

Enterprise Resource Planning

Service Industry

Whitepaper

Osource India Pvt. Ltd.

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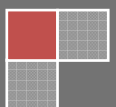


Table of Contents

Introduction	3
Problem Statement	4
Osource Solution	6
Software Functionalities.....	7
Benefits	18
About Osource	19

Introduction

ERP is one of the most widely implemented business software systems in industries and organizations of varied business interests. ERP implementation utilizes various ERP software applications to improve the performance of organizations for resource planning, management control and operational control. ERP software consists of multiple software modules that integrate activities across functional departments - from project planning, inventory management, prospect / order tracking to financial accounting. ERP software systems application modules support common business activities like finance, accounting and human resources.

Problem Statement

- **Fragmented Processes and Data Storage**

Different business units use distinct systems to record their data. The dissonance in the data tracking and storing methods of these systems forbids the company from portraying actual data. Bad data to the management prompts bad business decisions for the company. Every unit had a different way of doing things which gives rise to multiple processes in the organization. Separate processes generate disparate data which downgrades the efficacy of the company to come up with best practices for higher productivity.

- **Budget Tracking**

Every enterprise has a budget plan structured at the beginning of every project. But seldom are these budgets followed. Non-structured processes do not give a clear picture of how many resources are deployed for what purposes. There is no system to track the actual expenses against the budgeted resources.

- **Revenue Leakage**

Each system will need to be maintained, and will require separate functional and technical administrators. Training of new staff and system upgrades are an added expense. Lack of integration between MIS sores the ability of the company to provide timely and accurate information to its internal and external users thus increasing the turn-around times and incurring heavy expenses. Improper inventory management leads to superfluous resources which increases the cost to company.

- **Team Monitoring & Building**

Lack of planning would lead to unjust distribution of the resources and budgets. For the job to function smoothly, it is required that a team of people with the right talent is built within the allocated budget. The team performance, if not monitored periodically, would lead to incomplete and/or unsatisfactory development.

- **Project Tracking**

Different units work simultaneously on different parts of one project. If the information and detail about every completed and in process phase is not monitored at one location, it is difficult to find at which stage of completion does a project actually lie. Also, non-streamlined processes and non-directional flow of information may create unnecessary time delays in execution of action plans. Redundant actions may occur for an otherwise single process.

- **High Operational Costs**

Different systems may require distinct operating system, application support and database. The company's IT will have a larger burden in keeping the systems functioning. New requirements may mean newer systems, which will cost money at all levels, including infrastructure, application and coding.

- **Profitability Monitoring**

Each business unit will have their own account of their contribution to the revenue of the company. The overall performance of the company may therefore have different versions owing to the different statistics given by each business unit. Accurate forecasting of future action plans would not be possible with such disparity.

- **Customer Management**

Non-availability of a proper customer tracking system leads to customer needs being unheard or neglected. Lack of dedicated resources with decision making powers to resolve customer issues quickly are also not always available. And one unhappy customer would mean losing ten potential customers.

Osource Solution

Osource's Enterprise Resource Planning software is a program that unites all the operations of an enterprise into one control. It is a multifunctional program and not only does it perform several operations simultaneously but also generates individual results. It gives an enterprise sound control over all its business activities, including sales & marketing, delivery, billing, production, inventory management, quality management, and human resources management. The software is flexible and can easily be configured to suit the organizational specifics at an operational level. It also can be integrated with other systems application used by an enterprise.

Osource's ERP software is sculpted so as to integrate the different business practices of organizations with diverse business interests and varied strengths. It comprises of four core modules of Project Management, Financial Accounts, Human Resource Management and Prospect Management. Each module is a robust unite of all the processes that are practiced by individual business units and are weaved together to give optimum results for the enterprise. The software allows a master setup for all modules which serves as a central repository for all the data required by the enterprise. Master creation eliminates redundancy of data and reduces the data mining effort. The system is built on the most stable and robust .Net Framework 2.0 with C# as the programming language and Oracle 10g Database. The application is built on three-tier architecture and is highly scalable. The application, being web based, does not demand any client based component to be installed at the user end and can be accessed directly from standard browsers.

Software Functionalities

1. Project Management

1.1 Enterprise Setup

An initial setup of the enterprise is done in this module. When a new business is acquired, a client is created in the system. All details about the client are captured in the system. A new job is then created for that client. For this job, budget and milestones are set. Every time a part of the job is completed, the milestones are updated. Thus at any given time, it is possible to track the project in terms of project completion. Also, the resources required are mapped to the job from the employee database. Either an individual or a team can be mapped to the job. Such employees are locked for that project and would not be available for any other project for that period.

1.2 Resource Planner

The Resource Planning Module allows the management to plan the resource requirement for a future project. A resource can be booked in advance or a new resource requisition can be raised. Timely and systematic planning prevents resource deficiency and ensures smooth functioning of the process.

1.3 Time Sheet & Expense

The Time Sheet module allows both employees and managers to time and monitor individual as well as cumulative performances. It eliminates the need to constantly ask people for their timesheets. The automated process allows employees to avoid omissions and record their time much more accurately. Managers are able to log in and view employee timesheets to instantly know who has submitted data and who has not. Reports can be generated in real time giving the most up-to-date information for timely approvals.

The Expense Sheet module is an automated system which eliminates the piles of manual paperwork. All time and expense sheets and reports are stored on a secure server, and administrators and project managers can instantly generate a report from a past project. The system makes time and expense tracking accurate, effective and time saving.

Date	Ch	Non-Ch	Total	Copy / Paste	Select
29/Nov/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
30/Nov/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
01/Dec/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
02/Dec/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
03/Dec/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
04/Dec/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
05/Dec/2010	00.00	00.00	00.00	Copy / Paste	<input type="checkbox"/>
Total	0	0	0		

Fig.1 Timesheet Entry

Edit	Delete	Expense Date	Expense Type	Expense Description	Expense Amt
		02/02/2009	Auto Fare	Auto fare from office to client place	130

Fig.2 Employee Expense List

Fig.3 Employee Expense Input

1.4 Inventory Transfer / Write Up/Write Off

The Inventory Transfer sub-module allows the employee to transfer the inventory from one job to another job. The Write Up/Write Off module allows the Project Manager to Write Up/Write Off the inventory from a particular job thus reducing piling of unnecessary inventory and avoiding inventory waste. The expenses incurred for storage and disposal of superfluous inventory is also minimized.

1.5 Reports

Different reports can be generated from the system based on the criteria inputted for the report. The report can be location wise, designation wise or ISU wise. Given below are two such samples of reports extracted from the system.

Designation Wise Utilisation Report (Summary)
From:01-Jun-2010 To:30-Jul-2010

Print Date :30-Nov-2010

Designation	Std Hrs	Chargeable Hrs	Non-Chargeable Hrs	Chargeability %	Practice Management						Shared Services				
					PM	BDV	Media	TRG	Leave	Idle Time	ACCT	ADM	IT	HR	MKTS
Manager-1	9360.00	6406.60	3130.10	67.18	1243.20	539.20	0.00	179.50	780.00	2.00	0.00	0.00	0.00	0.00	0.00
Grand Total	9360.00	6406.60	3130.10	67.18	1243.20	539.20	0.00	179.50	780.00	2.00	0.00	0.00	0.00	0.00	0.00

Fig.4 Utilization Report

Detailed Job Ledger as on 12-Sep-2010
Period covered - From 17-Aug-2009 To 12-Sep-2010

Print Date : 30-Nov-2010

Client Group : Ocourse India Pvt. Ltd.		Client Name : Ocourse India Pvt. Ltd.		Job Name : Tax Audit 31 March 2009				
Industry : Others		Service Line : Audit		Partner / Director : Suraj Dubey				
Budget : 80700		Job Fee : 100,000.00		Discount : 0.00				
				Recovery Rate : 123.92				
Employee Name	Designation	Rate	Sep 06, 2010 - Sep 12, 2010			As on Sep 12, 2010		
			Hours	Total Cost	OPE	Hours	Total Cost	OPE
Opening Balance								
Opening Balance			-		0.00	0	0	0
Time Sheet								
Suraj Dubey			-	-	0.00	2	28,800	0
Production			0	0	0.00	2	28,800	0
Invoice/Credit Note								
WCC-0910-01727			-		0.00	0	100,000	0
Total Billing							100,000	0
Inventory Transfer In								
Transfer IN			-		0.00	0		0
Inventory Transfer Out								
Transfer OUT			-		0.00	0		0
Total Inventory In/Out							0	0
Write up								
Write UP			-		0.00	0	71,200	0
Write off								
Write OFF			-		0.00	0	0	0
Total Write Up/Off							71,200	0
Inventory							0	0

Fig.5 Job Ledger

2. Financial Accounting

2.1 Accounts Receivable

2.1.1 Invoicing

The AR module is used by the project/job managers to create an invoice for a particular job. The system automatically populates the closing fee (based on the time sheet details) and the Out of Pocket Expenses – based on the expense sheet details) for the selected job. Alternatively, the hourly charge for an associate on each job defined in the Project Employee Mapping Master is taken as the base for the billing. The relevant calculations such as service tax, education cess etc. is taken care of by the system thus reducing errors.

