

Re-branding and Re-discovering the Digital Information User

DAVID NICHOLAS AND TOM DOBROWOLSKI

Internet Studies Research Group, Department of Information Science, City University,
Northampton Square, London, UK and

Department of Information Science and the Book, University of Warsaw, Poland

It is time that researchers and practitioners give further thought to the terminology that they employ to study information use and information seeking in the digital environment. Existing (print) terminology is proving an impediment to understanding what happens when people go online to communicate or retrieve information, as they are increasingly doing. It also probably produces false readings. This article is based upon the findings of a number of funded research projects, which examined the behaviour of the digital information 'user.' The studies were undertaken by City

University's Internet Studies Research Group to evaluate the term 'user' and some related ones – information seeking, intermediary and end-user, in the light of our knowledge of the new digital information order. A replacement term – the information 'player' – is presented for consideration and explained. The new term should enhance our understanding of what goes on in the digital information environment and will bring us closer to the information mainstream, which is ever more represented by the World Wide Web and the use of its information resources.

Background

This article arises out of the frustrations of many years of attempting to portray and evaluate information-seeking behaviour in digital environments – and never really being able to do this accurately or to our total satisfaction [1]. Increasing sample sizes – something that is relatively easy to do thanks to World Wide Web logs – or changing the methodology – focus groups being the latest methodological flavour of the month – never seemed to do the trick. Patently, what really is required is a change in terminology, which would in its turn bring about a change in thinking and hence produce more apt and understood descriptions of the information seeking process. In short, we need a new vocabulary that would help us understand what is going on in the new – but ubiquitous, digital information environment (Nicholas and Dobrowolski 2000). The vocabulary

currently employed represents another age, and is proving an impediment to understanding and functioning in this one. The information profession is in danger of being imprisoned by a Renaissance vocabulary, which represents a largely print-based world, yet increasingly, works in a virtual world. New metaphors and a new language are needed if there is to be an improvement in our understanding of information seeking in cyberspace. There is especially a pressing need for a new vocabulary for evaluating networked services like the World Wide Web, Intranets and WAP mobile phones.

You might ask, what is in a name, a word or a phrase? The answer must be, in today's communication rich environment, everything. Terminology is our thinking and the search for accurate terminology should drive our thinking. Of course, terminology partly determines the perceptions of the people we serve. Consider, for instance, the

Dr David Nicholas is Head of Department of Information Science, City University, Northampton Square, London EC1V 0HB, UK. Tel: 020-477-8382/3. E-mail: nicky@soi.city.ac.uk

Tom Dobrowolski is Postgraduate Course Leader, Department of Information Science and the Book, University of Warsaw, Poland.

extent of professional soul-searching associated with the term librarian (Circle of State Librarians 2000) and the number of dissertations that have been written on the topic.

The information user

Essentially, the argument is that the profession needs to change its vocabulary to change its thinking, and needs to start with what is probably the most central (key) word of them all – user (Julien 1999). The word is generally used inaccurately because often it is used to describe non-users, too. The population being described by the term is a potential one, and an all-inclusive one. In reality it is used to describe anyone who might avail himself or herself of an information service. There are some hidden assumptions here that tell us much about the profession's psyche. The first assumption is that the term user embraces the majority of people – but frequently it does not. Despite the hype, Internet users still do not always constitute the majority of the population. The second assumption is that it is good to use. And this partly explains the evangelical approach of many information professionals towards their 'flock'. The implication is that use is *the* normal state, but, of course, it is not always the case. The profession just wishes it were.

There is however a more general complaint that can be levelled at the word. User (and users), like information, has lost much of its meaning. It is a tired, over-used, cheap and misused word, which provides the information profession with a debased currency. It does not reflect the close and complex engagement that takes place between a person and today's interactive information systems. The word users paints a picture of a featureless mass, a homogenous body – people who are accustomed to being fed information in batch-processing model. It is too passive and too mechanical for today's dynamic information environment. Users are in reality fast-moving individuals whose needs are constantly changing, depending on the problem, time, place and mood. Neither does the term recognise the fact that digital information systems create much greater information diversity than print-based systems. It is the wrong word, in the wrong place, at the wrong time.

The information player

Too much professional time has been spent complaining about the word user. There has been more than enough hand wringing. The time has come to abandon it, or prescribe closely its meaning. What we really need is a more active and accurate term to replace it. The concept of individuality referred to above leads us very nicely to the term we need – *information player*. It is a term much richer in meaning, one that conveys both individuality and action, that is *player* used in the context of sport, meaning a football or cricket player. Players, of course, can be members of a team, but even then there are always the stars, or they can be truly individual, like tennis or golf players. Or we could use the term as it is used in the context of business, meaning someone whom invests in financial markets, or plays the markets.

