**Real-Time Use Case: Implementing AI in Customer Support:**

**Skills Gap Analysis and Design Thinking Approach**

**Scenario:**  
A company wants to integrate AI-powered chatbots into its customer support system to improve response times and reduce workload on human agents. However, there are skill gaps preventing effective implementation.

**Skills Gap Analysis Table:**

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| Skill area | Current state | Desired state | Identified gap | Action plan |
| AI & Chatbot Development | Basic understanding of AI, but no expertise in chatbot design | Ability to design, train, and deploy AI-powered chatbots | Lack of technical expertise in NLP, chatbot frameworks, and API integration | Conduct AI and chatbot development training programs |
| Data Analysis & AI Training | Limited knowledge of data collection and processing | Ability to analyze customer queries and train AI models for better responses | Inability to handle customer interaction data for AI training | Upskill employees in data science and AI model training |
| Customer Experience (CX) Strategy | Customer service is reactive, not predictive | AI should enhance personalized and proactive responses | Limited understanding of customer journey mapping | Train staff in CX strategy and UX research |
| Problem-Solving & Critical Thinking | Employees rely on predefined scripts | Need adaptive thinking to improve chatbot response accuracy | Lack of strategic problem-solving skills | Conduct design thinking workshops |
| Change Management & Digital Adoption | Employees resist AI adoption due to fear of job loss | Smooth transition with AI augmenting human roles | Resistance to change and lack of awareness | Organize change management sessions and highlight AI’s role in assisting employees |

**Skills Developed Through Design Thinking:**

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| Design Thinking Phase | Skills Developed | Impact on Skills Gap (Industry Use-Case) |
| Empathize | Customer Research, Active Listening | AI chatbots are trained using real customer pain points, ensuring better query resolution. |
| Define | Analytical Thinking, User Problem Identification | Helps businesses identify why current chatbots fail & improve response mechanisms. |
| Ideate | Creativity, Innovation | Businesses explore alternative AI solutions, such as hybrid AI-human support models. |
| Prototype | AI Experimentation, Testing | AI models are tested with real customer interactions before full deployment. |
| Test | Continuous Learning, Feedback Analysis | AI chatbots are refined based on ongoing customer feedback, improving accuracy. |