

<b>Date:</b>	<b>2 November 2025</b>
<b>Project Title:</b>	<b>Calculating Family Expenses using ServiceNow</b>
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## Proposed Solution

### Project Design Phase – Calculating Family Expenses using ServiceNow

#### 1. Overview

The proposed solution aims to develop a centralized digital platform on ServiceNow that automates and simplifies the process of calculating, monitoring, and managing family expenses. This system provides real-time insights, approval workflows, and intelligent reporting to support better financial decision-making for families.

#### 2. Solution Objectives

- To automate expense tracking and calculation.
- To ensure transparency and accessibility for all family members.
- To provide detailed analytics for improved financial planning.
- To create a scalable and user-friendly expense management system within ServiceNow.

#### 3. System Architecture

The proposed architecture leverages ServiceNow's Now Platform capabilities:

1. **User Interface Layer** – Custom forms for expense entry and reporting.
2. **Business Logic Layer** – Workflows to automate calculations and approvals.
3. **Data Layer** – Tables for storing expense details, categories, and user profiles.
4. **Integration Layer** – Optional API integrations for external financial data or notifications.

#### 4. Key Functional Components

Component	Description
Expense Entry Module	Allows users to record daily, weekly, or monthly expenses.
Expense Calculation Engine	Automatically sums and categorizes expenses.
Approval Workflow	Enables review and approval of shared or large expenses.
Analytics Dashboard	Provides visual insights on spending trends and budgets.
Notification System	Sends alerts for budget thresholds or report generation.

#### 5. ServiceNow Features Utilized

- Flow Designer – For automating approval and calculation workflows.
- Service Catalog – For managing and submitting expense entries.
- Reporting & Dashboards – For real-time visualization of expenses.
- ACL & Roles – To ensure data security and role-based access control.

- Integration Hub – For future connectivity with banking or financial APIs.

## 6. Expected Benefits

Benefit	Impact
Automation	Reduces manual data entry and calculation errors.
Transparency	All family members can view and verify expenses.
Efficiency	Speeds up approval and reporting processes.
Scalability	Can be extended with new financial features.
Data Insights	Supports smarter budgeting and saving strategies.

## 7. Conclusion

The proposed Family Expense Management System using ServiceNow offers an intelligent and scalable approach to simplifying household financial management. Through automation, analytics, and collaboration tools, the solution ensures efficiency, accuracy, and informed decision-making within families.