch, e.g., actions, items, assertions, characteristics



Internet Case Study for Chapter 7: Process Strategy

Matthew Yachts, Inc.

Matthew Yachts, located in Montauk, Long Island, manufactured sailing yachts of all descriptions. The company had begun by building custom-designed yachts for a largely New York-based clientele. Custom-designed yachts still accounted for three-fifths of Matthew's unit sales and four-fifths of its dollar sales and earnings. Over the years, as Matthew Yachts' reputation for quality design and workmanship spread, sales broadened to cover all of the eastern seaboard.

In an effort to capitalize on this increased recognition and to secure a piece of the fastest growing market in sailing, Matthew Yachts began manufacturing a new standard, fixed-design craft. Matthew attacked only the high end of this market, as the boat measured 37 feet long. Nevertheless, even this end of the market was more price-sensitive and less conscious of performance than Matthew Yacht's custom-design customers were.

All of the company's yachts were manufactured at the Montauk plant and shared the same equipment and skilled labor force. Custom designs were given priority in scheduling, and the new boat was rotated into the schedule only when demand slackened. As sales of the fixed-design boat increased, however, scheduling the new boat on a regular basis became necessary.

Matthew Yachts were built basically from the bottom up. Fabricating hulls was the first step. Increasingly, fiberglass hulls were demanded for their speed and easy maintenance. Afterward came the below-deck woodworking, followed by the fiberglass and woodworking on the deck itself. The masts were turned and drilled separately. Masts and hull were then joined and the finish work completed.

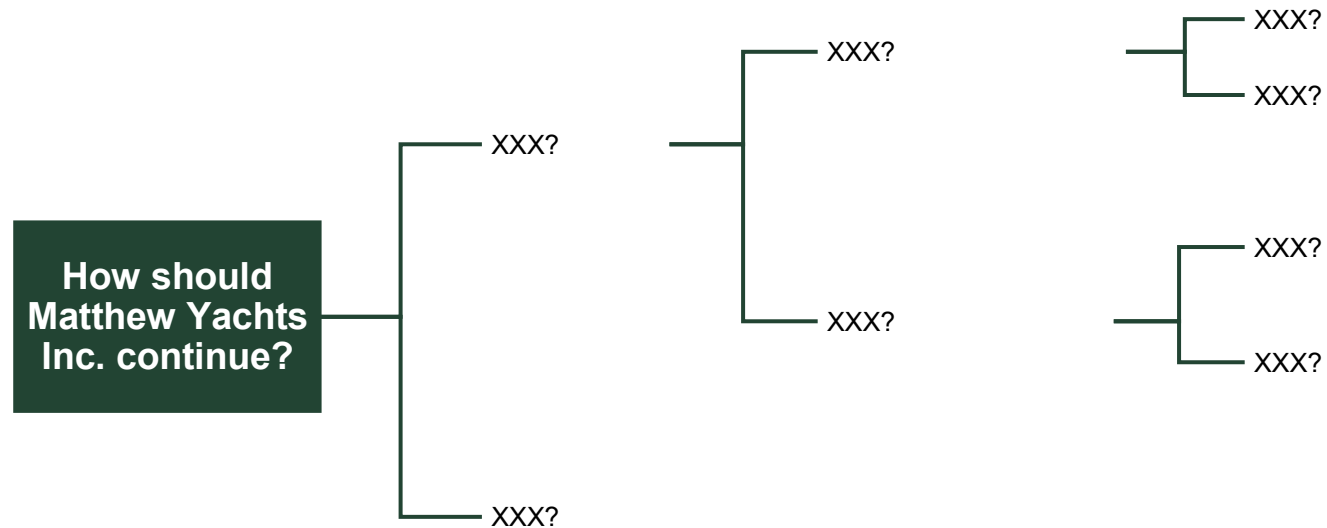
Over the past year, as the fixed-design craft continued its steady increase in sales, costs and deliveries began to slide precipitously, especially on the fixed-design yachts. During this period, when push came to shove, construction of the fixed-design craft always yielded time and resources to the higher-profit-margin custom designs. As a result, many fixed-design yachts were strewn around the yard in various stages of construction. Moreover, space in the existing shipyard was becoming scarce, and a plant expansion of one sort or another appeared inevitable.

Source: Roger W. Schmenner, Production/Operations Management, 5th ed., New York: Macmillan, 1993, p. 517.



