

## Project Design Phase

### Proposed Solution

|               |   |
|---------------|---|
| Date          | 02 NOV 2025                                   |
| Team ID       | NM2025TMID08125                               |
| Project Name  | Calculating Family Expenses Using Service Now |
| Maximum Marks | 2 Marks                                       |

### Proposed Solution Template:

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | Families face difficulty in tracking and managing daily expenses accurately due to manual entry, miscommunication, and lack of centralized records.          |
| 2.    | Idea / Solution description              | Develop a ServiceNow-based automated expense management system that allows families to record, categorize, and analyze expenses efficiently in real time.    |
| 3.    | Novelty / Uniqueness                     | The system combines automation, transparency, and collaboration by enabling multiple users to input expenses and view consolidated reports in one dashboard. |
| 4.    | Social Impact / Customer Satisfaction    | The solution minimizes manual effort, reduces calculation errors, improves accuracy, and enhances financial awareness and planning for families.             |
| 5.    | Business Model (Revenue Model)           | Can be offered as a cloud-based family expense tracker with tiered subscription plans or a free version for small households with limited features.          |
| 6.    | Scalability of the Solution              | The solution can scale by integrating with banking APIs, digital wallets, and advanced analytics for budgeting and predictive insights.                      |

## Conclusion

To prevent 'Calculating Family Expenses Using ServiceNow' addresses a significantly reliable tracking of family expenses in data management within family budgeting through automation, improves financial transparency and simplify tracking, reduce errors, and fosters accountability among family members. Reducing cost errors and fosters better accountability among family members.

### **Solution Description:**

To ensure accurate and reliable tracking of family expenses in ServiceNow, a custom business rule is implemented on the expense record table. This rule validates each entry by checking whether the expense details are complete and correctly categorized before submission. If missing or inconsistent data is detected—such as an uncategorized expense or invalid amount—the system prevents record creation and displays an appropriate error message.

This approach leverages native ServiceNow functionalities, making the solution simple, plugin-free, and easy to maintain. The automated validation ensures data accuracy, financial accountability, and smooth expense tracking workflows. It also enhances transparency among family members and prevents errors that could affect monthly budget calculations or reports.