- *Interactive.* Today's information consumer plays a much more important, complicated, creative and engaged role in the information seeking/retrieval process. The term user is one-dimensional and, if dynamic at all, that is so only in a linear sense. Player on the other hand suggests a multidimensional evolving relationship – the kind of relationship that is so much a feature of modern day information systems, like the World Wide Web. A player is constantly looking for new routes to goal – evaluating options (information) as they go. Feedback from players is an essential part of search success. The player is part of the system while the user was all too often the person who stood outside the system, looking in – the person who queued at the library desk for a cuttings file.
- *Recreational.* Today's information systems are now very much an extension of our life – and this will prove to be even more so as the digital mobile phone expands its horizons into the information systems/retrieval domain (Dobrowolski, Nicholas and Raper 2000). The word player very much comes from the real world. Information seeking today is no longer just about professional problem solving; it can be recreational (and mindless) too. Research has shown that peak use of World Wide Web sites is at office lunch times (Nicholas and Huntington 1999). Witness also the phenomenal success of Amazon.com and Lastminute.com for instance. Or consider the concerns with pornography on the Web. Indeed, the distinction between professional and recreational searching in the serendipitous and supermarket environment of the Web is becoming increasingly blurred. In a sense this has been partly recognised through the use of the term surfing (for information), but this word is rather too shallow a description for the process.
- *Social.* Information gathering is often a social – and pleasurable, activity. The social context of the term

player is very important. Players play with somebody else. Players have different social roles: you have, for instance, teacher and student, politician and voter, journalist and reader. This takes us close to the concept of virtual communities.

- *Competitive.* There are costs – financial and/or time costs, associated with finding – or not finding – information. You can win or lose in the information chasing and locating ‘game’. Of course, players invest their time and money in every information journey or enterprise. With the migration of many communication, information retrieval, recreational and shopping activities to the Internet the investment has increased enormously.

The word player has other very important connotations. Firstly, it is a term that acknowledges the new economic and political realities of the new millennium. There has been a shift in power from information producer to information consumer. The information consumer now holds centre stage (another example of player power). This fact worries academic librarians, online hosts and Media moguls alike. Indeed, anyone who manages large, centralised, inflexible batch-processing style information factories. Today’s consumers have a wide choice and can quickly vote with their mice.

Secondly, the word player is closely connected with the term spectacle, a term once associated with pageants and tournaments. Today the Internet is the biggest capitalistic spectacle of our times. Witness how people pay fortunes for impressive Internet addresses. Witness, too, the amazing – and mythical – rise of e-commerce. There are fortunes to be had for the big players and games and adventures for the not so lucky.

Thirdly, the term player is very much an Internet-type word. The Internet is very much part of the liberal world economy – the word user is most certainly not, and player most definitely is. There is a pressing need to get our words in line with the vocabulary of the Internet. The Internet has its own rich and picturesque language for describing itself. This cannot be ignored. It is only by employing this language that information professionals can address the much larger and more powerful audience that the Internet commands.

Perhaps, the profession’s continual neglect of the user [2] can be explained in some way by the term itself. After all such a general and vague term hardly reminds us of the primacy of the individual and the necessity to investigate the in-

dividual’s information needs. The term player demands such an investigation. It sends all the right signals. And that is what the World Wide Web is all about – sending the right signals. Maybe, the solution to many of our professional ills lies with just changing one word. Now that begins to sound easy.

What the profession has not come up with yet is a term that describes success – not simply use, in the digital information environment. Interestingly, there really was no word for this in the print environment either. Of course, the words references and records were often treated as synonyms for success. And the more records/references there were the higher the success levels – but the success being referred to here is really the success of the intermediary in finding the information, and not necessarily the success of the consumer in meeting their needs. Satisfaction – much beloved by questionnaire framers, is surely too vague a term (Nicholas 1997). In sports-speak it’s all about what constitutes a score, what is the information equivalent of a goal or a wicket? Courtesy of the World Wide Web comes the word *hits*. Certainly it has directness and energy on its side; the only problem lies in measuring it (Nicholas et al 1999). But you cannot have everything.

