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**PANACEA LIMITED WHITE PAPER**

**E-BUSINESS TRANSFORMATION FOR RETAIL AND  
DISTRIBUTION COMPANIES**

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## Overview

E-business, though still in its infancy as regards to Internet trading, is possibly today's fastest moving technology area. We have already seen first and second generation e-businesses make headline news as their market capitalisations soar on the back of speculation about their potential for future profits.

The watchwords have been 'market share'. No mention of profitability.

Though in an immature market it is only fair for the first wave of companies to aim for little more than brand awareness, many of these first and second generation e-businesses have made little or no attempt to rationalise and streamline their business processes to adapt to fully benefit from and to react to the pace of change in Internet land. Examples abound of companies such as Amazon, Action Computer Supplies and Simply Computers whose successful web sites have been, and in many cases remain, little more than a glossy front-end into an arcane, manual order fulfilment and customer management process. Is it little wonder that these companies have little intention of making profits from their e-business?

As e-business, whether business-to-consumer or business-to-business, moves into the mainstream, customers will demand ever better quality and clear differentiation from their suppliers. The likelihood is that the pace of change will continue to become ever faster. Customers currently expect e-businesses to change regularly, much more regularly than a bricks-and-mortar business. Soon they will expect e-businesses to *improve* regularly if they are to maintain their custom.

Panacea has developed an e-business transformation solution for retail and distribution companies who recognise the truth in the statements made above and who want to lead the way into the third generation of e-business – to become an Internet chameleon capable of predicting and reacting to its customers needs now and in the future. And on the Internet, the future could mean tomorrow.

## About Panacea Limited

Panacea was formed in 1986 by its joint Managing Directors, Phil Blatchford and Gary Woodward. Through its six key lines of business, Panacea has delivered successful IT solutions to a broad range of businesses and now directly supports more than 600 customers encompassing industries providing products and services to both businesses and consumers.

Over the past two years Panacea has assumed a pioneering role in developing and implementing e-business applications and services for retail and distribution customers, drawing on our fourteen years of IT solutions experience in these key markets.

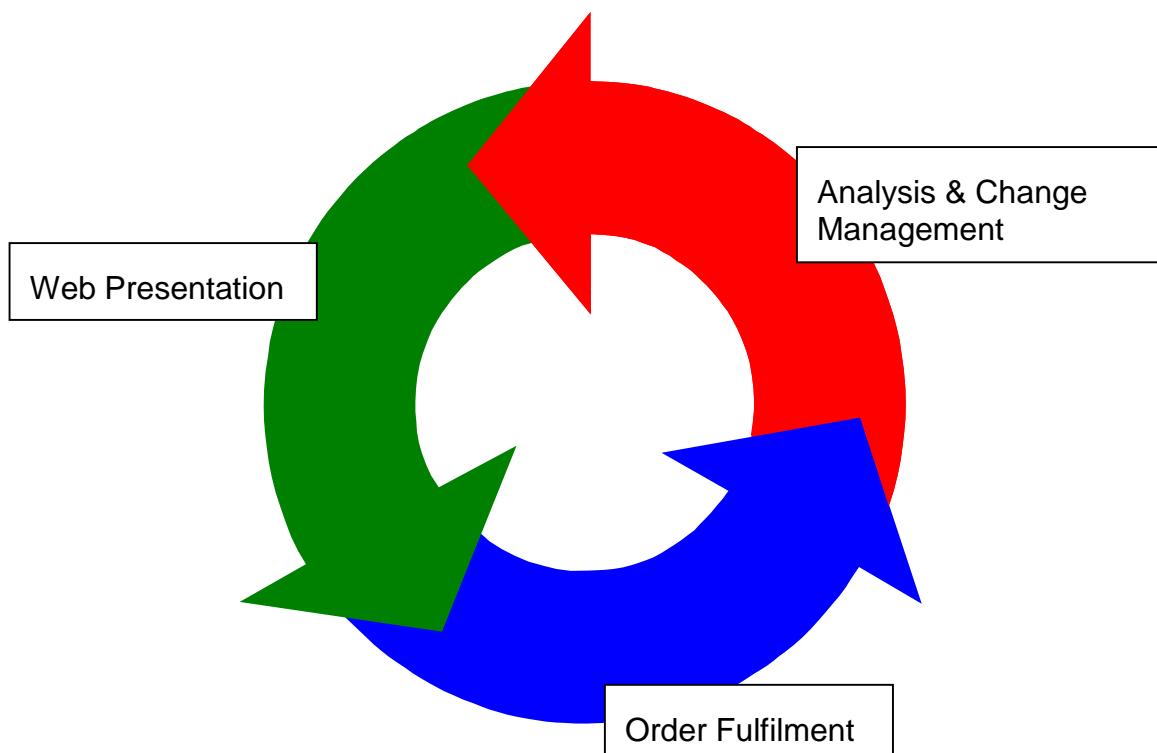
Having already implemented successful solutions for clients who manage their own Internet solutions with our support, Panacea is now able to offer an alternative route to e-business. On 3rd April 2000, Panacea launched its Application Service Provider (ASP) company, **Pasporte**, to complement its strength in e-business solutions provision. This is the final piece in a carefully planned strategy devised to make Panacea the first choice to deliver a *complete* e-business solution encompassing everything from creative consultation, web design, the front-end web site and e-catalogue through Enterprise Resource Planning, warehouse management, business process re-alignment, collaboration and messaging, knowledge management and Customer Relationship Management, secure, scalable and resilient infrastructure and life-long support.

## The Nuts and Bolts of E-business Transformation

First generation e-businesses were little more than Internet front ends into an existing business. In many cases the Internet front end fed (and continues to feed) into less efficient business processes than the processes finely honed over many years for more established lines of business. Second generation e-businesses began the task of reducing costs by integrating their Internet front end into their core business system, usually an ERP solution of some sort. However, most second generation e-businesses have still only enhanced the efficiency of their order taking facilities and few have looked further to understand how their business must change to truly benefit from the Internet revolution. Panacea's e-business Transformation service is a complete set of solutions that can revolutionise any retail or distribution organisation's use of the Web by reviewing a company's total IT and business requirements and not just their Internet front end.

### *Accelerated Change*

The biggest difference between e-business and established business is that the rate of change is accelerated and will continue to accelerate ever faster. Thus, it is imperative that companies transforming to become an e-business must break down the barriers between systems and between people so that information can be captured, analysed, discussed and acted upon quickly. Mistakes will be made in this high-pressure environment and these systems must be capable of highlighting problems without the need for concentrated



human effort. Once problems are highlighted it is imperative for discussion to take place quickly and changes should be made rapidly.

The benefit the Internet brings is that companies can afford to make changes quickly and monitor what happens. If it doesn't work then further changes can be made. However, this approach is only efficient if changes are based on a response to the accurate analysis of underlying trends. Equally, it must be possible to accurately judge the effect of changes.

### ***Improved Efficiency***

The Internet is often viewed as a tool to drive down costs and improve efficiency. It is true that the Internet and related technologies can remove layers of cost from an organisation but the true benefits of e-business will only be recognised if all elements of order fulfilment, inventory management and customer and supplier relationship management are considered.

Unless a company's business processes are streamlined and integrated with their IT systems, e-business may actually have a negative impact on efficiency, costs and customer retention. Every element of an e-business's infrastructure must be analysed, streamlined and then monitored with a view to further improvement as customer requirements change. IT systems must communicate effectively and data must be accumulated in a central data warehouse for the purposes of analysis.

The introduction of new technologies such as barcoding, warehouse management and consignment tracking, fully integrated into the company's ERP solution can have a significant effect on efficiency whilst also reducing errors visible to the customer. These solutions will often involve integration of systems with third party suppliers in order to further minimise errors, improve efficiency and to improve visibility both to the company's managers and to its customers.

