

**E-COMMERCE AND  
COLOUR MANAGEMENT :  
DIGITAL CHALLENGES FOR  
NEWSPAPERS**

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*The full texts of speeches and presentations from World Association of Newspapers conferences and events are now available through the Assist Programme database. Contact Jacob Arfwedson or Peng Chambon Perrier at the WAN Secretariat, 25 rue d'Astorg, 75008 Paris France. Tel: +33 1 47 42 85 00, Fax: +33 1 47 42 49 48, E-mail: [contact\\_us@wan.asso.fr](mailto:contact_us@wan.asso.fr)*

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## ELECTRONIC COMMERCE ON THE RISE

Newspaper publishers often have misconceptions about the Internet. "Most think it is a publishing medium, but it isn't; it is a transaction medium," stresses Jan Lamers, CEO of Financeel Economische Tijd in Belgium.

Even publishers who do understand this are finding it difficult to pinpoint exactly what electronic commerce is all about. "The first definition of electronic commerce is 'all business transactions that occur electronically'," he says, but, it is much more than that. "E-commerce is really about shifting customer relations and business models."

"The new definition integrates the whole commercial value chain. In the analog world, all five steps in the value chain — advertising, information, order, delivery and payment — happen in different places. E-commerce is nothing else but the integration of all these steps at the same time, in the same place on the network," Lamers explains.

Perhaps this confusion has come about because e-commerce is not just another sales channel; it is an entirely new economic paradigm, one for which we have yet to create an appropriate language. "We only have words that describe our industrial economy: 'industrialised countries', when industry represents less than 20% of GNP. We use 'tons of exports', when so much trade is weightless," Lamers continues. The same applies to time. "Real time is different in the analog and digital worlds. With letters, if you got a response within a week, it was fine. But email? You need a response within a day."

### *A whole new paradigm*

The new digital environment challenges a number of established givens. First of all, it refutes a traditional economic law, whereby the value of a product declines as its volume increases. This applied to industrial economies, where raw materials were scarce. "But (in a digital economy) there is an abundance of knowledge and information, and value does not necessarily decline if there is more," he says.

**This is particularly important to publishers because "there is room for both limitless aggregation and disaggregation. We can make newspapers of 100,000 pages, but we can also personalise them and offer three to four pages to one person," he continues.**

**Another change is in the flow of information, which evolves from a one-way, one-to-many flow to one that is bidirectional and one-to-one. "If you analyse information flows, company to customer is the dominant flow today; feedback is very weak. In a networked economy, this company to customer link will be a lot weaker because the customer is in control," Lamers continues. Newspapers should therefore organise themselves to take this new dynamic into account — something few of them are doing today. "How many newspapers give advertisers insight into their accounts? The ability to track and trace their packages? To see how many ads they've run?" he asks.**

**What does this new environment mean for advertising? First of all, advertisers don't like fragmented media, so advertising won't work on the Net, Lamers says — at least for the bulk of sites. (Today, 10 sites on the Net take 90% of revenues.)**

**Moreover, in a digital economy, "the value of advertising information is zero unless it is connected to a transaction," he says. "The information has to be linked to the transaction or the action I want to take." Newspaper publishers, however, have been working from an advertising information business model and thus, have been asking the wrong questions. "Rather than 'How can we sell ads on line?', the question should be: 'given my competencies and customer franchise, how can I better serve my customers?'," says Lamers.**

**Of course, newspaper publishers can deliver some of their advertisers' online needs. "Others you cannot, so you need to aggregate your services with others," he continues. "It is not within our culture to partner, which is a handicap," especially since other online players, including major telecoms companies, are doing just that.**

*Allowing for greater customer feedback*

One thing newspapers can do alone on the Net is track and trace customers in order to provide them with more personalised services. "That way, the customer-to-company relationship becomes a real learning relationship. It's also a great way to lock in customers, because if they go to another supplier, they have to start that learning relationship all over again." It appears that customer relationships can be a barrier to entry in this environment. As a result, Lamers says that tomorrow's winners will be those who know their customers best. "Newsstand sales will be bad policy in the future," he adds.

Of course, it will become absolutely necessary to ensure that all Internet activities are linked to a central customer database. After all, the value in collecting information, he says, is in being able to link it either to a transaction or to other information.

Finally, Lamers suggests that newspapers need to adopt a more focused approach to the Internet. "In the business-to-business market, more information was sold electronically than in print last year," he says. Internet traffic is up 700% per year and network infrastructure is growing exponentially. "There will be so much capacity that distribution costs will be close to 0," he warns.