Re-assessing information seeking behaviour

The concept of a player is very helpful one in understanding how people interact with information systems – and, also, re-visiting what we have said and learnt about them in the past. Continuing the sports analogy, few goals are probably scored in a textbook manner. In any game of football players do a lot of things that are not in the training/coaching manuals, but plainly they have received training. Similarly, a lot of information is collected by unconventional, unusual or serendipitous means. Thus, maybe, what was first seen as minimalist and idiosyncratic information behaviour was not so odd, strange etc after all – maybe it was just creative (Nicholas and Martin 1993). Too often ‘end-user’ searching has been compared unfavourably with that of information professionals. But would you really expect a player to always function as the manager or ancillary staff would like them to, would you expect all players (forwards or defenders) to operate in the same manner? Using the player concept helps us to get a

closer and better understanding of what the logs record – and what we witness, at the terminal, PC, mobile phone etc.

Of course, all players are subject to the rules of the game. The Internet has many rules associated with it – and these rules may be broken, of course. These rules can be social – i.e. recreational searching at the office should only be conducted at lunch times or that visiting pornographic sites is strictly taboo, or they may be associated with searching – Boolean or proximity searching, for instance.

Maybe, too, the term player will help bury, once and for all, the myth that searching databases is a fundamentally academic exercise, that requires high recall and is easily met by copious abstracts or bibliographic references of material (often) well past their sell by date. The time has come to finally admit that consumers in the digital information environment have long superseded academics as the star players, and should not be represented as *the* model information players. To determine satisfaction/success on the basis of the number of references found – or, for that matter, the amount of time spent online, must be wrong, but nevertheless it has been used as a quality metric for a very long time.

Informobility

The advent of the mobile phone as an information retrieval system – connected, for instance, to the Internet and other specialist databases, will surely kill off the term user and herald the arrival of the player. With information on the move – or informobility; plainly now the stress is really on action, movement and playing. The digital mobile phone offers a highly personal information service that is a much closer approximation to real life – and as far away from the traditional (four-walled) concept of a library as you can get. So, why then use the same term for customers of two very different services? The mobile phone represents a genuinely popular (mass) platform for seeking and finding information. We are all players now. What will surely drive the use of the phone as an information retrieval medium will be the vast and ever-increasing amounts of real-time information becoming available. Playing too is a real-time activity: there is harmony between the two words.

Other Renaissance terms

Getting behind the word is getting behind the concept. Getting behind the concept requires us to evaluate other obsolete, pejorative or 'loaded' words. We need to re-visit other terms, too, most importantly, information seeking, intermediary, and end-user. Take information seeking – is this phrase not, also, redolent of dim and distant past – one which featured fairy tales, perhaps? It's a phrase that implies timeless, mild and undirected action with no real end product. Clearly some searching is like that, but by no means all. *Information resolving* might be a more appropriate term for much of the searching conducted today.

Given that we are now dealing with a *player* then its axiomatic that the role of the information professional must be revisited too. After all it is largely a team game that we are talking about and intermediaries do search on behalf of others. If we have energised the concept of the user then, maybe, we have to energise the concept of the information professional too. Unless, that is, we believe that, as a direct result of user-empowerment, energy has flowed away from the information professional. And plainly that has happened in places, where information professionals have retired to the backroom – processing database feeds for instance. In general though, words such as intermediary and intermediation are far too passive, hands-off, words. They are in synch with the concept of user but out of synch with the concept of playing. As always the real issue is how dynamic a role should be adopted by the information professional. On the most general level, are information professionals *players* too? If they are players then what position do they play in? In football parlance, are information professionals strikers or goalkeepers, or, maybe, player/managers? Perhaps, as we have hinted, some information professionals are not players at all, but ancillary staff – the chief coach or the groundsman, for example. The game is the same but the roles are quite different. If information professionals are to be coaches then that assumes that they are acknowledged authorities in the field – and maybe many of them would be deluding themselves if they believed this. To be coaches they would also need to understand their players intimately and that means having player profiles – information needs assessments. This is also far

from being anywhere near the truth. But maybe the change of vocabulary would lead to a change in their behaviour?

What then of the groundsman metaphor – someone who is responsible for the environment in which the players operate: the ‘pitch’ in sports terms and cyberspace in information terms. This is a plainly a back-room operation, but nevertheless still one of importance. The involvement of many information professionals – incidentally one of the few terms that still fits, in Intranet, World Wide Web site and database developments would suggest that many are, indeed, ground staff. Traditionally the profession has very much played the role of the groundsman, but that was when much information gathering was conducted in the library, but today’s pitches are found in cyberspace – and few information professionals can claim to have full territorial rights there.

