



FOOD & BEVERAGE

CHOOSING AN ERP SYSTEM FOR FOOD & BEVERAGE
MANUFACTURERS & DISTRIBUTORS

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OVERVIEW

This document aims to provide buyers of ERP software who operate in the food and beverage manufacturing and distribution sector a brief overview of the ERP software industry plus a guide to successfully selecting an ERP system.

The document highlights various matters CitySoft recommends buyers take in to consideration when comparing their various options. Finally, this document positions & critiques SAP Business One, BatchMaster for SAP Business One and BEAS for SAP Business One as potential ERP systems for the food and beverage manufacturing and distribution industry.

THE ERP SOFTWARE MARKET

The Segments

The ERP software market place consists of four segments serving startups and small businesses (Tier 4); small to medium sized businesses (SMB's) (Tier 3); small to medium sized enterprises (SME's) (Tier 2) and the enterprise space (Tier 1). The ERP systems differentiate themselves on technology, often represented by a products scalability in terms of system user numbers, transactional volume capacity and database size, and the sophistication of their respective functional capabilities. Price is also a major ERP differentiator. The software tiers and product capabilities align with a company's size (system user count and turn-over). The general expectation is that as a company grows in size and maturity it requires more sophisticated ERP software to help manage a more complex business environment.

The Software Developers

There are an overwhelming number of ERP products in the market place catering for finance and distribution companies however there are fewer quality ERP systems for food and beverage manufacturers. The tier 4 systems typically consist of inventory and manufacturing extensions to basic accounting systems and by virtue of this need to link multiple business systems to create a business system solution limits the long-term usefulness of these types of solutions. The leading global developers of business software – Sage, SAP, Microsoft & Oracle operate in the tier 3 and tier 2 ERP space as do a large number of mid-sized software developers who have been industry players for extended periods of time. Food and beverage manufacturer and distribution buyers of ERP software in the tier 2 & 3 space are spoilt for choice however there are a number of considerations regarding the various ERP systems that are ignored at your peril.



Buyer beware

Technological advancements and buyer sophistication in the last decade or so have forced some ERP developers to exit the market as a result of not being able to modernize their ERP software systems. Others are still selling their pre-Internet developed ERP software, often complete with a cosmetic facelift, often to unsuspecting or less sophisticated buyers. Some developers invested in a full migration of their legacy ERP systems into Web enabled and Web native technologies whilst other vendors either acquired a Web ERP system & migrated their clients on to their new ERP system or forced their clients to migrate to another ERP product already in the vendors ERP product portfolio. It is an important buying consideration to learn as much as possible about the past and future road map of the product you are considering as major cost and business disruption can await you if the vendors capacity to modernize their ERP is limited and if their strategy is to acquire and or migrate you to a new product in the near future. For some vendors the product they are promoting may have entered a maintain phase with no further plans to develop the product. This spells trouble.

Industry Solutions

The technologies upon which the tier 1 & 2 ERP systems are built means pretty much anything is possible when it comes to creating an ERP solution for a business. Many of the tier 3 & 4 ERP products simply aren't designed to be modified or extended to meet a company's specific requirements and, in many cases, if they can be changed the changes generally can never be cost justified and are often impractical to system users. Given the availability of quality ERP systems for the food and beverage manufacturing and distribution industry buyers are better served considering the industry designed ERP system over general ERP systems that may have the capability of being transformed and configured to meet the specific needs of your industry.

Plan

When organizations are considering a new ERP system it's usually because of the challenges they are facing with their existing system. Therefore, the planning stage is critical as no-one wants to find out too late that there are issues in the business that the new system cannot address. During the planning stage, speak to all key stakeholders in the business about their needs. Collect, classify and rank every business information need as this will assist you narrow your search for your new ERP system. A systematic analysis and planning approach will de-risk your investment in ERP software and will enhance your ability to compare options.

The Perfect end to end ERP Solution

The days where an ERP system was expected to be the be all and end all of systems are long gone instead ERP vendors have turned to a model based on integration with best of breed systems such as eCommerce, Advanced Warehousing, traditional POS and business intelligence systems. An ERP systems design and openness to connect with and share data with other Web applications and smart device will be instrumental in creating a flexible, capable and future proofed ERP solution for your business.

The leading ERP systems are commercial based on covering the necessary and expected business functions. It is not uncommon for industry specific solutions for food and beverage manufacturing and distribution to provide excellent coverage for a business's operational manufacturing and distribution needs but then fail to provide a quality finance and accounts capability. This is one reason why an enterprise-wide review of how a system will meet all your business needs is a must.

