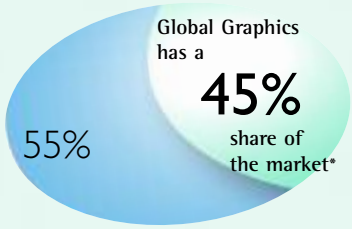
software division

A statement from Jim Freidah, Chief Operating Officer

Against a background of tough economic conditions the Software division's sales for 2001 maintained a level of Euro 24.4 million for the year, the same as for 2000. There was a decline in sales of products into high-end applications in the graphic arts market (primarily the Harlequin RIP) but this was offset by sales of new products, notably our range of PDF technologies, and our further expansion into the middle market where there is increasing integration of software (both external and internal) into devices such as ink-jet printers, photocopiers, desktop printing systems, and print-on-demand systems. Investment in development increased to meet the demand of these new markets and products. However, even with this investment and the prevailing economic climate, EBITA achieved the quite healthy level of 32% this past year.

Several factors were responsible for the decline in sales within the graphic arts market. Capital equipment sales, including imagesetters, saw a double-digit decline (source:NPES). Original Equipment Manufacturers were left holding higher than normal inventories and so their buying patterns changed. Publishing (newspapers in particular) was hit hard due to a decrease in advertising revenues, and sales in the US slowed down, a decline compounded by the sad events of September 11. Mergers and acquisitions by major players such as Barco – Purup, Agfa – AII/Xitron, and others saw the market consolidate and increased the already fierce competition between the main protagonists.

This past year our strategy remained focused on three fronts - traditional high-end graphic arts, middle market printing, and PDF technologies.



high-end RIP market share

The Harlequin RIP has long been acknowledged as having market-leading performance. It can drive nearly 100 different printing devices and can give productivity gains of two or three times. It is the RIP of choice for many OEM partners.

*Source: management estimates

market trends

The high end and the low end of the printing market are converging to create a middle ground. In this "middle" market – where devices are sold by OEMs into large corporations - growth is being driven by the demand for speed and color from laser printers and digital copiers. The low end of the market for desktop devices such as printers and black and white multi-function peripherals is also expanding.

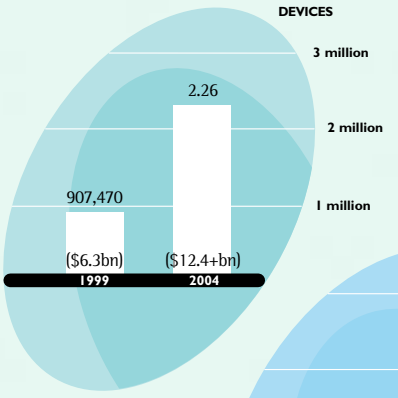
The Harlequin RIP has long been a well established name in the traditional high-end market. This flagship product has consistently outperformed other high-end products since 1989, often giving productivity gains of as much as three times and offering state-of-the-art features like native PDF interpretation. Despite our substantial share of this market through sales of the Harlequin RIP, we have put much effort into strengthening our product offering to OEMs to allow them to meet the challenges of changing market conditions, and to offer more sophisticated solutions to their customers, while differentiating themselves from their competitors. We have been and will continue to develop the way in which we work with our core customer base by offering expanded services and a wider and more flexible range of technologies to enable our customers to meet requirements for speed, reliability, and color accuracy as their customers demand increasing levels of sophistication in workflow solutions.

Our longer-term strategy to expand sales into the middle market is now bearing fruit. This strategy has two directions. First, to drive our Jaws RIP technology to be embedded within print devices. The second, to offer desktop workflow and RIP solutions to drive devices externally using Harlequin, Jaws PDF, and MaxWorkFlow™ technologies.