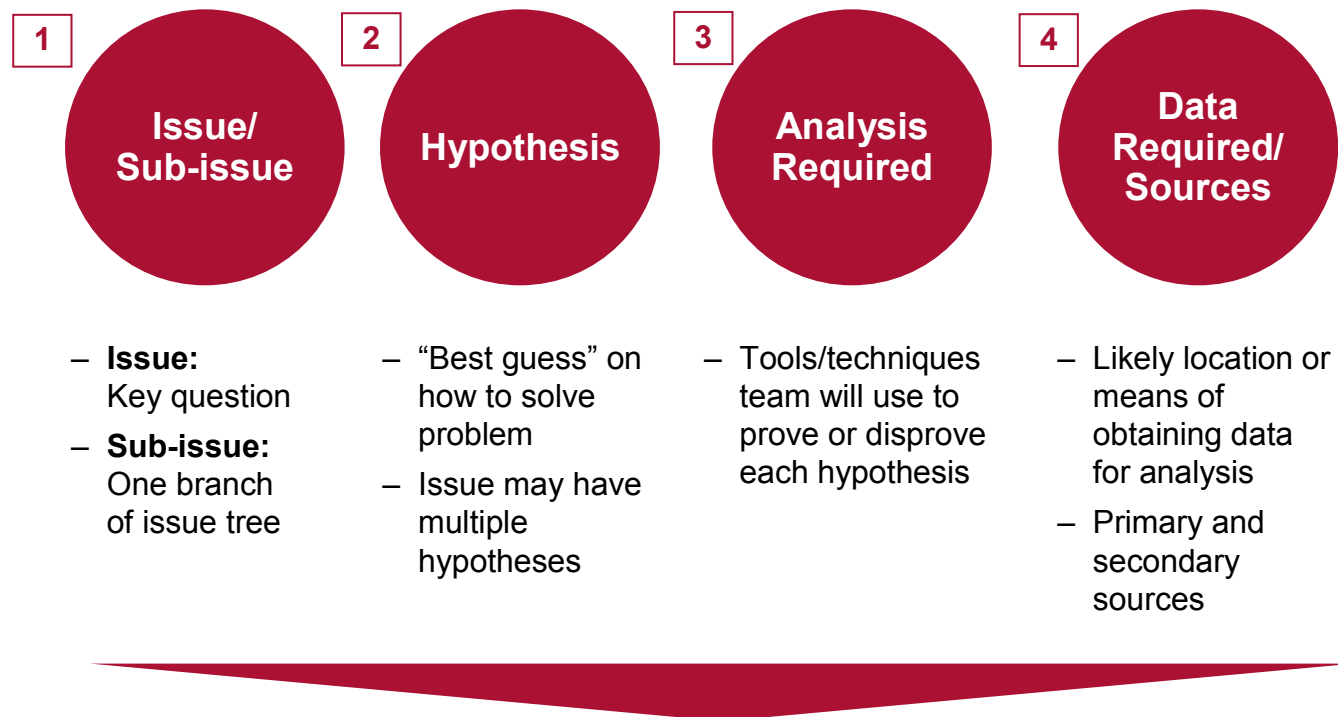
Student Case: Issue-Tree

Given the fact that Matthew Yachts, Inc. has decided to stay in the business of building standard, fixed-design yachts





Research planning forms a bridge from the issue mapping to the work plan



Factors in making choices

Time	Resources
Quality	Certainty required



The completed worksheet suggests how much each issue will require

Issue/Subissue	Hypothesis	Analysis Required	Data Required/Sources
<ul style="list-style-type: none"> • How to improve a company's profitability <ul style="list-style-type: none"> – By increasing revenue – – 	<ul style="list-style-type: none"> • The company can increase revenue and enhance profitability by focusing on a product set and building well-recognized programs in these areas <ul style="list-style-type: none"> – – – 	<ul style="list-style-type: none"> • Assessment (cost/benefit analysis) of potential service offerings <ul style="list-style-type: none"> – Current and potential demand/revenue for different services <ul style="list-style-type: none"> • Size of target population • % using/would consider using the company's services/products • Buyer value (needs) assessment • Competitive assessment; the company's ability to meet customer needs versus our competitors – – – Cost of delivering different levels of capability for each of the possible service areas <ul style="list-style-type: none"> – – – 	<ul style="list-style-type: none"> • Area demographics/census data <ul style="list-style-type: none"> – Number of people – Age – Income <ul style="list-style-type: none"> • • • • Buyer needs and behavior/surveys and focus groups