The screenshot displays the 'Invoice Creation' interface. At the top, there are tabs for 'Job Summary', 'Invoice Details', 'Tax Details', 'Statutory A/C Entry', and 'MIS A/C Entry'. The 'Invoice Details' tab is active, showing a form with the following fields:

- Type: Invoice (selected)
- Status: Approved
- Invoice No: OSO-0910-10-00002
- Invoice Date: 29/10/2009
- Against Which Invoice: -Select-
- Location: Lower Panel
- Invoice Type: Advance
- Rejection Reason: (empty)
- Client Name: Axis Risk Consulting Services Pvt. Ltd.
- Job Name: Axis -ABIS
- Contact Person: Zenoh D'Cunha
- Currency Type: Rupee
- Forex Rate: 1
- Billing Address: Nishumi, 3rd Floor, 75, Dr. Annie Beasant Road, Worli, Mumbai - 400 018.
- Description: (empty)

Below the form, there is a summary table with the following data:

FEE Detail		Fee (Rs)	
Fee (Rs)	30000	Fee (Rs)	30000
OPE Detail		OPE (Rs)	
OPE (Rs)	9000	OPE (Rs)	9000
Base Amount (Rs)	39000	Base Amount (RS)	39000

At the bottom, there is a table with columns: Edit, Delete, Expense Type, Processed Closing Balance (INR), UnProcessed Closing Balance (INR), Total Closing Balance (INR), Total Closing Balance (INR), OPE Amount, Edit, Delete, Tax, Tax Amount, Status.

Edit	Delete	Expense Type	Processed Closing Balance (INR)	UnProcessed Closing Balance (INR)	Total Closing Balance (INR)	Total Closing Balance (INR)	OPE Amount	Edit	Delete	Tax	Tax Amount	Status
		Air Fare	0	5000	5000	5000	6000			service tax	3900	ADD
										Edu. Cess	117	ADD

Fig.6 Invoice Creation

2.1.2 Collection

The system can also be used to capture the collection details of the receipt generated against the invoices. The system has the provision of accepting multiple receipts against single invoice. The system also has the ability to capture the Forex difference, bank charges & miscellaneous deductions in case of the invoices generated in foreign currency. The system has the facility of acknowledging the receipt of the physical TDS copies as well.

Collection									
Collection Type : <input checked="" type="radio"/> Invoice <input type="radio"/> WriteOff									
Collection No. <input type="text"/> <input type="button" value="Search"/> <input type="button" value="Clear Search"/> <input type="button" value="Add New"/>									
Edit	Delete	Collection No.	Date	Cheque No.	Cheque Date	Currency	Amount	Deleted	Bounced
		BR0809030001	31/03/2009	12211	03/03/2009	Rupee	1201	No	No
								Page : 1 of 1	<input type="button" value="First"/> <input type="button" value="Prev"/> <input type="button" value="Next"/>

Fig.7 Collection

Invoice Selection

Invoice Details : Edit Mode

Invoice No.	<input type="text" value="0809-00001"/>	Date	<input type="text" value="25/03/2009"/>
Currency Type	<input type="text" value="Rupee"/>	Forex Rate	<input type="text" value="1"/>
FEE	<input type="text" value="0"/>	FEE (Rs)	<input type="text" value="0"/>
OPE	<input type="text" value="1200"/>	OPE(Rs)	<input type="text" value="1200"/>

Tax	On Amount	Tax Rate	Tax Amount	Status
Invoice Amount	<input type="text" value="1200"/>	Invoice Amount (Rs)	<input type="text" value="1200"/>	
Total Amt Collected	<input type="text" value="0"/>	Total Amt Collected(RS) :	<input type="text" value="0"/>	

Collection Details

Currency Type	<input type="text" value="Rupee"/>	Forex Rate	<input type="text" value="1"/>
FEE	<input type="text" value="1"/>	FEE (Rs)	<input type="text" value="0"/>
OPE	<input type="text" value="1200"/>	OPE(Rs)	<input type="text" value="0"/>

Tax Type	<input type="text"/>	<input type="button" value="Ok"/>
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Tax	On Amount	Tax Rate	Tax Amount	Status
Net in Bank(RS) :	<input type="text" value="1201"/>	Amt To Be Collected(RS) :	<input type="text" value="0"/>	

Fig.8 Collection Details

2.2 Accounts Payable

2.2.1 Bill Booking

The payables process starts with the entry of the vendor's invoice details referred to as the invoice booking process. Post invoice entry, the system routes the invoice electronically as per the line of authority defined in the system for the approval of the invoice. Post approval, a bill is booked in the system against the vendor's invoice. The expense claims, tax and advance details are also mapped to the bill.

