

## **Phase 1: Problem Understanding & Industry Analysis**

### **Project Title:**

AI-Powered Dynamic Pricing & Quoting Engine (CPQ)

### **Problem Statement**

In today's competitive B2B and SaaS landscapes, sales teams often struggle with legacy quoting systems that are slow, error-prone, and unable to adapt to real-time market changes, leading to lost revenue, eroded margins, and delayed deal closures. Traditional CPQ (Configure, Price, Quote) processes rely on static rules and manual interventions, which fail to incorporate dynamic factors like customer behaviour, competitor pricing, inventory levels, or economic shifts. This results in suboptimal pricing—e.g., over-discounting to win deals (reducing margins by up to 15%) or under-pricing due to outdated data (missing 20-30% revenue uplift opportunities). Integrating AI addresses these gaps by enabling predictive analytics for win probabilities, personalized recommendations, and automated adjustments, but many organizations lack a unified engine to blend CPQ with Einstein AI, causing fragmented workflows and compliance risks. The core problem is building an agile system that streamlines quoting while maximizing revenue through intelligent, dynamic pricing in a 2025 AI-driven economy.

### **Proposed Salesforce Solution**

Building a Salesforce Revenue Cloud app that:

- Centralizes product, quote, and pricing data.
- Integrates with external market APIs to track real-time pricing.
- Leverages Einstein AI to recommend personalized pricing strategies, upsells, and win probability predictions.
- Provides dashboards for sales teams, pricing officers, and management to measure quote success and revenue impact.

### **1. Problem Statement**

#### **Colleges face challenges in:**

Tracking quote performance, pricing rules, and AI recommendations in one place.

Managing dynamic pricing and market integrations effectively.

Connecting quotes with opportunities based on customer segments and behaviors.

Offering personalized pricing guidance that improves revenue and margins.

### **This leads to:**

Manual pricing management.

Missed upsell and revenue opportunities.

Low sales engagement and unclear pricing strategies.

Our project addresses these issues by building a Salesforce Revenue Cloud App that:

Maintains a complete quote profile.

Integrates with market APIs.

Tracks pricing rules, discounts, and win probabilities.

Uses Einstein AI to recommend pricing strategies, upsells, and placements.

## **2. Requirement Gathering**

### Functional Requirements

**Quote Management:** Create quote records with product info, pricing history, customer segments, and AI recommendations.

**Product/Pricing Management:** Track product bundles, pricing rules, discount thresholds, and market status.

**Performance Tracking:** Map win probabilities, discount rates, and quote participation.

**Pricing Guidance:** Use AI to suggest suitable pricing models based on market gaps and performance.

**Notifications:** Send alerts for upcoming market changes, high-risk quotes, or recommended adjustments.

### Non-Functional Requirements

**Scalability:** Must handle thousands of quotes and product records.

**Data Security:** Follow Salesforce's security model (profiles, roles, sharing rules).

**User Experience:** Offer a simple Lightning UI for sales reps, pricing officers, and management.

**Integration:** Ensure smooth integration with external market APIs and ERP systems using REST APIs.

### 3. Stakeholder Analysis

Stakeholder	Role	Expectations
Sales Rep/Placement Officer	Manages quote data, tracks pricing	Easy dashboard, scheduling tools, analytics
Pricing Manager	Inputs discounts, monitors performance	Simple UI to update pricing progress
Customers	View quotes, apply for deals	Personalized pricing guidance, alerts
Vendor Companies	Post products, adjust pricing	Access to eligible opportunities, communication
Management	Decision-making based on reports	Complete view of performance and revenue stats

### 4. Business Process Mapping

#### As-Is Process (Current Situation):

Quote data maintained manually (Excel and spreadsheets).

Pricing adjustments coordinated via email and phone.

No centralized performance dashboard.

Quotes depend on generic pricing advice.

#### To-Be Process (After Salesforce Implementation):

Quote data stored in Salesforce (centralized).

Automatic flow for pricing (eligibility check, scheduling, and status tracking).

Real-time dashboards for sales management.

Einstein AI recommends pricing strategies and upsells to quotes.

### 5. Industry-Specific Use Case Analysis

#### SaaS/Tech Industry Trends :

Growing use of Revenue CRM platforms for quote lifecycle management.

Need for data-driven pricing guidance to enhance revenue rates.

Demand for personalized pricing paths using AI and machine learning.

**Salesforce is widely used in SaaS/Tech for :**

Quote information systems.

Engagement and revenue retention.

Pricing counselling and opportunity management.

Our solution fits these industry needs perfectly.

## **6. AppExchange Exploration**

**In this phase, we explored Salesforce AppExchange apps such as :**

PROS Smart CPQ and Revenue Cloud (Revenue Data Architecture): For quote lifecycle management.

**Conga Contracts :** For scheduling pricing approvals.

**MuleSoft Connectors :** For integrating external market APIs.

We will use Salesforce Revenue Data Architecture (RDA) as the base model and customize it for our project.

## **7. Use Cases, AI-Powered Dynamic Pricing & Quoting Engine (CPQ)**

### **Quote Management**

- Create and maintain quote records, including product info, pricing history, customer segments, and AI recommendations.
- Centralize all performance data in one place for sales, pricing officers, and management to access.
- Track discounts, win probabilities, and participation in deals or adjustments.

### **Product & Pricing Management**

- Maintain a database of products with details such as family, list prices, and locations.
- Record pricing rules and discount thresholds with eligibility criteria, markups, and duration.
- Track quote applications and connect them to products.

### **Pricing & Adjustment Scheduling**

- Schedule price reviews and adjustments for eligible quotes.

- Send SMS and email notifications and reminders to sales about upcoming changes.
- Track quote attendance and results from each pricing round.

### **Pricing Guidance & Recommendations**

- Use Einstein AI to evaluate quote performance and risks.
- Recommend pricing paths, upsells, and adjustments based on market gaps.
- Display recommended opportunities on the sales portal or dashboard.

### **Reporting & Analytics**

- **Provide a dashboard for pricing officers that shows :**
  - Number of quotes approved
  - Adjustment success rates
  - Risk gap analysis across batches
- Track quote progress over quarters.
- Offer management real-time insights for decision-making.