

# Special Edition on Printing Solutions



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Society is gradually becoming based on information technology through the Internet and other networks. The quality of information continues to diversify even further and the sheer volume of information is increasing dramatically. Therefore, improving the human interface is of paramount importance. Printers are becoming even more important in their role of providing information as documents that are aesthetically pleasing and easy to read. The business environment has changed from one of extravagant competition to one that is more centralized. The United States, Europe, and China/ASEAN are emerging as the world's three blocks and the characteristics of each region are becoming clear.

To respond to these changes in the market environment as quickly as possible, we have to place emphasis on providing color page printers and applications for those printers. In effect, we need to provide the products and solutions that our customers want. In changing our printer business from a stand-alone business to a solutions business that includes system software and applications, we are required to provide higher customer value and business value.

In this issue, we describe the future technology trend mainly focusing on customer-based product and solution development.

I would like to ask all of you for your continued understanding, guidance, and cooperation regarding Oki Data's printer business.

impact printers and monochrome page printers entered a downward trend from 2001. Color page printers however are expected to continue stable annual growth at a rate of 20% or more (Reference 1)). We estimate that, centered around color page printers, there will be growth in new printer markets such as multi-function printers and quick printing, and there will be infrastructure growth in government and IT policy sectors as well.

Up until now, Oki Data had mainly done business in the impact printer and page printer markets. We secured status as the top supplier of impact printers with high performance, durability, and high quality as our strengths. There is deep-rooted market demand for impact printers that can multi-part-form print, so we will continue selling these products to over 120 countries worldwide. For page printers, a digital LED (Light Emitting Diode) head allows us to provide products that are smaller in size yet have high performance and are highly reliable. Our color page printers that use digital LEDs are becoming recognized as the first full-fledged business color printers on the market to offer greatly improved printing speed. Our new product which we put on the market last year prints 30 pages per minute with a resolution of 1200 dpi (dots per inch).

As shown above in Fig. 1, a portion of general commercial printing such as offset printing will shift to print shop and convenience store printing. This trend is also expected in in-house printing (copying departments inside companies) in general offices. For desktop printing in general offices or small-scale department printing, we believe that the shift from monochrome printers to color printers will accelerate.

## Business Strategy

Looking at the printer market in monetary terms,

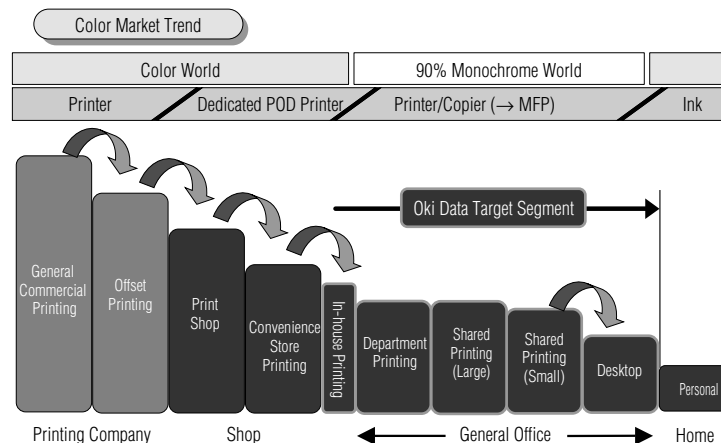


Fig. 1 Color Printing Market Trend

Oki Data will strive to develop color page printers that take full advantage of the fast speed, small size and high reliability that the digital LED head realizes, and to provide customer-centered printing solutions. We will base our business strategy on meeting market demands. It is important for us to meet market needs such as providing printing image quality on a par with offset printing as color page printing enters general offices, and providing products for desktop use that are small and inexpensive. To realize these goals, we must have a precise understanding of our customers' needs, pursue direct communication with our customers, and be able to see our customers' faces.

We aim to improve customer satisfaction as part of our company quality policy which states "providing the products that our worldwide customers want".

Concerning environmental problems, we will establish our own product environment assessment to ensure we can provide products that place limited burden on the environment by conserving energy and by designing our products to be recyclable.

### Technology Strategy

Oki Data's impact printers feature hardware technology that is stable while providing high performance and high quality. In the future, it will become even more important to develop applications that support each industry. We will maintain top-level quality in the industry by having printers that are faster, quieter, more energy efficient, have an expanded range of thick paper applications for passbooks, and can consistently store and load special media. In this way, we will propose applications that meet the needs of our customers.

As previously mentioned, color page printers employ Single Pass Color®\*1) using a digital LED head. Compared with the four-cycle engine that is currently employed in many color machines, this format has the advantages of having a simpler structure and delivering fast printing. While continuing to employ digital LED heads, we will focus on developing technology that delivers sharper, faster, more energy-efficient Single Pass Color® page printers and realizes image quality and printing speed comparable to offset printing. We will also take advantage of the properties of the digital LED head to further miniaturize our product.

In a few years, we expect more than half of all page printers to be color printers. We are concentrating on high-density mounting technology and introducing LSI modules to realize color page printers that are small, low-priced, and will expand even into SOHO (Small Office Home Office). We will also develop the next-generation LED print head.

Color page printers used in a network environment must realize on-demand printing and must be able to support a wide range of customer demands.

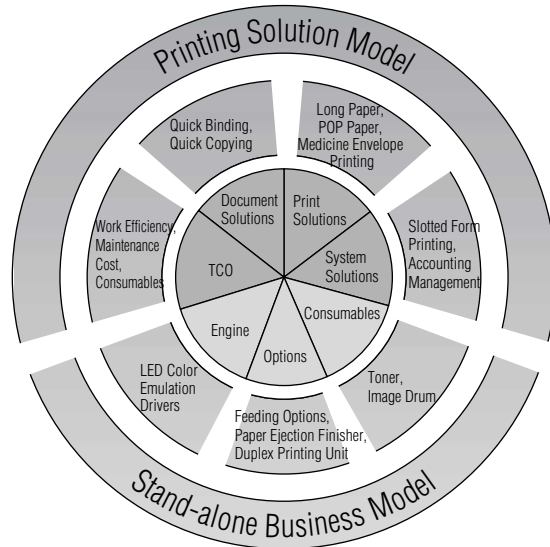


Fig. 2 Oki Data Business Model

As shown above in Fig. 2, Oki Data's printing solution model includes:

#### (1) System Solutions

Provide form software, management services such as accounting management, and security related applications.

#### (2) Print Solutions

Support special media, such as long paper or medicine envelope printing, and provide commercial applications.

#### (3) Document Solutions

Provide quick binding function, quick copy function, etc.

#### (4) TCO (Total Cost of Ownership)

In addition to the merit of providing applications, maintaining printers and providing total merit including management cost, this contributes to increasing customer worth by providing printing solutions.

### References

- 1) Japan Electronics and Information Technology Industries Association (JEITA): Investigation Report on Printers, 02-Weekly-3, p. 26, 2002.

\*1) Single Pass Color is a registered trademark of Oki Data Corporation.