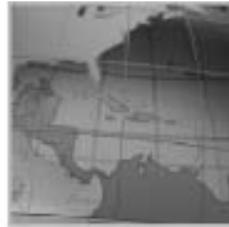


Analysis



April 2011

Xerox ColorQube: Breaking New Ground in Office Color Printing

Table of Contents

Executive Summary	3
Key Findings.....	3
Introduction	3
Technology Review.....	4
Solid Ink Technology.....	4
ColorQube 9200 Series MFPs.....	6
New ColorQube 9300 Series MFPs	7
Improved Productivity and Security	8
Commitment to Sustainability	8
What ColorQube Means for Xerox.....	9
Driving New Business	9
The Channel Believes	10
Stealing Pages from Xerox?	11
The ColorQube Customer Experience	11
Color Is No Longer Just For the Privileged	12
No Inkjet Bias.....	12
Ease of Use	13
Less Waste/Environmental Impact.....	14
InfoTrends' Opinion.....	14
About InfoTrends	16

“The ColorQube 9200 MFP was a groundbreaking product because it made high-performance, high-quality color affordable for the office workgroup.”

Executive Summary

Approximately two years since the original launch of the ColorQube products, Xerox has announced the latest version of its solid ink-based Multifunction Peripheral (MFP) platform. The ColorQube 9200 MFP was a groundbreaking product—not only for Xerox, but for the rest of the industry—because it made high-performance, high quality color affordable for the office workgroup. As a milestone product, InfoTrends believes it is important to review market activity over the past 18 months to gauge the success of the ColorQube program.

This document takes a look at the original ColorQube 9200’s performance to provide insight on overall market reaction, measure success relative to Xerox and market projections, as well as determine how the ColorQube platform has influenced the office workgroup market. At the same time, we will examine the new features and capabilities of the new ColorQube 9300 series to better understand future opportunities for Xerox’s solid ink technology.

The basis for this analysis comes from our own insights into the office imaging market, direct feedback from Xerox and its channel partners, as well as our own conversations with a number of Xerox ColorQube customers.

Key Findings

- Sales of the ColorQube 9200 series MFPs in 2010 represented approximately 25% of all Xerox A3-size color MFP sales in segment 3 and 40% of segment 4
- Half of the current Xerox ColorQube sales displaced a competitive product
- Customers are printing 33% more color pages on the ColorQube platform than they are on Xerox’s comparable laser devices

Introduction

Two years ago, Xerox introduced the ColorQube 9200 series MFPS—a new class of multifunctional products with two key design elements in mind: to make color more affordable and accessible for office workgroup users. The ColorQube 9200 series delivered several firsts for the industry, most notably the machines were the first A3-size multifunctional products based on Xerox’s solid ink marking technology.

Nevertheless, the technology itself has also delivered new capabilities to the office workgroup space. A multi-tiered, hybrid color pricing plan allows customers to more effectively pay for the color they use. This “cost per coverage” pricing model is very unique to the industry and something that InfoTrends has suggested as a market requirement for quite some time. Meanwhile, the solid ink-based marking system

provides a reliable platform that is easier to use, requires less maintenance, and delivers significant environmental benefits compared with comparable laser-based products.

To understand the importance of the ColorQube platform and to provide a foundation for our analysis of its performance, it is useful to first review the basic principles of Xerox's solid ink marking technology in context with the capabilities of the original ColorQube 9200 series.