Better methods of communication need to be introduced that allow customers, employees and suppliers to discuss requirements and concerns in real time, across geographic and company boundaries and to share accumulated business information for discussion. This approach breaks down historic barriers and improves the time to change to customer needs. This concept of collaboration, of shared information that has historically remained guarded in the boardroom, is often alien to established organisations and requires strong management and changes to contractual terms in order for its implementation to be a success.

### ***Increased Complexity***

The e-business model provides us with a conundrum. On the one hand e-businesses must be leaner, more responsive and on the other, their IT infrastructure and systems security is becoming ever more complex and the business is ever more reliant on it functioning effectively.

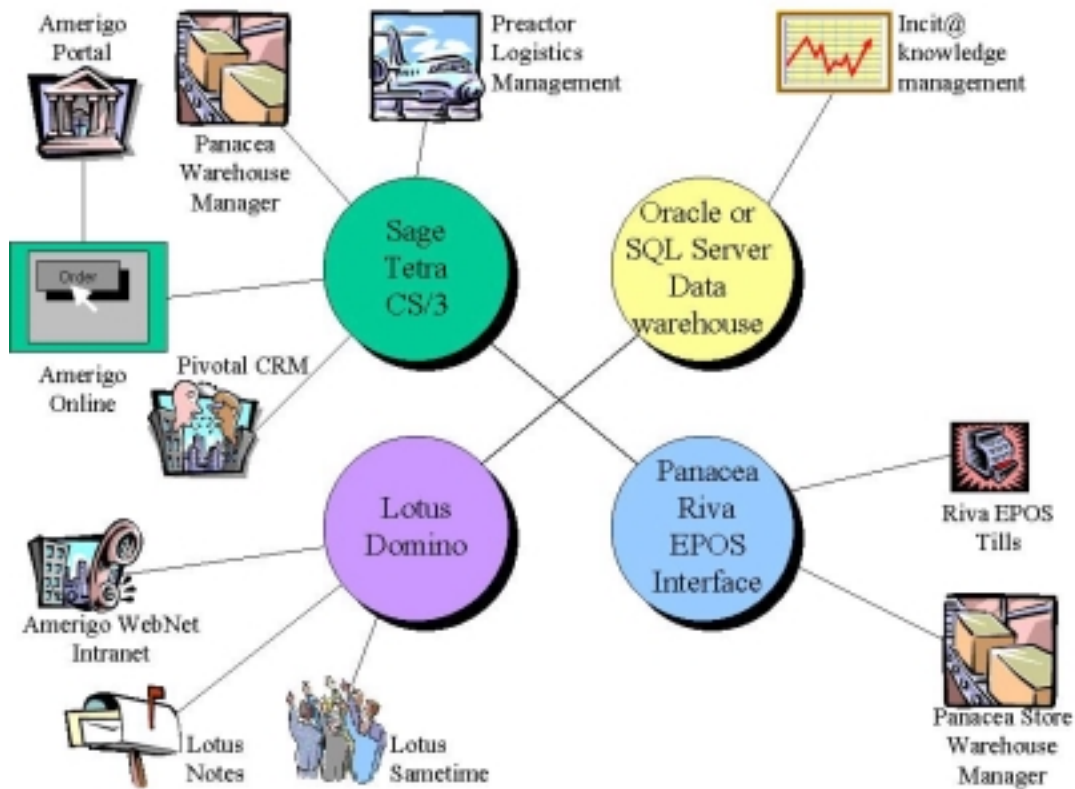
There is little doubt that companies whose skills are in retail and distribution do not want to build ever larger IT teams, do not want to allocate yet more space to IT infrastructure and do not want the ongoing problems of systems

upgrades, training and wholesale skills changes. To manage these considerable problems, a new breed of company, the Application Service Provider (ASP) has arisen. Using the technologies made all pervasive by the Internet, ASPs can implement, manage and support a company's IT infrastructure whilst allowing them access to their applications via the Internet or other networks employing Internet technology, for a fixed rental fee. This avoids significant capital costs and the many less tangible costs of managing one's own IT infrastructure whilst allowing a distribution or retail e-business to focus on what it does best.

