Friday—Keynote Speaker

Digital Newspapers: Where do we go from here?

ROSENTAL ALVES: ...He is the author of the book MediaMorphosis, Understanding The New Media. When we were not thinking about the possibility of the electronic journalism in the late 70's he was starting the Knight Ridder, the first research on how the newspaper news would move eventually to an electronic media and he worked for years with the video tech's experience, etc, and uh the book MediaMorphosis is a wonderful book that we adopted in our course here since the 90's and uh and it explains how what happened in the past in the history of the media with the arrival of new mediums that and it has been a very important lesson for all of us that were studying or working with new media. So, I'm very pleased, you have his bio in the program, and I'm very delighted to introduce to you, Roger Fidler.



ROGER FIDLER: Thank you, good afternoon, I'm delighted to be here. Actually Rosental has invited me on several occasions to come and speak and I really wanted to but for one reason or another I had conflicts that prevented that so I'm very delighted to be here this year.

A couple things I want to focus on in the time that I have, one of them that I think is the issue confusion that we have today between the technology that we use for delivering displaying content and the content and presentation. Just as a newspaper is not a printing press or

paper and nor is it a website or a database or a computer monitor, nor is just simply an information system. I think we really need to think about what is a newspaper and what do we do with it. Now obviously I'm going to focus on newspapers because that is my background and that's what I've been working on for quite some time, is trying to understand how newspapers can make the transition from traditional ink on paper into the digital world.

So as I've researched these papers and thought about it we need to understand that it's a newspaper, that it's not the technology. It's unfortunate in the English language that we have the news and paper tied together because people start thinking that is has to be on paper to be a newspaper. That's not what it's about. In most other languages in the world that's not an issue, but in English it is.

When we look at some of the technologies that are emerging and, I think, I'm particularly, I've been involved in, or people know that I've been working the idea of the tablet and flat panel displays going back to 1981. But, again, the work that I've been involved is not developing a tablet; I want to make that really clear. The tablet, I've seen as a vehicle, a tool that would make it possible for electronically delivered newspapers to display an environment that would be mobile. And I think it's obvious to all of us that what we prefer is mobility. We want something we can read anywhere, that it's comfortable and convenient for us.

And so at the time in 1981 when I was asked to write an article for a special report the Associated Press Managing Editors Association was doing about what newspapers might be like in the first decade of this new century it struck me that it probably would be digital and I still firmly believe that the future of publishing is digital. But to do that it would

not be a television screen, it would not be something that would sit on your desk, but it would be something we could carry with us.

Now all of you have heard of some technologies that are emerging today and there's a lot of buzz today about things like E-ink, flexible paper. I don't know how many of you saw Minority Report? You know the newspapers they were reading on the subway - headlines were changing as they were reading, the pictures they were showing, very dynamic. Covers of magazines would change as they slid out of the person's portfolio, and that's created a belief that the future of newspaper is this flexible electronic paper. Well, again, this is a technology and there are several technologies out there.

I want to talk briefly about those technologies but then I want to focus more on the content and presentation. E-ink is an interesting technology that allows the inks to be changed so that you can actually flip it between white and black, so that you can actually have what appears to be something like an ink on paper printing. It's still on a plastic substrate and, right now, in fact, it's still on glass. Sony just announced that they're coming out, this month I believe, with a reading device in Japan that will use the E-ink technology. It is not flexible however and flexible, I think, has been misunderstood. We're not talking about something that's going to be an exact replication of ink on paper. It's still not paper. What you're having is a device that, ultimately, can involve plastic substrate, so it's more durable, lighter weight, but it's very likely going to be a rigid display for quite some time.

The problem with E-ink, and there's several other technologies, there's one called Gyricon it's been developed by Xerox-PARC. The E-ink came out of MIT media lab. We have a technology that came out of liquid crystal institute at Kent State called Cholsteric Liquid Crystal and Cholsteric and Cholesterol the same organic material, that's why we have all the pizza parlors in the universities, so that we can siphon off all that cholesterol and make Cholsteric displays. But anyway we don't tell the students that until after they've graduated. The Cholsteric Liquid Crystal, the E-ink, the Gyricon are all referred to as bystable technologies and what's appealing about them is that they don't require power to maintain an image on the display.

