

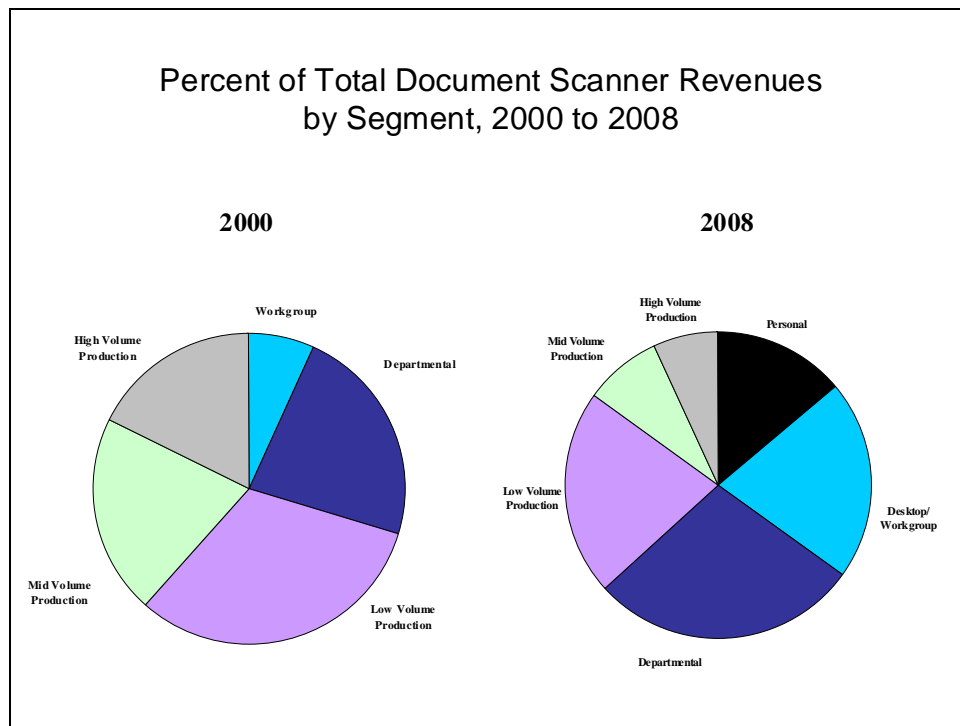


Office Document Scanning Comes of Age

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Document scanning has come a long way since the turn of this century, when production scanning was king and distributed scanning was only beginning to emerge. No longer tied only to document intensive industries, this former niche market has matured to support a variety of applications throughout the general business world. Technology advances have brought production scanning features down market while simultaneously reducing cost of ownership. The variety of products available has never been more diverse or affordable. Document scanning can now be integrated across a host of business applications, spanning small businesses to corporate environments.

As the scanner market has evolved, a significant shift is occurring. Production scanning, which once represented seventy percent of the revenues in this market, currently commands less than two-fifths of total annual revenues in N. America. Revenues of all document scanners have grown substantially, however, so although production scanning represents a smaller piece of the pie, it remains a viable market that vendors continue to invest in. At the low end of the market, shipments have skyrocketed and now collectively represent the large majority of document scanners sold annually. In 2007, the segmentation was adjusted to account for the expansion at the low end of the market to include a new personal segment. Personal document class scanners reflect the growth in sales of scanners that meet the business needs of single users, especially in small offices and home offices (SO/HO.)



Some of the most dramatic trends driving the evolution of the document scanning market include the adoption of distributed scanning solutions and the proliferation of ad-hoc office scanning via network scan devices. Of course, key underlying technologies, applications, and vendor activities have enabled these developments. Low cost products with robust feature sets combined with the propagation of the internet gave life to the distributed scanning concept. Meanwhile digital copier and multi-function product (MFP) vendors exploited corporate networking technologies and added scan functionality to help sell their new network connected office devices. Applications vendors have delivered the solutions that support these products, which increasingly are simpler to use, yet offer more complex functionality.



Distributed Scanning Unleashed

One of the most significant trends impacting this market has been the evolution of distributed scanning. The proliferation of the internet and its use as a business tool has supported the concept. Companies are no longer forced to route paper documents to central locations for high volume scanning and processing. Rather, scanning can be done where documents are created (often in diverse geographic locations) using smaller volume scanners throughout organizations. The information can then be routed electronically to a myriad of applications to process, manage, and store the relevant information. This trend alone has led to a much broader adoption of scanning solutions and has helped spur growth in shipments of document scanners by more than an eightfold increase since 2000.

The majority of this growth has occurred at the low end of the market, namely the distribution of personal, desktop/workgroup, and departmental scanners. But even production scanning is becoming more distributed. Centralized production imaging installations are migrating to more decentralized configurations that replace a high volume scanner with a few low or mid volume production machines. Although high volume production document scanning is still found throughout paper intensive industries, the trend to distribute the scan function is also impacting production scanning applications.