## Panacea's E-business Transformation Solutions

Panacea is able to offer a complete set of solutions that integrate effectively using standard Internet technologies. All our solutions are anchored on solid IBM RS/6000 and Netfinity hardware platforms for optimum performance, resilience and scalability. We employ leading software technologies from Microsoft, Lotus, Oracle, Riva, SageTetra and Business Objects to deliver reliable, supportable solutions that will integrate with third parties with the minimum of fuss. Our own Amerigo™ e-business products provide off-the-shelf solutions backed up by skilled business and technical consultancy and integrate effectively with our Incit@™ knowledge management solutions. Finally, our customers can choose between purchasing and managing their e-business solution with Panacea's support or, via Pasporte, our ASP business, their e-business infrastructure can be implemented, hosted and managed for a fixed rental fee thus freeing the customer to focus on their business and not their IT infrastructure.

Our total E-business Transformation solution is illustrated below.



This all-encompassing strategy significantly differentiates Panacea from the majority of Internet Solution Providers and is backed up by fourteen years experience in implementing successful distribution and retail solutions.

## **An Example Transformation of a Retail Company into a Clicks and Mortar e-Business**

### ***Current Position***

Retail Ltd has a strong brand image that is re-inforced through advertising and by a consistent image for its shops. This brand provides Retail Ltd with a strong basis for a successful e-business company.

Retail Ltd already has a 'broadcast' Internet web site that attracts a reasonable number of hits per month. The website is hosted by a third party and is maintained by Retail Ltd's marketing and design partner.

### ***Aims***

Retail Ltd is focused on securing additional funding to transform itself into a 'clicks and mortar' business. By combining the strengths of a national high street presence, strong brand image and web-friendly products, Retail Ltd is ideally placed to transform itself into an e-business.

Unlike many retailers who have dipped a toe into the Internet market, Retail Ltd recognises the benefits of entering the market with a fully integrated solution that merges its e-business with its high street retail business. Offering customers the chance to browse product on the Internet with the facility to pick up that product from a local store and to return products via the store should greatly increase consumer confidence whilst broadening Retail Ltd's appeal.

Panacea's aim is to work with Retail Ltd and their marketing agency to define the IT infrastructure and business processes needed to create an efficient e-business with a strong brand image and enjoying total integration between their high street retail business and the e-business.

## ***Proposal***

What follows is an outline of the solution that we would recommend to Retail Ltd to provide a fully streamlined e-business capable of rapid change. All elements of the solution have been chosen to maximise the solution's resilience and scalability so that Retail Ltd can be open for business on the Web 24 hours a day, 7 days a week.

Starting from the Web end, customers will enter the Retail Ltd's site via the Retail Ltd portal which will provide information considered general information about Retail Ltd, special offers and promotions. The user will be offered the chance to register and login. During registration the user will provide information about themselves which will later be used to target the information displayed to them when they log in to the site. Once logged in the user will be offered information considered relevant to them. This information will be maintained by Retail Ltd's staff using Web based maintenance screens. Promotions and special offers will be maintained in Sage Tetra CS/3 as now and these will be automatically brought to the user's attention.

The user will be able to enter the Retail Ltd online ordering facility from the portal. The user will be lead into the final ordering process through graphically rich screens.

Orders will be created directly in Sage Tetra CS/3 and will lead to the generation of a picking list within the Internet Warehouse. This warehouse and company will run separately to the Retail Warehouse and company. Panacea's Warehouse Manager product will be used to guide the warehouse staff to the correct bins to select product and using barcode readers, scan each product on the picking list and take them to the despatch area. Products will then be scanned for despatch and will be loaded onto the relevant courier's transport. The despatch process will create an electronic output to be used by the courier who will provide regular electronic updates to Retail Ltd about consignment status. These updates will be loaded into CS/3 and will be available to the Web customers to view when they log in to check the status of their order.