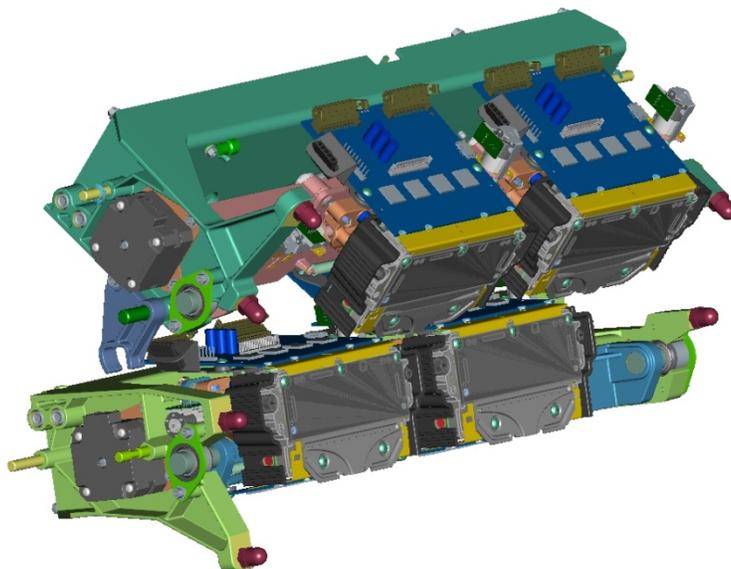
Technology Review

At the heart of the ColorQube platform is Xerox's solid ink imaging technology. InfoTrends has long predicted a broader deployment of ink-based technologies into the office workgroup market to address certain unmet needs—primarily affordable color printing. Our theories are based on some fundamental assumptions: (1) ink costs less than toner, (2) the writing system is typically less complicated compared to xerography, and (3) the print quality that can be produced with inkjet-based technologies is very good. Xerox's solid ink-based products deliver in each of these three core areas.

Solid Ink Technology

Solid Ink technology is not new, and it has been used in products long before the original ColorQube MFPs were introduced. In fact, Xerox obtained the technology when it acquired Tektronix in 2000, but the technology itself has been in the market since 1991. Over the years, Xerox has developed and marketed more than 21 different solid ink-based products serving thousands of customers, and the firm claims that its solid ink installed base currently produces more than 6 billion pages annually.

Indeed, the technology's longevity in the market is part of what makes it so attractive for office workgroup users. While InfoTrends believes that ink-based marking systems offer clear benefits for office color users, there is no doubt that liquid ink-based technologies suffer from some negative bias among these customers because that technology is most often associated with desktop consumer products. Xerox's solid ink technology, on the other hand, has never suffered from this bias because it has only been implemented in workgroup devices aimed at traditional office users and graphic arts environments.

Figure 1: Solid Ink Full-Width A3-Size Printhead Array

For a long time, Xerox's entire solid ink product line was based on an A4-size printhead. To facilitate the development of the ColorQube 9200 series, Xerox created an A3-size, solid ink page-wide array, which was a significant technical achievement. Xerox actually stitched multiple modular printheads together in a staggered array that spans the full width of an A3-size page. Specifically, the ColorQube 9200 used four printheads assembled in a staggered, overlapping formation to achieve an imaging width of 11.7 inches.

Xerox has continually sought to improve the printing performance and quality of its solid ink technology, while focusing on what is likely its most compelling differentiator: lower color operating costs. Although solid ink technology was initially aimed at the graphic arts market, it quickly became appealing to general office users because of its simplicity and ease-of-use. It is the simplicity of the writing system that makes ink-based technologies potentially so disruptive to the office color market.

The ColorQube platform takes advantage of some of the inherent benefits of an ink-based marking system. Perhaps the most important of these is its relatively simple imaging process compared to xerography. Traditional laser-based devices are very complex, utilizing a number of moving parts that must be finely tuned to work together to achieve optimal image quality. Laser-based xerographic imaging has been perfected over the years, but the process remains complex and there are numerous components that can wear out and must be replaced or maintained. The ColorQube's solid ink-based writing system, on the other hand, involves a relatively simple process of ejecting ink onto paper.

Xerox's solid ink technology utilizes a "cartridge-free" design, using ink sticks as opposed to the typical toner cartridge associated with a laser-based machine. Inks can be replaced at any time while the machine is running, which translates to less mess, minimal waste, and increased up time. Apart from the ink sticks, which are completely consumed during

the imaging process, there is only a single customer replaceable unit available for the ColorQube product. In short, the Xerox ColorQube platform provides customers with a reliable product that requires less maintenance, which means less downtime and greater productivity.

