

Ideation Phase

Empathize & Discover

Date	28 January 2026
Team ID	LTVIP2026TMIDS66183
Project Name	Project – Civil Engineering Insight Studio
Maximum Marks	4 Marks

Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

Civil Engineering Insight Studio

Civil engineering challenges are among the major issues faced in modern infrastructure development. Rapid urbanization, increasing population, and growing construction demands have led to complex project planning, safety concerns, cost overruns, and sustainability challenges. Inefficient design decisions and lack of real-time analytical insights often result in structural risks, material wastage, and delayed project execution. Maintaining accurate visibility into structural performance, material usage, and project progress at every stage is essential for authorities and planners to make informed decisions related to infrastructure expansion, resource optimization, and sustainable urban development.

To address these challenges, data-driven analytics and AI-assisted engineering insights provide effective solutions by analyzing historical project data, structural parameters, material properties, and environmental factors. Such systems enable performance evaluation, risk identification, cost optimization, and sustainability assessment across various civil engineering projects. By leveraging analytical models and intelligent data processing, Civil Engineering Insight Studio supports engineers and decision-makers in designing safer, more efficient, and sustainable infrastructure systems.

Empathy Canvas Map for the Project:

