Introduction

With the current downturn, margins are being squeezed in most industries, resulting in an urgent need for higher efficiency and greater effectiveness, including the putting in place of better-value ways of working. A true e-business of the twenty-first century is one which thinks and acts in a way that allows it to collaborate, integrate and empower by:

- internal and external business processes working together seamlessly, enabling collaboration with suppliers, partners, employees and customers across traditional enterprise boundaries;
- ensuring that employees have at their fingertips the information, applications and services they need to do their jobs.

It is the Web and the applications, standards, tools and services that have been developed around it that have removed the traditional barriers to building collaborative relationships and now made it an economically attractive option. The benefits from the transformation of business processes are derived from eliminating intermediaries like wholesalers and retailers from the value chain, removing manual operations, improving productivity and speed of operation, increasing efficiency and enhancing customer and supplier relationships.

According to industry analysts IDC Research,[1] companies are on the brink of another growth cycle in IT spending, with application integration, mobile wireless and security the chief factors driving companies to invest in technology. A joint survey released in May 2002 by KPMG[2] and the CBI reveals that 90 per cent of companies believe e-business will reduce costs by at least 10 per cent but only 15 per cent are currently reaping the rewards. Improving business processes alongside new technology could boost the profits of UK companies by £4.3 billion a year according to the Gartner Group,[3] who quote Easyjet and Tesco as two examples of organizations that have maximized their agility. By re-engineering the distribution chain and pushing sales online Easyjet cut out the costs of sales intermediaries and then further reduced costs by issuing e-tickets. Improvements with customer information at Tesco has reduced lost sales on promotions by 33 per cent and reduced promotion overhead and waste by 30 per cent, while wireless technologies have also increased the productivity of warehouse staff and improved the accuracy of warehouse-to-store deliveries.

In this briefing we take a look at this subject with a non-technical and pragmatic approach by dividing it into four parts.

THE STRATEGIC BENEFITS OF COLLABORATIVE WEB-ENABLED BUSINESS PROCESS MANAGEMENT

Collaborative commerce had its beginnings in the 1980s with both electronic data interchange (EDI) and Procter & Gamble and Wal-Mart's 'collaborative replenishment' project. Today, with the move towards greater collaboration and increased outsourcing of both core and non-core activities, companies are becoming virtual organizations – a combination of organizations working together in close partnership, with shared risk and reward, to deliver end value to customers.

The value comes from the business initiatives involved in moving to web-enabled, collaborative end-to-end (E2E) processes. IT, although often the most expensive component of these projects, is an enabler, not an end in itself. It should be the business driving the technology not the technology driving the business. Research has shown that there is no automatic correlation between the amount of money spent on IT per employee and company profitability, although if done well spectacular results can be achieved. Companies must insist on quick payback times, thorough business plans and careful, regular pre- and post-implementation analyses of all major technology projects. According to Strassmann:

> *Companies are finally fed up with the escalating costs of IT through incompetent implementations. IT must be put into the hands of people who are competent to deliver and it has to be taken for granted. It must be available when you need it, how you need it, cheaply, reliably and securely. Companies need to worry about how to use it, not how to manage it. From now on just watch the economics and the risk, not the technology.*[4]

THE TECHNOLOGICAL, FINANCIAL, LEGAL AND RISK MANAGEMENT CONSIDERATIONS

A typical large company has 30–50 separate applications which are not integrated. The need to connect to customer and supplier systems has exacerbated this problem and left companies with a large number of incompatible systems. With wholesale replacement of systems not often a viable solution, Web standards and services and enterprise application integration (EAI) middleware are providing an automated, cheap alternative to labour-intensive point-to-point integration. To facilitate this integration underlying systems do not have to be changed but business logic needs to be separated from data and the presentation layer has to be split off. This is because it is no longer possible to predict the nature of the device that may be used to contact the company, e.g. PC, handheld computer or mobile.

Equally, there is a need for a sound, dynamic security policy, which is embedded in the corporate culture combined with an ongoing risk assessment and mitigation process, including business continuity, in addition to the more obvious physical and technical tools such as firewalls. The challenge is to achieve maximum functionality within an entirely secure environment by including security in the design.

END-TO-END (E2E) BUSINESS PROCESSES

Just as companies are recognizing the benefits of selling directly to consumers over the Web, companies are now applying disintermediation to their own corporate structures. An increasing number of companies are seeing the benefits of employing a self-service approach to HR and employee information, leading to a growth in enterprise portals. According to Wal-Mart's CIO, in the last ten years the driver of change has made the transition from technology to information.[5] What is really strategic is the use of the information and how it is exploited and maximized. Wal-Mart is in a business that competes at the speed of information, so it must be presented in such a way that it drives execution and improvements in the business. Martin Butler believes that two-thirds of the value of large companies is made up of information and knowledge and to overlook this issue is to devalue the business.[6]

Successful customer relationship management (CRM) is about giving the customer a better experience, hence enhancing the company's chances of retaining the lifetime value of that customer and acquiring new customers. The goal of CRM is to understand who the most profitable customers are – essential for both online and offline business. The Web is the ideal tool internally to tie together the disparate, product-based systems that contain customer data, and externally it can provide all customers with a similar and consistent experience, whatever products they buy. Integration of CRM with enterprise resource planning (ERP) and supply/demand chain management (S/DCM) are critical to success, especially supporting systems like order fulfilment, logistics, inventory management and electronic bill presentment and payment. The aim is to give the customer a seamless experience.

The supply chain in many organizations can consume well over 50 per cent of a company's operating expenses. It is therefore an obvious area to explore and exploit in the search for business systems improvement. When Microsoft adopted e-procurement the average transaction cost was reported to drop from £145 to £5.

HOW TO ANALYSE, RE-ENGINEER AND MANAGE BUSINESS PROCESSES

The use of process-based management as the basis for managing the business was accelerated in the 1990s by the large number of ERP implementations within organizations and their use of a process-based philosophy. Over the last ten years, process-based techniques (PBT) have evolved from being used as just one-off tools applied for a particular purpose within the organization, such as costing or business improvement, and have become an all-embracing advanced planning, monitoring and control system which encompasses quality management philosophies – business process management (BPM). The quality initiative Six Sigma is sweeping the US, with business leaders in a quest for operations performance improvement. For peak performance, companies should assign process owners and position Six Sigma as one tool in the context of a holistic and strategic business process management approach.

> *Whether designing products and services, measuring performance, improving efficiency and customer satisfaction – or even running the business – Six Sigma positions the process as the key vehicle of success. Research has shown that the costs of poor quality (rework, mistakes, abandoned projects etc) in service-based businesses and processes typically run as high as 50% of total budget.*[7]

In 1995, 62 per cent of UK managers were affected by some sort of organizational change programme: in manufacturing and financial services it was running at 75 per cent, in utilities it reached 90 per cent.[8] In the twenty-first century change is a constant. For organizations which manage change skilfully, it can become the driving force that perpetuates success and growth, with every change presenting a new opportunity to increase efficiency or to build the business. But all too often change fails as companies do not rise to the challenges it brings.