Bill Booking							Add New
Select							Search
							Clear Search
Bill No.	Bill Date	Vendor	Ref Bill No	Ref Bill Date	Amount	Status	Delete
BL0809030001	24/MAR/2009	A.K.Trading Company	ab0001	24/MAR/2009	10000	Approved	
BL0809030002	28/MAR/2009	Choice Solutions	2	10/MAR/2009	11000	Approved	

Page : 1 of 1 First Prev Next Last

Fig.9 Bill Booking

Enterprise Module > Project Management > Accounts Receivable > Accounts Payable > General Ledgers > HR > Help > Fixed Asset >						
Bill Booking Save Back						
Bill No	BL0809030002	Voucher Date	28/03/2009	Voucher Status	Submitted	
Ref. Bill No	2	Ref. Bill Date	10/03/2009	Location	Mumbai	
Vendor	Choice Solutions	Credit Days	1	Due Date		
Contact Person	Rajiv Jonwal	Contact Person	Rajiv Jonwal	Billing Address		
Currency	Rupee	Exch. Rate	1	Net Amount	11000	
Narration	Entry made for					
Add Material / Service Detail						
Material / Service Detail Tax Detail Advance Detail Claim Mapping Statutory A/C Entry MIS A/C Entry						
Edit	Delete	Sr.	Material	Quantity	Rate	Amount
		1	HP Printer	1000	10	10000

Page : First Prev Next Last

Fig.10 Bill Booking Details

2.2.2 Payment

Post approval of the bill, the payment run process can be performed in the system and accordingly, payments can be issued to the vendor in the form of cheque/DD/bank transfers. The sub-module can also be used to obtain the details of outstanding payments due to vendors. Before the creation of a payment voucher, the previously entered invoice and credit notes can be adjusted against the prepayment & debit notes of that supplier. On Payment to the vendor, accounting entries are carried out in the books of account and vendor outstanding is automatically updated.

Bill No.	Bill Date	Bill Due Date	Bill Amount	Adj./Paid Amount	Balance Amount	Amount Paid
BL0809030001	24/Mar/2009		11000	0	11000	5500

Fig.11 Payment Details

2.3 GL Accounting

All financial transactions culminate at the General Ledger for financial reporting, planning and control. The GL sub-module allows the user to pass the necessary JV's pertaining to the payables/receivables function and perform the bank reconciliation process. This sub-module is also used to generate various financial statements such as Trial Balance, Profit & Loss Account and Balance-sheet.

3. Human Resource Management

Osource's Human Resource Management System is designed to effectively integrate everyday human resource activities of an organization with information technology. It consists of the following sub modules:

3.1 Recruitment Module

The Recruitment Module takes care of manpower requisitions from various departments, the complete process of mapping the requisitions and the final negotiation with the applicant. The recruitment module includes Manpower Budgeting, Requisition and approval, Candidate Application, Short-list Candidates, Interview Scheduling & Feedback, and Issue & Acceptance of Offer Letter, CTC Structure Definition, Generation of Appointment Letter and Requisition Closure.

3.2 Employee Life Cycle Module

Employee Life Cycle Module integrates all the processes and activities performed by / for the employee during his tenure in an organization. This module is further divided into various sub-modules as listed.

3.2.1 On-boarding

All the joining and induction process of the candidate is done through this module, once the recruitment is done. The on-boarding module includes capturing Candidate Joining Details, Induction & Candidate Confirmation.

3.2.2 Appraisal & Training

The appraisals for the employees can be scheduled and monitored through this module. The training module helps to identify the shortcomings of the employees and schedule training for the same. The appraisal module includes Appraisal Cycle Definition, Initiation, and Self Appraisal & Performance Appraisal. The training module includes Scheduling training programs, Employee Mapping to training programs, Training Requests and Approvals, Feedback and Online Tests.

3.2.3 Transfer & Promotion

All the transfers and promotions performed for the employee during his tenure is tracked in this module. The automated processes avoid time delays and repetition of processes. The module includes Transfer Out, Transfer In & Promotion escalations.

3.2.4 Separation

The module ensures comfortable exit of an employee with quick automated processes. The separation module includes Online Resignation & Approval, Exit Interview and Due Clearance.

3.3 Employee Self Service Module

The Employee Self Service Module allows the employee to keep a complete update of all his records. The module is further divided as listed below.