ColorQube 9200 Series MFPs

In May 2009, Xerox introduced the ColorQube 9200 series MFPs, its first solid ink products based on a tabloid/A3-size engine. This marked a significant milestone for Xerox as it pushed the solid ink technology into the core of its product line: segments 3 and 4 of the office color MFP space. With color print speeds ranging from 38 to 50 ppm, the new MFPs combined Xerox's solid ink technology with the common hardware modules and network controller found on Xerox's laser-based WorkCentre MFPs. The result was a product platform that changed the game for office workgroup printing by making color more affordable, while at the same time providing unmatched features in areas such as ease-of-use, reliability, and environmental sustainability.

What primarily set the ColorQube platform apart from its competition was a revolutionary pricing model known as the Hybrid Color Plan. Most A3-size MFPs today are sold on standard cost-per-copy plans that charge a fixed rate for color pages. The ColorQube 9200 series classifies pages based on the amount of color pixels on a particular page. Therefore, color pages can be billed at different rates depending upon the amount of color on the page. This represents a radical departure for the market because it allowed Xerox customers to more effectively pay for the color they use, rather than pay a penalty for the small amounts of color that are typically used in everyday office documents.

With the ColorQube 9200 series products, customers do not pay a set rate for all color pages but instead pay less for pages with smaller amounts of color. In other words, documents that consist primarily of black text but also contain a color logo or URL are classified as "Useful Color" pages and cost the same as a black-and-white page. Documents with moderate amounts of color, such a Web page, are classified as "Everyday Color" pages and cost slightly higher than a black and white page.

Only documents with heavy amounts of color are charged at the full color rate. This innovative multi-tiered pricing structure reduces the cost of color printing, enabling businesses to print in color while greatly lowering their monthly print costs. In many cases, customers have found that the ColorQube platform allows them to shift even more documents to color, while still paying less for their monthly print costs than they did previously.

The ColorQube 9200 series takes advantage of all the previously described benefits of solid ink technology to provide a reliable platform that is clearly designed with the customer in mind. Xerox placed a strong emphasis on ease-of-use with innovative

features, such as simple ink loading and a single long-life customer replaceable unit (CRU). The paper path of the ColorQube 9200 series is also illuminated with blue LEDs making occasional access less intimidating and easier. In addition, help videos are embedded within the user-interface of the device, offering quick troubleshooting assistance for various procedures. All of these features are designed to minimize user interventions and calls to IT support.

Finally, the ColorQube 9200 series MFPs offer significant “green” benefits. The cartridge-free ink technology means that all of the ink used in the device is completely consumed during the printing process. In addition, with only one customer replaceable unit, the ColorQube 9200 series produces up to 90% less packaging and consumable waste while printing versus a comparable laser device.

New ColorQube 9300 Series MFPs

On May 6, Xerox announced the successor to the ColorQube 9200 series MFPs. The new version, called the ColorQube 9300 series, is based on the same basic engine platform as its predecessor, but provides a number of important enhancements—primarily in the areas of productivity and security. To begin with, the print speeds have been increased slightly for a couple of models.

Figure 2: Xerox ColorQube 9300 Series MFP



The low-end ColorQube 9301 has a print speed of 38 ppm color and 50 ppm monochrome. The ColorQube 9302 has default print speeds of 45/55 ppm (color and monochrome), while the ColorQube 9303 operates at 55/60 ppm (color and

monochrome). In addition, Xerox says that real world printing performance for simplex and duplex printing as well as copying has been improved due to some optimization of image processing. Scan speeds have also been improved, with the new machines supporting 84 ipm for monochrome (up from 75 ipm) and 60 ipm for color (up from 51).

