

Welcome to PDMA-India



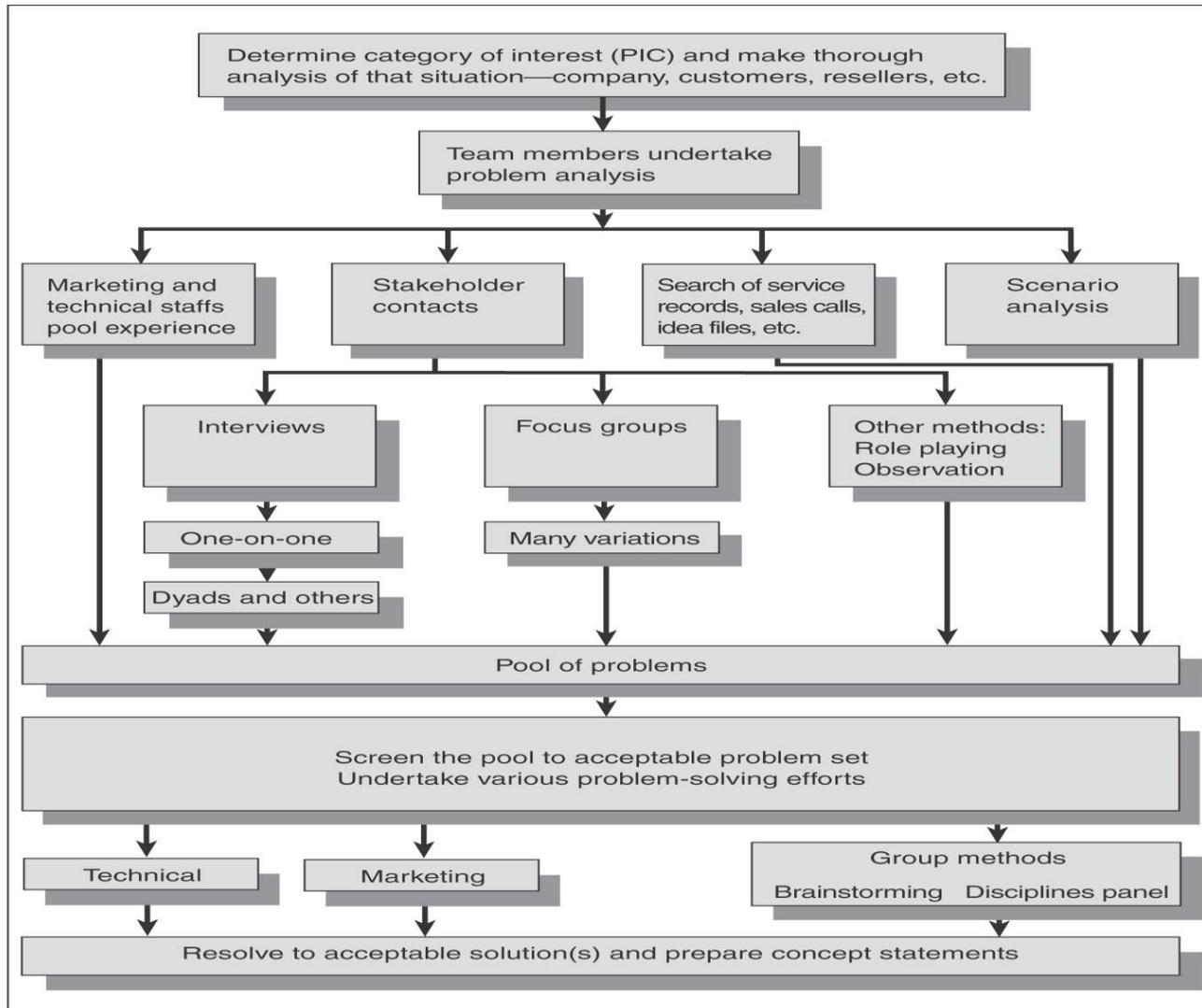
Presenter

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Problem-Based Ideation: Finding and Solving Customers Problems

Problem-Based Concept Generation



Problem Analysis: General Procedure

1. Determine product or activity category for study.
2. Identify heavy users.
3. Gather set of problems associated with product category.
 - ▶ Avoid “omniscient proximity” -- rate importance of benefits and levels of satisfaction.
4. Sort and rank the problems according to severity or importance.