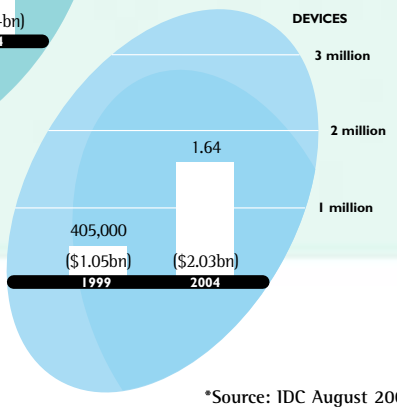
In February 2001 we announced our technology alliance with Motorola to establish the use of the Jaws RIP technology with Motorola boards and chip-sets for high-end embedded RIP solutions destined for digital printing, imaging devices and imaging applications. Two months later we signed an agreement with the Destiny Corporation of Taiwan to embed our Jaws RIP products onto Destiny's range of proprietary controller platforms for low to mid-range monochromatic and color copiers, printers and digital printing systems. This agreement has significantly extended our reach into the segment of the market that requires a combined software and hardware controller board solution. Developments to deliver such a combined product are now well under way. In this market the speed and flexibility of our RIPs and their ability to consume PDF, PostScript® (page description language) and PCL® (a printer command language widely used for driving laser printers in office environments) within one architecture thereby saving the printer manufacturer engineering costs, means that we can deliver a cost-effective solution in a price-sensitive market. Growth in this sector is being driven by the demand for high-speed printers, digital copiers, and multi-function peripheral devices (segments 5 and 6, 70-91+ copies per minute).

In October we signed a strategic relationship with Hewlett Packard to integrate the Harlequin RIP in high-speed servers to drive the newly acquired Indigo print-on-demand devices. The agreement covers the full range of HP devices and takes advantage of the Harlequin RIP's

Growth in Copiers total*



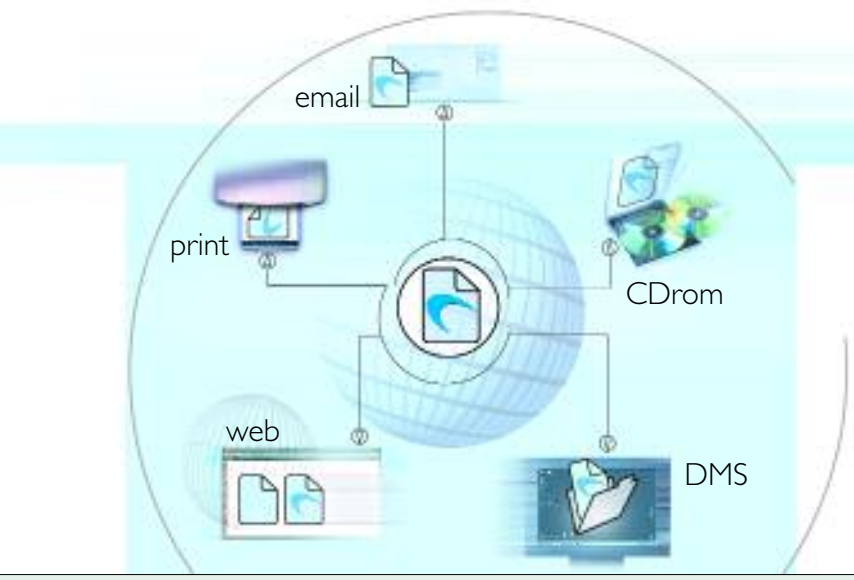
Growth in Color Copiers (combined inkjet and laser)*



middle market growth

Growth in the middle market is being driven by the increasing integration of printing software into devices such as photocopiers, multi-function peripherals (fax, scan, copy, print, email in one device) and desktop printers.

*Source: IDC August 2000



why PDF?

The PDF format retains the characteristics of complex graphics, fonts and layout of virtually any document from any application and is recognized as the standard file format for document creation, distribution and storage.

speed, native PDF interpretation, and scalable modularity. HP combined with other partners such as TR Systems and AHT are expanding the availability and use of our RIP technology in external RIP server products, where there is a requirement for cost-effective solutions with high demand on quality or performance particularly with regard to color. The advantages of our products here include their productivity, their ability to interpret PDF files directly (unlike competitive products) leading to a faster and more accurate rendition of the file, and our ability to drive a wide range of legacy equipment.

The Portable Document Format is rapidly becoming the format of choice not just in the graphic arts industry but also in the corporate document management industry.

Demand is being generated from application software vendors, on-line print services, corporate in-house print departments and for integration within workflow solutions. We make our PDF technology available to OEMs and system integrators to add flexible and efficient PDF capabilities to their own applications. An agreement signed in 2001 with the Canadian company Ultimate Technographics to incorporate the Jaws RIP and our PDF technology into a range of pre-press products led to us hosting the international launch of Ultimate's SkinnyServer on our exhibition stand at IPEX in April 2002. The SkinnyServer is a complete pre-press workflow solution with extra high productivity results, in a unique client-server environment.

