Targeting users in information provision – more than researchers, students and professionals

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Abstract

Purpose – A previous contribution (Fourie 2013) set the scenario for pursuing options to find a balance between information communication technology (ICT), information retrieval systems (IRS) such as databases, library catalogues, repositories, Google Scholar, digital libraries, portals, search engines and the users of these systems. This contribution pursues the issues by asking how information service providers can target their users. The emphasis is on making a difference, and to move beyond merely targeting researchers, post-graduate students and professionals such as doctors, chemists, and lawyers.

Design/methodology/approach – The contribution will be written against the background of research from information behaviour, user studies and marketing.

Findings – Information services and database producers mostly focus on post-graduate students, researchers and professionals. There is little support for under-graduate students and novices to a profession. Acknowledging preferences for Google and social media, more effort is required to gain the interest and loyalty of upcoming professionals – starting with under-graduate students.

Originality/value – Although there are many publications on user studies and marketing in the Library and Information Science literature, this contribution aims to draw on new ways of targeting users, and to note new potential user groups.

Keywords – Databases, information services, students, users, marketing, targeting

Paper type - Research

1   Introduction

In a previous contribution (Fourie 2013) the need to find a balance between information retrieval systems such as information communication technology (ICT), information retrieval systems (IRS) such as databases, library catalogues, repositories, Google Scholar, digital libraries, portals, search engines and the users of these systems was suggested as depicted in Figure 1.
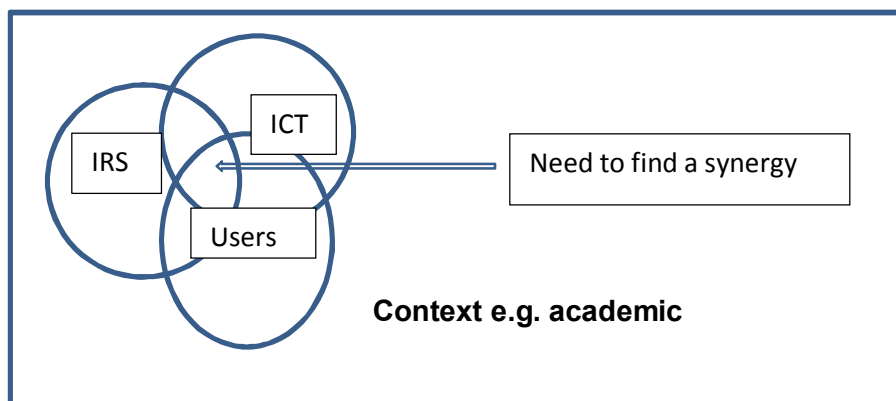
Figure 1: Finding a synergy between IRS, ICT and user groups in context

In targeting users, it is not just about the selection and presentation of content to be included in a database; numerous examples of value added content and services made available by information service providers (also referred to as database providers, aggregator services) can be noted. These include services aimed at students, librarians, faculty, publishers, authors, and professional organisations. Fourie (2013) highlights such services as provided by the ACM Digital Library, SpringerLink, The American Chemical Society (ACS), the American Institute of Physics (AIP), Wiley Online Library, Taylor and Francis, SAGE and RSC Publishing. But, is this enough to get and keep the under-graduate student on board? As an academic and researcher, I have no reason to complain about the products and services that are on offer – I use these on a daily basis. It would, however, be wonderful if upcoming generations can also benefit from this, to gain their interest and loyalty over a life-span.

This contribution further pursues the issue of finding a synergy between IRS, ICT and users in contexts by asking how information service providers can target their users… and identify new ones. In competing with search engines such as Google, it is about comprehensive and extended services, branding, loyalty… how to draw people, and how to keep their interest. The Net Generation (under-graduates) of today is the serious researchers, academics, professionals, political leaders, executive directors and informed decision-makers of tomorrow (Julien et al, 2011). Their loyalty to databases and information services need to be secured while they are still under-graduate students. Merely teaching information literacy (Serenko et al, 2012), even on advanced (Streatfield, Allen and Wilson, 2010) and workplace (Lloyd, 2011) levels is not sufficient. We belief that libraries alone cannot change mind sets; often students are exposed to a short introduction on how to use the library and databases and sometimes it might be a more comprehensive, credit-bearing course e.g. at the University of Pretoria all first year students complete a model in advanced information management including computer and information literacy skills; a textbook directs the information literacy component (Bothma et al., 2011).

Even if information literacy skills are hailed as essential life-long skills in-line with many other digital skills (Bawden, 2001), there is limited opportunities for students to refine and truly master the skills doing a few assignments that might require them to search for information. There is also limited motivation and reward to really get "into the use" of databases and information services: after three years they enter workplace and often – small businesses, entrepreneurial enterprises and institutions who cannot afford a library or subscription to the products of information services. Considering the popularity of Google and social networking as means for finding and sharing information in everyday life contexts, and the fact that these and other web search tools will be the resources for the future, it makes sense from a student point of view not to spend too much energy on databases and information services; there is no reason – or opportunity to return once out of the academic system.