Obviously, it has enormous advantages in lengthening the time between battery charges. We may be talking the difference between three hours and 300 hours once we migrate to that technology. The other advantage is that it's a highly reflective technology. It doesn't require backlighting and so you can take it out in bright sunlight and read it comfortably or read it in a normally lit room for reading a book. So those are appealing.

At this stage, however, all of these technologies that are being developed are black and white. It's going to be awhile before we have color. In the labs there are capabilities to do color displays based on these technologies. Manufacturing them economically is still something that seems to be probably at least five years out into the future. I would not expect to see these reflective by-stable display technologies commercially available in color, on plastic before the end of this decade. I might be proven wrong, but usually it takes longer than most people believe for these technologies to become commercial. They are exciting technologies and they will in fact enhance the reading on a screen. But they're not there yet.

Now, what is available and, I think some of you have already seen, are the tablet PC's thanks to Bill Gates who discovered the idea to tablet PC's about 1998. He encouraged companies to manufacture these devices and there are now something like 15 or 16 manufacturing different types of tablet PC's.

Now this is a vision that I had in 1981 of something that would weigh about 2 pounds and be -" thick and more like a magazine that I could ready comfortably. This is a real device. This is the NEC slate. They're available on the market and have been there for about a year now. There are other manufacturers that are making devices, some are convertibles that are just like a laptop and you rotate the screen around and you have a pen-based tablet.

The significance of this is lost at times. People are looking at as just another laptop. The real significance is that it's really the first device that we've had available, designed for, or optimized for, reading. It's a reading device as well as a computer. I say it partly because certainly the screen resolution is better than anything we've had up to this point.

Something we take for granted is that all the documents we deal with, magazines, books, reports, the notes you're taking, the brochures that we have, the program are all in a portrait orientation - not in the television landscape orientation. Now we've been used to monitors that are in this landscape orientation and we've come to think there's something sacred about that. It just happened that IBM, when they came out with their PC's in 1981, very cheap to take the picture tube off the assembly line hook, it up to a processor and a keyboard and voila you had a computer. They weren't really concerned about presentation or dealing with documents. These devices, now, because we can have both landscape and portrait now allow us to display documents in a document orientation for reading, without having to scroll. And that's a significant component to this.

People have also gotten hung up on the handwriting recognition and talk about the fact that it's still not perfect. Let me tell you that I can't read my handwriting most of the time. It's hard to imagine that any computer's ever going to be perfect. But it's not about handwriting recognition, but in fact the ability to take notes on this and save digital ink. This is more like the proverbial napkin in the restaurant where you can draw the diagram and sketches as well as take some notes. You save the digital ink, which you can then print out. You don't always transcribe your notes into machine-readable text. So I don't think that's really the issue even though that has been the focus of a lot of attention.

Now, for me, in the work that I've been working on for some time, the issue is how do we adapt the concept of a newspaper to an electronic reading device. Now, again, you hear people frequently say they're never going to read on a computer screen a whole newspaper. Well, the problem is, again, the monitors we are dealing with were never designed for reading. In fact, the CRT's that we've been dealing with were designed for low resolution moving images, not for reading text. That's one reason people get tired trying to read on the screen, or they print it out and read it on paper. These devices are finally starting to move us to a point where we can finally have a device that gives us much of the same reading experience as reading ink on paper: the mobility, the resolution, being able to read in all environments.

Now, the research that I've done at Kent State started out from the perspective of the reader and the advertiser. We did not start out saying let's start with technology and then figure what to do with the technology, but what do the readers want, how do we create a reading experience. We call it an e-reading experience, comparable to that of reading on paper. We did a number of usability studies at Kent State, bringing people in it is not a scientific proof that it's going to succeed. All it does is tell us if the approach we've taken is one that people are going to be able to understand easily and be able to use. Our goal was to make the technology essentially invisible. Not to have the technology be the first thing people saw, but the first thing it saw was the newspaper or the book, and that what you're doing is reading in a very comfortable environment.

