

Identify at least five major functional areas addressed by the ERP application (e.g., Finance, Supply Chain, Human Capital Management, CRM, Manufacturing, etc.).

1. Finance and accounting

- Features: Global financial consolidation, compliance management, automated reconciliation, and real-time financial reporting.
- Business Value: Better adherence to international accounting standards, increased accuracy, and quicker month-end closing.
- Comparing to commercial ERPs (like Oracle Financials and SAP S/4HANA): Like SAP's FI (Financial Accounting) and CO (Controlling) modules, which offer real-time financial insights and assistance with global compliance.

2. Procurement & Supply Chain Management (SCM)

- Features include inventory management, contract compliance, order fulfilment, and worldwide vendor performance tracking.
- Business Value: Better supplier relationships, more efficient procurement, and fewer inventory discrepancies.
- Comparability to Commercial ERP: Similar to Oracle Procurement Cloud and SAP MM (Materials Management), which provide end-to-end supply chain visibility.

3. Human Resources (HR) and Human Capital Management (HCM)

- Features include performance reviews, payroll processing, leave management, self-service employee portals, and adherence to regional labour regulations.
- Business Value: Better workforce management, less manual labour, and streamlined HR procedures.
- Comparable to Commercial ERP: SAP SuccessFactors and Oracle HCM Cloud, which centralise HR operations and facilitate global workforce management, are comparable.

4. Production and Manufacturing Scheduling

- Features include quality control automation, production scheduling, shop floor integration with IoT sensors, and Bill of Materials (BOM) tracking.
- Business Value: Better alignment of supply and demand, lower production inefficiencies, and higher-quality products.
- Comparing Commercial ERP: Complements Oracle Manufacturing Cloud and SAP PP (Production Planning), which integrate with real-time shop floor data and optimise production workflows.

5. Sales and Customer Relationship Management (CRM)

- Features include order tracking, service history, delivery timeline visibility, and 360-degree customer dashboards.
- Business Value: Improved order fulfilment, better sales forecasting, and higher customer satisfaction.
- Comparable to Commercial ERP: SAP Sales Cloud and Oracle CX (Customer Experience), which combine sales and service data to provide a comprehensive customer view, are comparable.

Map each functional area to the corresponding business processes described in the case.

1. Finance & Accounting

Supported Business Processes:

- Due to manual reconciliation, monthly financial closing was previously slow. Reporting on compliance in various jurisdictions.
- financial consolidation in real time for international operations.

Evidence from a Case Study:

"Automated reconciliation and real-time reporting allowed the finance team to close monthly books much more quickly."

- ✓ Faster financial reporting is a business value.
- ✓ decreased human error.
- ✓ increased adherence.

ERP Equivalent for Commercial Use:

- SAP CO (Controlling) & FI (Financial Accounting).
- Oracle Financial Reporting & General Ledger.

2. Procurement & Supply Chain Management (SCM)

Supported Business Processes:

- Global vendor management and procurement (previously divided across regions).
- tracking of inventory (delays in fulfilment were caused by warehouse mismatches).
- Order fulfilment and logistics (customer dissatisfaction was caused by stock discrepancies).

Evidence from a Case Study:

"Warehouse managers could now monitor inventory levels and stock movements across continents, and procurement teams had a global view of vendor performance and contract compliance."

Business Value: Less disparity in inventory.

- ✓ enhanced monitoring of supplier performance.
- ✓ quicker and more precise order fulfilment.

ERP Equivalent for Commercial Use:

- SAP WM (Warehouse Management) and MM (Materials Management).
- Oracle Cloud for Procurement and Inventory.

3. Human Capital Management (HCM) / HR:

Supported Business Processes:

- Processing of payroll (formerly done using spreadsheets).
- Management of leave and attendance (lacked standardisation).
- Recruitment and performance reviews (manual procedures).

Evidence from a Case Study:

"When HR was integrated into the system, employees in various time zones could access self-service portals. Payroll processing, leave administration, and performance reviews were centralised and brought into compliance with regional labour regulations."

Business Value:

- ✓ Payroll and compliance automation.
- ✓ Enhanced self-service for employees.
- ✓ Talent management has been simplified.

ERP Equivalent for Commercial Use:

- HCM/SAP SuccessFactors.
- Cloud-based Oracle HCM.