The next step once a detailed requirements list has been created and a short-list of vendors selected is to match a solution against each requirement. Whilst many of the requirements should be met with

the standard functionality in the ERP system, with or without standard configuration, some requirements may require development work, work-around solutions, a 3rd party add on to the core ERP or may not be met by the solution. Thoughtful classification of a supplier's solution response options will play a major role in ruling a vendor in or out of consideration. CitySoft recommends buyers focus on a vendor's solutions around custom reporting and business intelligence, integrations, data conversions, enhancements (Developments) forms and workflows as the solutions and approach to these areas of an ERP project can have a significant impact on the overall investment and quality of solution.

ERP systems typically cover a company's sales, inventory, purchasing, finance, accounts and banking requirements plus multi-currency management, a fixed assets register, multiple entities, a cashbook capability, user security, audit trails, a report writer and of course multi-user capabilities. Some ERP systems extend further by also offering business intelligence, advanced warehousing and manufacturing, either or discrete or process manufacturing. We often implement manufacturing-centric ERP solutions into manufacturing companies who were unsuccessfully using an ERP's inventory module due to there being no manufacturing functionality in an attempt to fashion out a quasi-manufacturing capability for their business. Even where an ERP offers capabilities such as single and multi-level bills of materials, fractional quantities and multi-units of measure an ERP designed around distribution and even one designed for discrete manufacturing simply don't contain the flexibility to cater for the intricacies present at a food and beverage manufacturer. A typical bill of material (BOM) just isn't a formula or recipes with variable outputs.

Quality ERP systems designed for process manufacturers and distributors of food and beverages not only address the operational challenges of managing shrinkage, batch & lot tracking, wastage, rework, potency, quality control and sampling but they also manage the related accounting aspects without convoluted workarounds, manual interventions, spreadsheets and the like to manage and record costs. The ability of a food and beverage manufacturing ERP system to size and resize production work orders to meet a target output is also a significant capability missing in a general ERP system.

Most ERP system provide multi-location inventory management and some also offer advanced warehousing including license plates, GS-1 labelling, lot and batch management and radio frequency paperless warehouse management.

ERP systems designed for food and beverage manufacturers and distributors are more likely to provide system coverage for perishable goods management. For instance, directing pickers to pick goods with the earliest use by date first and avoiding shipping goods that do not meet the customers minimum shelf-life expectations. Other capabilities of quality food and beverage manufacturing software may include the ability to quarantine goods until such time as they are cleared to ship by the QC department and, cold chain management.

The following section provides readers with insight into three SAP Business One centered ERP solutions for food and beverage manufacturers and distributors.

SAP BUSINESS ONE



Core SAP Business One can satisfy the needs of some food and beverage manufacturers even without adding either BatchMaster or BEAS to core SAP Business One ERP. The core SAP Business One system includes light manufacturing and advanced inventory that may satisfy the needs of less complex manufacturing entities with BEAS or BatchMaster adding a depth of functionality that sets them apart from general ERP solutions.

SAP Business One is a tier 3 ERP system pushing into tier 2 when adding either Boyum BEAS or BatchMaster for SAP Business One to the solution footprint.

Boyum BEAS and BatchMaster for SAP Business One are value add process manufacturing extensions for SAP Business One that make SAP Business One a brilliant solution for small to medium sized businesses and small to medium sized enterprises operating in the food and beverage manufacturing and distribution market.

Unlike the tier 4 options where two systems are typically cobbled together, BEAS and BatchMaster were written on the SAP Business One platform meaning the user experience and solution strength are superior to the tier 4 options.

BY ADDING THE PROCESS MANUFACTURING STRENGTHS OF EITHER BEAS OR BATCHMASTER WITH THE POWER OF SAP BUSINESS ONE CREATES THE IDEAL SYSTEM FOR FOOD & BEVERAGE MANUFACTURERS AND DISTRIBUTORS

Additionally, the core SAP Business One inventory management system can be expanded by adding either Boyum Produmex Warehouse management or the BatchMaster WMS system which are best of breed warehousing systems supplying RF paperless warehousing for SAP Business One ERP.

BATCHMASTER

BatchMaster for SAP Business One has been designed specifically for food and beverage manufacturers and distributors. BatchMaster re-wrote all their leading manufacturing capabilities into SAP Business One on the SAP Business One platform to create an all-in-one ERP system for process manufacturers. Whereas the BatchMaster ERP system boasts brilliant process manufacturing capabilities its finance and accounting capabilities are not as highly regarded. However, by combining the power of BatchMaster process manufacturing with SAP Business One, SMB's and SME's now can enjoy the best of both worlds – a quality sales, accounts and financial system combined with a market leading process manufacturing system presented as one unified end to end system.