Now, a newspaper is a very challenging thing to work with and again we take it for granted that it's been around for 400 years and it's evolved to where we are today and we don't think about what it is. In one of my past lives I was a newspaper designer so I became very intimately involved with how newspapers were packaged and designed, and what we realized when we looked at it is that it's actually a highly evolved scanning medium, or browsing medium, that allows us to be exposed serendipitously to stories that we may not know we're interested in until we encounter them and advertising that we may not have known we'd be interested in until we encounter it.

It's also one of the most advertising friendly environments that you can have. The fact that as I'm reading and I have juxtaposition of advertising and editorial content, and as I'm reading, well, if I'm not interested in that, well, I turn the page, very easy to handle. You don't have to worry about interruptions, whereas in television when you watch a program the commercials are interrupting you and tends to annoy you. Or when popups show up on the screen when you're going to web or you're dealing with lots of flash animations around you as you're trying to read something, that can be very annoying. In print we don't have that same problem.

So the challenge was not how do we take the page of a newspaper and shrink it down to fit into this magazine-size device, but what we try to do is understand what is the essence of a newspaper, what is it that we can do to continue to enhance the ability to scan a great deal of information quickly but not sacrifice the content to be certain that people can have the full text of stories when they want it.

Additionally, what we're looking at is how can we do all of this offline. Now, we're talking about online here and of course the focus everyone has right now is on the web and handheld devices and so on, but there are also advantages of being able to go out to the web or go online and be able to grab a publication, download it to your device, and read it offline so you don't have any of the delays that you get on the web. You can read it where it's comfortable and convenient for you. When you want to read in bed, where you don't have WI-FI all the time available to you. You can read it at a coffee shop. Admittedly, there are hot spots that are moving out into lots of different places. Increasingly that will become more common. Even then I suspect what people will prefer to do is download it, have it on their device and then be able to read it comfortably without having to worry about their connection.

Now, what we decided to do after we went through a number of iterations is to think about a newspaper as really two different types of content. One type was really what we referred to as the summary pages, where we take the headlines, the Dex or the explanatory line that's associated with the story that the Los Angeles Times that has

worked with us on this project, they're called Key-Dex. Take the byline, because obviously the egos of the reporters are really important here as we had to have a by-line out on these summary pages, and package it so that we preserved the brand of the publication so that the person would easily recognize a Los Angeles Times or a Washington Post and within those pages we would also have advertising so that advertising is juxtaposed.

So I'm going to show you very quickly what we have done, I hope that we're still connected and then to, I'm going to keep this short so I can take questions for you and I'm sure you'll have some. As I go back to this, it takes awhile to wake up the computer here, this is the final form of the prototype that we now refer to as the Kent Format, stands for Kent Electronic Tablet Newspaper, or Electronic Newspaper Tablet format, conveniently came out © Kent.©

What you see here is a front page that looks very much like the Los Angeles Times. This is the same news judgment priorities, headlines - we use the same headlines - so we're actually able to take the content directly from their publishing system to be able to produce this. We did some routines that converted it to well formed XML to flow it into InDesign.

I have to tell you right up front Adobe has been a major sponsor of ours and we used Adobe products for this, but it's also because I believe they do have the right idea about how to package visually rich content. So all of this has been produced in InDesign and exported into a PDF or the Adobe version, which is Acrobat.

So here we have headlines and summaries. The number one theory about what - (inaudible) - I'll speak to the video issue in a moment because there's some interesting things we've learned from the research we've done about adding multimedia components like video and audio to publications. The distinction here, and one of the real challenges, is that what you're seeing is a blend of print and web. We're not web and we're not print. It's somewhere blended in between.

You notice that the page fills the screen - there's not computer noise around this - that's all intentional. The only thing you see are the navigational elements that we've built in consistently. Up on right side what you see are the tabs that relate to each of the sections, so just like in print if I want to pull out the sports section I can go pull out the sports section. If I want to go to the Calendar section I can do that at any point while I'm reading. Across the bottom are the, what we consider to be the essential elements for navigation. What we've done again is blending print and web so we have the sequential page turning, which is not something people expect on the web.

In fact, that was kind of an interesting case - we were doing usability research is what people's expectations were and how they would relate to this. But we also have is the web-light back function that follows the path that I've taken so I've got all of the hyperlink non-linear capabilities within this blended with the linear capabilities of print. The idea again here was to simplify it, make it something that people would feel comfortable with.