Improved Productivity and Security

A new Xerox Smart controller offers enhanced features with a faster processor (1.5 GHz), and a larger 160 GB hard drive. The new Smart controller design provides for true multitasking, allowing users to copy, print, scan, or fax even while other jobs are processing. Xerox's Print Around feature holds a job needing resources (such as a different paper size) and prints the next job in the queue. Plus, users can manage the job queue at the device by promoting or deleting jobs accordingly. The new devices also support print-ready files, such as PDF and PRN files, which can be scanned to and printed from most standard USB memory sticks for improved convenience.

One of the more important new features is a new cleaning unit that has a yield of 330,000 pages, a 65% increase in yield compared with the 200,000-page cleaning unit used in the older models. Because it is the only customer replaceable unit (CRU) for the ColorQube MFPs, any significant increase in yield for this component contributes greatly to overall productivity because it leads to fewer device interventions and less down time for servicing the machine.

New security features include User Permissions, which allows businesses to restrict access to print features by user, by group, by time of day, or by application. For example, limits can be set so that all Outlook e-mails always print duplex and in black and white. On the other hand, conditions could be applied so that all PowerPoint presentations print in color. Once again, Xerox is adding productivity features that will ultimately save their customers time and money in the overall configuration and deployment of their print environment. Other new security features include 256-bit encryption using the FIPS 140-2 standard to ensure data security, as well as a feature that allows individuals to password-protect their PDF files.

Commitment to Sustainability

As mentioned previously, the ColorQube platform already offered compelling environmental benefits related to the reduction in packaging and consumable waste generated by the solid ink platform, particularly when compared with typical laser-based devices. Nevertheless, Xerox has shown that it remains committed to the environment by reducing the new ColorQube 9300's energy consumption by 17% compared to the ColorQube 9200 series family.

A lot has been made over the years about the power consumption requirements of solid ink technology, particularly when the machine is not operating, but in sleep mode. The reason for this is that solid ink needs to be heated to print, and the heaters remain

operating in sleep mode to keep a small amount of ink heated and ready for printing. It should be pointed out that solid ink actually consumes considerably less energy while printing. It is clear that Xerox is consistently improving the energy efficiency of its solid ink technology, but it seems clear this issue can be easily overcome when one considers the overall environmental benefits of the technology.

What ColorQube Means for Xerox

There are numerous ways to gauge the success of the ColorQube program. The first, of course, is simply to look at sales and compare them with overall market performance. Sales for the Xerox ColorQube products were quite strong in the latter half of 2009, which was severely impacted by poor economic conditions and was, by all accounts, a down year for the rest of the industry.

Nevertheless, 2010 was clearly a bellwether year for the ColorQube 9200 series products. Sales of the devices were consistently strong in each quarter, and the platform already represents a significant share of Xerox's total sales in the color MFP market. According to InfoTrends' own estimates, sales of the ColorQube 9200 series products in 2010 represented approximately 25% of all Xerox A3-size color MFP sales in segment 3, and 40% of segment 4. This is a substantial achievement given that the ColorQube platform consists of only three different models spread across both segments.

Clearly, the ColorQube's value proposition is registering with Xerox customers. The firm attributes the success of ColorQube to its differentiated value proposition, with new levels of lower color pricing—a real differentiator especially in today's highly competitive market. More importantly, the ColorQube platform is creating new business and capturing new pages for Xerox, which is obviously an important part of the overall product strategy.

Driving New Business

Xerox says that its new business rate is higher with ColorQube than what it has seen with its laser products. In other words, Xerox is capturing more new business with these devices and displacing competitors at a higher rate with ColorQube than what it traditionally achieves with its laser-based products. Of course, new incremental business (and pages) has always been the key target for ColorQube. Indeed, the firm says that ColorQube sales represent new business for Xerox more than 50% of the time.

The ColorQube platform is also helping Xerox achieve greater penetration in new segments of the market—or at least segments that traditionally have not been that strong for Xerox. The primary customer for ColorQube is one that is interested in color, but cost reduction and affordability have always been their primary concern. With the ColorQube product, Xerox says it has been able to attract smaller businesses, architectural firms, and customers migrating from older technologies. The products have also done well with businesses that have sustainability in mind.

