

The HBR guide to generative AI for managers contains insightful approaches to using generative AI as a Co-pilot or Co-thinker for problem-solving and root cause analysis. “You can ask *gen AI* to help you and your team understand various methods of root cause analysis such as the ‘five whys’ technique, fishbone diagrams [Ishikawa diagram], fault tree analysis and others.”⁴⁵ This makes it much easier to systematically identify the true causes of issues rather than merely reacting to symptoms, enabling teams to design deeper, more durable solutions.

Figure 4.1 illustrates practical problem-solving tools and techniques that can be used alongside generative AI to clarify problems and generate multiple potential solutions. For example, a retail company facing long wait times and low satisfaction scores combines high-quality AI prompts with design thinking to address this common customer service challenge:

Empathize: Analyze customer feedback with AI to identify key pain points.

Define: Clarify the issue as inefficient handling of routine inquiries.





Ideate: Generate ideas and decide to implement an AI-powered chatbot to automate basic queries.

Prototype: Develop and test the AI chatbot to improve response quality.

Test: Use AI analytics to refine the system based on real user interactions.

⁴⁵. Farri and Rosani, HBR Guide to Generative AI for Managers.

Figure 4.1. Problem-Solving Tools and Techniques

Problem-Solving Tools and Techniques		
Mind Map	– Brainstorm multiple causes and solutions around a central problem.	
Flow Chart	– Map linear process steps to pinpoint errors, delays, or inefficiencies.	
The 5 Whys	– Ask "why" at least five times to trace the root cause of the problem.	
Ishikawa Diagram	– Identify the problem, classify causes (e.g. people, processes, machines), and analyze to find the root issues.	
Design Thinking	– Focus on user needs through empathy, defining the problem, ideation, prototyping, and testing.	