ERP - a Love-Hate Relationship

Idea In Short

Learn enterprise resource planning basics before your first large engagement, because you will meet it. ERP integrates finance, manufacturing, procurement and more into one process backbone, drives standardization and costs millions over years. Respect the data inside it and never trust it blindly.

Oh, ERP

Enterprise resource planning (ERP), pronounced letter by letter, is familiar to anyone working inside a Fortune 500 company, and many people use it daily.1 Quite simply, it is the software backbone that runs most large businesses. In the early days of computing, thousands of different programs served individual departments, heavily customized and workable in the short term, yet neither integrated nor scalable. ERP entered as the cure for that fragmentation, and the cure brought side effects worth understanding.

From Factory Floor to Everything

The idea began more than three decades ago as an offshoot of manufacturing software controlling the factory floor, telling the plant what was being made, which supplies needed ordering and when work would complete. ERP extended that logic, broadly, to every part of the business. Modern suites from vendors such as SAP touch finance, human resources, information technology, manufacturing, marketing, procurement, sales, service and supply chain, covering the end-to-end process as the one solution a company supposedly needs. SAP2 alone counts a quarter of a million client organizations, real companies selling real products globally, which makes ERP less a product category than corporate infrastructure.

More Than a Database

Databases matter, and the top vendors offer much more than piles of data.3 The real magic lives in the processes linking business functions. A manufacturing module notices inventory falling below a threshold and signals the purchasing module to order more. When the order reaches the warehouse, a three-way match reconciles the vendor's purchase order, the sales order and the packing slip. A coordinated business process, executing itself, is a thing of beauty. These processes encode industry best practices, which means ERP inherently drives standardization. The rigidity chafes, and for most adopting companies the discipline improves on the chaos it replaced. A science fiction writer of thirty years ago dreaming of one massive program that could access, monitor and control all of a company's transactions was, in effect, describing idealized ERP:

> every bit of data linked into a smooth, almost seamless flow of transactions and analysis

The Hate Part

Implementation is where love sours. ERP projects often take years and cost millions of dollars, sometimes billions, requiring a small army of consultants and programmers to make the system behave. Industry humor claims SAP stands for Stop All Production, and the joke earns its edge, since implementations are large enough to appear in annual reports because they can move earnings. When projects go badly, the customer-vendor relationship goes with them, and courtrooms follow, as in the well-known dispute between a California county and its implementation partners. Searching for ERP disasters returns a long and instructive reading list. Consolidation has meanwhile narrowed the choices, as vendors acquired their way toward the integrated promise: one giant absorbing JD Edwards, PeopleSoft, Siebel and Taleo, another collecting Ariba, Sybase and Business Objects. Fewer vendors, bigger bets, higher stakes per decision.

What It Means for Consultants

The odds of landing on an ERP-related project are very high, especially at Big Four and technology consultancies. The work spans vendor selection, business process mapping, requirements gathering and user training, in projects that run longer and more process-oriented than strategy studies. One warning deserves bold type:

> ERP has the data, and the data will not be clean

Garbage in equals garbage out. If the material master or vendor master is wrong, every downstream report inherits the error, and wrong forecast assumptions poison the analytics the same way. Treat ERP analytics as a mix of science and art, and audit before you trust.

What It Means for Lawyers and Accountants

ERP is where the transactional truth is buried. How many products were sold, how many customers signed up, how many deliveries went out, how many employees left: that information probably lives in the ERP. The professionals who extract it well share two habits:

1. They learn the basic business processes, because speaking to the purchasing department in business and ERP terms the buyer understands saves enormous time and frustration, and
2. They ask for data specifically, naming the time frame and the exact fields wanted, then expect some spreadsheet and database work before the extract sings.

A capable new analyst can make ERP data tell its story, provided someone asked the right question of the right table.

Questions Before Any ERP Decision

Executives approaching an implementation or upgrade can spare themselves the worst outcomes with a short interrogation:

- Which processes will the company standardize to fit the software, and which genuinely justify customization, since every customization purchased today is maintenance owed forever?
- Who owns data quality before migration, because a new system loaded with old errors simply automates the mess?
- What does the realistic timeline look like once vendor optimism is discounted, and what operates the business if cutover slips? Which internal people will carry the knowledge after the integrators leave?

Companies that answer these questions in writing before signing tend to land in the love half of the relationship. Companies that skip them fund the conference horror stories.

Why the Relationship Survives

Despite the cost, the rigidity and the occasional lawsuit, the verdict from practitioners is unambiguous. In one survey of more than 400 information technology professionals, 85 percent called ERP essential to their business and said they could not live without it. That is the love-hate relationship in a single statistic: expensive to enter, painful to change and, once running, indispensable. Consultants who understand both halves of the relationship, the elegant process integration and the messy implementation reality, walk into every large engagement better armed than those who know only one.

- 1Enterprise resource planning
- 2SAP
- 3Oracle

Summary

ERP is the process backbone of large business: integrated, standardizing and indispensable enough that 85 percent of IT professionals cannot live without it. Implementations run long, expensive and occasionally litigious. Consultants, lawyers and accountants alike should learn to ask its data the right questions.