Xerox has always said that the primary customer for ColorQube is one for which color is a key requirement. In other words, these products are likely more popular with customers that have a high mix of color documents or significant color print volumes. The product appears to be successful in key vertical markets, such as health care, marketing/creative services, financial, as well as public sector companies and government agencies. The product is also fairing quite well with those companies for whom environmental sustainability and green initiatives are a high priority.

The Channel Believes

An important part of making the ColorQube platform a success for Xerox was getting “buy-in” or acceptance from its channel partners. The product represented a number of radical departures for an industry that is fairly set in its ways, including an ink-based platform, a multi-tiered pricing model for color pages, as well as a long list of other elements that would require changes in selling motion and a different approach to the customer. Xerox invested up front to train and educate its channel on the ColorQube platform and it appears that those efforts have not gone unrewarded.

As mentioned earlier, the ColorQube platform has proven highly effective at displacing competitive products—resulting in new and incremental business for Xerox and its partners. This is important in today’s market, where price seems to be the only way to differentiate from the competition. With ColorQube, Xerox and its channel partners have a new story to tell and a host of real differentiators to convey to the customer. One Xerox representative refers to the ColorQube as “a great offensive weapon.” This kind of enthusiasm is difficult to come by and clearly provides Xerox with ammunition when seeking to displace its competition.

The ColorQube is considered by sales representatives and customers to be an innovative product—not just a “technology tweak,” but a true innovation. Of course, reducing the cost of color is still the primary selling factor, and cost savings was ranked the number one selling feature and perceived benefit among customers we spoke with. But the multi-tiered pricing system is viewed as being unique in the marketplace, and there is little doubt that Xerox channel partners are using this as a distinct advantage against competitive products.

The reliability of the ColorQube platform is also very important to its overall success. Customers place a lot of value in productivity and “up time.” Many sales reps point to the fact that the machine requires very little service, primarily because it has very few moving parts and considerably fewer serviceable components compared with laser-based products. Customers look closely at issues, such as the average number of pages between service calls, and it appears that this too is a strong benefit of the ColorQube technology. Furthermore, Xerox sales reps indicate that the ColorQube’s strong environmental message and the benefits from waste reduction are key factors in sparking initial

customer interest. Again, this is just another part of the ColorQube differentiation and value proposition.

Stealing Pages from Xerox?

When ColorQube was initially launched, some suggested that Xerox was forcing its customers to choose between its own laser-based products and the new solid ink platform. Many suggested that Xerox ultimately risked losing ground by displacing its own laser customer base with a new technology. Nevertheless, there are strong reasons why this is not a major concern for Xerox. To begin with, the ColorQube platform is first and foremost a technology used to displace the competition, and with the competitive knockout rates displayed thus far it appears to be quite successful on that front.

InfoTrends believes that if Xerox can shift more customers to the ColorQube platform, it will increase the number of pages that are converted from monochrome to color. In other words, customers will print more pages with minimal color coverage using the ColorQube's "Everyday Color" print meter. So while some color pages would incur a lower per-page click charge, the net result in total color annuity would be an increase due to the additional color pages that customers would not print using the traditional "one price fits all" color pricing scheme.

Finally, Xerox has always believed that customers will actually increase their overall color print volume once they become comfortable with the three-tiered metering model. Based on our conversations with ColorQube customers, it appears that those projections are holding true.

The ColorQube Customer Experience

ColorQube is obviously an important product platform for Xerox. Meanwhile, the firm's customers certainly view the machine as much more than just another color MFP. Based on our conversations with many Xerox users, the ColorQube product is basically changing the way customers think about color: they are printing more color pages; making color more prominent and accessible; using color in new ways; and, ultimately, reducing their costs for color printing.