4. Manufacturing & Production Planning

Supported Business Processes:

- Previously, production scheduling was not linked to sales projections.
- Quality checks and shop floor control (manual data compilation resulted in errors).
- tracking of the Bill of Materials (BOM) (inefficiencies in component planning).

Evidence from a Case Study:

"BOM tracking, production scheduling, and integration with real-time shop floor sensors for quality checks were all introduced by the manufacturing module."

Business Value:

- ✓ Better production scheduling.
- ✓ Defects were decreased through automated quality checks.
- ✓ Improved production-demand alignment.

ERP Equivalent for Commercial Use:

- QM (Quality Management) and SAP PP (Production Planning).
- Cloud-based Oracle Manufacturing.

5. Customer Relationship Management (CRM) & Sales

Supported Business Processes:

- Order tracking for customers (previously lacked visibility).
- Delivery schedules and service history (manual tracking caused delays).
- Forecasting sales is separate from manufacturing planning.

Evidence from a Case Study:

"A CRM dashboard that displayed a 360-degree view of customer orders, service history, and delivery timelines was made available to sales teams."

Business value:

- ✓ Enhanced customer satisfaction
- ✓ Improved coordination between manufacturing and sales.
- ✓ Improved tracking of orders.

ERP Equivalent for Commercial Use:

- CRM/SAP Sales Cloud.
- Customer Experience (CX) in Oracle.

Part 2 – Real-World ERP Evaluation

1. Introduction

Enterprise Resource Planning (ERP) systems integrate various business processes into a unified platform. This evaluation focuses on SAP S/4HANA, a leading ERP solution, comparing its modules with the functional areas identified in the case study (assuming a manufacturing/distribution business).

2. Core Functional Modules in SAP S/4HANA

Module	Description
Finance	Manages accounting, financial reporting, and compliance.
Controlling	Covers cost accounting, budgeting, and profitability analysis.
Sales and Distribution	Handles order processing, pricing, and shipping.
Materials Management (MM)	Manages procurement, inventory, and vendor relations.
Production Planning (PP)	Supports production scheduling, BOM, and shop floor control.
Quality Management (QM)	Ensures product quality through inspections and audits.
Human Capital Management (HCM)	Manages payroll, recruitment, and workforce planning.
Plant Maintenance (PM)	Tracks equipment maintenance and asset management.
Supply Chain Management (SCM)	Optimizes logistics, demand planning, and supplier collaboration.

3. Business Domains Supported

SAP S/4HANA serves multiple industries, including:

- Manufacturing (automotive, industrial machinery)
- Retail & Distribution (inventory, order fulfilment)
- Services (professional services, utilities)
- Public Sector (government, healthcare)

Its flexibility allows customization for industry-specific needs.

4. Comparison with Case Study Functional Areas

Functional Area	SAP S/4HANA Equivalent	Similarities	Differences
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Procurement & Inventory	Materials Management (MM)	Both handle purchasing and stock control.	SAP integrates with vendor portals and real-time analytics.
Production Planning	Production Planning (PP)	Both manage BOM and work orders.	SAP includes AI-driven predictive scheduling.
Sales & Customer Orders	Sales & Distribution (SD)	Both process orders and invoices.	SAP offers CRM integration and real-time pricing.
Financial Management	Finance (FI) & Controlling (CO)	Both cover accounting and reporting.	SAP provides global tax compliance and multi-currency support.
Quality Control	Quality Management (QM)	Both ensure product standards.	SAP includes IoT-enabled quality inspections.

Key Observations:

- SAP S/4HANA offers **deeper automation** (e.g., AI, IoT) compared to traditional ERP systems.
- **Real-time analytics** (via SAP HANA) enhances decision-making.
- Pharmaceutical and automotive industries, for example, have pre-configured solutions.

5. Key Industry Focus

In manufacturing, where intricate supply chains and production workflows necessitate smooth integration, SAP S/4HANA is widely used. Because of its robust financial and CRM capabilities, it also performs exceptionally well in retail and professional services.

6. Conclusion

Although SAP S/4HANA provides more scalability, AI-driven insights, and industry-specific optimizations, it still fits in nicely with the case study's functional areas. It is a strong option for big businesses because of its cloud capabilities and real-time processing.

References & Screenshots

- [SAP S/4HANA Module Overview](#)