

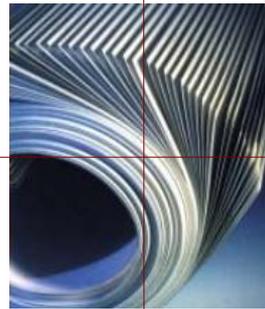
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E- MARKETPLACES IN THE PAPER AND CARDBOARD INDUSTRY

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Report



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1. Industry definition and characteristics

The paper industry

In accordance with the general industrial classification of economic activities within the European Communities (NACE Code 21), the paper industry covers the manufacture of paper pulp, paper or processed paper products. The manufacturing of these products is grouped together because it comprises a number of vertically connected processes. There are three main activities:

- Paper pulp is produced by separating the cellulose fibres from the wood or waste paper and removing impurities.
- Paper is manufactured by pressing these fibres into sheets.
- Processed paper products are made from paper and other materials using various cutting and shaping techniques followed by coating and calendering.

The paper and cardboard industry. Statistics *

- The European paper and cardboard industry had sales of around €400,000 million in 2003.
- In the same year, some 95 million tonnes of paper and cardboard were produced.
- The sector provides work for 280,000 people directly and over 4 million indirectly.
- The industry comprises over 1,280 paper and cardboard factories.
- Forty-two per cent of the fibres used are recycled and 43% are virgin pulp. The use of non-fibrous materials is less frequent (15%).
- Germany is Europe's leading paper producer followed closely by Finland, Sweden and France. The main pulp producers are Finland and Sweden.

- European countries are the third largest global sector producers (29% of total production), behind North America (31%) and Asia (30%).
- Global paper production is destined mainly for the manufacture of newsprint (11%), writing and printing paper (33%), and other papers (56%). These include cardboard and paper for packing (80%) and toilet paper (12%).

Source: European Commission. Directorate General for Enterprise and Industry

Paper and cardboard recycling

The management and recovery of waste paper and cardboard is of special relevance as currently over 40% of the raw materials used in the industry come from recycled material. The packaging industry is the main consumer of this although recycled paper is also used significantly in the sanitary and domestic sectors and to produce newsprint paper. Waste paper and cardboard recovery levels are increasing throughout Europe although more important than the figures is the fact that the recycling of all this paper has prevented the felling of a huge number of trees, has saved millions of litres of water and has significantly reduced energy expenditure.

The European Commission, aware of the increasing importance of waste paper recovery, approved a Declaration aimed at increasing recycling rates throughout Europe and reconciling environmental concerns with industry yields. One of the key points of this Declaration is the commitment undertaken by all industry players to increase recycling levels to 56% by 2005 (currently at 40%).

2. e-commerce in the paper and cardboard industry

The paper sector, characterised by a high degree of procedural fragmentation, highly cyclical and unpredictable supply, and demand and a distribution chain comprising numerous stages, could benefit enormously from the advantages of e-commerce. Recent studies suggest that the use of these technologies in the sector could result in savings of up to 10% in global transaction costs (\$600 billion in 2003). However, the evidence suggests that at present e-commerce is under used in the paper industry. There are several reasons for this:

- Conservatism and a lack of specialists to implement and use this technology
- Failure to understand the scope and size of the means and resources required to take on a larger technological commitment
- Concern over the risks associated with e-commerce
- Concern over the price manipulations that sometimes occur in reverse auctions held electronically
- A lack of standardised and benchmarked products (an obstacle the PapiNet programme aims to overcome).
- A lack of a consolidated customer and/or post-sales service culture.

Despite the limited use of e-commerce at present, there is general agreement in the sector that there are undoubted competitive advantages to be obtained from these technologies.

These include:

- The integration and co-ordination of all participants in the supply chain
- A significant reduction in the costs associated with identification, negotiation and purchasing when bids are made by many suppliers
- Higher profits due to the simplification of administrative procedures and the elimination of unnecessary intermediaries and agents.
- Greater scope in the number of buyers and sellers which enables international expansion

The papiNet project

In August 2000, Europe's leading paper and cardboard producers launched a series of e-business standards for sector transactions. The [papiNet](#) project consists of a set of documents and standard electronic terminology aimed at speeding the flow of information between participants in the supply chain (mainly by the automated management of invoices, prices, orders and other distribution logistics documents). The system has also developed its own software to help clients and suppliers implement these standards.

The Confederation of European Paper Industries ([CEPI](#)) is currently using [papiNet](#) technology to create an e-commerce standard for the sector. Initially, this will provide a channel for the exchange of information between suppliers and buyers, although in the near future the same platform will enable on-line transactions to be made. Key players in the paper and cardboard industry (**SCA**, **UPM-Kymmene**, **Metsä-Serla** and **Arjo Wiggins**) are involved in this plan.