Down at the bottom we have navigational buttons for turning pages; you can also use your arrow keys on the computer. As I'm turning pages within each section, you notice I'm still within the main news section, these are stories that we took all of the content of the Los Angeles Times national addition and we built this addition so this is complete, it's

not a truncated version of the newspaper. What you'll also notice is the adjacencies of advertising, so here is an ad for BMW it also tells me that if I click here I can experience this (inaudible) the types of video that we see on the websites but I'm bringing that in to the context of a partial page ad.

Then, I'm going to go through this a little further, you notice I can scan stories as I'm going along, easy to turn pages, very fast, here I can get a product demo of the Compac tablet, interested in the story here on Powell. And you notice now I've gone from a summary page just touching that hyper-link to the content page that has the complete text of that story. It's not sacrificed anything, we've kept the print-link metaphors have continued, which they can use as one way to turn pages so if I hit that it turns the page, but I can also use the page turning within the format or the arrow keys on my computer. Notice the advertising is still here and as I'm reading what I'm getting is page views as I'm reading that story.

So it's an interesting thing to watch. If you watch that ad, if I turn back again, the illusion is that the ad has not changed, just the story has and we created what we call © run of story ads © through this model that advertisers when we've shown it to them in New York and Los Angeles were very excited about because as you're reading you've got that ad constantly there which on the web you often scroll past the ad and on a newspaper page you would obviously turn the page and you might not see that ad again. And from that ad I can still have the hyper-links that takes me out to their full page ad to be able to go to see more information if I'm interested in it after reading the story.

You could also do a number of things in the format that are different than what you would find in the print or the web. Here for example we can have layers of information within the context of that ad so we don't have to actually take them somewhere else. We can have multiples of information within the advertising so layered content is something that we have been exploring. We find that we can use not only for advertising but for editorial content and graphics that can have these layers of information within them.

I'll go back, this takes me by the way to top, we've found all sorts of ways to make it easy for people to get back where they came from and I'm going to turn just going through it. Notice at the bottom, you probably can't see it from there, it says "summary page 6 of 7," --we always tell them how many pages there are in each summary section so they can go through this as they're reading the newspaper.

...Let me go back here a second...Still have full pages ads, wonder why we did it for Adobe but...good products...the, here you see a table of contents of all the stories. If I really just want to scan all the headlines, I can scan all the headlines and get that so I multiple ways of getting at the content. Notice down at the bottom we have what's called an "advertising locater" and web links - it's also the last page of the section. We decided that worked really well so that if I click on that last page it now takes me to a list of all the advertising in the paper that day sort of like magazines do the listing of all the advertisers in a permission ((inaudible)). But I also have all of the weblinks here that are active so if I'm back online and I go back online any one of these I can go get more information about that advertisers ad, but if I remembered what I saw and there that ad for BMW...I'm going a little too fast here, ok, go back to the ad that was about BMW I can find it again, which is not something you can do easily on the web. Often finding an ad

after you've seen it is very difficult to do and I think one of the disadvantages the web has had.

Very quickly, we're going to another section, we've discovered of course that the most important thing about a newspaper is the crossword puzzle so obviously you need to have the opportunity to work on the crossword puzzle and on the tablet, which is penbased, I can either write on this tablet and view the crossword puzzle or I can use the keyboard and key in. These are one of the things that we've been experimenting with. There are other ways crossword puzzles can be done and that may be something we'll do in the future but the point being that we can replicate much of what we do it print but we can also add the value associated with the web.

Moving on through here, a couple other things that are important to see, one of the nobrainers that we have, looks like we've lost our audio, are adding movie trailers into the ads (plays movie trailer, inaudible). We've shortened these down so all of these are about 1MB and about 60 seconds. Even though this is an offline product I can go back online anytime and still do transaction work and what we believe for an advertiser what's going to be really important is for them to find a way to interact with their reader, encourage them to do an interaction or transaction through to their website.

So here for example if you want to subscribe to this movie mail service I can fill this out either with the pen or the keyboard and be able then to select subscribe and send that in. If I am offline at the time what it does is capture that data and put it in to my out basket so the next time I go online it will send it in. If I'm online obviously it would take it out there immediately and be done. So there's still opportunities here for people to be able to interact through an offline product.

