

## IdeationPhase

### Define the Problem Statements

Team ID	NM2025TMID04752
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	

#### Customer Problem Statement :

Customers face challenges in efficiently managing users, groups, and roles within their systems. Manual access control processes often lead to permission conflicts, inconsistent role assignments, and security risks. These issues cause confusion among administrators and delay workflow execution. Lack of automation in user and role management also increases the risk of human error and non-compliance.

They need a structured and automated solution to define roles clearly, manage access permissions effectively, and streamline workflows. Implementing this solution will enhance data security, reduce administrative workload, and improve overall operational efficiency and system reliability.

### Problem & Solution Table

Problem	Description	Solution
<b>Access Control Inconsistency</b>	Inconsistent user permissions and access levels lead to security vulnerabilities.	Define clear access controls and permission policies
<b>Role Overlap and Mismanagement</b>	Overlapping roles and poor management cause confusion and as-	Establish distinct roles and assign appropriate permissions
<b>Workflow Delays</b>	Manual processes slow down workflows and increase error rates.	Automate workflows to reduce manual intervention
<b>Security and Compliance Risks</b>	Insufficient controls expose sensitive data and violate compliance.	Implement robust security measures and audit trails
<b>Audit &amp; Monitoring Gaps</b>	Lack of visibility makes it difficult to track user activities and changes.	Enhance monitoring and reporting capabilities

**Example:**

**Problem Statement PS 1:**

As an admin, I am trying to manage user roles and remove inactive accounts, but the system restricts changes because dependencies and access links are unclear. This makes me feel stuck and frustrated, as it slows down maintenance and affects workflow efficiency.

I need a clearer way to identify role dependencies and automate reassignment before making changes or deletions.

**Problem Statement PS 2:**

As a team manager, I want to ensure user responsibilities are properly reassigned when roles or accounts change. However, the system lacks alerts or automated reassignment, causing gaps in task ownership and reduced team efficiency.

An automated workflow for reassignment and notifications would maintain accountability and ensure smooth operations.

**Problem Statement PS-3:**

As a security officer, I want to review and monitor user permissions across groups and roles, but the system lacks proper visibility and reporting tools. This makes it difficult to track access levels and ensure compliance.

A centralized dashboard and audit trail would improve transparency and strengthen security control.

**Problem Statement PS-4:**

As an IT operator, I need to modify user roles without disrupting existing permissions or workflows. However, unclear role dependencies cause conflicts and errors during updates.

A structured role hierarchy with automated validation would prevent misconfigurations and ensure system stability.