Production Scanning Lives On

While production scanning represents an ever shrinking piece of the pie, it is a mainstay in this industry. Many production scanning features are available across all categories of scanners today, and yet scanner manufacturers remain dedicated to improving throughput, a critical factor in 24/7 production operations. Production scanners are designed with exceptional feeding systems to reduce the amount of sorting required (even staple detection and removal are on the horizon), and they deliver better quality images to eliminate time-wasting rescanning. They are also easier to operate and have better ergonomics than they once did, which is more critical when operators have to work at these machines all day. Vendors are also becoming more solutions focused, effectively bringing turn-key solutions to bear on otherwise complex vertical market installations. Despite the attractive growth at the low end of the market, production scanning is the backbone of this market and will remain important in the years to come. Even newly indoctrinated scanning users may come to rely on these devices as their scanning applications mature and their volumes increase.

Network Connectivity Shifts Market

The proliferation of network scanners is expected to be the next significant development in document scanning. General purpose document scanning has been on the rise since network scan solutions came to market. Ad hoc “scan-to” applications, originally fostered within many companies via scan-enabled digital copiers or MFPs, are helping integrate paper into many work environments. Simple scan-to functions that can take a document and convert it into a PDF, attach it to an email message, or store it in a local or network file folder are now part of most basic scanning solutions. As users have gotten used to the conveniences afforded with these scan tools, they are demanding more sophisticated document routing and processing functionality.

To support these rising expectations, document scanning vendors have recently delivered their own network scanner solutions to compliment the multifunction scanning options available in the market. In addition to long time player Hewlett-Packard, Canon, Fujitsu, Kodak, and Ricoh have recently staked a claim in the network scanning market. Unlike the digital copiers they may ultimately compete against, the network scanners offered by scanner manufacturers deliver some compelling features that are more unique to single-function scanners.

The single-function network scanners available today are known for their superior paper handling. They can capture documents in monochrome, grayscale or color, in simplex or duplex (simultaneously capturing both sides of a document) at rated speed. Most offerings can scan a range of documents in sizes from ID cards to legal, and even documents as long as 34 inches. Fujitsu’s products offer double feed detection and can automatically de-skew images, orient pages, and remove blank sides. An especially important feature that scanner manufacturers have incorporated is a preview function that allows the user to verify the image before routing – a feature that is consistently shown through research to be desired by users. HP and Fujitsu also offer a built-in keyboard for easier image manipulation and document routing. Next generation models are already rolling out, setting the stage for even more impressive functionality from these devices. These network products will be attractive to departments (like accounting, human resources, customer service, legal, and sales) that need affordable, yet more reliable and sophisticated document capture and processing solutions than those offered in MFPs and digital copiers.



Document scanner manufacturers are also working on tightly integrating these scanners with office applications (such as Microsoft Office SharePoint Server) and developing partnerships with middleware companies (like eCopy) to make application integration easier. While much is yet to be accomplished, the diverse needs of businesses are expected to foster expanded development of networked document capture. As a result, a variety of network scanners are likely to be available across desktop/workgroup, departmental, and low volume production segments in the years to come. A host of scanning devices are likely to be found in organizations of the future, and the good news is that users finally have some choices beyond MFP scanning in shared office environments.

Why Invest Now?

In spite of the uneasy economic climate, document scanning technology is on a trajectory to mature and expand into the general office market. Ultimately, companies need to continue operating at ever increasing levels no matter what state the economy is in. Capture technology is one way to improve operations and increase productivity to compete more effectively without adding personnel. The investment is often returned rapidly – a strong selling point especially during hard times. Whatever the argument, businesses will be looking for ways to remain profitable despite the bad economy and scanning solutions can be applied to do just that.

Scanner vendors have already begun to leverage their knowledge base to deliver products and services that reduce or eliminate high up front capital investments. In the high volume production arena for example, vendors are developing outsourcing services that spread the cost of scanning solutions over time while delivering ongoing scanning support. Software as a service is another example of offloading the capital expense on businesses, but allowing them to reap the benefits of deploying capture technology. And programs to offer leases on hardware provide companies the benefit of having equipment in-house, but give them the ability to spread the cost over time. In this era of recycling awareness, reducing documents via scanning solutions can also be viewed as a “green” alternative to business as usual and may be a motivating factor for some users.

Some companies may need to hold off on investing in document processing technologies at the moment, but this will only be a bump in the road. The spread of document capture applications throughout the business world is already underway. Network scanning and distributed capture applications are playing a pivotal role in the future of business document solutions, which are the catalysts for companies who want to take control of their business documents.

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Additional info: Document Scanner Segmentation Definitions

Speed and pricing are the criteria used as guidelines for placement of document scanners into the segmentation, with greater importance on speed than price. Not all products fall into the segments perfectly. For products that do not conform to the segmentation, they are placed where they most likely fit based on other specifications, market competitiveness, and vendor feedback. The current document scanner segmentation is as follows:

Segment	Speed Rating	Typical Price Range
Personal	8-15ppm	under \$750
Desktop/Workgroup	16-30ppm	\$750 - \$1,499
Departmental	31-50ppm	\$1,500 - \$3,999
Low Volume Production	51-75ppm	\$4,000 - \$9,999
Mid Volume Production	65-100ppm	\$10,000 - \$34,999
High Volume Production	>100ppm	>\$35,000

Please note: currently, most network scanners remain in the departmental segment. It is anticipated that a separate category will be created for network scanners as the market matures.