The point on this model that we've created is to preserve the visually rich environment, one where photography can be played well, where graphics can be played well and where we can preserve the ability to scan information in a structure that gives some priority and hierarchy to that information.

Now, I want to emphasize a couple things before I go on to the next step - this is not tied to tablet PC's - this is not tied to tablet PC. This can be displayed on any computer, a Macintosh, a PC; it's the entirely independent of the display device. Remember earlier I was talking about, ok, we have technology on the one hand. People talk about well it's, gee isn't this going to be replaced by E-Ink. E-Ink is a display technology. It is not a newspaper, just as a printing press is not a newspaper. E-Ink is another display approach. They can be, what's very likely we will see tablets in the future using E-Ink technology or Cholsteric technology, maybe Inaudible, or maybe something else that nobody has really even thought about yet. Those are all display technologies. What we've created here will work with E-Ink, it will work with any tablet with any computer that exists today. That's really the purpose here, not to complicate it by locking it into one device.

Now, this is still prototype. The Los Angeles Times has worked with us for a number of years developing this. It's still under consideration to go forward with it actually being a live product. What we used this for was to better understand the e-reading experience, how a newspaper could adapt, and I believe this is the way we will go, ultimately.

Now maybe you're familiar with products like Newsstand and Olive and others - these are quite different than this. Those are some of the first steps into the idea of a truly digital

newspaper. What those services do is take the printed newspaper pages, or the ones as they're going to press in PDF originally, take it out, do some enhancing of that product and make it available for people to display on their computer.

While I think it's an interesting approach, and certainly from a newspaper perspective it is appealing because it doesn't require much work on their part - they can get a check in the mail every month for extra copies that are sold, they can add their numbers to their circulation collecting the ABC numbers on this - so there are advantages. But the numbers of people that are accessing those digital additions are still relatively small. I think that it's a mistake to assume that because those numbers are small people are not going to be interested in digital newspapers. I believe they will.

The difference between what Newsstand and Olive and other have done and what we're doing here is showing how the newspaper actually can be reformatted into a format for reading on the screen. And one of the disadvantages of trying to read a broadsheet newspaper on a computer screen or small screen is that have to scroll up and down, left and right, and it gets confusing at times for people to try to find their way around. Here, you don't have that problem. They're all, there's no scrolling, there's no difficulty in people finding their way through the newspaper.

So, that's the first effort we did. The realizing that it was probably going to take a couple more years before newspapers were ready to invest in this, and I said one of the issues relating to launching an electronic addition like this is it does require some additional bodies and that's sort of a dirty word these days in the newspaper business. I mean all of you have worked with websites now trying to staff is a very difficult thing to do. So in this case we're not talking about a magic wand what we're talking about is several people being in the loop as the newspaper's being produced, produced the electronic addition. They can use the content from their content management system that they have for print and for the web but they would be doing it as the print addition's being produced and this electronic addition could come out simultaneously with print or even before.

My Trojan horse for this and getting people to use it was realizing that one of the real weak points for the web and for electronic publishing for newspapers today is how to deal with their enterprise work. Now, ironically, the focus on the news is breaking news and that's not surprising, people go and say let me find out what's happening right now, let's get the quick news and they go to CNN, they go to newspaper sites, they go all over the map on the web to get breaking news. But newspapers are not just about breaking news; in fact breaking news is only a relatively small component of what a newspaper is.

The real value, I believe, is in the enterprise work, the work where reporters have spent a significant amount of time to bring together information, distill it, make sense out of it and present it in a package that will be important to their community.

The problem however, I'm an avid newspaper reader and at 6 o'clock in the morning if I see a series that's been done by a newspaper that takes up four broad sheet pages every day for five days I'll look at and say that looks pretty cool, I might want to read that, but my wife's pretty quick at clearing out the newspapers at the end of the day so by the time I get home, it's gone. I suspect that very few people actually take the time, certainly not reading the whole series.

On the web when you try to do a series like that, what happens is that you get these galleys of type, endless galleys of type, you've got a photo gallery somewhere the pictures tend to be very small, not directly associated, or you have small photos in the galleys of type that link to a larger photo. Graphics, if they're there at all, and many times graphics are not put onto the website because they're very complicated sometimes to convert or in a separate location. So you have all these things broken up, you're not really reading in a comfortable way. Having been a copy editor in a one of my lives, reading galleys of type is not a lot of fun. We got paid to do that; we don't usually pay our readers to read galleys of type.