3. e-marketplaces in the paper and cardboard industry

Historical overview

Historically, e-marketplaces in the paper and cardboard industry have had a fairly conventional development. At first, the envisaged potential of internet and e-commerce led to exaggerated euphoria resulting in the creation of a large number of trading platforms. In 2000 there were around 40 e-marketplaces for the paper and packaging industry; today there are 13. Although history repeatedly demonstrates that all technological innovation has to undergo a period of transition, experience shows that in this industry today there is only room for one or two markets per region.

In these five years, ambitious projects such as **PaperExchange.com**, **PaperX.com**, **ForestExpress** and **AccessPaper** have had to close down or become technology suppliers for the sector.

One of the reasons for these failures is the lack of added value. As Jorma Saarikorpi of the paper multinational **UPM-Kymmene** explains, "it is easy to create an e-marketplace, the difficult part is attracting clients". Having learned the lesson, surviving markets today include **AsiaPaperMarkets.com** and **PaperLoop.com** (see section 3.3), which provide one-stop services for the paper and cardboard industry such as software programmes, information, insurance and consultancy, in addition of course to a trading platform.

It also bears emphasis that the paper industry is very conservative and resistant to change (the average age of industry managers is higher than in other sectors), which means the internet and other technologies are relatively underused. Hence the need to promote and encourage the use of information and communications technologies to broaden corporate horizons and cement ties between the industry and its environment (clients, suppliers, partners and distributors). This means e-marketplaces have to promote not only their own platforms but also e-commerce in general.

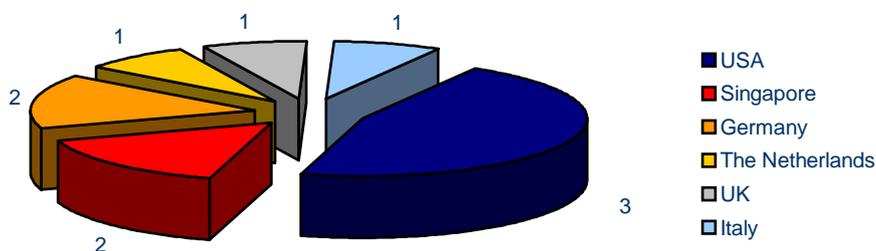
Our analysts all believe that in the medium term over 20% of companies will use e-marketplaces on a regular basis, either to carry out trading transactions or as marketing, promotion and information channels. The accuracy of this prediction will largely depend on a change in corporate mentality in this segment. Another factor preventing the regular use of e-marketplaces is a lack of standardised products, a serious obstacle when using catalogues and other commercial tools. In order to overcome this problem, clients need to be given more product information; numerous sector voices speak of the need for a "Universal Specification" which standardises and benchmarks products, making transactions easier and more fluid (source PriceWaterhouseCoopers, 2001).

Active e-marketplaces

E-marketplace	Country of origin	Operating language	Geographical coverage
AsiaPaperMarkets.com	Singapore	English	Asia, Australia, Africa and the Middle East
Epapertrade.com	Singapore	English	Global
Expresso Paper Platform	The Netherlands	English	Europe
Go2Paper.com	USA	English	USA
Graphics Quote	USA	English	USA
On2Fiber	Germany	German	Germany and Austria
On2Paper	Germany	German	Germany and Austria
PaperLoop	USA	English	Global
PaperMart UK	UK	English	UK
PaperWeb	Italy	Italian	Italy
Printing Industry Exchange	USA	English	Global
Pulp and Paper On Line	USA	English	Global
SecondaryFiber.com	USA	English	Global

Source: eMarket Services Directory

Countries of origin, products traded and users of the platforms



Countries of origin

The vast majority of the e-marketplaces of the pulp and paper industry (46%) are located in the **US**. In spite of the late weak internal market demand and the increase of imports from the Asian and Latin American competitors (factors which brought a 1,4% fall in the paper and cardboard market in 2002), the production value reached the US \$56 billion in 2002.

The presence of 2 e-marketplaces headquartered in **Singapore** is not surprising due its condition of market leader in the information and communication technologies (ICT) worldwide (the World Economic Forum ranked Singapore the world's third most network-ready country in 2004). Both business-to-business (B2B) and business-to-consumer (B2C) have been increasing in popularity. The former has proved useful in changing the way local firms carry out order processing in several sectors, including the paper and pulp industry.

Regarding the **German** market for paper and cardboard it is important to pinpoint that the production increased by 1.2% to reach a volume of 18.1 million tons in 2002. Over the last five year period as a whole (1997-2002), the market increased by just over 11%. The largest sector in 2002 was the paper/board for packaging, which accounted for almost 49% of total production, equivalent to 8.8 million tons. The two German platforms listed in the eMarket Services Directory are only available in German and its geographical coverage is limited to Germany and Austria. Its trade core seems to be the paper fiber.