BatchMaster for SAP Business One specifically deals with recipes, allergens, and an items physical properties. It accounts for wastage, re-work, work order resizing, samples, constant and variable loss factors and fractional quantities. Quality control and compliance are important areas of BatchMaster for SAP Business One. Material Requirement Planning (MRP) & Master Production Scheduling (MPS) enables a business to optimize production, best manage the timing and make up of purchase orders and in doing so helps better manage a company's internal cashflow.

The BatchMaster for SAP Business One ERP system can be further expanded by adding the BatchMaster warehousing suite which operates equally well for the management of inventory for production as it does for managing finished goods for sale. A small number of optional modules also exist to meet the particular needs of various industry segments such as for bakery, nutraceutical manufacturers and for food sampling purpose.

BOYUM BEAS FOR SAP BUSINESS ONE

Boyum BEAS for SAP Business One is another option for SMB and SME's operating in the food and beverage manufacturing and distribution industry.



Beas Manufacturing provides manufacturers with a scalable platform to enhance cross-company collaboration and process execution to improve operational performance, increase asset reliability, maintain quality enforcement, provide consumer traceability and improve recipe agility. When combined with the Boyum Produmex Warehousing system businesses running SAP Business One and Boyum BEAS have at their disposal a powerful end to end integrated business system tailored to their industry.

BEAS software helps companies accurately monitor their manufacturing processes to maximize throughput. BEAS manufacturing supports automated BOM and cost calculations which can represent a major time saving. BEAS deals with multi-constraint production resources which in turn aids with the supply of accurate customer expected delivery dates.

BEAS deals with recipes and recipe effective dates, tracks actual and expected waste and handles BOM variations and revisions.



**"BEAS MANUFACTURING
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WITH"**



Aceites García de la Cruz

BEAS for SAP Business One also supports shop floor capture of information in real time. Timely capture of data enables businesses to react faster to unexpected situations, reduce overhead costs and optimize available resources.

Beas Manufacturing Quality Control allows enterprises to define what, when and how products are tested, providing a full audit and electronic documentation trail of the quality control procedures and processes, thus increasing overall product quality and levels of traceability. For companies where product consistency is key BEAS for SAP Business One is the solution. Testing, enforcing operational disciplines, identifying and managing expiry dates, and planning for downtime all contribute to achieving a competitive advantage.

WHICH ERP SYSTEM BEST SUITS MY BUSINESS

So far in this document we've discussed the importance of comparing each products technology and functional coverage against your particular business system requirements so as to determine the degree of fit a product offers your business and therefore its suitability for your business.

We've highlighted the importance of a vendor's investment in their product and their products position in its product lifecycle and we've also outlined the industry tiers to help you avoid wasting time looking at products that will be unaffordable or functionally or technically inadequate for your needs.

Your preference with respect to product technology may very well eliminate a number of ERP system candidates. Product affordability is also likely to narrow the field as the required investment differs quite significantly between software tiers.

BatchMaster for SAP Business One and Boyum BEAS for SAP Business One are both quality products developed for food & beverage manufacturers and distributors. SAP are a leading global business software developer and Boyum (BEAS) and BatchMaster are highly valued SAP independent software developers for SAP Business One.

The best product for your business, from these three options – core SAP Business One, BEAS for SAP Business One or BatchMaster for SAP Business One, may come down to one or a few small product differences. A preference for one products look and feel, the user experience and ease of use may trump one products overall functional superiority.

BatchMaster has in the authors opinion a slight edge over BEAS with respect to out of the box process manufacturing functionality however following set up and configuration the differences are quite minimal.

SAP Business One is an example of a client server technology that has undergone a transformation that now sees the product supporting web client access. SAP has successfully reimaged SAP Business One as a Cloud application.

The products can be purchased (perpetual license purchase) or subscribed to and all three products are offered as a software as a service under a partner certified cloud offer.

It is important to choose a consulting firm who are not only specialists in your chosen product but who operate if not exclusively, predominately, with businesses of your size and sophistication. The engagement models and project service costs of ERP implementation firms generally align to the four business tiers and interoperability between segments doesn't generally exist. The project disciplines, scope of project works, and solution sophistication differ between business segments and software tiers meaning a consulting firm who for instance typically operate in say the tier 2 space generally won't be suited to ERP projects in say the tier 4 space.

If you would like further details on any of the topics covered in this report or if you'd like to discuss your specific requirements with an ERP consulting expert, please contact CitySoft.