INTACTA EXPRESS

OTCBB: ITAC | **Performance Enabling Technologies** | **Vol. 1 No. 1**

NEW TECHNOLOGY TO LINK PRINT AND PERSONAL COMPUTER

Reprinted from Yomiuri Shimbun, April 18, 2000

The Yomiuri Shimbun has entered into an agreement with Fujitsu with respect to the use of 'INTACTA.CODE™.'

The INTACTA.CODE™ is an innovative technology that allows multimedia information handled by PCs such as sound, image, and OAdata to be 'printed onto paper.' The printed information is read into a computer by a scanner.

The Yomiuri Shimbun is exploring new styles of newspaper fit for the 21st century, and the INTACTA.CODE™ is, in a sense, an experiment for the newspaper to diversify and grow out of the printed information, as part of that effort. We will introduce it to our readers gradually in the paper and magazines that we publish, offering information as add-on to our regular articles and photos.

YOMIURI SHIMBUN: 10 MILLION READERS DAILY

Established in Tokyo in 1874, Yomiuri Shimbun is part of the Yomiuri Group of Companies and is the world's largest newspaper, with satellite offices in New York, Hong Kong and Thailand. The newspaper is Japan's largest daily, with a total of 10 million readers of their morning and evening editions. The Yomiuri Shimbun's overseas bureaus are located in 33 cities and are staffed by 60 reporters. The paper's editorial and major news stories are translated in the English-language paper, the Daily Yomiuri. www.yomiuri.co.jp

INTACTA.CODE™ REVOLUTIONIZES JAPAN'S NEWSPAPER INDUSTRY

Japan's Largest News Daily To Print Software Applications Amid Newsprint with INTACTA.CODE™

Atlanta, GA, April 18, 2000 - Fujitsu Limited, Japan and Intacta Technologies Inc. ("Intacta") headquartered in Atlanta, GA announced today a technology alliance regarding a totally new application of technology to the newspaper industry. When the 10 million readers of the world's largest newspaper, Yomiuri Shimbun open their daily editions they will soon find free software – printed in machine-readable code on a page of the newspaper. Fujitsu, under license from Intacta has developed an application that encodes and prints virtually any software on plain newspaper. When the specially coded box of printed dots is scanned into a computer, using any standard scanner, the printed dots are translated back into computer programs. Virtually any software, including music files, high-resolution graphics or any executable computer application, can be delivered using the technology.

The new application uses Intacta's patented encoding software called INTACTA.CODE™ to print encoded patterns of dots with a high degree of error correction, enabling the delivery of complete applications on such low-resolution and susceptible media as newsprint.

When newspaper readers scan the printed INTACTA.CODE™ newsprint into their computers, special software, working with standard scanners, decodes the print to the original application, music file or graphic. Fujitsu began distributing the decoder software, free of charge, on the Internet for Japanese customers via its Web site on April 19th.

Pen Scanner reads INTACTA.CODE™

Intacta president, Altaf Nazerali said, "We are pleased our alliance partners have chosen INTACTA.CODE™ for this enterprise. We feel it's a tremendous indication of their confidence in our technology that they have used it to create a whole new realm of multimedia content in the publishing and printing industries." Mr. Nazerali said Intacta has entered into a 3-year agreement with Fujitsu and will receive ongoing fees from the project. Mr. Nazerali also indicated Intacta is seeking similar alliances in other countries for the technology.

About INTACTA™ Technologies

Intacta (OTCBB:ITAC) is a U.S. based software company headquartered in Atlanta, Georgia with its research and development facilities in Beer Sheva, Israel. The Company develops and markets software components designed to bridge enterprise communications and information management systems across digital and non-digital mediums. INTACTA.CODE™, the company's flagship product, is an award winning technology patented in the United States, Israel, and Europe. Platform transparent, and language transparent, INTACTA.CODE™ is designed to integrate with existing enterprise communications and information management systems requiring enhancements to security, transmission, and device handling on any number of handheld platforms, including Windows CE, WAP, and Palm OS. Intacta licenses its INTACTA.CODE™ to developers and system integrators, either as a standalone module or as an SDK for seamless and transparent integration within any application. www.intacta.com

About Fujitsu Limited

Fujitsu (Tokyo Exchange: 6702) is a leading provider of comprehensive information technology and network solutions for the global marketplace. Comprising over 500 group companies and affiliates worldwide – including ICL, Amdahl and DMR Consulting Group – the Fujitsu Group had consolidated revenues of $43.3 billion in the fiscal year ended March 31, 1999. With world-class hardware and software technology in computers, telecommunications and microelectronics, and a corps of 55,000 systems and services experts around the world, Fujitsu is uniquely positioned to harness the power of the network to help its customers succeed. Altogether, the Fujitsu Group has 188,000 employees and operations in over 100 countries. www.fujitsu.co.jp/en/

The free reader and samples of Intacta.code can be found at www.intacta.com/html/download.htm.

