

Assignment-9

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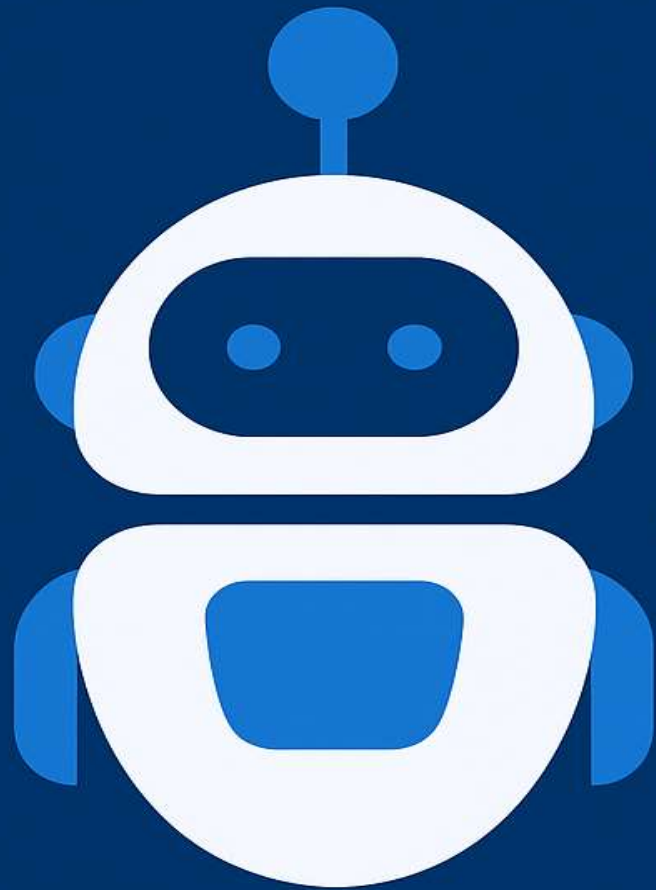
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RPA – The Future of Operational Excellence at Tata Steel

Enhancing Efficiency, Accuracy, and Innovation
with Robotic Process Automation



Introduction

- *Robotic Process Automation (RPA) utilizes software robots to automate repetitive, rule-based digital tasks.*
- *In a manufacturing powerhouse like Tata Steel, RPA can be transformative across various areas, including finance, HR, inventory, procurement, and logistics.*
- *This presentation outlines:*
 - *A phased roadmap for implementing RPA*
 - *Key operational areas ripe for automation*
 - *Measurable outcomes and ROI potential*

Why RPA for Tata Steel?

- *High-volume processes* (e.g., invoice processing, report generation) currently consume valuable time and human effort.
- *Automation frees the skilled workforce* to focus on decision-making, innovation, and strategic work.
- *Reduces operational risks* by eliminating human errors in critical processes like procurement, payroll, and compliance.
- *Enhances data consistency* and improves audit readiness across business units.
- *Enables Tata Steel to adapt quickly* to changing business demands in a competitive global market.

Step 1 – Establish a Clear Scope

- *Initial Focus Areas:*
 - *Inventory management systems*
 - *Procurement workflows and approval chains*
 - *Invoice intake, validation, and reconciliation*
- *Objectives:*
 - *Speed up end-to-end transaction processing*
 - *Reduce manual interventions that cause delays or errors*
 - *Ensure data accuracy and traceability across systems*
- *Strategy:*
 - *Start small, focusing on **structured and rules-driven tasks** with predictable patterns to demonstrate ROI quickly and minimize implementation risk.*

Step 2 – Choose Specific Tasks to Automate

- *Identified Ideal Use Cases:*
 - **Daily Maintenance Logs:** Automate data logging from equipment status reports.
 - **Supplier Order Entry:** Convert email orders into ERP entries automatically.
 - **Shift Scheduling:** Auto-generate shift rosters based on predefined rules.
 - **Warehouse Inventory Updates:** Sync inventory levels in real-time as goods move.
- *Why These Tasks?*
 - High volume, low complexity
 - Rule-based decisions
 - Frequent and repetitive operations
 - Currently performed manually with scope for speed and error reduction

