

INFOIMAGING@Kodak

HEALTH IMAGING POSITION PAPER AUTUMN 2002



Sometimes technology hints at change. And sometimes it insists on it.

Right now, our business and our industry are undergoing dramatic and seismic shifts as a result of technology. Specifically, the convergence of image science and information technology has created a new industry in which we compete—an industry called infoimaging.

This extraordinary technological development has opened a world of possibility and opportunity for Kodak and its customers. And, at the same time, the convergence of image science and information technology has altered the value chain that connects imaging companies like ours with customers.

But what will truly separate companies that succeed in this new industry from those that fail will be their willingness to view their business through an infoimaging lens vs. seeing their business as they always have.

For Kodak Health Imaging, infoimaging represents an enormous opportunity to strengthen our value chain with customers—a chance to reinforce old bonds, initiate new ones and forge future linkages.

We must see the possibilities—and seize the opportunity.

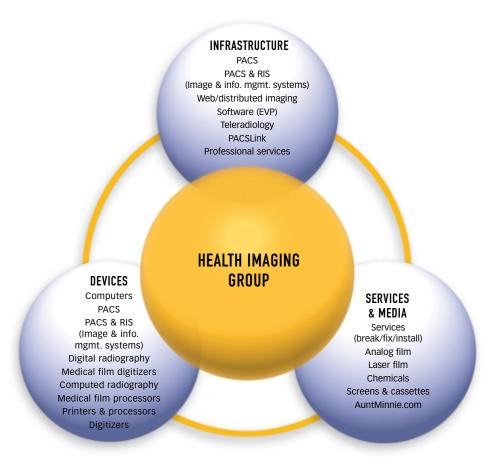
BEFORE INFOIMAGING

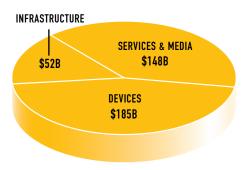
Before infoimaging, the value chain connecting Health Imaging to our customers was fairly simple and linear—with just a few points along the chain from which Kodak derived value. For example, a radiologist would take an X-ray, develop the film and distribute it to the appropriate medical personnel for interpretation. And while Kodak continually led the industry in new imaging advancements-improvements to imaging equipment and better X-ray and imaging film and processing the value chain essentially remained the same: capture device, film, processing, output. As a result, the number of points along the value chain from which Kodak derived value was limited.

But infoimaging has dramatically changed this. In addition to making image capture and diagnosis much less time-consuming, infoimaging has expanded the opportunities for us to connect with customers. As a result of infoimaging, the value chain linking



Kodak's Health Imaging division to customers is now less linear and more web-like—enabling us to touch and serve customers at several points in the value chain simultaneously.





The \$385 billion infoimaging pie slices into three big pieces. This trio of interrelated sectors—devices, infrastructure and services/media—connects to form the infoimaging market.

Kodak's Health Imaging division to customers is now less linear and more web-like—enabling us to touch and serve customers at several points in the value chain simultaneously. The opportunity for infoimaging lies in the convergence of the diagnostic image, patient data, and computer aided diagnosis—all to support more rapid and accurate diagnosis, and potential treatment.

Infoimaging is made up of three rapidly expanding markets—devices, infrastructure and services and media—and Kodak Health Imaging has the distinction of being one of the few players involved in all three. These three markets make up what we call the \$385 billion infoimaging industry.

Devices are products that capture, view, digitize and output. That's our line of computed radiography, digital radiography and laser imaging systems, to name just a few.

- Infrastructure enables images to be processed, stored, edited, transformed and transported. That's hardware and software, such as image-enhancing software, computer networks, and picture archiving and communications systems (PACS).
- Services and media allow images to be shared and preserved. That's X-ray prints and other medical images, long-term online archival storage, teleradiology and, of course, film and paper.



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INFOIMAGING IN ACTION

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DIAGNOSTICS: SALT LAKE CITY; DIAGNOSIS: THE WORLD

One of the most recent and truly international examples of infoimaging in action was Kodak's involvement in the 2002 Salt Lake City Olympic Winter Games. For the Games, Kodak donated world-class digital medical imaging equipment and services to an on-site medical imaging center called the Olympic Polyclinic—a place where athletes, coaches and others received diagnoses of injuries. The Olympic Polyclinic is a classic example of how all three segments of infoimaging—devices, infrastructure and services and mediacan be combined to serve patients. Kodak devices were used to capture the images, and the Kodak devices (as well as devices from other companies) were networked and connected via IT infrastructure to a Kodak PACS and to the nearby University of Utah Hospital. Finally, Kodak printers, film and ink were used to provide the athletes, coaches and others with hard-copy images of their injuries for their physicians in their home countries.