DAILIES INK LINKS TO ON-SCREEN CONTENT

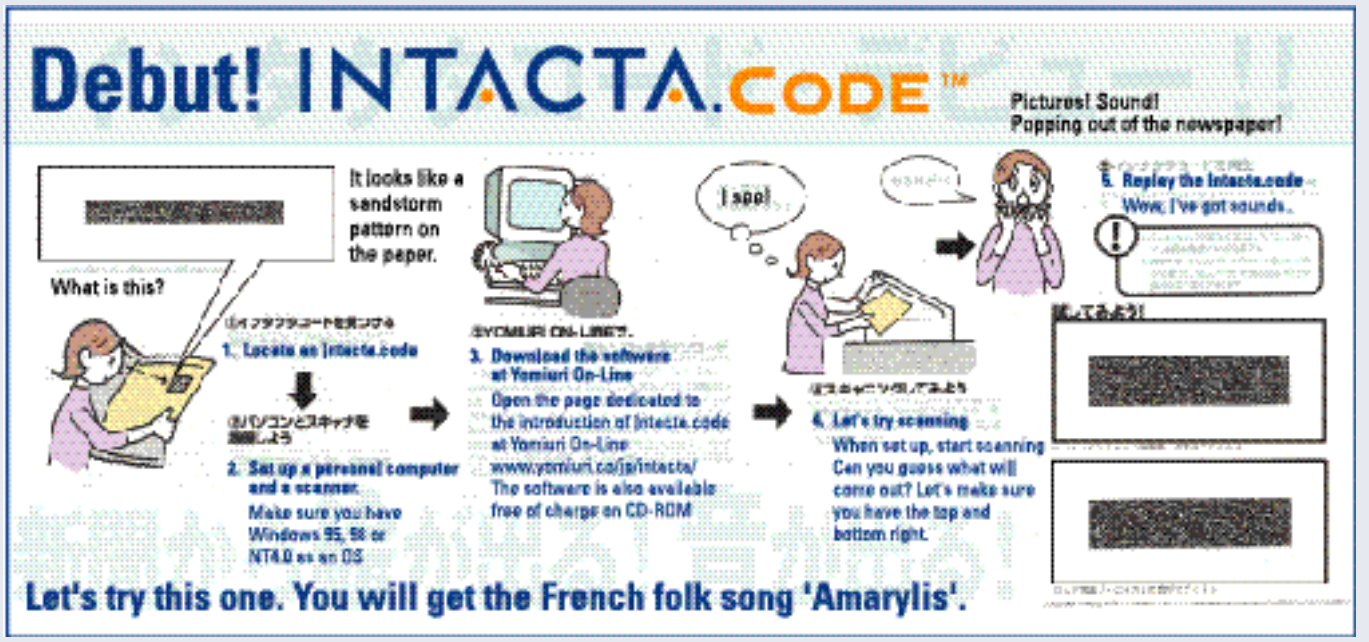
Technology: Adding Bar Codes to Newsprint

by Jim Rosenberg

Reprinted from Editor & Publisher May 17th, 2000

Just when it seemed that the dot-com-driven boost in run-of-paper advertising was about to crest, the information age may soon put just the slightest bit more ink onto newspaper pages. It may even make the newspaper the preferred vehicle for a new kind of product sampling that moves the often-manual inserting process from the mail-room floor to the digital desktop. The larger significance, however, would seem to lie in the beginnings of the digital convergence of multiple media.

So forget disks or downloads. Newspaper and insert printers can now produce scannable codes that in one case take readers to Web sites and in another supply the content directly. Both applications offer possibilities for enriching editorial and advertising content within minimal page space. On the ad side, the beauty of software is that sample content can be provided in scannable printed form, essentially converting cumbersome product sampling into ROP advertising. And the machine-insertable free-standing insert, through use of proposed peel-off cards and a card reader, may soon also benefit from similar encoding technology.