Step 3 – Find a Technology Partner

- *Recommended Vendors:*
 - **UiPath** – Known for intuitive design, strong ERP integration
 - **Automation Anywhere** – Offers scalable bots and analytics dashboards
- *What Tata Steel Should Look For:*
 - Seamless integration with SAP, Oracle, and other in-house tools
 - Support for bot scalability across departments and plants
 - Robust training & change management support for IT and process teams
 - Proven implementation experience in manufacturing or heavy industries
 - AI-capabilities for future-proofing the automation strategy

Step 4 – Implement the First RPA Bot

- *Pilot Project Focus:*
 - *Automating invoice intake, matching, and ERP entry for supplier bills*
- *Bot Capabilities:*
 - *Reads scanned or digital invoices (PDFs, emails)*
 - *Extracts relevant fields (PO number, vendor name, invoice total)*
 - *Cross-validates against procurement data*
 - *Flags discrepancies and logs successful entries in SAP*
- *Success Metrics:*
 - *Time to process each invoice (baseline vs automated)*
 - *Error rate and correction count*
 - *Number of invoices processed per day (throughput)*
 - *Employee hours saved*

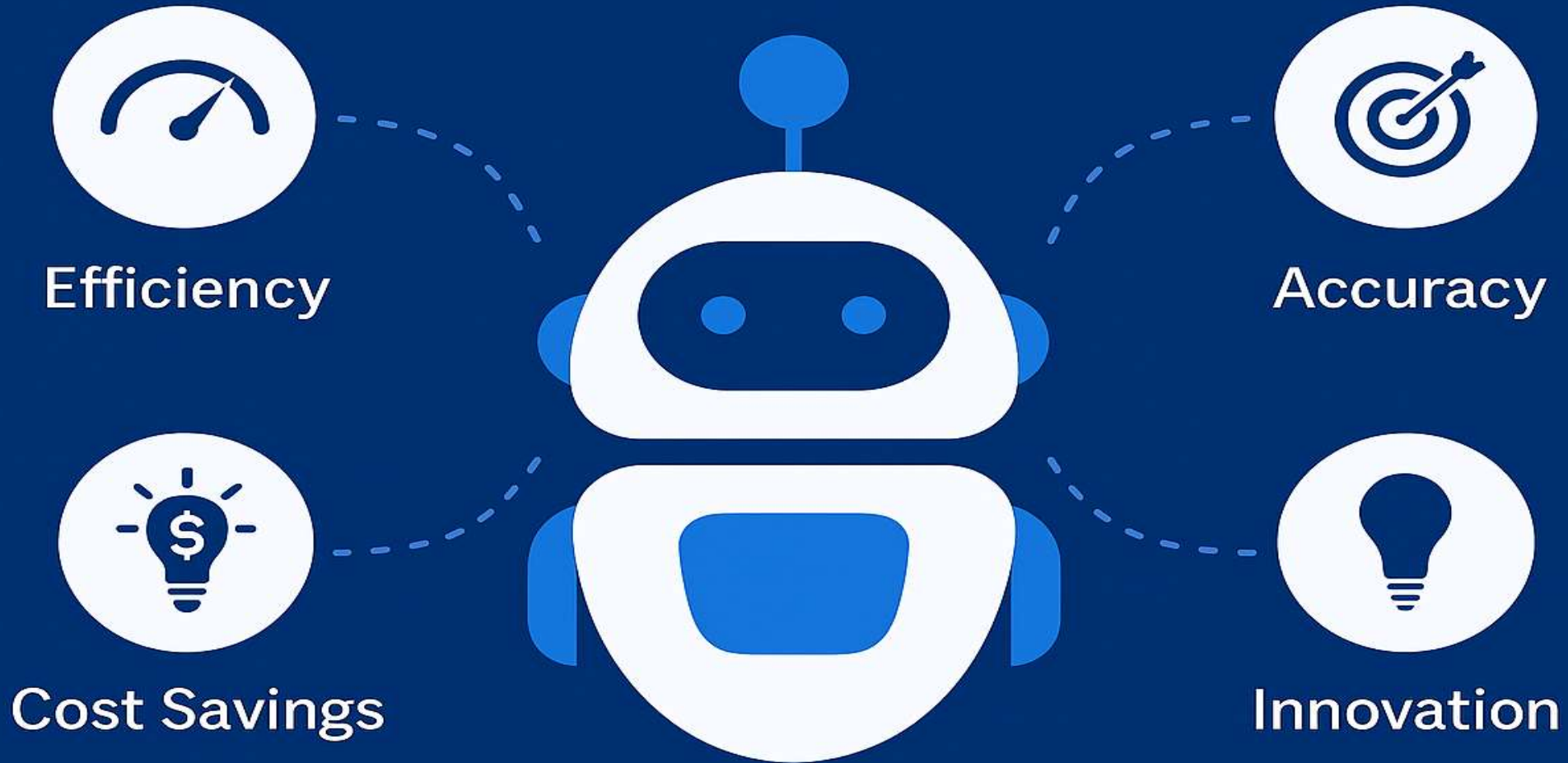
Step 5 – Measure the Success

- *Quantitative Outcomes from Pilot:*
 - **70% faster processing time** vs manual efforts
 - **90% reduction in data entry errors**
 - **50% decrease in FTE (Full-Time Equivalent) costs** in accounts payable
 - Significant reduction in invoice backlogs
- *Ongoing Evaluation Tools:*
 - Interactive dashboards showing real-time performance
 - Alerts for anomalies or task failures
 - Weekly reports comparing pre- and post-automation performance

Step 6 – Expand Automation Scope

- *Phase 2 Rollout:*
 - **HR Department:** Automate leave approvals, payroll calculation, employee onboarding tasks.
 - **Production Reporting:** Automate creation of compliance and quality reports.