Each store will have a PC that is connected via ISDN to the central Sage Tetra CS/3 server which will allow store staff to check availability of stock in the group, send and receive e-mail and view and create business reports using Incit@™. Attached to the store PC will be a tethered scanner to manage the stores warehouse.

If product is to be collected from a local store the product will be shipped to the store for collection and recorded as an inter-warehouse transfer. When product is received at the store it will be received into the store's Internet warehouse using barcode scanners.

Products may be returned via post to the Internet warehouse or may be returned to a store. The system will manage the returns process and update stock in the Internet warehouse and Internet Returns warehouse.

Head office and the stores will be able to monitor the progress of orders through their system using the Incit@™ knowledge management tool. This tool will be configured to directly access Sage Tetra CS/3 for real-time reporting and to access the Retail Ltd's data warehouse which will take feeds from CS/3, web site and web user statistics, the Riva EPOS manager and any pre-configured external feeds such as market trends, advertising spend, weather, etc. Using Incit@™, Retail Ltd's senior managers can monitor key performance indicators (KPIs) at a high level, usually using a traffic lighting system, but then drill down to more specific information to understand any changes. Other managers can monitor information relevant to them, automatically generate management accounts and react to buying trends quickly.

By implementing Lotus Notes and Lotus Sametime, Retail Ltd's managers can share information and hold real-time discussions regarding trends and concerns and act upon them quickly. Because there is general (though controlled) access to the central systems that control the Web site content, pricing and promotions, these same managers can, if they have permission, then reflect changes quickly to Web users.

<b>Item</b>	<b>Quantity</b>	<b>Price</b>
<b><i>Business Consultancy to re-define business processes and understand the best way to implement the IT infrastructure</i></b>	20	£17,000
<b><i>Technical Consultancy to define implementation of IT infrastructure</i></b>	5	£4,250
<b><i>Web Development Consultancy to agree and implement design and configuration of the Amerigo™ Portal and Amerigo™ Online products</i></b>	10	£8,500
<b><i>Amerigo™ Portal</i></b>	1	£7,500
<b><i>Amerigo™ Online for 2 Web Servers, 2 Database Servers and 1 CS/3 Company</i></b>	1	£32,500
<b><i>16 user License Sage Tetra CS/3 for Oracle database</i></b>	1	
<b><i>Additional CS/3 company for Internet company</i></b>	1	
<b><i>24 user Oracle 8 database for CS/3</i></b>	1	
<b><i>16 user Oracle 8 database for data warehouse</i></b>	1	

<b><i>Incit@™ knowledge management system</i></b>	8	£16,000
<b><i>Panacea Warehouse Manager incorporating Shop Warehouse Manager</i></b>	24	£24,000
<b><i>Telxon RF Scanners at Warehouses</i></b>	8	£24,000
<b><i>Telxon RF Hubs</i></b>	4	£3,000
<b><i>Symbol Tethered Scanners for warehouse scanning at stores</i></b>	30	£7,500
<b><i>PCs for stores to run CS/3, Notes, Sametime and Incit@™ sessions</i></b>	30	£30,000
<b><i>Lotus Notes and Sametime</i></b>	30	
<b><i>ISDN2e connections at stores</i></b>	30	
<b><i>Routers at stores for connection to central CS/3 server</i></b>	30	£24,000
<b><i>Tetra CS/3 Server: RS/6000 H70, 2 machines each with 4 x processors, 1Gb RAM, redundant power</i></b>	1	
<b><i>Web Server: 8500R (rack), 4 x processors, 512Mb RAM, redundant power</i></b>	2	
<b><i>Data Warehouse Server: current RS/6000 F40</i></b>	1	
<b><i>Creation of data warehouse and feeds</i></b>	20	£17,000
<b><i>Implementation Services for all of the above</i></b>		
<b><i>Support</i></b>		
<b><i>Web site hosting</i></b>		
<b><i>Web site maintenance</i></b>		

The above prices are provided for illustration purposes only.