YOMIURI SHIMBUN INTRODUCES INTACTA.CODE™ TO ITS PAGES

Excerpt translated from Yomiuri Shimbun, April 18, 2000

Sound and animation popping out of a newspaper page – the new technology of printing electronic data onto paper called INTACTA.CODE™ will make a grand entry in our Yomiuri Shimbun. Any type of electronic data is printable. A 'Paper floppy'is born, in other words, by bridging multimedia and print that is cheap and capable of mass distribution.

Music will come out of your news page; you can recreate the entire game of the Japanese Chess Championship. The INTACTA.CODE™ is indeed a dream-come-true system that extracts a wide variety of electronic data from a newspaper page. Such electronic data as related to a given article can be taken out from the same page.

Conventionally you can enjoy electronic data of image or sound only from a floppy, CD-ROM, or a connection with a network such as Internet.

These formats provide you with a large amount of information, but are certainly removed from the print media in the user friendliness because you cannot find the article in the paper without search in the CD-ROM or you have to type in the correct web address (URL) to retrieve it from the web site.

The INTACTA.CODE™, on the other hand, enables the reader to retrieve articles, photos, and music to his computer without the trouble of going through another medium thanks to the fact that an article and its related data are printed in the same space. URL addresses that often frustrate users with own typing errors will be in the code, which makes the target page just a click away.

Another benefit is that you can reproduce the information at any time as long as the printed page is kept. In essence the system integrates the features of the two media: the print that you can view an entire page and store easily and the electronic data that is multimedia in nature.The INTACTA.CODE™ is a sort of encryption in which digital data is expressed as a collection of dots. It is read by a scanner to recreate sounds, animated images, programs and other information on a personal computer. It is in the same league with the bar code that you are familiar with at supermarkets. While the bar code has lines of different thickness placed in one direction (two-dimension), the INTACTA.CODE™ can change the volume of information to be contained in a given space by adjusting the density of its pattern.

In the case of newspaper, one square centimeter of INTACTA.CODE™ on a page can contain as many as 100 characters in alphabets and numbers. No specialized scanner is required in contrast to the bar code. You need only a scanner, a personal computer, and the Intacta reproduction software.

You need to have a computer operating on Windows 95/98/NT4.0. The scanner has to be 300dpi or better in resolution. Either a flat-bed or pen-type scanner is fine but not a sheet-feeder type. Sound software such as Mediaplayer will be needed for sound reproduction.

Japan Leads the Way

Working with Fujitsu Ltd., Atlanta-based Intacta Technologies Inc. provided software to Yomiuri Shimbun, the world's biggest daily. Licensed by Intacta, Fujitsu developed a way to print machine-readable code in ink on the newsprint, right along with the news, sports scores, and pictures.

Based on data-transmission security technology developed for the Israeli military by Intacta Labs Ltd., Beer Sheva, the code appears in a box as printed spots that can be scanned into a computer "using any scanner" able to distinguish at least 300 dots per inch, according to Intacta. The data represented by the spots can be of any sort — text, music, color graphics, or an executable computer application — and remains in native format, according to Sales Development Director Todd Dombrowski.

The company says its INTACTA.CODE™ "high degree of error correction" permits accurate delivery of code on substrates that allow relatively low resolutions and that are easily rumpled or damaged.

Complete, accurate reading "even after random damage affecting up to a quarter of the … surface," is possible because "we randomly make the data redundant," explained Altaf Nazerali, Intacta's president. That amount of redundancy can be increased or decreased. On a computer, Intacta's viewer software (which translates the dots) recognizes incomplete data and reconstitutes it from the redundant content.

On April 19, Fujitsu began distributing the Windows-only software free to Japanese customers via Yomiuri Shimbun's Web site. The three-year license awards ongoing fees to Intacta, which seeks partnerships in other countries. An unnamed European daily soon will print the code. Nazerali said Intacta probably would give the software to papers for a single, limited-time, editorial-use fee and for a per-use fee in advertising. The paper introduced the code to readers with snippets of song (42 seconds' worth from a 3/8-by-3-inch strip of code) and animation, and is awarding prizes for successful scans. Yomiuri Shimbun is using the code to augment its printed stories and photos.