Without question, the ColorQube's primary value proposition is lower color operating costs. If the customer has a significantly higher mix of monochrome-only documents or a limited need for color, there is likely little incentive to switch to the ColorQube platform. Therefore, the best ColorQube customer is one who is looking to reduce color costs or looking to produce more color documents. This obviously impacts the way that Xerox markets and promotes the ColorQube platform, with a strong emphasis on reducing color costs combined with messaging on the value of color.

33%

“Customers are printing 33% more color pages on ColorQube than they are on comparable Xerox laser devices.”

Color is No Longer Just for the Privileged

With its tiered color pricing plans, Xerox’s ColorQube product has set new standards for the cost of color pages, effectively delivering the promise of color to many more office users. For many ColorQube customers, lower operating costs factor heavily in the initial purchase decision. In short, the ColorQube is viewed as a means to reduce the costs of color printing.

But once the machine is in house, businesses quickly begin to understand the true value of the ColorQube platform: the ability to transition more documents to color in an affordable way. This increases the effectiveness of their communications at costs that are lower than competitive laser products and, in most cases, more affordable and convenient compared with outside printing services. Indeed, Xerox reports that its own internal research shows that customers are printing 33% more color pages on ColorQube than they are on our comparable laser devices.

Even for those customers who do not see an increase in color pages, the ColorQube provides significant value. One customer that we interviewed, a large health care facility, indicated that their print volumes stayed roughly the same since replacing their color laser-based MFP with the ColorQube 9201 MFP. Nevertheless, this customer realized significant cost savings, primarily because the bulk of the documents they print contain only small amounts of color—usually a logo or a small section of highlighted color text. In the past, this customer was forced to pay the full meter price for each color page. But with the ColorQube, these same documents fall under the “Useful Color” rate, which means they are billed at the same price as a monochrome-only document.

There is little doubt that customers understand the value of the ColorQube’s multi-tiered pricing plan for color pages. The cost penalty for color in the traditional office workgroup has traditionally been significant, primarily because users pay a set price for color pages regardless of the amount of color on the page. The basic ability to pay for the color used is something that the market has requested for years, and Xerox has delivered this capability with the ColorQube platform.

No Inkjet Bias

Many have suggested that ink-based technologies will struggle to succeed in the workgroup space because of the negative opinion of inkjet among office users. This “inkjet bias” relates primarily to the association of inkjet with desktop consumer devices, which obviously would not be reliable enough to withstand the rigorous demands of a workgroup printer. Nevertheless, InfoTrends has long predicted that once vendors begin to design ink-based products that are clearly designed for the office, this type of bias could easily be overcome.

It seems that few customers have refused to consider the ColorQube platform simply because it is based on solid ink technology. In fact, the benefits of solid ink have been one of the compelling reasons that customers consider it as an alternative to the traditional laser-based product. Among the customers we interviewed, bias against inkjet technology was never mentioned as a concern.

Xerox's strong heritage with its Phaser color system and the length that this technology has been in the market has served it well. InfoTrends believes there is no fixed opinion on this from a technology perspective. In fact, customers seem more concerned with the initial hardware cost and the long-term benefits of the three-tiered metering plan when it comes to comparing ColorQube to laser.

Ease-of-Use

While reducing color costs seems to be the primary reason that most customers make the jump to the ColorQube platform, other benefits quickly become apparent once the machine is installed. For many customers, the ColorQube's ease-of-use quickly becomes one of its most attractive qualities, followed closely by reliability, color quality, and up-time. Again, what makes the ColorQube so unique is the simplicity of its marking engine.

Figure 3: Ink Stick Loading in ColorQube



Replacing inks in the ColorQube is as simple as opening a top tray and dropping in a new ink stick—and this can be done while the machine is running. The simplicity of supplies replenishment cannot be overstated, especially when compared with toner-based printing products. Xerox customers that we spoke with are quite enamored with the entire process. Users appreciate the simplicity of replacing supplies in the ColorQube because it is more convenient and less time consuming, while management sees the value in greater productivity and less downtime.

