GENERAL INFORMATION REGARDING THE CASE STUDY AND PARTICIPANTS
Name and Address of the Organization: Bharat Petroleum Corporation Limited Pipelines Department Sewree 'K' Installation, Sewree-Fort Road, Sewree, Mumbai- 400 015

Contact Information of all Contributors (Please designate a primary contact author). Do not give any author/ contributor details /identity except on the cover page sheet as case studies are blind reviewed.	
Primary Contact	**Name: ARJUN PATIL** **Designation: Senior Manager, Procurement & Contract Services, BPCL (Pipelines)** **Mobile: +91 9584042652** **Email: arjunpatil@bharatpetroleum.in**
Team Members	1. **Manoj Jadhav** 2. **Namit Chittoria** 3. **Vikash Kumar**

We want to get the Case Study Published through ICRC:

Yes ☑

No ☐

CASE TITLE:

Revolutionizing Procurement Efficiency: Automation of SOR Rate Mapping in BPCL

CASE ABSTRACT:

BPCL's procurement process for service jobs such as civil, electrical, mechanical, and instrumentation works relied on manually mapping Schedule of Rates (SOR) in SAP. While SOR ensured consistent pricing, its manual application posed significant challenges, including inefficiency, high error rates, and prolonged procurement timelines. Recognizing these limitations, in 2023, BPCL identified an opportunity to innovate by automating SOR rate mapping in SAP, including escalation management for pipeline-specific jobs. This transformation streamlined procurement workflows, improved governance, and enhanced accuracy. The initiative has demonstrated measurable impact by reducing manhours, accelerating procurement cycles, and eliminating manual errors, setting a precedent for scalable, sustainable procurement reform.

CASE BODY:

Situation Overview

BPCL's procurement process for services such as civil, electrical, mechanical, and instrumentation works heavily relied on the Schedule of Rates (SOR). The SOR provided standardized rates for various jobs, finalized through a tendering process and applied for a contract duration of two years. However, its manual entry into SAP during the creation of Purchase Requisitions (PRs) and Purchase Orders (POs) led to significant inefficiencies and challenges:

1. **Time-Consuming Processes:** Each PR and PO required manual entry of SOR rates, slowing down procurement workflows.
2. **Risk of Errors:** Manual data entry increased the likelihood of inaccuracies in rate application, impacting procurement costs and execution timelines.
3. **Complex Escalation Management:** A 10% rate escalation for jobs along pipeline routes added complexity, requiring careful manual adjustments during rate mapping.

These inefficiencies often resulted in delays, governance challenges, and increased administrative effort, highlighting the need for a transformative solution.

Challenges:

1. **Manual Entry Dependency**: Repetitive and error-prone processes in rate application.
2. **Escalation Application Complexity**: Pipeline route jobs requiring 10% escalations necessitated manual calculations.

3. **Operational Delays**: Manual workflows slowed down PR and PO creation, affecting service timelines.
4. **Governance Risks**: Incorrect rate entries posed financial risks and impacted compliance.

Quantitative and Qualitative Benefits

Quantitative Benefits:

- 30% reduction in manhours for PR-PO creation.
- Faster procurement cycles by up to 40%, enhancing project execution timelines.
- Elimination of financial risks associated with incorrect rate application.

Qualitative Benefits:

- Enhanced governance and compliance through automated processes.
- Improved accuracy and reliability in rate application.
- Streamlined workflows, reducing delays and improving stakeholder satisfaction.

CASE SOLUTION

Proposed Solution:
To overcome these challenges, BPCL initiated the automation of SOR rate mapping in SAP, with the following key features:

1. **Automated Rate Mapping**: SOR rates for civil, electrical, mechanical, and instrumentation services were mapped directly to SAP service codes.
2. **Escalation Integration**: A provision for automatic 10% rate escalation for pipeline route jobs was incorporated.
3. **Elimination of Manual Data Entry**: Automation ensured accurate rate application without human intervention.
4. **Governance Enhancements**: Features such as rate capping, auto-expiry of rates, and a maker-checker approach were implemented to ensure compliance and data accuracy.

Implementation Process:

1. **Requirement Gathering and Stakeholder Alignment:** BPCL's procurement and IT teams collaborated to understand operational pain points and define project scope.

2. **Mapping of SOR Rates:**
    - Rates were mapped to corresponding SAP service codes through a dedicated automation module.
    - Provisions were made to accommodate rate variations, such as escalation for pipeline jobs.
3. **Data Verification and Testing:**
    - A maker-checker system was adopted to verify the accuracy of rate mapping before integration.
    - Thorough testing was conducted to ensure seamless functionality.
4. **System Integration:**
    - Automated modules were integrated into SAP, enabling real-time application of rates during PR and PO creation.
    - Auto-expiry of rates as per SOR period and capping mechanisms were added.

Impact:

Operational Efficiency: The automation resulted in a 40% reduction in PR and PO processing time, significantly improving operational efficiency.

Governance: Automated checks ensured compliance with approved rates, eliminating the risk of manual errors.

Scalability and Sustainability: The solution is scalable for use across BPCL's diverse operations and serves as a blueprint for future automation initiatives in procurement.