

## Project Design Phase

### Problem – Solution Fit Template

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|---------------|--|
| Date          | 27 JUNE 2025   |
| Team ID       | NM2025TMID07955  |
| Project Name  | OPTIMIZING USER, GROUP, AND ROLE MANAGEMENT THROUGH ACCESS CONTROL AND WORKFLOWS |
| Maximum Marks | 2 Marks  |

#### Problem – Solution Fit

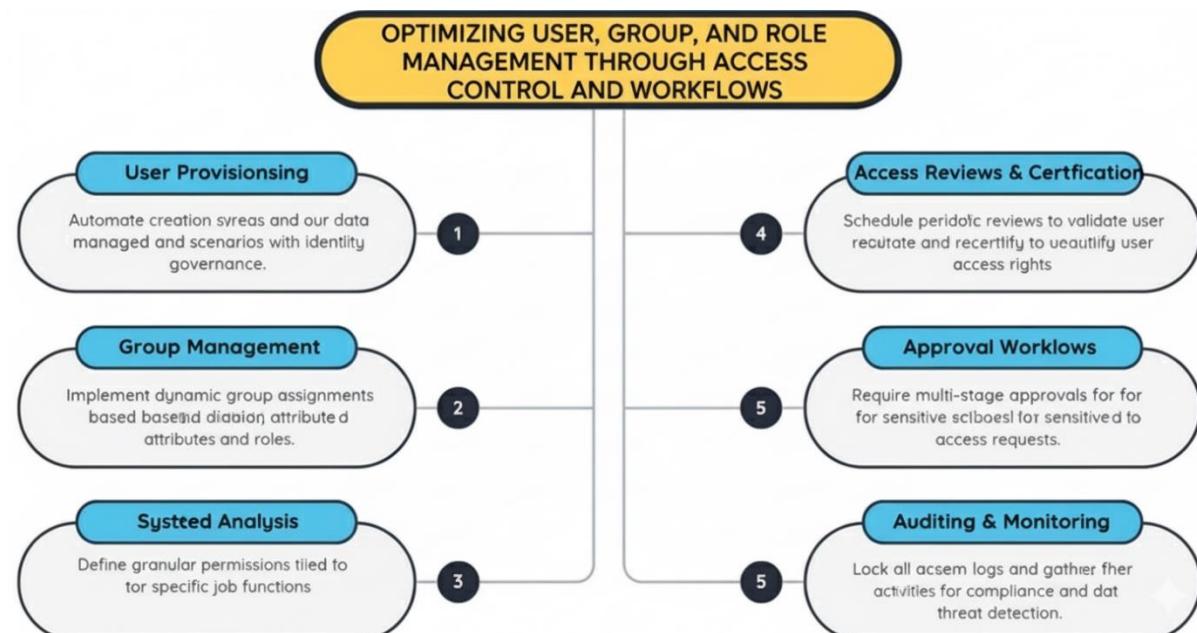
In many organizations, managing users, groups, and roles remains a manual and time-consuming process. Administrators are required to assign permissions, approve access requests, and track changes individually — leading to inconsistencies, human errors, and increased security risks. The lack of automated workflows further causes approval delays and makes it difficult to maintain consistent and secure access control across systems.

The proposed solution addresses these challenges by implementing an automated access control and workflow-based user management system. This system streamlines the assignment of roles, management of group memberships, and control of access permissions. By leveraging predefined rules and approval workflows, organizations can ensure that the right users receive the right level of access at the right time — thereby enhancing security, operational efficiency, and accountability.

#### Purpose

- To simplify and automate complex user, group, and role management processes through structured access controls and approval workflows.
- To enhance operational efficiency and minimize manual errors by implementing automation aligned with organizational needs and user behavior.
- To strengthen system security and compliance by enforcing consistent, rule-based access to sensitive data and resources.
- To improve user satisfaction and trust through a transparent and efficient process for access requests and approvals.
- To identify existing access management challenges and design a workflow-driven solution that enhances security, accountability, and performance for all stakeholders.

#### Template:



#### References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>

## **Project Overview**

The project “Optimizing User, Group, and Role Management through Access Control and Workflows” aims to enhance the efficiency, security, and accuracy of administrative operations within an organization. In many existing systems, user and role assignments are performed manually, increasing the likelihood of mismanagement, unauthorized access, and operational inefficiencies.

This project introduces automated access controls and approval workflows to streamline the assignment, modification, and revocation of user roles and permissions. By incorporating rule-based validations, predefined approval hierarchies, and continuous monitoring, the system ensures that access rights are securely managed and aligned with organizational policies.

The solution improves data security, accountability, and regulatory compliance, while significantly reducing the administrative workload for IT teams. Ultimately, this project establishes a strong foundation for a secure, transparent, and efficient role-based access management framework within enterprise environments.