What then should be done about end-user – another very overworked, de-personalised term? End-user is used to describe people who search information systems themselves – once a rare activity, now an extremely common one. The information profession is not alone in using this term; it has also become part of business-speak, too. Of course, the term is built around the concept of user – and shares all the same problems. It is also very inaccurate – many end-users, for instance, pass on some information to others and do not consume it themselves. The term gatekeeper – another useful sports metaphor, is often used to describe these people. The distinction between searcher and consumer that was once so marked is now so blurred as to be meaningless. But having argued for the removal of the term, it should be re-introduced, but its meaning should be severely proscribed. Its use should be reserved to describe activities that involve the consumption of information canteen or batch-processing style; although not used in a derogatory sense but in a passive, uncomplaining sense.

Conclusions

These past few years information professionals have had to sit back and allow Internet ‘nerds’ to educate them in the ways and characteristics of the new information world order, that is the Internet. Starting from scratch as they did, they invented a brand-new vocabulary, full of live,

popular, direct and apposite words. Very few of the words used – surfing, visitors, hits, navigate etc, have their origins in the information science field, which, of course, is significant in itself. The information profession should take a leaf out of their book and put some new words to work – starting, but not finishing, with the word player. If the term user already seems outmoded in connection with the World Wide Web, just think how even more outmoded it will appear in the context of the WAP or Internet-connected, always-on digital mobile phone. A redundant and obsolete vocabulary is likely to divorce the profession from the wider information world that is surely wishes to join.

Information is surely more than just something we use, it is the currency of our age. Plainly we do not just use currency; we hoard it away, employ it to our own advantage and exchange it for other items of value. Information has taken on all the characteristics of a currency and the term user is looking increasingly obsolete as a result.

In the information seeking area the last major change of vocabulary was when the term end-user was introduced in the early 1980’s. With so much change having taken place since then a major change is overdue – the time has surely come to introduce the concept of the information player or, in its abbreviated form, the *i-player*.

Such a change in vocabulary should help information professionals find their true role in the Information Society – and so far that role is unclear and slow coming. Surely a major part of their role will be understanding, counselling and training the *i-players*. The personal trainer could be a highly prized job. For that to happen, the whole profession has to move closer to the players and treat them all as individuals – something that many information professionals have been historically reluctant to do. Information professionals have to demonstrate their own player credentials (most of the successful football managers have been players) – and that is not simply about showing that they are better players, but also about showing that they possess true team spirit.

Notes

1. This became most notable during the senior author’s two recent two projects – Web log analysis:

case study newspapers, 1998–1999 and The changing information environment: the impact of the Internet on information seeking behaviour in the media, 1997–1998.

2. As illustrated most recently by the fact that there have been literally thousands of papers written on the design and technology of World Wide Web sites and yet very few papers published on Web site users in the professional literature of information science. A retrospective search of Library and Information Science Abstracts on Dialog, conducted on 18th April 2000, uncovered just half a dozen references world-wide.

References

- Circle of State Librarians. 2000. Annual Study Conference, Who am I? Held on 7th February, at the Institution of Civil Engineers, London.
- Dobrowolski, T., D. Nicholas and J. Raper. 2000. Mobile phones: the new information medium? *Aslib Proceedings* 52(5) May: 197–99.
- Julien, H. 1999. Constructing 'users' in library and information science. *Aslib Proceedings* 51(6) June: 206–209
- Nicholas, D. 1997. The information needs interview: a long way from library-use statistics. *Education for Information* 15(4), December: 343–50.
- Nicholas, D.. and T. Dobrowolski. 2000. The information player: a new concept for the Internet user. In: Handbook of special librarianship and information work, edited by Alison Scammell. 8th edition. *Aslib* (to be published December 2000)
- Nicholas, D.. and P. Huntington. 1999. Who uses Web newspapers, how much and for what? A log analysis of The Times/Sunday Times web sites. In: Net Media99 Conference: Proceedings. City University, July. CD-ROM.
- Nicholas, D., P. Huntington, P. Williams, N. Lievesley, and R. Withey. 1999. Developing and testing methods to determine the use of web sites: case study newspapers. *Aslib Proceedings*, 51(5), May:144–54.
- Nicholas, D., and H. Martin. 1993. Should journalists search themselves? (And what happens when they do?) In: Online Information 93: proceedings. Learned Information: 227–34.