Problem Analysis Applied to the Cell Phone

- ▶ Keeping the unit clean.
- ▶ Breaks when I drop it.
- ▶ Battery doesn't stay charged long enough.
- ▶ Finding it in dark.
- ▶ Battery dies in mid-conversation.
- ▶ Who "out there" hears me?
- ▶ Dropped calls.
- ▶ Looking up numbers.
- ▶ Voice fades in and out.
- ▶ Hard to hold.
- ▶ Health risks?
- ▶ Can't cradle between ear and shoulder.
- ▶ Antenna breaks off.
- ▶ Flip cover breaks off.
- ▶ Disruptive instrument.
- ▶ Can't see facial/body language.
- ▶ Rings too loud/too soft.
- ▶ Wrong numbers.
- ▶ Fear of what ringing might be for.

The Bother-Someness Technique of Scoring Problems

List of pet owners' problems:	A Problem Occurs Frequently	B Problem is Bothersome	A x B
Need constant feeding	98%	21%	0.21
Get fleas	78	53	0.41
Shed hairs	70	46	0.32
Make noise	66	25	0.17

Problem Analysis: Sources and Methodologies

- ▶ Experts
- ▶ Published Sources
- ▶ Contacts with Your Business Customers or Consumers
 - ▶ Interviewing
 - ▶ Focus groups
 - ▶ Observation of product in use
 - ▶ Role playing

Typical Questions for Problem Analysis Focus Groups

- ▶ What is the real problem here – what if the product category did not exist?
- ▶ What are current attitudes and behaviors of focus group members toward the product category?
- ▶ What product attributes and benefits do the focus group members want?
- ▶ What are their dissatisfactions, problems, and unfilled needs?
- ▶ What changes occurring in their lifestyles are relevant to the product category?

Observation and Role Playing in Problem Analysis

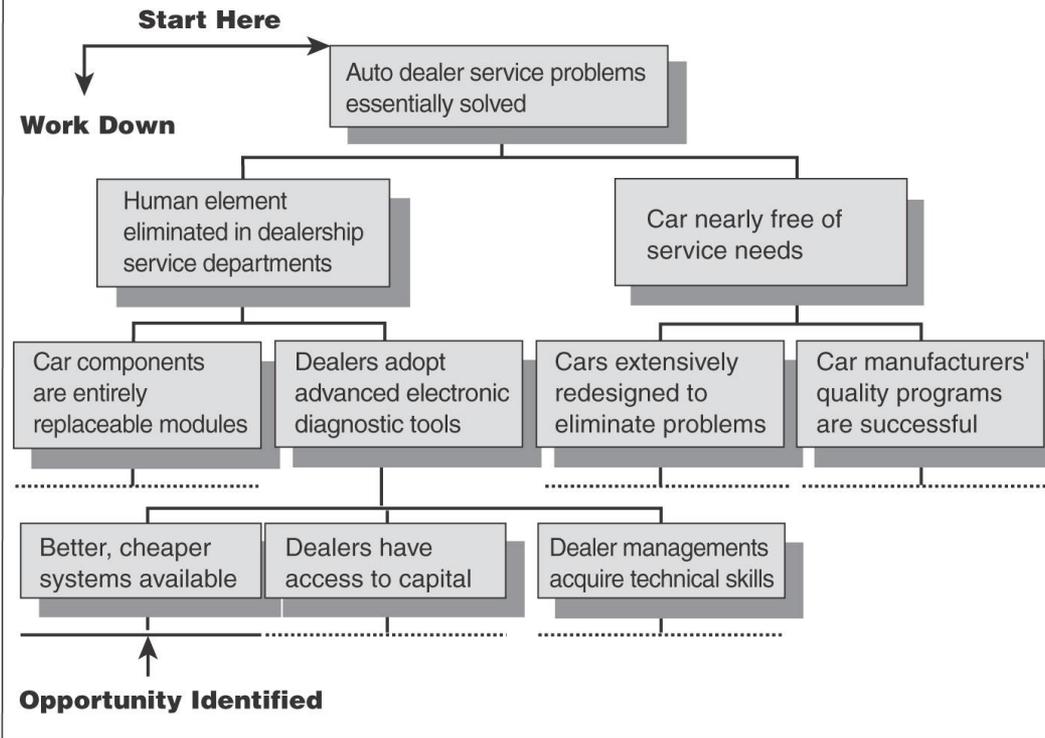
- ▶ Carmakers send their designers out to parking lots to watch people and how they interact with their cars (Ford called this “gorilla research”).
- ▶ Honda got insights as to how large the passenger compartments of their SUVs should be by observing U.S. families.
- ▶ Bausch and Lomb generated ideas on making contact lenses more comfortable by getting pairs of executives to act out skits in which they played the eyeball and the contact lens.