In New York last week to explore business opportunities with U.S. newspaper publishers during their annual convention, Dombrowski said Yomiuri Shimbun's Web-site offer had more than 300,000 takers in the first 36 hours, with another 10,000-plus asking for distribution via CD. Within two days, papers elsewhere in East Asia were inquiring about INTACTA.CODE™

continued page 3

Dotty Idea Perfect For Papers

Daily Telegraph
April 27th, 2000

by Mark Ward

SOON you could be downloading software, music and special offers direct from your newspaper. American researchers have found a way to encode almost any kind of computer program or multimedia file as a panel of dots that can be printed on paper. The dots can be converted back into software or music tracks by passing a standard scanner over the pattern. Once the data dots have been scanned a computer can turn them back into their original program using special software. The program to do the converting is being made freely available on the internet.

Researchers at Atlanta-based Intacta came up with the system that can turn music files, high resolution images, video clips or software programs into the coded dots. Now Intacta is working on ways to get mobile phones and other hand held devices using the system.

Emerging Technology

Music from Your Daily Paper

PDAC Newsletter
May 20, 2000

by Susan Gustafson

Open your newspaper and place it on your scanner to add the latest song from your favorite band or clips from this week's movie releases to your Pocket PC. No, this is not just a fantasy. Using software provided without charge by Fujitsu, more than 10 million readers of Japan's largest daily newspaper are able to do that right now. The software turns scanned rectangles of apparently random dots into readable files. What an exciting way to distribute multimedia information to a wide audience.

But what's even more exciting is the enabling technology that makes it possible to accurately scan a file printed at relatively low resolution on newsprint and have it readable even if the paper arrives folded and wrinkled.

The technology, developed in Israel, is called INTACTA.CODE™. It offers the speed, accuracy, and security needed for all types of data transmission. The INTACTA.CODE™ software encodes, compresses, then transmits with error correction and security. Transmission can be via print or via a wired or wireless connection. Decoding software is used on the receiving computer.

Fast, accurate, and secure data transmission is essential for people using PDAs for business. In most cases, we have relatively slow connections, so data compression saves time. The data is important to us and to our businesses, so whether we are transmitting our personal information to a desktop computer or a contract to a customer, accuracy is essential. And as wireless connections become more prevalent, secure data transmission will be even more important.

Intacta has the technology to provide speed, accuracy, and security. INTACTA.CODE™ is versatile and could become an industry standard if OEMs include it in ROM. If that does not happen, Intacta Technologies Inc. will have to market the software to large companies, one company at a time. Because both encoding and decoding software is required, this is not a solution likely to be sold to individual consumers. Except, of course, for the software that allows you to translate dots on paper to music on yourPocket PC. Watch your local newspaper. It could be coming soon.

The free reader and samples of INTACTA.CODE™ can be found at www.intacta.com/html/download.htm.

Surf The Newspaper

eWEEK from ZDWire
May 22, 2000

by John Dodge

Newspapers, the quintessential old-technology medium, are going digital.

In a test of new technology from Intacta , London's Express newspaper last week ran a page with a collection of seemingly meaningless dots that, when scanned onto a computer hard drive, could be played as a video clip. The INTACTA.CODE™ technology required a typical table-top document scanner and specialized decoding software.

Besides video clips, the code can deliver music files, high-resolution graphics and any executable software.

Intacta's technology includes a hefty dose of error-correction expertise so that it can translate the dots even when some of the newspaper ink smears, officials of the company said.

Japan's Yomiuri Shimbun newspaper is also testing the Intacta technology. Earlier this month, the Charleston (S.C.) Post and Courier began printing alongside some stories and advertisements bar codes that, when scanned with a reader from developer GoCode, call up a Web site on readers' computers.

Turn Our Black Snow Into Peter Snow

Daily Express
May 17th, 2000

DAILY EXPRESS readers can today take part in an experiment that borders on the worlds of science fiction and James Bond: Using a computer file printed on an ordinary newspaper page. No, that isn't a picture of black snow printed alongside on the right: The mass of dots is encoded digital information for the computer file. All you need is a computer with Internet access and a scanner. Working with tonight's Tomorrow's World on BBC 1, you can turn this bit'of the Daily Express into a video clip of presenter Peter Snow.

On the programme, which starts at 7pm, Snow will show viewers how the revolutionary technology turns paper into computer files. Produced by American software company Intacta, printed dots can be turned into anything from a word processing file or spreadsheet to graphics, audio and video files. You could carry a music album in your wallet. In tonight's show, Express readers will be asked to go to the Tomorrow's World site at www.bbc.co.uk/tw There you'll be linked to a step-by-step guide to converting our picture alongside into the video clip. There will be a simple piece of decoding software to download and information on downloading video-playing software if it's not installed on your computer.