This, however, does not spell the end of print. There is clear indication that the two media will co-exist rather than compete, with advertisers using print to develop awareness and prospect customers, and the Internet for customer relationship building and personalised products.

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## ELECTRONIC COMMERCE IN ADVERTISING SALES

"We believe that the migration to a paperless process will become a decisive weapon in the battle for advertising market share," says Walter Zingg, Senior Vice-President of Business Development for PubliGroupe, Switzerland's powerful advertising representative firm. EDI (Electronic Data Interchange) is an excellent opportunity to tighten relationships with key customers, he adds.

After all, "many of our advertisers are big users of EDI, using it to communicate with suppliers, health services and banks," he adds. "Consequently, paper-based relations with us are seen as costly, time-consuming, complicated and error-prone."

Though there are a series of tools available — Adobe postscript, for example —they are only one option. "Simply lining up tools does not go all the way, it does not redefine the business process," says Zingg. (An international committee is working to develop the "PDF" standard for exchange of the advertisement itself, but so far, it has been inconclusive because of production problems.) Rather, the goal is to move to a paperless business process, both internally and with trading partners.

### *What is EDI?*

In the context of newspaper advertising, EDI includes "all activities, databases, processes and legal and contractual arrangements that allow a company to operate as a commercial entity without exchanging paper with its trading partners," explains Zingg. In concrete terms, this initially means either Open or Lite EDI.

"Open EDI is the concept where all steps, from a proposal to the payment of the invoice, would be based on the structure defined by the UNEDIFACT standard. It can be implemented based on the EDIFRA document 6.14, with national adaptations where required," he explains. Each partner can then use appropriate software translation and can choose to use leased lines, Internet or X.400 mailboxes for data interchange, depending on the frequency and volume of transactions.

**Zingg suggests that newspapers may want to provide a user device for its trading partners (ie. client software), which could also function as a stand-alone device.**

**Light EDI is another option, though it is targeted to smaller orders and occasional use. The solution is Internet browser-based and easy to use; there is no software to install on the part of customers. Zingg believes it is likely that newspapers will use a combination of both to reap the benefits of electronic commerce with all client types.**

*The benefits for newspapers*

**What's in it for newspapers? "First of all, studies show that the full implementation of EDI can lead to up to a 30% reduction in the costs of doing business," he continues. EDI also offers better quality control and reduces the transaction cycle time from days to seconds, all of which increases competitiveness.**

**EDI also opens the door to new products and services such as last minute offers. It also facilitates the communicating of short-notice rate variations, special sections or events as well as the creation of an industry rate database and a space reservation system.**

**Last but not least, EDI allows newspapers to go one step further than Open or Lite EDI and implement electronic clearing houses (ECH), which Zingg considers the "only practical solution for all participants to communicate in a one-to-one manner."**

**With such a device, advertisers and agencies could send a single set of messages to a single computer for a multimedia campaign. One confirmation message would inform the client that all papers have received, processed and confirmed the order. A consolidated invoice issued by the clearing house and one payment to the same would represent "a dream come true for all regular, national advertisers: the one-order, one-bill service," says Zingg.**

**The creation of an ECH would provide greater incentive to quickly implement EDI on an industry-wide basis. It could also lead to consolidated research and reporting services and the creation of an industry database. Moreover, "given that**

**a key task of the clearing house would be to translate from and to paper documents during the transition period, it would enable customers to move to EDI when they were ready — without suffering from the fact that others have not yet changed," he says.**

**Given its particular strength in the Swiss media market, PubliGroupe has developed the capacity to be able to offer the platform from which to build a clearing house. "We do provide access to reservations, access to our database, not just for information but for transactions. We provide the client software," he explains.**

**Of course, Zingg agrees, EDI is not easy to implement. He says the largest single success factor is not available technology but management commitment. Assuming you have both, Zingg suggests a number of ways to start:**

**"Start the process with important trading partners to create a sizeable impact," he advises. A project management approach, a cost-effective open solution, dedicating the required resources as well as internal and external support, especially in the initial phases, were other key suggestions.**

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## **EDI CHALLENGES FOR JAPANESE NEWSPAPERS**

**Japanese newspapers are trying to make it easier for their advertisers and media buying agencies to choose and use newspapers more effectively, says Yoshimi Watanabe, Computer System Division Engineer with the Asahi Shimbun. Implementing a page-by-page advertising rate system, re-engineering advertising computer systems and conducting an advertising contact research survey are some of the actions taken by individual papers to meet this goal. Thanks to these efforts, Japanese newspapers are now EDI-ready, he says.**