We also offer a range of our PDF technologies in standalone products sold through corporate reseller channels which have been adopted by many major corporate clients such as UBS and Marathon Oil.

In June we combined Harlequin Limited and Jaws Systems Limited into Global Graphics Software Limited. In the United States Harlequin Incorporated was renamed Global Graphics Software Incorporated. As you can see from our product range, the Harlequin and Jaws brand names have been retained and vigorously promoted.

SALES AND MARKETING

Our sales and marketing teams were restructured in 2001 to reflect our target markets so that dedicated resource was allocated to existing customers, middle market customers and corporate PDF sales.

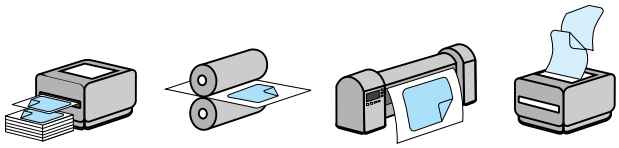
Our RIP products are sold through OEM arrangements with manufacturers of imagesetters, computer-to-plate equipment, digital press and inkjet proofers. Our technology is customized to their requirements, allowing them to differentiate themselves in their market by offering various functionality and compatibility features. Our arrangements with systems integrators and distributors for RIP products typically enable them to re-sell under their own names.

Within the middle market our route to market is also through the OEM, either through strategic alliances with controller board manufacturers such as Destiny, where our RIP is embedded onto a proprietary board, or direct to the manufacturer of the device who is designing his own board technology. Then, there are OEM partnerships for server and workflow solutions with companies like HP and T/R Systems for driving high-speed and clustered device solutions.

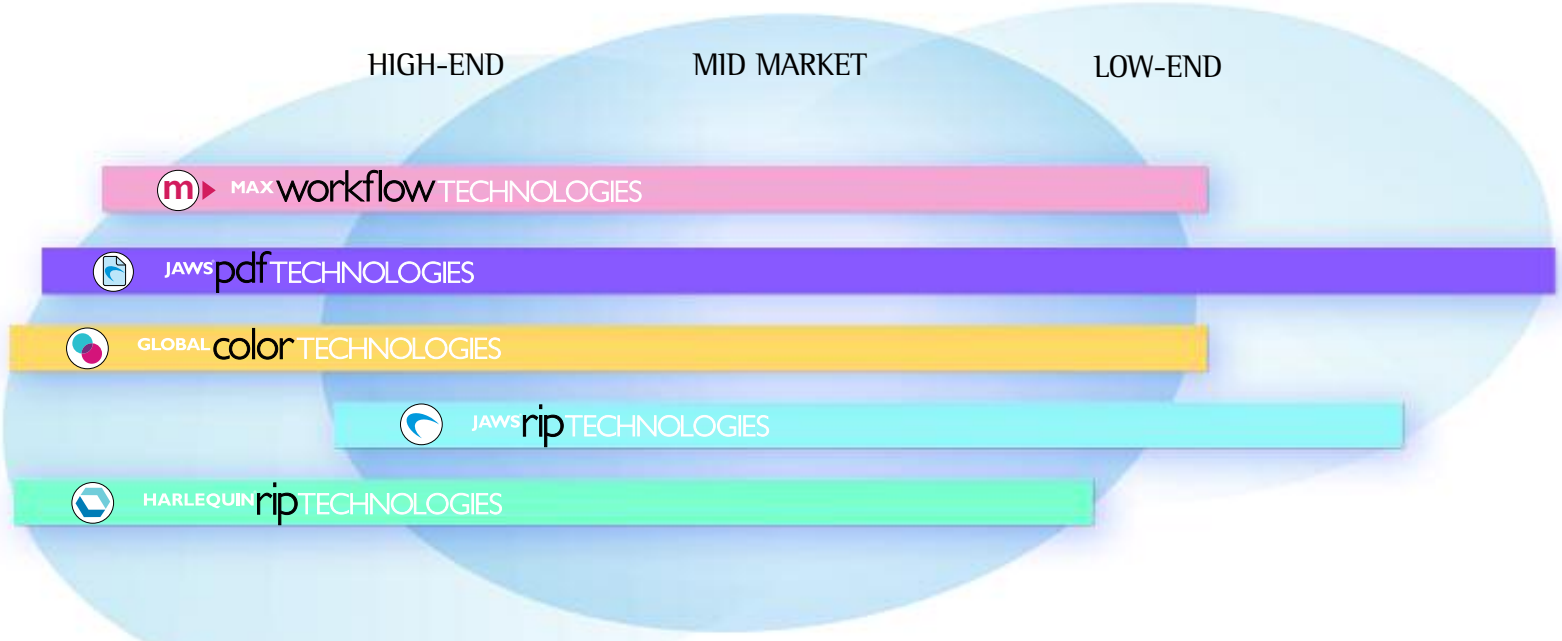
Our PDF product portfolio is available to OEMs through our usual arrangements but is also sold through a distributor and reseller channel specializing in sales to the corporate office environment. Specific focus areas include the government, education and the finance sectors. Agreements are in place with main distributors in the UK, US, mainland Europe and Scandinavia, and the Pacific region. Some sales are also achieved directly to users through a web ordering system at www.jawspdf.com.

