



Whitepaper: Common Misconceptions about ERP that can Bury a Corporation

How Best-of-Breed Applications can be used in an MDM Strategy to Enhance the Core Information stored in an ERP System.



Pricedex Software

Introduction

ERP (***Enterprise Resource Planning***) In essence, an ERP system is a large-scale 'transaction' recording system, which records and monitors Manufacturing, Supply and Fulfillment costs and logistics, Material Costs, HR Costs, and other variable and fixed costs.

True ERP systems should also focus on incorporating and integrating a number of different technology applications, each focused at a particular function within the corporation. These latter, more specialized technology applications are often referred to as 'Best of Breed' systems.

The goals and objectives of an ERP implementation focus primarily on two areas: Efficiency, and Accountability. The most tangible processes relating to Efficiency include Manufacturing, Supply Logistics, and Sales/Fulfillment. Accordingly, the most tangible areas related to Accountability are the costs and revenues related to the aforementioned processes, and visibility by management, through reporting, as to the relative productivity in these areas.

ERP Common Misconceptions

ERP implementations are large-scale and typically have the added challenge of integrating the regional or global operations of a corporation. Many implementations involve major consultancies, who offer expertise in project planning, project management, implementation and integration. However according to an article in *Industrial Supply Magazine*, in a recent industry report, more than 29% of ERP implementations fail to achieve even half the planned business benefits.¹

So, with all this available expertise, why is it we continue to hear reports of failed implementations, some of them of incredibly large scale, into the hundreds of millions of dollars?

Misconception 1: “An ERP System can supplant all your Corporate Applications with a single application, and reduce IT support costs”.

Too often we hear of ERP implementations, where consulting firms come in and determine which applications will be replaced, and which will be deemed redundant. Notwithstanding the numbers of committees struck, and meetings held, business managers face uphill, mostly losing, battles to maintain the specialized tools they need to conduct their business; and either the functionality of a legacy system is lost or disconnected in the new ERP implementation; the legacy system enhancements are cancelled or put on hold; or, worse yet, entire systems are shut down.

¹ <http://www.industrialsupplymagazine.com/pages/Article---Getting-IT-right-in-ERP.php>

The main reason for this is that there is great pressure on the consulting teams to deliver on promises made to deliver an operational ERP system as 'the single application', 'on-time' and 'within budget'. The consultants know what the ERP system's strengths and weaknesses are. But the costs associated with customizing an ERP system to include the myriad of business processes that revolve outside the world of transaction management, which is the core competency of an ERP system, are sometimes substantial and thus, customization is limited, forbidden or avoided altogether.

The resultant effect is that many departments' inputs are either ignored or set aside when the ERP implementation takes effect. In other words, many good systems, business processes, and functions are wrongly sacrificed. Department heads and staff are left scrambling to build alternate tools, usually with little or no budget, to prop up established processes related to running their operations.

Their tools of choice? Standard office suites modules; documents, spreadsheets and databases which are then completely external, with no interfaces to the ERP system, which adds to the frustration of the departments, and adds to the risk of data integrity.

Misconception 2: “An ERP System will enable a company to establish a strong Master Data Management practice”.

Typically, in an ERP implementation, the focus is given to the data records which trigger 'transactions'. For example:

- The Material and Part Masters contain the official records of the components which make up a Bill of Material (BOM), used for costing and manufacturing, and supports those transactions.
- The Customer Master and Price Master contain the current terms and prices for selling to a Customer, which support the Sales Transaction.
- The Vendor Master contains the current terms and costs related to procurement, which support the Purchase Transaction.

However, there is a plethora of data that continues to compile outside the ERP system, all related to the decision-support processes that relate to the transactions. For example, the Supplier and Material Masters do not necessarily contain all the various data related to sourcing, quotations, negotiations and all the data relating up to the decision to acquire material. Nor do they contain all the records of analysis leading up to the acquisition decision, such as parity on quality, material, currency fluctuations, landed costs, etc... These records would typically be stored in a 'best-of-breed' Quote Management/Contract Management system.

Additionally, and especially in the case of the Part Master, it is not going to contain all the market-facing content, such as images, product sheets, features and benefits, competitor information, and other material used in Sales and Marketing to support either the data requirements of the Customer, the Catalog, or the Website content. This data is managed and stored more efficiently in a Catalog Management or Product Information Management system.

Further, the Customer Master and Price Master in an ERP system will not incorporate the myriad analysis data which looks at market price sensitivities, competitor pricing, sales channel analysis and alignment, and other extensive data which goes into the process of Pricing. Nor will it properly hold and manage the historical information supporting those decisions. These records are better managed and stored in a 'best of breed' system whose focus, or specialty, is on Pricing Management.

Unfortunately, with the implementation of an ERP system, many of the processes which were built up and automated on older, legacy systems, are simply 'stripped away', leaving corporations at severe risk of significant revenue erosion through the inability to recall, or relate the historical data to current data; or even rebuild and maintain what is necessary to support the customer in a continuous process moving forward.

Misconception 3: “An ERP System will enable a company to establish strong Data Governance Practices”.

Data governance is a set of rules and processes which ensure that important data assets are formally managed throughout the enterprise. Data governance ensures that data can be trusted, and that people can be made accountable for any adverse event that happens because of low data quality. It is about putting people in charge of fixing and preventing issues with data, so that the enterprise can become more consistent and efficient².