**"Two types of data benefit from EDI systems: management information and advertising creative copy," explains Watanabe. Two major studies were recently undertaken to examine the status of both, and concrete implementation measures have been proposed. In 1993, the NSK (Japanese Publishers and Editors Association) formed a task force to study advertising transactions. It looked closely at the Japanese television experience, where no standard message format existed. This led to a situation where each advertising agency had to decide on a message format for each TV station — a factor which made it complicated for agencies with several budgets running on many TV stations.**

**As a result, "NSK focused on developing a standard message format. In 1996, the task force recommended the adoption of the CII syntax rule," he says. CII syntax, already used by 15 different industries in Japan, is able to handle Japanese characters and can extend to handle the EDIFACT standard. (This standard was eventually modified in 1997, following input from the Japanese Advertising Agencies Association.) The NSK task force also developed a standard message form for orders, response to orders and billing.**

**At about the same time, the Japanese advertising giant Dentsu launched its own EDI project. Aimed at standardising business protocols amongst ad agencies, newspapers and TV stations, the project had the participation of two ad agencies, eight newspapers and two TV companies. In newspapers, four are still in the test phase of this project while others are using EDI for bill processing.**

**On the advertising material front, the NSK did a study last year that indicated that more newspapers were EDI-ready in this domain than they were for sharing management information. "I believe the reason for this is that advanced digitalisation in the production process of advertisements at production companies and ad agencies," says Watanabe.**

**"The objective of EDI is not only speed, but accuracy and savings," he continues. Watanabe also believes that EDI in this domain will open the door to new advertising opportunities, notably instantaneous news-type advertisements which capitalise on breaking events. Used in this manner, EDI can be a new tool for advertising sales.**

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## SUCCEEDING WITH COLOUR MANAGEMENT

**Colour consistency and stability is a strategic issue for newspapers, not just a technical one, says Elie Khoury, Managing Director of Alwan Color Expertise, colour management consultants based in France.**

**Readers have a unique relationship with newspapers and their advertisers. "Readers have a unilateral attitude to newspapers," he says. "You can't do something else while you're reading a newspaper." Add in the psychological impact of a full page colour advertisement, and you'll understand why this relationship cannot be duplicated with magazines or with Internet publishing, he adds.**

**Yet Khoury says his clients are asking him, 'how can we communicate in newspapers?' He cites a luxury products customer who was so dissatisfied with the colour reproduction of his ad that he withheld payment and worse, decided to abandon the use of newspapers altogether. When this happens, "it's a lose-lose situation," he says.**

**Newspapers face a lot of challenges with respect to colour reproduction. They are receiving an increasing amount of information in digital form, be it from reporters with digital cameras, from image banks and agencies, or from advertisers, who are sending digitised material, some of it already colour-managed. Moreover, expectations are higher: today, both readers and advertisers expect to see high-quality colour in newspapers.**

**Advertisers in particular want "transfer security, colour consistency and output stability. They also want consistent reproduction throughout multiple media. They want predictable and reproducible colour - on different presses and in different countries," Khoury stresses. This is a big challenge for daily newspapers, but a necessary one, he continues. "Pepsi spent more than \$400,000 to change its logo colour. It is a specified blue. So they are reluctant to go into newspapers, because they don't know if their logo will come out violet or sky blue," Khoury explains. Likewise, a food advertiser who publishes a glossy insert wants to know only one thing if he publishes a similar ad in a newspaper: will it look the same?**

### *Colour management changes the printing process*

It is Khoury's job to work with customers to oversee the implementation of colour management procedures and systems that will ensure these goals are met. "We encounter the same obstacles you find anywhere when you introduce change, on both the technical and human level," he says.

Technically, advertisers need to know how their colours will appear in newspapers and in other media. "Therefore, we need to identify the particularities of newspaper technologies vis a vis other media," he says. For instance, we know that newsprint cannot handle as much colour saturation as coated paper. However, newspapers can achieve consistency through a quality assurance approach, which makes the colour management process more easily controlled. "We have colourmetry and colour measuring tools, so we know what we can print on certain presses," Khoury continues.

Perhaps the human challenges are a little tougher to handle. "Colour management also changes the way we do our job. People must do things they didn't do before, and then do it differently. Colour management may require redefining work flows," he says.

Newspapers can start by standardising working and environmental conditions — lighting, for example — so everyone can see the same things, says Khoury.