JUST WHAT THE DOCTOR ORDERED—PRODUCTIVITY AND PATIENT CARE

Quick and easy diagnosis isn't limited to international athletic competition. Kodak Health Imaging also helps hospitals increase productivity and improve patient care. For example, at Newton-Wellesley Hospital outside Boston, a suite of Kodak Health Imaging products demonstrates the benefits of infoimaging. To improve process workflow

and document archiving, Newton-Wellesley uses devices such as the Kodak DirectView DR 9000 and Kodak DirectView CR 900 systems; infrastructure such as Kodak DirectView EVP software and hospital IT networks; and media such as images printed from workstations. This infoimaging solution has been so successful for Newton-Wellesley that it is considering implementing a Kodak DirectView PACS system.



LOOK INTO THE FUTURE AND SMILE

Infoimaging also is impacting dental imaging. At dentist Gary Shapiro's office in Beverly Hills, Calif., infoimaging is helping patients better visualize the impact of aesthetic and cosmetic procedures on their appearance. Using a Kodak DC290 Zoom Digital Camera and a third-party software program, Dr. Shapiro is able to show his patients "before" and "after" photos to illustrate exactly how a dental procedure will affect their appearance. He incorporates the "before" photos and the software-enhanced "after" images into a PowerPoint presentation for his patients, which is more personal than a generic book of how the procedures affect the appearance of anonymous individuals. The result has been an increase in patients committing to procedures.

INFOIMAGING'S IMPACT

These examples are but a few of the many infoimaging success stories from Kodak's Health Imaging division, and we will be sharing more with you. Each of these examples illustrates how Kodak can strengthen its bonds with customers and create new opportunities for growth for itself and for customers. The proof is in the results.

Kodak's digital medical imaging equipment contributes to reduced medical time for those needing treatment. For example, the Kodak DirectView DR 9000 produces a digital X-ray in 10 seconds, and because



- the image can be immediately viewed, the radiologist can determine almost immediately whether additional images are needed. This decreases the wait time for patients and reduces staff load.
- > While most of the nearly 400 diagnoses at the Olympic Polyclinic were made on site, consultation outside the Polyclinic was required on one head injury and one early pregnancy. With the ability to transmit images over IT networks, these consultations were able to occur quickly with appropriate specialists at the nearby University of Utah Hospital.
- More dental patients are likely to proceed with elective and aesthetic procedures like tooth whitening after seeing their own "before" and software-enhanced "after" photos instead of reviewing traditional photo samples of strangers, and this is good for a dentist's business.

THE PATH TO GROWTH

Without a doubt, our company, our industry and our jobs are changing. Infoimaging is forcing us to look at how we serve customers in new ways. Technology is opening the doors to new products and services that we never before thought possible. This, in turn, is creating new opportunities for us to work with and acquire new and different companies—Lumisys Inc. and its desktop CR systems and X-ray film digitizers, for example. So how do we communicate these exciting opportunities to each other within Kodak Health Imaging and to our customers? It's very simple, really, and it goes like this:

OUR INDUSTRY

Infoimaging is the industry in which Kodak competes. It is a \$385 billion industry created by the convergence of image science and information technology.

OUR STRATEGY FOR GROWTH

In order to grow in this new industry, Kodak has identified four growth strategies that we call "The Critical Few." They are:

- 1. Expand the benefits of film
- 2. Drive output across all of our businesses
- 3. Make digital easier to use for both commercial customers and consumers
- 4. Develop new businesses in new markets

OUR CUSTOMER VALUE PROPOSITION

We communicate the benefits of our Health Imaging products and services to our customers through our "Better View of Life" philosophy.

In other words, infoimaging is expanding our value chain connecting us to customers. "The Critical Few" are a strategy map for seizing the opportunities of infoimaging. And "Better View of Life" is how we communicate value to our customers.

We must see the possibilities and then seize the opportunity.

For more information about infoimaging, go to: **www.kodak.com/go/infoimaging**