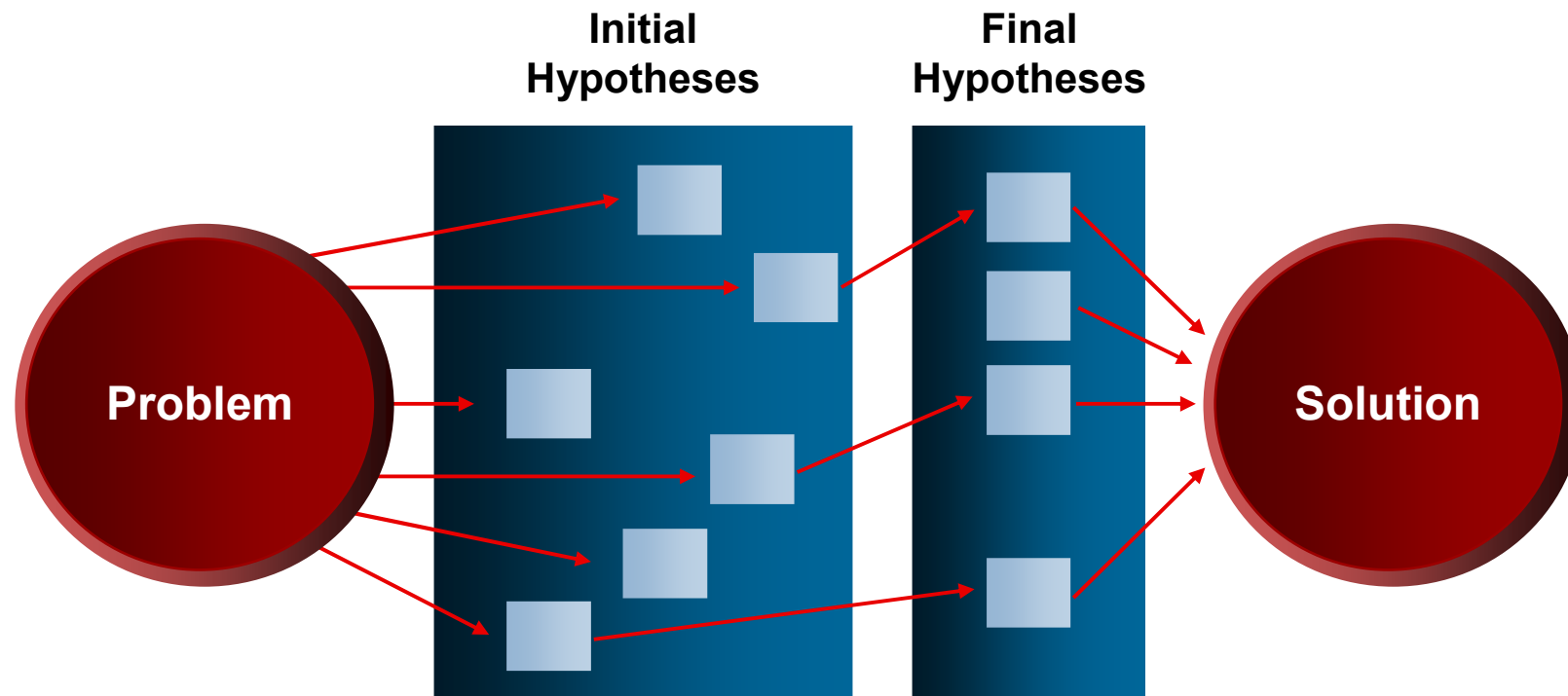


Issue-based problem-solving is an iterative process

Despite the best upfront planning, the research and analysis may **not deliver the results** that the team expected or that solving the client problem demands. The team often needs to **revisit some or all of the steps** and revise the workplan accordingly



As analysis proceeds, many hypotheses are discarded and new ideas added





Finally, the team communicates the answer to the question posed on the problem definition worksheet

- The best solution is worthless unless the client understands and buys into it
- The pyramid represents the core concept of structured communication - every piece can and should be reduced to a single main message



Overall Structure



Individual Page

- Structure communication as a pyramid, presenting the main message first
- Develop the rest of the pyramid to support the main message, in ever greater detail
- Use topic sentences to tell the story mapped by the pyramid



Remember the following things...

- Use questions where possible with a **yes/no discipline** to harden the logic
- The bottom level of the tree must relate to **measurable** and **observable** items in order to prove or disprove hypothesis
- **Don't go for perfection.** Not only is it unnecessary, but the issue tree may be revised several times during the project as more is learned about the problem. During this process, hypotheses will be discarded and replaced



Remember the following things...

- **There is no single correct issue tree** for a given problem, but one may be more useful than another for identifying issues and developing hypotheses
- At first, using an issue tree can be awkward. It **requires very structured thought**. Look at other issue trees to spur your thinking. Understanding and comfort will only come through practice
- **Build the issue tree as a team** to benefit from one another's business experience, enhance communication, and define project roles and responsibilities



Further readings

- James M. Higgins, *101 Creative Problem Solving Techniques: The Handbook of New Ideas for Business*
- Morgan D. Jones, *The Thinker's Toolkit: 14 Powerful Techniques for Problem Solving*
- Michael Michalko, *Thinkertoys: A Handbook of Business Creativity for the 90s*
- Edward de Bono, *Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas*



Open questions?

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