 - **Supplier Communication:** Track delivery schedules, send automated follow-ups or alerts, and acknowledge order receipts.
- *Long-term Goal:*
 - Build a centralized automation layer connecting HR, production, procurement, and logistics to enable **enterprise-wide digital transformation**.

RPA Benefits



Top 5 Benefits of RPA for Tata Steel

- *Cost Savings:*
 - *Reduction in labor costs through process automation*
 - *Increased process throughput without additional headcount*
- *Error Elimination:*
 - *Improved data integrity across systems*
 - *Accurate audit trails and compliance documentation*
- *Operational Agility:*
 - *Faster processing cycles across departments*
 - *Better response to fluctuations in supply, demand, and compliance changes*
- *Scalability & Flexibility:*
 - *Easily scale bots for new use cases or process expansions*
 - *Adjust workflows with minimal reconfiguration*
- *Empowered Workforce:*
 - *Employees can focus on creative, strategic, and customer-facing tasks*
 - *Improved employee satisfaction through reduction in repetitive workload*

Industry-Ready Presentation

Tata Steel RPA – Invoice Automation System

Tata Steel – RPA Invoice Entry Automation

Upload Invoice (PDF)

Invoice Number:

Vendor Name:

Amount:

Date:

Submit to ERP

ERP Invoice Log

Invoice Number	Vendor Name	Amount	Date
001	ABC	10000	10/06/2025

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- *Drive Link for the Project:*

- <https://drive.google.com/drive/folders/1Kr9mdG7HiomC99hgBt4ajtBnPvbc0LsY?usp=sharing>

Let's automate to innovate – and secure Tata Steel's place as a global manufacturing leader.

Conclusion

- *RPA offers more than just task automation—it enables a **new model of intelligent operations**.*
- *By following a **structured, focused implementation path**, Tata Steel can:*
 - *Cut costs significantly*
 - *Achieve near-zero processing errors*
 - *Enable a smarter, faster, and more efficient organization*

Let people lead innovation – and let bots handle the rest.