Less Waste/Environmental Impact

Finally, Xerox customers stress the importance of the ColorQube's environmental benefits. While many admit that these factors did not weigh heavily in the initial decision to acquire ColorQube, the "green" benefits add significantly to the customer's overall satisfaction.

By requiring fewer supplies, the ColorQube platform provides customers with a much simplified supplies management process. The ColorQube's ink sticks take up considerably less space to store than traditional toner cartridges, and customers are quick to realize the benefits. According to Xerox, one of its customers reported that after moving from a laser-based product to a ColorQube device, the reduction in space required for supplies storage actually freed up enough room for two additional office spaces.

The ColorQube platform leverages cartridge-free ink technology that utilizes only one customer replaceable unit. This is a significant technological achievement on its own when we consider the plethora of moving parts and replaceable components normally associated with a toner-based machine. The result is a device that produces up to 90% less packaging and consumable waste versus a comparable laser-based machine. Over the course of the product lifetime, this could translate to significant cost savings for the customer and a dramatic reduction in overall environmental impact.

The reduction in waste alone sets the Xerox ColorQube product far apart from its competition in terms of environmental impact and overall sustainability. Indeed, the ColorQube platform can greatly reduce the amount of waste that may be recycled or end up in landfills. According to Xerox, more than 800 tons of waste has already been averted based on the number of ColorQube devices currently in the market.

InfoTrends' Opinion

InfoTrends has long believed in the disruptive power of ink-based technologies in the office workgroup space. With its multi-tiered pricing plan, high-quality color output, and strong environmental benefits, Xerox's solid ink-based ColorQube has delivered on the promise of ink for the office. Indeed, InfoTrends believes that Xerox's customers are only just beginning to understand the true value of ink, in general, and the ColorQube platform to be specific.

What Xerox has been able to do with ColorQube is shift the focus from the cost of color to the *value* of color. True, customers initially acquire the ColorQube product because it represents an opportunity to drive down costs, but customers quickly realize that the multi-tiered pricing plan allows them to print more types of documents in color—in most cases at little or no cost premium to a monochrome-only page. Most customers understand that there is intrinsic value to printing in color, even for documents that do

not move outside of the organization. This is a significant step for the industry, and it is a competitive advantage for Xerox that will likely pay dividends in the future.

For years, individuals ranging from office managers to CFOs and small business owners have felt threatened by the “unrestricted use” of color. The fear being that once people are presented with unfettered access to color devices that they will print “everything” in color, leading to print costs that spiral out of control. Those fears were largely well-founded because the cost penalty for color on most office workgroup devices today, whether installed under a click-based service contract or on a toner-out basis, is quite substantial.

With the ColorQube product, Xerox has opened the door to make color not only more affordable, but more accessible to everyone in the organization. It is easy to see that this value proposition has resonated not only with customers but with Xerox channel partners and sales reps alike. The new ColorQube 9300 series of MFPs only strengthens the product line and further validates that Xerox remains committed to solid ink technology for the office space.

InfoTrends called the original ColorQube launch “a bold move for Xerox that could have a major impact on the office imaging landscape.” This has certainly held true, but the ColorQube platform has done more than disrupt the market, it has changed the way customers view the use of color in the office. For Xerox, the introduction of the ColorQube platform has meant new customers and new color pages. For its customers, the Xerox ColorQube provides a way to truly take advantage of the value of color.

This material is prepared specifically for clients of InfoTrends, Inc. The opinions expressed represent our interpretation and analysis of information generally available to the public or released by responsible individuals in the subject companies. We believe that the sources of information on which our material is based are reliable and we have applied our best professional judgment to the data obtained.

About InfoTrends

InfoTrends is the leading worldwide market research and strategic consulting firm for the digital imaging and document solutions industry. We provide research, analysis, forecasts, and advice to help clients understand market trends, identify opportunities, and develop strategies to grow their businesses.