One of the promises of an ERP implementation is that, with the controls offered by the ERP system, strong Data Governance practices can be established so that corporations can eliminate redundant practices, make people accountable, and become more efficient due to the benefit of 'a single point of the truth'. Unfortunately, in most circumstances, and especially those which force 'unofficial', non-integrated, intra-department processes, this is not the case.

Aside from the areas of business practices noted in the previous section, one of the common failures of an ERP implementation is the failure to take into account areas of stakeholder responsibility for maintaining a continuous process of data entry, and continued

² https://en.wikipedia.org/wiki/Data_governance

accountability for data entry by the process stakeholders. The root causes of the failures can be traced to four specific areas:

- 1) Documentation of the business processes overlooked in the ERP implementation and development of complementary systems to support those processes.
- 2) Documentation of the business processes related to the ERP system.
- 3) Recognition, planning, and budgeting for the initial and ongoing training on the ERP system.
- 4) Failure to interface and integrate external complementary ('best of breed') processes and systems in a Master Data Management (MDM) strategy.

ERP 'Survival' Best Practices – a Golden Opportunity

Advancements in technology over the past decade have opened the doors to a golden opportunity for corporations to rethink their ERP strategies, and reconsider a 'best-of-breed' approach to integrating most, if not all, specialized enterprise business processes compatibly under a single overall 'ERP Architecture Umbrella'.

The advent of new, mature and robust software frameworks, and more 'open' communication methods such as leveraging cloud computing techniques; have made the integration of complementary 'best of breed' applications with ERP systems far more practical and cost effective. It is now possible, more than ever, to look to extending the generic ERP architecture and interface and integrate industry-specific applications, such as Warehouse and Inventory Management, Customer Relationship Management, and Pricing and Product Information Management, in lieu of supplanting them and often losing their business and customer value.

Today's ERP software architecture can potentially envelop a broad range of enterprise functions and integrate them into a single unified system. For instance, functions such as Human Resources, Supply Chain Management, Customer Relationship Management, Finance, Manufacturing Warehouse Management, and Logistics, were all previously standalone software applications, generally housed with their own platforms. Today, they can all work under a single umbrella – the ERP architecture.

There are a number of different approaches to building out this type of architecture. One method is to consider constructing a single database repository that communicates with multiple software applications, on a merged portal.

The other is to determine, from each business area, what is the 'enterprise data' resultant from each discipline, and ensure that data is interfaced into the Data Warehouse, thus becoming the 'single point of truth', while ensuring that all the extraneous 'work up' information is retained within the complementary 'best of breed' application(s), to ensure (i) there is an auditable record of decision/change; and (ii) the Data Warehouse is not cluttered with extraneous information.

The Ideal ERP 'Platform' – Part One

The ideal ERP platform would take into account the core functionality of the traditional ERP system, and chain complementary systems to the Data Warehouse with the goal of ensuring data governance overall all aspects of the business. The diagram below provides a notional model.



New ERP Paradigm

Image 1 - Decentralized ERP Platform Architecture

Pricedex Software **Common Misconceptions about ERP that can Bury a Corporation**

By extension, each of the functional areas can now be extended with complementary processes to support the ERP Platform. The images below represent Customer-facing processes typically detached from the ERP architecture, and Internal-facing processes similarly detached.



Image 2 - Customer-Critical, and Operations-Critical Complementary Processes

The Ideal ERP 'Platform' – Part Two

Companies considering an extended architecture approach as an MDM strategy to enhancing their ERP systems should consider investigating industry-specific best-of-breed technology solutions providers as a first step. There has been extensive effort and innovation over the past several years in best-of-breed Product Information Management (PIM) systems, for example, which have evolved into larger-scale, comprehensive solutions for many, if not all of the customer-critical processes identified above. And, by extension, certain elements of the information they manage in relation to Pricing Management and Channel Management can extend to support critical historical information to support other operational processes, including Product Lifecycle Management, Rebates and Promotion Management, Procurement and Warranty Management on the operational side.

The first step to investigation is to discover, with departmental heads and other 'stakeholders', what are the business processes that are distinct from the ERP system, and how are they currently handled. The next step is to identify what dependencies exist on ERP data to perform these functions, and what ERP functions depend on the data these processes produce. As a final step, identify what data is not relevant to the Data Warehouse, but should be systematically managed or governed in the complementary systems.

The resultant information will give a clear indication of what is truly 'at risk' within the corporation, and is worthy of investigation and investment in complementary systems to complete the ERP architecture.

Finally, consider consulting an industry-specific software solutions provider. It is likely that their cumulative industry subject-matter expertise will yield significant returns, to the benefit of your corporation, without the burden, risk and cost of educating them on your industry sector and its business practices.

About Pricedex Software Inc.

We are a leading developer of world-class pricing and product information management (PIM) solutions. Pricedex enables manufacturers to establish, manage and maintain product and part relationships, pricing methodologies, catalog structures and business rules and logic while integrating with back-office, ERP and e-Commerce systems.

Additional whitepapers describing Pricedex solutions and technical architecture are available upon request or by visiting the Pricedex web site, www.pricedex.com.