What we decided to do was say let's take those series and put them together into an E-book format, using the concept that we had using for electronic for newspapers so that people start to become familiar with it so you see the chapter headings down the right side, you see the same navigational elements here, but now I have the ability to read this. I can download it from the web, read it on my computer when it's comfortable for me. I have hyper-links from the index. We can add the audio components (inaudible).

What you will notice about it, the quality of the photography is just phenomenal. One of the things we found when we did our reasonability research, the thing that really struck people, was the color on every page that we had and that's one of the bonuses you get with electronic publishing is that color doesn't cost you anything to have on every page.

One of the difficulties for screen-fractal((inaudible)) reproduction like Newsstand and Olive is that if the photos were black and white in print they end up being black and white in the electronic addition. If you have a black and white ad it ends up being in electronic form. People expect color. I think we've now, the web has just conditioned people that they expect to see color. Black and white, unless it's being used for some specific purpose, is not going to be as popular.

Very quickly, time is short, one of the other advantages for electronic publishing is putting it in multiple languages. Here we have that same series that now has been done; we have the Spanish version of it. By putting this on the web we now can make all of this available internationally to people so this can be opened up to South America, Central America to be able to read. It's a fascinating story and one that's going to have a long shelf life.

So this concept of the digital news book that we have actually goes back to the beginning of time for newspapers, actually they predate newspapers. Newsbooks were being done in the 1500's before newspapers. Today we're sort of reinventing them as digital newsbooks. And it's a way for newspapers to begin to develop new products that they can market.

Now these, this one that was done for the Los Angeles Times and we're getting ready to do a couple more - by the way this won a few Pulitzer Prizes, there is a, there's another one here, they have won five Pulitzer Prizes this year and we're just preparing now to do newsbooks on the winners from this years Pulitzer Prizes.

One aside I want to point out is, one of the failing I think of the web and the way newspapers are handling the websites is that here is the Los Angeles Times with five Pulitzer Prize winners, the Wal-Mart series they did was a very well done series, very significant, has a lot of interest, but there's no link from their homepage to their Pulitzer

Prize winning stories. No way to easily find them. You sort of have to look around for the multimedia thing on the side and then when you find but it's not in the multimedia, they don't even have a special report button even to find it. I would think, I mean, I know they're very proud of winning five Pulitzer Prizes, one of the things you'd want to do is put right out there, this is our best stuff, this is the enterprise work that we've done that won prizes and encourage people to read it. Don't just bury it. Here, with these, with the Rocky Mountain News, with the Denver Post that we were working with they put them up on their website, they can be downloaded from their stories. Unfortunately, they're still not yet learning how to market their content on the web. And so what they've done is to put these stories into a button that's in the first galley of the story on the web but it's not easy for people find it. It needs to be something that's actually brought out front on the websites to make them accessible.

Here, by the way, is layering of information on graphics. And then, I'm just going to go quickly, we have video clips (inaudible) in the newsbook, it's fully multimedia. They thing that we found that people really like the most (inaudible) and what we found in this is that when you're reading the story you're counting the photos that relate to the story at the point that you're reading it and then to be able to hear this person speak gives you another sense, or another understanding, of that person. Very powerful.

One aside from that is that in our experience in testing this is we found and, I think it's probably going to prove out if we do more extensive studying, is that people's attention span for video clips and audio drops off rapidly after 45 seconds. A minute is all you need. If you look at your websites and you're putting out there video clips that go on and on endlessly and are huge files they're probably not appealing to a lot of people. These we're able to get down through editing down to under a minute and to keep the file size down to under a MB, which makes a difference so people can download a whole issue of the newsbook anywhere from five to ten MB. So using cable modem or high speed modem they can get this in a matter of a minute downloaded to them and then read offline.