Newspaper To Print Software Code

The Atlanta Journal
April 19, 2000

Intacta Technologies announced a deal Tuesday with Fujitsu that will print software code in a Japanese newspaper --- a technology that the companies believe could radically change the newspaper industry.

The software code will be included in a coming edition of the Yomiuri Shimbun --- the world's largest newspaper, which has about 10 million readers, the companies said.

Dailies Ink Links continued

Working With INTACTA.CODE™

INTACTA.CODE™ can be transmitted as a bitmap graphic, attached to an e-mail message, faxed, or hand delivered as a printout. To give some idea of the ratio of file size to printed area, Nazerali said code covering an 81/2-by-11-inch piece of paper corresponds to 100-120 KB of data. "In specialized applications, we can increase that," he said. Data volume varies with pattern density. INTACTA.CODE™ is now printed only in black, but process-color patches are under study, said Dombrowski, who added that, if scannable, multi-color patches could boost data density within a given print area.

A page of code in Business Week could carry AT&T's entire annual report, according to Nazerali. Given the ratio, however, he conceded that it is unlikely to be suitable for an applications program, although a stripped-down demo file or certain small Palm and CE applications may be possible.

Dombrowski suggested that an online site or service that advertises a temporary generic user name and password in newspaper-printed code could further benefit by asking that similarly encoded subscriber information on the delivery label also be scanned.

Code boxes can bring extra information to printed ads (and updated information to printed catalogs) or take readers to Web sites in a fashion similar to small scannable bar codes that other firms have developed. Nazerali said Japanese readers already use the code to connect to baseball teams' Web sites. Nazerali credited INTACTA-.CODE™ with packing "significantly more data in the same amount of space" as a bar code. It is also, he noted, more accurate than optical-character-recognition software (and works with any language or alphabet). On-screen but offline, the editorial possibilities are tantalizing. The same attribute - similarity to certain types of random print screening - that allows the code to be used as a concealed form of document authentication also allows different information to occupy the same space on a page. For example, used as background in a graphic or instead of solid black in a big headline, the code could be used to call up additional information, the full text of a speech, a translation, or a sound (speech) file for the blind or visually impaired.

The Company also is investigating use of the same encoding,compression, and error-correction technology to overcome transmission-quality and speed/bandwidth problems in strictly electronic media.

PERFORMANCE ENABLING TECHNOLOGIES

in tăct'ă .cōde

: a process that encodes and compresses digital data, like an image, sound, or text for delivery and retrieval across any medium such as paper, PDA's, Smart Phones, or enterprise servers

: enhancement for current security measures for information moving across public networks, VPN's or internal communications systems

INTACTA.CODE™ is an award winning technology that is designed to integrate with existing enterprise communications and information management systems requiring enhancements to security, transmission, and device handling. Our patented technology deploys Compression, Encoding and Error Correction Engines that distribute and correct content allowing for degradation of the medium while maintaining 100% of the content and format.

The INTACTA Advantage

Our technology is equally applicable to the print media and the electronic media including:

- Wireless data transmission, where intermittent signal drops and erratic quality make highly reliable and robust error correction imperative.
- The compression of data for secure delivery over other low quality and lower speed links.
- More economical distribution of multimedia.
- Integration with Internet appliances including Palm, Windows CE, and WAP and Smart Phones to store highly compressed digital information for portable devices while protecting the security of transferred data.

We license INTACTA.CODE™ to developers and system integrators, either as a stand-alone module or as an SDK for seamless and transparent integration within any application.

INTACTA.CODE™

Is Platform and Language Transparent

Enterprise organizations in banking and finance, media and publishing, and telecommunications will enhance their operations with INTACTA.CODE™. Whether your challenge is mobilizing host data to pervasive computing devices such as Palm, Smart Phone, Pocket PC, or bridging digital to paper workflow procedures in Supply Chain, ERP, or Customer Relationship Management applications, INTACTA.CODE™'s security and authentication features can be readily integrated through industry standard components.

CONTACT INFO
Todd Dombrowski,
Director of Business Development
INTACTA Technologies Inc.
235 Peachtree Street N.E.
2215 North Tower
Atlanta, GA 30303

T. 404.880.9919
F. 404.880.9219
E. tdombrowski@intacta.com

www.intacta.com
Intacta Technologies trades on the Nasdaq, OTC Bulletin Board: ITAC.

Printed in Canada