As our 2015 IEEE Computer Society membership renewal form made clear, a mailed hardcopy of Computer no longer will be a core member benefit, as it has been since 1968. Print copies—for those members opting to purchase them—will now cost an additional US$149. To paraphrase the legendary New Zealand philosopher-politician Fred Dagg, “We don’t know how unpropitious are these circumstances.”

In my view, including a print copy of a flagship publication as a member benefit is part of the cost of doing business for any professional society. In the present situation, not only is the print copy withheld, but the charge for it as an option is exorbitant. I fear that in 10 years’ time this decision will have produced undesirable consequences for the CS.

**DIGITAL INK**

I’m not a print Luddite, and I’m not against online publishing. To the contrary, I envision the ultimate extension of future digital publishing to be an interwoven fabric of thought threads rather than a slowly expanding repository of static documents-cum-metadata—the latter being subsumed under what we now call digital libraries.

As things stand, content continues to be controlled exclusively by the content provider. The information consumer is passive as far as the creation of the artifact is concerned. Even if information retrieval is nonlinear (as with hyperlinks), the traversal remains prescriptive.

For many years I’ve argued that this is an unacceptable restriction that ensures suboptimal information uptake. There should be a way to distill information into nonprescriptive presentations to more closely mirror information consumers’ interests, rather than simply formatting an author’s brain dump. The information consumer could attach information from one source to another and digitally reassemble the information into new, more relevant thought frames. Of course, a looming digital challenge is how to retain links back to the original sources so that authorship metadata will always be available and the thought threads can become multidirectional from any node.1,2 (For more on my vision of digital publishing see “A Cyberpublishing Manifesto.”1)

Years back, I developed a few prototypes of such a system using the alternate data streams built into earlier versions of Microsoft Windows file managers. If you’re familiar with ADS data structures, you can imagine how bidirectional authorship chains might work.3 You can’t implement such a model with a straightforward application of a cut-copy-paste

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**A Paperless Gamble**

**Hal Berghel,** University of Nevada, Las Vegas

For the first time in nearly half a century, a printed copy of Computer won’t be shipped as an included member benefit. I offer some thoughts on the matter.
As great as digital libraries and online publications are, they don’t satisfy our criteria of being information-rich communications vehicles sharable within affinity groups.
would ultimately save ACM money, and second, as a result of the new cost structure, it could offer more publications to serve increasingly smaller niche audiences.

In addition, there were collateral advantages. SGML-derivative document structures could render easily for both print and digital output via Postscript/PDF/LaTeX and HTML (well, not so much in LaTeX, but that’s another story). Moreover, the peer-review system could be automated by means of the same digital infrastructure as the

innovators in the included disciplines rely on DLs and websites far more than other members. So neither the DLs nor the websites are ideal candidates to carry brand identity.

Part of what it is to be a professional is to network with other professionals in related areas. And the success of such networking requires self-identification with the group. Sociologists explain this in terms of social identity theory. Our

self-image is a function in part of the many groups with which we identify. Part of such self-identification and shared experience involves shared communication and association with a brand, and that’s where the print version of Computer comes in. In other organizations that I’ve been associated with, their printed magazines have been in more or less continuous circulation. It’s part of the professional hand-off process for potential members, colleagues, and interested students: Computer helps the profession focus on the relevant issues of the day.

Computer remains the CS’s most visible brand. Think of it as an organizational logo with content. The fact that it will still be available in digital form via the CS Digital Library and IEEE Xplore isn’t the same: you can’t circulate a copy to a kindred spirit with an earmark or sticky note attached using Xplore. You don’t get attracted to an affinity group through indexable and searchable databases. Facebook is ubiquitous; SQL isn’t. Members of organizations associate themselves with objects of common interest that are portable across social situations. Computer qualifies; DLs don’t. Neither do membership cards. DLs are the ideal vehicle for technical research publications, but not for casual reading by colleagues. It’s both inconvenient and impersonal to share mutually interesting information from opposite sides of a Web paywall. The barrier is too high to be effective for bonding.

Now for the coup de grâce of my argument: Berghel’s Digital Epidemiology Hypothesis. Reading the print edition of Computer is 97.6 percent safer than reading it on a mobile platform—hardcopy is a poorer habitat for bacteria and viruses. Eliminating the print copy as a member benefit may lead to a sudden increase in E. coli dispersal in high-tech offices globally. If there’s a sudden outbreak of MRSA in Silicon Valley, don’t say I didn’t warn you! (The validation of my hypothesis is left to the reader, but remember to wash your hands after reading—unless you’re reading the print copy, that is!!)

REFERENCES

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