Obviously there are a lot of things I could talk about in here, and it has been an exciting time working on this and actually seeing ideas that I've been working on in the 80's and 90's becoming real. And having finally a device to read it on. Again, the emphasis I want to make here is that it's all about content and presentation, it's not about the specific technology. The technologies will keep changing. Don't lock yourself into thinking about one technology but recognize that we have to adapt our content to all different types of technologies as they emerge. That it's not the tablet, it's the computer - it's the newspaper that we're marketing. So, here I'd like ask if there are some questions or thoughts or critiques. I'd be very open to your thinking.

AUDIENCE QUESTION:(inaudible)

ROGER FIDLER: The L.A. Times ones are not now on their website, the Rocky Mountain News and Denver Post ones are now on their websites and the new ones we're doing will be on their websites for the L.A. times. All of the newsbooks we've created, they're outsourced to us, we've had graduate students working on it and myself in Kent, are all available on the ICI website, it's www.ici.kent.edu. And you'll find, they're all free.

I might add one other point - they're free. What we're working on for the next generation of these is how to have them be sponsored or sold as e-books. There's no reason why

these newsbooks couldn't be sold on Amazon.com or adobe e-book site. Four, five dollars it starts to generate some revenue and I see them as revenue generating, ultimately, not just a freebie we give away. Other questions?

AUDIENCE QUESTION: I'm Doug Feaver. I'm just curious as you've presented these things to the L.A. Times people if their sales departments are going back to something Bill Grueskin was talking about this morning that their sales departments aren't accustomed to seeing advertising on the homepages of websites, including the Los Angeles Times are asking about why not seeing advertising. I mean this is very much newspaper format in terms of the way it looks, typically with no ads on the front page. If you're hearing about that, what is the particular conversation?

ROGER FIDLER: That hasn't come up, I mean partly because the people we've been dealing with at the Los Angeles Times are the print news room and so we accept that section france and front pages don't have advertising. I mean obviously there's nothing to prevent us from putting advertising other than the ethics of the newspaper in doing that. What excites people though in the advertising department is the adjacencies of advertising and pure content on those inside pages and how those can link to more information.

AUDIENCE QUESTION: From a structuring point of view are you using a special mark up language? Do you have a subset of HTML or a cousin of HTML, or something like that?

ROGER FIDLER: Is there a special mark-up language?

AUDIENCE QUESTION: How would this tie to the (inaudible) for PDA's and semi-PDA's and whatnot?

ROGER FIDLER: If I understand correctly, what we're doing right now is we take the content from their legacy system, they have CCI, is their publishing system, which has its own proprietary format, it's not a true XML. Apparently CCI is migrating eventually toward being a true XML-based content management system. We'll see how that works out and they are working trying to integrate InDesign into CCI. Again, we'll see how that works out. Unisys has already made the commitment that their publishing system is totally XML content management system and that Adobe InDesign will be their integrated pagination system. What we did then, we had to write a program and I had a really bright graduate student working with me who wrote a program to take the content as it would come from the Los Angeles Times system and convert it to well-formed XML that we then brought in to InDesign. InDesign works with XML. We could then match that up with paragraph and character styles very easily and so the production process is enhanced dramatically by doing that. We've also developed some semi-innovation routines as well.

AUDIENCE QUESTION: Roger, my question is a lot of the design innovations that you've got in this are very interesting in this, especially the ad thing. It seems like there's no reason why you couldn't put them on a news website. There's nothing that looks like this - I know you're pitching this for portable use but any reason why we shouldn't -

ROGER FIDLER: No, there's nothing that prevents. This could be - it's PDF. If you have PDF on your browser you can view it within the browser in this format. What we've found however is that you want to take full advantage of your screen resolution. Instead of

going to full screen mode in this it's really important. Otherwise if you're on a small screen it tends to be a bit smaller when it's in your browser. Now you can collapse your browser and do all of these things. Unfortunately, most people don't do that so it limits the readability.

AUDIENCE QUESTION: Just to follow up, I was just going to say, especially some of the ad stuff you showed me, not necessarily using the exact same technology, does it make sense that we as an industry with our websites -

ROGER FIDLER: Uh-huh...

AUDIENCE QUESTION: ...do some of these things that you've showed me?

