THE SHOCK OF THE NEW

remember the incident like it was yesterday. It was February 1991. I was a fresh-faced student in the journalism department at then Technikon Natal. In one of my first lectures, the lecturer had begun talking about the importance of understanding modern publishing technologies, such as offset lithography.

Graeme Addison, the newly appointed head of the department at the time, happened to be sitting in on the lecture. He immediately jumped up and interrupted the lecturer, admonishing him for teaching old, outdated and irrelevant material. The lecturer may have been flustered, but Addison was right to put a stop to what was, in effect, a history lesson not a lecture in modern technology used in the newspaper industry.

The world of publishing and journalism was moving on. The printing and publishing systems of old were being replaced by desktop publishing. Computers, though still far from the powerful, multimedia systems of today, were already making their impact felt.

To his credit, Addison secured funding to build a computer lab for the department. He kitted it out with a dozen PCs running software such as Aldus PageMaker and CorelDraw. He also bought scanners and laser printers. It was an expensive exercise. A colour flatbed scanner from Hewlett-Packard cost more than R10 000 at the time, and laser printers were not the commodity items they are today.

Compared to today's systems, those lab computers couldn't do very much. Remember, this was when the latest and greatest from Microsoft was Windows 3.0 running on top of DOS and Intel's long-dead 80386 chip was still state of the art. No one had even heard of the world wide web back then. But those old systems were up to the task of teaching journalism students the basics of computer-based publishing. Addison used the computers to create mock-ups of magazines and newspapers. It was a great success.

I learnt one very important lesson from Addison in my three years in his department: that it is crucial for journalists to keep up with developments in modern technology if they don't want to be left behind as the world moves on. That applies more now than ever, as the internet tsunami tears through the industry, upending old business models and creating new ones.

When computers were introduced into newsrooms, and desktop publishing took off, many people lost their jobs. Printers and lithographers who were unable to reskill themselves were made redundant. Journalists felt the impact of technological change less: all they had to do was master a word processor and, a bit later, learn how to send and receive electronic mail.

But the impact of the shift to desktop publishing in the early 1990s was minor next to what the internet is going to do to the journalism profession in the next decade. The journalism and publishing business 10 years from now will have changed radically.

Yet I am constantly amazed at the Luddite mentality one

JOURNALISTS SHOULD PLUG IN TO NEW TECHNOLOGIES IF THEY DON'T WANT TO BE LEFT BEHIND AS THE WORLD MOVES ON, **INSISTS DUNCAN MCLEOD**

finds in most South African newsrooms. Too many journalists are scared of technology. They avoid learning about new systems. I fear they will be the modern-day equivalent of the stone plate makers in lithographic printing.

But this time around it's different. The web revolution is going to affect everybody in the news business, including journalists. That's because the nature of the entire industry is changing. Print media, like the music industry before it, has had the rug pulled out from under it by the internet.

Newspapers are in trouble and, as Microsoft chief executive Steve Ballmer recently predicted, it's unlikely we'll see a return to the levels of advertising that publishers enjoyed before the current economic crisis. They've already lost much of their classified advertising. Readership is falling. Many newspapers will not survive.

Though South Africa's print media is still doing relatively well compared to developed markets, once broadband is available ubiquitously and cheaply even Daily Sun readers will switch to reading their daily gossip fix on the mobile phones. I'd be surprised if smartphone functionality – web access, email and the like – isn't available in even the most basic handsets five years from now.

Print will become an elitist product. Buying a newspaper will cost a small fortune to cover the costs of printing a

While bad for publishers, the web is fantastic news for entrepreneurially minded journalists. It allows them, for the first time, to "disintermediate" publishers. They can build their own businesses, without incurring the huge expenses involved in producing a printed product. And they can collaborate in loose-knit groups to build alternative news

I recently resigned as technology editor of the Financial Mail after 12 years at the magazine. I have registered a company, NewsCentral Media, designed a website, TechCentral, and am striking out on my own, using my reputation in the technology and telecommunications fields to sign up advertisers. I will launch the website on 1 September and will be turning a profit within a matter of months.

Not everyone can do this, of course. I wouldn't have been able to sign up advertisers without a reputation I built while working for a dead-tree product. But I'm proving it can be done, and I expect other experienced journalists will do the same, and soon

My message to journalists in the print media – those who are worried that they're going to become the plate makers of the web era – is simple: stay abreast of technology changes at all times, especially technologies that affect media. If you're not on Twitter, for example, sign up. And start a blog. It's not as hard as you think.

Don't be afraid of new technology, but rather embrace it, and think about how you can use it to set your career on an exciting new path. Print publishers are desperate for good digital skills as they move online. Be part of that change. It's where the money is, after all.

Journalism schools also have a big role to play. Some level of computer studies should be mandatory for journalism students. Any journalism graduate worth their salt should be able to install software on a server, for example, or use an FTP program. These are the tools of the trade.

I'm not saying you need to do mathematics or advanced coding, but a solid understanding of web tools is also a must. Any journalism school that is graduating its students without first giving them a solid grounding in HTML, CSS and JavaScript, content management systems, and some degree of understanding of web-based programming tools, is failing them – and failing the media industry.

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product with little advertising. The vast bulk of people will get their news online - on their PCs, on their mobile phones, or on electronic gadgets not even conceived of yet - and most of that content will be free.

The changes are bad news for print publishers. Growth in online advertising has not been sufficient to offset the decline in print advertising. In fact, web-based advertising may never generate the same revenues for the media industry that print did at its peak. And perhaps it doesn't need to: hosting a website on a computer server is a lot cheaper than printing a newspaper. Advertising may simply get reset at a lower