Products traded and clients

The typical **products** traded through these platforms are pulp, paper and paperboard, processed paper, cellulose wadding and webs of cellulose and fibers, adhesive, gummed, punched paper, filters, and dishes of paper.

The primary activities of the manufacturing **firms** that participate in these e-marketplaces are:

- Paper making from pulp.
- Paper converting.
- Paper reams and rolls.
- Bulk paper used to make packaging - e.g. paper bags and sacks.
- Bulk printing and writing papers - i.e. to make note pads, books, printer and photocopier paper.
- Bulk envelope paper.
- Bulk label making paper.
- Newsprint.
- Non-newsprint communications papers - e.g. to make magazines and journals.
- Filter paper - e.g. for making tea bags, coffee filters, vacuum cleaner bags etc

Yet, the majority of these e-marketplaces listed above are open to all of the market players of the industry, including distributors/wholesalers, agents and trading companies.

Prominent e-markets

AsiaPaperMarkets.com (www.asiapapermarkets.com)

Created in Singapore in 1999, it has a wide geographical reach covering Asia, Australia, Africa and the Middle East. According to its website, it intends to enter the European and North American markets in the near future. With an initial investment of \$10 million, shareholders include the Infocomm Development Authority of Singapore and two private

companies, Asia Tech Ventures and AsiaCommerce. Recently the financial institution ABN-Amro took a stake in the e-marketplace.

This is a very extensive website with many additional services aside from the trading platform, including sector and regional reports and a regular news bulletin. As well as its head office in Singapore, it also has sales offices in China, India, Indonesia, South Korea, Malaysia, Taiwan, Australia and the United Arab Emirates.

PaperLoop.com (www.paperloop.com)

North American e-marketplace created in 2000 by United Business Media and Pegasus Capital Advisors LP. Apart from its commercial function, the main aim of the company is to provide sector companies with information via numerous publications and associated websites. The group also organises events and conferences related to the paper industry. Its geographical scope is international.

Pulp and Paper On Line (www.pulpandpaperonline.com)

Part of the North American group Vert Markets, this e-marketplace was created in 1998 and enjoys a certain prestige on the US market. Currently, approximately 4,000 suppliers use its services to buy and sell sector products. As with the other e-marketplaces described above, this platform offers various services in addition to the trading channel such as regular virtual publications and bulletins and technical assessments.

Go2Paper.com (www.go2paper.com)

This platform was created in Oakland, California in 2001. It provides a wide range of services, notably an e-marketplace and IT solutions specially designed for paper industry companies. Focusing exclusively on the US, it has over 3,000 registered users. Registration for the e-marketplace is free and they charge a variable fee for the transactions carried out.

Expresso Paper Platform (www.expressopaper.com)

This e-marketplace was created by a large group of European companies (Antalis, PaperlinX Europe, Map, M-real, Sappi, UPM, StoraEnso, Portucel Soporcel, Lecta Group, and International Paper) and has its head office in the Netherlands. Trading volumes are smaller than for the other e-marketplaces described above and it lacks the additional services they offer. However, it is one of Europe's most prominent platforms. It uses the PapiNet system to send commercial correspondence.

4. Confidence and security in electronic auctions

Electronic auctions are a valuable competitive element which benefit all participating parties. However, certain corporate practices which can harm the market and pervert the nature of these tenders have been observed. These unfair practices involve companies using the low bid of an unknown and unreliable (and at times fictitious) supplier to obtain a larger discount from their usual supplier, resulting in a loss of margin and jeopardising the future of a reliable supplier. Unfortunately, the paper and cardboard industry has not been immune to these practices. Accordingly, in June 2003 the [European Carton Makers Association](#) (ECMA) issued specific guidelines to ensure transparency and security during electronic auctions ("Good Trading Practices in electronic bidding processes – Reverse Auctions"). This association, comprising over 80% of European cardboard sector companies, has always acknowledged the undisputed benefits of these technologies and with this declaration intends to prevent and avoid these practices that harm the market.

5. Links of interest

Europe

- CEPI (Confederation of European Paper Industries)
<http://www.cepi.org/>
- CEPIFINE (European Association of Fine Paper Manufacturers)
<http://www.cepifine.org/>
- CEPIPRINT (Association of European Publication Paper Producers)
<http://www.cepiprint.com/>
- ERPC (European Declaration on Paper Recovery)
<http://www.paperrecovery.org/>
- UTIPULP (Group of European Market Wood Pulp Users)
<http://www.utipulp.org/>

USA

- AF&PA (American Forest and Paper Association)
<http://www.afandpa.org/>

Australia

- APIC (Australian Paper Industry Council)
<http://www.apic.asn.au/>

Japan

- JPA (Japan Paper Association)
<http://www.jpa.gr.jp/>

UK

- Confederation of Paper Industries
<http://www.paper.org.uk/>