3.3.1 Employee Profile

The employee profile module of HRMS records and manages complete information about the employees. An individual portfolio for each employee is created which can be updated and mapped for various processes to be performed to ensure smooth business activities. The information stored includes employee personal dossier, educational details, employment & experience details, CTC details, awards & honors and miscellaneous skill details. The employee master acts as a central repository for all employee related information.

Basic	Employment	Bank	Other	Education	Family Member	Nomination	Skill	Awards/Honors	Contact	Experience	Language	CTC	Document	History	Back
Employee Basic Master Details : Save															
Employee Code :		00000003													
Employee Name :		Rupali S Singh													
First Name *		Miss.		Rupali											
Middle Name :		S													
Last Name *		Singh													
Father/Husband's Name :		Shivnath													
Gender :		<input type="radio"/> Male <input checked="" type="radio"/> Female													
Height (Centimeter) :		140													
Marital Status :		Single													
Birth Date *		09-aug-1980 <small>(dd-mm-yyyy)</small>													
Mother Tongue :		Hindi													
Religion :		Hindu													
Mobile No. *		98196567878													
Official Email Address *		rupali@osourceindia.com													
Employee Type *		Permanent													
Identification Marks :		mole on left hand													
Blood Group :		O+													
Weight (Kg.) :		40													
Marriage Date :		<small>(dd-mm-yyyy)</small>													
Birth Place :		Mumbai													
Nationality :		Indian													
Caste :		Brahmin													
Personal Email Address :		rsk_singh@rediffmail.com													

Fig.12 Employee Master

3.3.2 Leave & Attendance

Employee leave and attendance records are monitored with automated processes. The escalations and controlled access ensures that the policies are followed without management hassles or employee issues. The module includes leave requisitions & approvals, leave revoke, attendance upload and approval.

3.3.3 CTC & Business Expense Reimbursements

These are two individual modules taking care of all the reimbursements an employee is entitled to. The reimbursements could be claimed before or after making an expense, depending on the nature of the expense incurred. There are stringent rules on proof submission and approvals which ensures that reimbursements are not misused. The automated escalations allow smooth and quick clearance of claims. The expenses include travel, accommodation, booking against cash advance etc. The payments can directly be made to the vendors which is then recorded for further accounting processes.

4. Reporting

The system generates multiple reports for all modules of Enterprise Resource Planning. These reports allow the management to monitor the functioning and the performance of individuals, departments, business units and enterprise as a whole. It also helps in forecasting and strategic planning for purposes of expansion and/or diversification. These reports can be generated through a Query Builder where a query can be inputted against which a report is generated. Following is a list of few reports generated in the system:

- Employee / Client / Job Listing
- Timesheet Reports
- Expense Sheet Report
- Expense Sheet Report (CTC Reimbursement)
- Job Ledger
- Inventory Report Summary
- Production Summary
- Chargeability Report
- Cross Entity Billing
- Prospect Tracker
- Leave / Attendance Register
- Invoice Register
- Collection Register
- Outstanding Ageing Analysis
- Bill Register
- Payment Register
- Trial Balance
- Profit & Loss Statement
- Balance Sheet
- TDS Register
- Service Tax Register
- TDS Certificate Acknowledgement

Benefits

- Implementing ERP ensures that the business operations are in alignment with the set budgets and strategies
- Advance planning and forecasting eliminates last minute crunch of resources
- No two activities performed in the system are for the same business activity, thus saving time, effort and costs
- Proactive follow-up of customer / prospect ensures that business is not lost due to time delay or negligence.
- Streamlined activities and workforce augment organizational goals and business targets and gives a strong financial control
- Improvement in operational efficiency assures high productivity
- Standardization of processes reduces operational errors, thus reduce costs and risks
- Robust framework and a diligent IT support team assures that the system remains in function and does not fail due to negligence

About Osource

Osource is a premier software solutions and integration services provider which designs, develops, integrates and maintains business applications that enable enterprises to solve complex, mission-critical business problems.

Osource actively collaborates with clients to create value out of their businesses. We are partners to our clients; sharing the responsibility of improving the business through our experience and expertise. We strive to make a positive and lasting business impact by going beyond a client-vendor relationship and becoming an extended part of our customers' enterprise. A large percentage of our revenues come from repeat business.

Osource offers a full suite of IT solutions and services, including custom application development, application management outsourcing, consulting, legacy modernization and migration, and system integration. We have delivered path-breaking solutions in key verticals such as banking, retail, construction, pharmaceutical, entertainment & media, consultancy, telecom & manufacturing.