Khoury also suggests standardising colour conversion methods by adopting ICC profiles, which test the colour identity card of a device. "You use a colour manager to do this, such as Apple Colour Sync, which uses mathematical algorithms to convert colour from one device to another," he explains.

Khoury maintains that the benefits of colour management far outweigh its costs. "Investment in colour management brings a return in three to 12 months," he says. Moreover, productivity improvements are very important — 30 to 50% — because colour management reduces costs in a controlled work environment.

**Not only do direct costs decrease, but more importantly, so do indirect costs. Better colour reproduction means fewer bad experiences, less lost business and a better image of the media itself.**

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## **SUCCEEDING WITH COLOUR MANAGEMENT: AN OVERVIEW OF THE U.S. SITUATION**

Colour management is one part — albeit an increasingly important one — of a total quality program in a newspaper, says John Iobst, Director of Advanced Computer Science at the Newspaper Association of America. "Quality is an end-to-end process. It starts when the photo is taken and ends when it is on the press...At every step, quality must be managed," he says. Colour management is also one of the last efforts newspapers can make to increase the volume of their colour advertisements.

Colour management is simply a set of mathematical algorithms that ensure that a colour is reproduced at its appropriate value. In newspaper presses today, a typical problem occurs when a colour, which has a hypothetical value of '9', gets printed as a '6'. "We've lost something in the process," says Iobst. "So, start with a value of 13.5, assuming you're going to lose one third of the value. This is what goes on in the black box of colour management."

"Colour management will level the playing field with other media, ie. magazines and television," he continues. "Magazines have pretty colours. TV has the glitz, but colour is far from constant across sets. But advertisers don't expect colour consistency from television. So newspapers have to get closer in quality to magazines." Iobst believes that a newspaper with a very aggressive quality program can offer colour reproduction that can compete with magazine colour on a daily basis.

He cites a recent Knight Ridder colour management pilot study. The company took three of its newspapers —in St. Paul, San José and Duluth — and convinced a major advertising agency, which handles BMW, to work with them. The agency created a special ad, which had reasonable characteristics, but was still a challenge to print. "If you put the results of what appeared in the three newspapers together, they look very close," he says. "It was a real inspiration to continue on the colour management path."

### *Publishers and advertisers have colour management obligations*

Effective colour management requires that both newspapers and advertisers make efforts in several domains. For newspapers, this involves several things:

1. A proper maintenance program, not just for their printing press but for all equipment involved. "All of it needs to be maintained on a consistent basis," he says.
2. Profiling the press. "When you profile a printing press, you print known colours, then read them and find out what the press reproduced. That information is fed back through a series of calculations to generate a module that makes the process whereby a '13' becomes a '9' happen," he explains. Today, press manufacturers themselves are creating standard profiles for their presses, which allow advertisers to see what their ads look like before they go to press.
3. Training. Employees must use colour management tools properly.
4. Use appropriate tools. "Press operators have to use the densitometer," he says. "The spectrophotometer is not quite as critical, but it helps when you get to really detailed colour areas."

Advertisers, for their part, need to do the following:

1. Manage their expectations. "The best newspaper colour reproduction will not look as good as what shows up on glossy stock," says Iobst. Even if the colour values are the same, their appearance will differ. "Advertisers have to understand that and be able to live with it."
2. Use colour by the numbers and calibrate monitors. Designers often wonder why their ads don't look like they did onscreen, he says. This is more likely a problem caused by lack of colour calibration than by poor reproduction. "What they saw on the screen was not what the computer stored," he explains. This lack of calibration is a big problem across the industry.

**3. Proceed with internal colour management. "Manage all information association with colour reproduction. Do scanner profiles, device profiles, imager profiles, press profiles and calibrate monitors on a daily basis," he continues.**

**4. Put colour bars on ads. "Advertisers will resist as these do not fit in with good design. Newspapers, who don't trim the page, have no way to hide the colour bar," he says. The use of bars is really key to ensure colour by numbers as well as to ensure you're running the densities specified, he adds.**

**Finally, Iobst talks about the advantages of doing editorial colour. "This is a cost rather than an income, but if a newspaper can produce good editorial colour on deadline, it will help sell ads," he maintains.**

**Colour management does bring a return on investment, Iobst says, though "there is an upfront and ongoing investment: software, hardware, the use of materials when you run press profiles. But, you do get improved colour quality." When newspapers are investing billions in new presses to print colour — and in particular, colour advertising — quality is all-important.**

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