ROGER FIDLER: That's been a part of our discussion at the LA Times, and actually the other newspaper we talked to, about whether we shouldn't try to take this whole concept and sort of emulate it within the website using HTML or XML to be able to do that. We have no research data on any of this but it my gut feeling on it is, the web, the way it is evolving is very different from this. It's a different product. I think increasingly the web is primarily where people expect to find breaking news items, very directed reading or they're looking for specific information that you may provide there. It's not really the browsing medium; it's not where you're finding the overall context of material. So I think, again, it's not a matter of one approach replacing all others. I mean the reality is that we're going to have websites and websites will continue to evolve along their path. We will have material being provided for handhelds and cell phones and the Blackberries and whatever else may come out. There will be screen facsimile for a number of different approaches; things like electronic tear sheets and so on make it very useful. It's all part of the mix and so I guess my gut feeling is trying to make the website look like this would probably be a mistake. But you know I'd like to be able to see somebody try it and we could go from there. Yes, Peter...

AUDIENCE QUESTION: This is obviously a very interesting format for anything with shelf life.

ROGER FIDLER: Um-hm.

AUDIENCE QUESTION: ...And you're doing it I presume on a non-commercial basis, although um you're relationship with the LA Times and the Rocky and Denver Post. Can you give us some sense of if one of the other newspapers are presented in the room or somebody watching here wanted to package up one of their special reports how many hours it takes, how many, you know, are you talking four figures, are you talking six figures, you talking eight figures, to do one of these things and, are you, is Kent, or are you looking to turn this into a commercial product that you then go out to newspapers and say package this up - you sell the ads around it and either sell it or give it away free but and you get enough (inaudible) pages, etc?

ROGER FIDLER: Well at this point it has been sort of a research project. You know, proof of concept. As I said I do believe this ultimately becomes a commercial product that is revenue generating and obviously we're looking for sponsors or advertisers within the context. Obviously, for a special report you've gotta be sensitive to the nature of the content that you're having your special report, what kinds of sponsors would support it. Also, the ability to sell copies out there. So you generate revenue just from selling it off of an E-book site or your own website. And I think that's where it's going to go.

Now, as far as producing these, we've built this around templates. We have the templates set up. We have some procedures for simplifying the production process. I have graduate students producing them. We don't try to rush them out because we're learning a lot each time we do one of these and that's part of my teaching for my graduate students - about design and how to work within this, kind of this, problem solving. But obviously the amount of time it takes to produces depends on how complex the series is, how many parts there are, what they've done. The hardest part usually is converting the information graphics. It takes a bit more skill to be able to reorder them from the broadsheet graphics into something that's a magazine size. Uh, but not impossible. Um, ultimately what I think is that it will come in house and we'll do it in house or I think we're probably going to see is businesses started that will essentially be outsourcing services that will produce these or for newspapers. Right now it's really cheaper and easier for a newspaper just to outsource it than to do it in-house. Cause they only do, what, two or three special reports in a year. They get enough of them together you have a business. So that's what we're looking at. Again, this is my Trojan horse. It's a way of getting newspapers out there familiar with the concept so that they will ultimately move to doing a daily edition.

AUDIENCE QUESTION: It's a new format that I think how can it be competitive with laptop, because you know laptop compare the price, laptop has many functions and is cheaper and -

ROGER FIDLER: Ok, so you're talking about the technology. How does a tablet PC become competitive with a laptop? Well, a tablet PC is a laptop. I mean, there's nothing about the tablet that has been sacrificed for it. Actually, it's an enhanced laptop because you have pen-based capability added on to it and the ability to rotate between landscape and portrait. This PC tablet I have is 30 GB hard drive and a megabit processor. I can do everything on that tablet that I can do on my laptop. I didn't bring the keyboard with me because I didn't need it for this but it has a keyboard, mouse, DVD drive, that I can plug into it. So, it's another variant on the laptop. I think where it really has its impact is replacing the sub-laptops. Now, if you want a, if you're still going to have your workhorse laptop you want to be able to do a lot of heavy duty processing work on then you're probably still going to have that laptop. Right now the tablets are finding their strongest market in vertical niche markets. Hospitals, for example, insurance companies and so on are buying them up about as fast as they can make them. This will start migrating into the consumer marketplace as people become more familiar. They have not done a lot of marketing to general consumers yet. But that will happen over the next year or so. Again, I'm not trying to sell tablet PC's. So. Alright. Thank you very much for your time. Good luck to you.