Scenario Analysis

- ▶ “Extending” vs. “leaping”
- ▶ Using seed trends for an “extend” scenario
- ▶ Techniques:
 - ▶ Follow “trend people”/”trend areas”
 - ▶ “Hot products”
 - ▶ Prediction of technological changeover
 - ▶ Cross-impact analysis

Relevance Tree Form of Dynamic Leap Scenario

The analysis begins at the top of the chart (the ideal future condition that is the expected end). Working down the page, each level shows the necessary conditions for the item above it. All branches of the Relevance Tree are worked down to the conditions that already exist. Somewhere in the analysis, on one of the branches, a condition that does not exist offers someone today an opportunity for product innovation. In this diagram, with only a few of the branches completed, there appears to be an opportunity for some firm to develop better, cheaper diagnostic systems for dealers to use. (The analysis is for demonstration only.)



Wild Card Events and Their Consequences

- ▶ **No-Carbon Policy:** Global warming may cause governments to put high taxes on fossil fuels, shifting demand to alternative sources of energy. This changes the allocation of R&D investment toward alternative energy, possibly causes new “energy-rich” nations to emerge, and ultimately may lead to a cleaner environment for everyone.
- ▶ **Altruism Outbreak:** This is the “random acts of kindness” movement – solve social problems rather than leaving it up to the government. Schools and other institutions will revive due to community actions, and perhaps inner cities would be revitalized.
- ▶ **Cold Fusion:** If a developing country perfects free energy, it becomes prosperous overnight. It gains further advantages by becoming an energy exporter.

Solving the Problem

- ▶ Group Creativity Methods/Brainstorming
- ▶ Principles of Brainstorming:
 - ▶ Deferral of Judgment
 - ▶ Quantity Breeds Quality
- ▶ Rules for a Brainstorming Session:
 - ▶ No criticism allowed.
 - ▶ Freewheeling -- the wilder the better.
 - ▶ Nothing should slow the session down.
 - ▶ Combination and improvement of ideas.

Brainstorming Techniques

- ▶ Brainstorming circle
- ▶ Reverse brainstorming
- ▶ Delphi method

Electronic Brainstorming

- ▶ Supported by GSS (group support systems) software.
- ▶ Overcomes many drawbacks of brainstorming (only one can talk at a time, fear of contributing, “social loafing”).
- ▶ Participants sit at networked terminals.
- ▶ Contributions are projected on screen, and also recorded (so no errors are made in transcription).
- ▶ Can be done over multiple sites via computer linkups or videoconferencing.
- ▶ Can handle larger size groups (into the hundreds).

