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## **Oracle Applications in the Food and Drink Industries**

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### **Introduction**

The Food and Drink industries have become one of the major contributors to the economies of the countries of Western Europe and the USA. From the earliest days of these Industries, there have been two distinct parts: the manufacturing/supply chain side; and the retail, selling side. For many years the supply chain side dictated volume and brand; and the retail companies reacted to this supply the best it could. However, the use of Information Technology during the 1980s transformed this balance; for the first time, the retailers could manage and control what was being sold; they could measure directly the effectiveness of merchandising and promotional campaigns; and they began to control the supply chain from its end point. The manufacturers had no option but to respond to this shift in power by becoming more efficient, more effective, and, most important, more flexible. This paper describes some of these trends and characteristics of the manufacturing and supply chain end of these industries, and presents a Case Study of the world's leading cider manufacturer, H P Bulmer, in their search for ever increasing efficiency and their use of Information Technology for sustained competitive advantage.

### **Manufacturing Style**

The 1980s saw a rapid growth in the use of computer-based manufacturing solutions to manage and control the materials and then the processes of many 'discrete' manufacturing companies. These companies were characterised by a unit-based bill of materials, a direct relationship between the components and the sub-assembly or final assembly, and a material management requirement that could be met by the application of classical MRP and MRP II techniques.

The process companies, on the hand, were more concerned with flow of product through the factory; with managing recipes rather than with bills of material; and with very high throughput of relatively simple products. But by the end of the 1980's the distinction was much less clear; electronics companies were implementing flow-line techniques; high volume discrete manufacturing companies were using techniques such as back-flushing and 'works-order-less' repetitive schedules; and material supply and purchasing were taking advantage of technologies such as EDI to change dramatically how material was sourced and provisioned.

The Food and Drink industries, like others, were feeling new and different pressures. Never before have we, the consumer, seen as much choice in our supermarkets and corner shops than we have today. Each brand must be positioned by a suitable campaign; each campaign can be uniquely measured and evaluated; and there are always many more

brands waiting to take the place of each other. The manufacturing/supply issues then become critical; the manufacturing process must be able to respond instantly to such parameters as the weather (if your brand of ice cream is not available when the sun shines, the consumer will buy someone else's!); instant marketing campaigns of 10% extra for free, for example; and unexpected space on the supermarkets' shelves when your competitor is unable to produce.

This then is the challenge of the Food and Drink manufacturer: he must minimise his stock holding of both ingredients and packing material; he must be able to respond very quickly (within hours) to a marketing opportunity spotted by his Brand Managers; he must be able to vary his product mix in the light of events such as the weather, his competitors' misfortunes, fickle public tastes; and he must do all this at a profit against a selling price that is fixed by the market. Mission Impossible - some might say!

## The Solution

These industries, then, have invested heavily in solutions that have promised to assist in the realisation of these objectives, and we have seen all of the major players implement manufacturing management systems. However, these systems have not always delivered their promises; the uncertainty of these consumer markets, the speed at which new players can become major suppliers and, above all, the flexibility that is required at all levels within these companies, have not always been provided. One thing is clear; Information Technology has a vital part to play in all areas that we have so far discussed, and the companies that implement successfully will undoubtedly survive and grow in the future.

One such company is H.P. Bulmer, of Hereford, England. H.P. Bulmer are a long time user of Oracle technology, and have recently committed to Oracle Applications,

both Financials and Manufacturing, to help them automate their supply chain and keep up with demand into the next century.

## Case Study - H P Bulmer

H.P. Bulmer is the world's largest manufacturer of cider, as well as acting as sole licensee for a number of other soft drinks products (Fig.1). Brands include household names such as Woodpecker and Strongbow, as well as newer labels such as Scrumpy Jack. The company was founded in 1887, and the family retains over 50% of the shareholding today. The company suffered from significant under-investment in IT in the 1980s, with the result that they were ill-equipped to face the challenges of the 1990s.

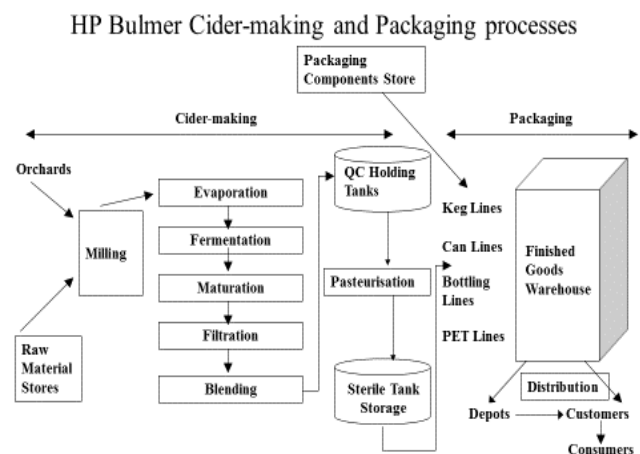


Figure 1. HP Bulmer Cider-making and Packaging operations

In the early nineties new IT and IS strategies were developed based on a replacement of systems in all core business areas and the adoption of the Oracle RDBMS, Oracle Tools and packages. Since then, a range of bespoke and package solutions have been pursued which have delivered key business benefits as the company has continued to invest heavily in new plant and a sustained high level of marketing spend. The systems programme has been closely coordinated with the evolving business requirements of the company in a particularly dynamic market sector.

New centralised product and customer maintenance systems have been installed to feed all processing and reporting systems with

common data. New pricing and promotions systems have dramatically shortened the price change cycle and increased promotional spend controls, whilst maintaining the flexibility required to compete effectively in the market place. A new system has also been developed to plan and monitor the installation of bartop equipment in tens of thousands of pubs (bars) throughout the country, whilst at the same time providing additional functions to audit this valuable company asset.

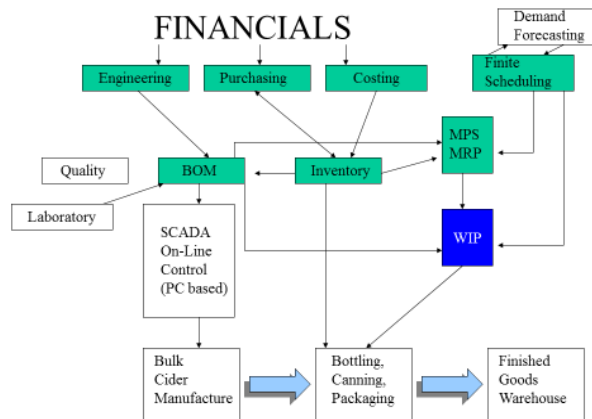


Figure 2. Oracle Financials BOM-SCADA integration

More recently Oracle Manufacturing and Finance packages have been selected and the first modules are now being implemented. The need to provide centrally maintained product specification information to the SCADA system at the heart of a new process development project has been met (Fig.2), and focus is now being given to improved demand forecasting and reduced inventory levels. The implementation of new integrated ledgers is seen as key to the future reduction of administrative overheads in a period of major restructuring.