In 2001 the Software division's 10 largest customers represented approximately 54% of total sales.

the Raster Image Processor (RIP)



RIPs convert computerized text and images into printable form. RIPs are integrated into all digital output devices, including desktop printers, photocopiers and CtP equipment because they enable these devices to interpret and process information. RIPs are also used in transmitting information over the Internet.



technology areas and their market position

In order to meet the requirements of existing customers, the middle market and the growth in demand for PDF products, we grouped software solutions into five technology areas during 2001 following a period of intensive product development.

Technologies span the entire document workflow process from document creation, through document management and output. Original Equipment Manufacturers use these solutions to custom-design their own systems that are available to end-users under a variety of internationally recognized brand names.

Global Graphics solutions are used: in the commercial printing industry (high-end) in digital pre-press systems; incorporated within copiers and printers destined for large corporate organizations and print on demand providers; and, integrated into desktop devices by Original Equipment Manufacturers supplying the corporate end-user or SOHO (small office/home office).

We continue to offer extensive product service and support including telephone and on-line services that allow us to respond quickly and efficiently to customer requests. On-line services are provided through a password-protected area of the Global Graphics web site that may be accessed by major customers. Special training courses are available for OEM sales forces to ensure optimal usage of our products and to strengthen and maintain customer relationships.

We remain active on a number of standards committees. Indeed, the CIP4 Consortium is chaired this year by a Global Graphics Software employee. CIP4 (International Co-operation for the Integration of Processes in Pre-press, Press and Post-press) is a group of more than 40 well-known manufacturers, that have worked with the Frauhofer Institute for Computer Graphics (Darmstadt, Germany) to develop digital printing and publishing standards to automate and streamline all production processes, from document creation through to printing, binding and fulfilment. We are also active within: the Committee for Graphics Arts Technologies Standards (CGATS), one of whose task forces we chair; the ISO (International Standards Organisation) TC1 30/WG2/TF2 which is developing aspects of PDF/X; and the International Color Consortium, an organization devoted to developing a specification to enable different computer platforms and devices to translate color definition formats into a standard format.

COMPETITORS

The printing, publishing and document management software market remains highly competitive and is marked by evolving industry standards, rapid technological developments and frequent new product introductions. The principal competitive factors include product functionality, reliability, recognizable branding, the quality of support, and price.

Our principal competitor for RIP products is still Adobe® Systems Inc. the developer of the PostScript language which is the industry-standard page description language. Harlequin and Jaws products are based on PostScript, as are the products of most other competitors such as EFI Inc. and Oak Technologies. The company also competes with system integrators who develop their own RIP products but whose market share is significantly smaller. Adobe is the primary competitor for PDF technologies.

Global Graphics Software's customers

OEM arrangements with manufacturers, systems integrators and distributors include:

ABDick (Itek)
ArtQuest
Autologic
ColorByte Software
Compose Systems
Creo
Dainippon Screen
Delphax Systems
Durst-Dice America
ECRM
GMG Weihing (Colorproof)
Heidelberg/Ultre
Hewlett-Packard
Highwater
Kodak
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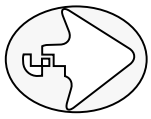
Ultimate Technographics
Xitron

research & development



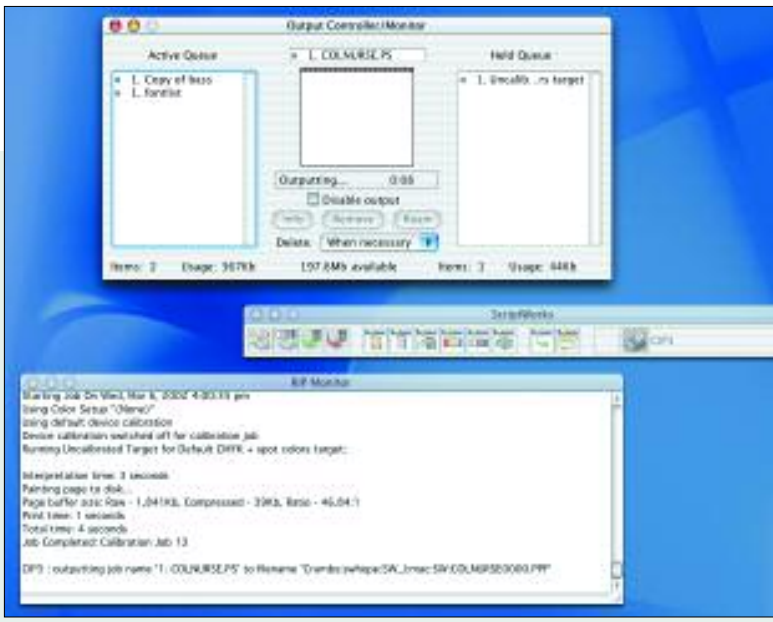
As of December 31, 2001 Global Graphics Software had 59 personnel dedicated to R&D in the UK and the United States, an increase of more than 13% over the previous year. Our expenditure amounted to Euro 6.6 million or 15.9% of sales, an increase of more than 20% over 2000.

A closely knit team of highly skilled individuals, the research and development team is continually engaged in product enhancements and development. At the top of the agenda are the development of innovative software solutions to meet future demands in the pre-press market, digital printer and copier market and PDF and workflow markets. The Company keeps its technology and products at state-of-the-art levels and to the latest industry specifications.

product overview

Harlequin RIP technologies

The Harlequin RIP is acknowledged as having market-leading performance and can give productivity gains of two to three times. It was first used in a production system in 1989 and today's RIP is a direct descendant which has been tried and tested by scores of OEM partners and hundreds of thousands of installations worldwide, with thousands of different configurations and output devices. Its speed, flexible system architecture and rich feature set mean that OEMs can build a vast array of Harlequin RIP-based workflow solutions.



The Harlequin RIP is fully compatible with the latest operating systems.

Jaws PDF technologies

Global Graphics Software provides an extensive line of PDF products for both OEMs and end-users. The Jaws PDF product line delivers document creation, management, and output tools for applications from corporate intranet delivery to e-mail and digital publishing:

- *Jaws PDF Creator™ is a simple and affordable solution for creating PDF files that fully conform to the published PDF standard specification*
- *Jaws PDF Courier™ is a customizable and secure PDF document delivery system that enables print service providers in corporate/facilities management and commercial environments to offer cost-effective and branded "many-to-one" PDF creation and centralized printing/output services to their customers or in-house clients*
- *Jaws PDF Server™ is a centralized, server-based software solution for standardized PDF file creation, optimization and distribution on a corporate scale*

MaxWorkFlow technologies

MaxWorkFlow is a modular digital workflow solution that allows OEMs to create customized workflows based on any industry standard file format. It combines the power of an ultra-fast, PostScript® LanguageLevel 3 (LL3) compatible RIP with a number of module options providing intuitive and instantly visual solutions for workflow issues. Key prepress functions and output management are represented as icons that are literally a "drag-and-drop" away, providing ease of use, speed and productivity. MaxWorkFlow is also the engine that powers Jaws PDF Server.

MaxWorkFlow data conversion modules.

Jaws RIP technologies

The Jaws RIP offers a compact and highly efficient 'kernel' interpreter targeted at the middle market segment of printing and document creation, including use with wide-format inkjets, color copiers, embedded printer controllers, and PDF document creation.

GlobalColor™ technologies

Long recognized as a pioneer and leading provider of color management technologies, Global Graphics Software now offers a complete line of GlobalColor products. This range provides color management control from the input source all the way through to the printing press, ensuring that color quality is controlled throughout each step of the production cycle.