Since the early days of databases being available (Bourne and Bellardo Hahn, 2003; Ruthen and Kelly, 2011) the emphasis was on information retrieval – finding information relevant to a topic, and later having immediate access to the full-text of articles, etc. The emphasis was on content, search interfaces, and interactivity supported by the system (i.e. software). Information is organised by means of indexing terms, descriptors and abstracts (indicative, informative and structured). We moved from a focus on the information system, the knowledge of users (i.e. cognitive issues) to more recently affect and emotion (Nahl and Bilal, 2007). Nothing wrong with these since as has been shown by research over many years, these means of information organisation offer essential access points to researchers. However, does this offer sufficient support for the under-graduate student, and more importantly, should the under-graduate student be seen as a separate market segment, and if yes, how can this be approached?

Databases and information services should be about more than just effective and efficient information retrieval. Society requires life-long learners and users of information; students need to be kept on board when entering workplace; databases and information services might keep their interest by directing them to social networking and other web tools and resources, and providing tools for information sharing and collaboration. Fully recognising the need for information service providers to operate on a profit basis I would like to suggest that opportunities should be considered to work within a profit frame but also extending information access based on the rationale set out in the preceding paragraphs. Information service providers can start by: (1) reconsidering their target markets to address more specifically and explicitly the needs of under-graduate students in terms of content, metadata (information organisation), interfaces and supporting services, and in bridging the gap between being a student to moving on to being a novice researcher or professional newcomer; (2) providing links to everyday-life and future workplace information needs, which might encourage graduates' loyalty to their services, especially if there is limited free access to some of the services and affordable pay-as-you go options for value added services such as abstracts and full-texts.

2.   In terms of targeting users – what is suggested in the LIS literature?

User studies (Dobreva, O'Dwyer and Feliciati, 2012) and information behaviour studies (Case 2012) feature strongly in gaining a better understanding of users and their information needs. Often studies are limited to the use of products and services, or aligned with attempts to promote the use of products and library services (Smith, 2011). Inadequate use of databases is often ascribed to lack of awareness (Dugan, 2011). Betz et al. (2009) report on promoting the use of Scopus and Web of Science, to graduate students on campus. Dugan (2011) reports on an initiative to increase the awareness and usage of business databases available at Purdue University among faculty and graduate students, while Duke et al. (2009), discussing a project on collaborating with students in marketing databases, found that student-generated surveys and marketing ideas proved useful. Often marketing efforts are linked to training sessions (Henderson et al,. 2009) or raising awareness through email messages or using Short Message Services (SMSs) (Anbu K and Mavuso, 2012), or by means of something that might draw students' interest.

Matsoukas et al. (2011) report on the use of customized USB flash drives to promote library resources and services to first-year medical and dental students, and Ivie et al. (2011) on resources with information on marketing library services including YouTube videos and Facebook articles. Many years ago Brenda Dervin (1989) in sharing her views on the sense-making approach argued for involving the audience as listener and learner, teacher and confidante. Although her slant was public campaigns, it might serve as a useful reminder to take a bottom-up-approach, and to take a long term view on the target audiences for databases, and involving them in contributing. Considering the options available through the Web – webinars, questionnaires and focus groups – achieving a bottom-up approach in the

design, populating (i.e. adding content), and marketing of information services, seems like an exciting research project in its own right.

3.   What if we consider it from a marketing point of view?

Taking a marketing point of view, various approaches and techniques come to mind: market segmentation, targeting, positioning, SWOT analysis (strengths, characteristics, weaknesses, opportunities and threats), a psychoanalytical approach (Rousseau, 2003), gap analysis (comparing actual performance with potential performance), determining the core brand values (Temporal, 2002), and determining visibility and access (also outside the academic and professional community).

The following are a few suggestions offered to stimulate discussion on how information service providers might encourage loyalty to their products, and life-long development of information literacies to reach the advanced information literacy levels society requires from responsible citizens and entrepreneurs, information consumers and participatory decision-makers e.g. in health contexts. The following is not intended as comprehensive list or intended to offer "solutions" – merely as a starting point for further reflection and research.

3.1   Market segmentation

Database service providers need to reconsider their customer base (also referred to as the audience, users, clients). This is referred to as market segmentation. "Market segmentation is the process of dividing a market into subsets, or segments, of consumers so that the member of each segment share common characteristics, are distinct from members of other segments, and can be reached by similar channels or media" (Du Plessis, 2003, p. 58). Information service providers are not serving a single segment.

In terms of market segmentation various terms/approaches are found in the subject literature. Psychographic or lifestyle segmentation (Du Plessis, 2003. p. 74) denotes segmentation on the basis of the activities, interests, and opinions as well as the attitudes, values, and needs of consumers. In the case of IRS and information services, it might be worth looking into how psychographic segmentation can be aligned to consideration of the brain, learning and personality profiles of consumer groups since these have been noted to influence information seeking behaviour? Heinström (2003) has for example reported on five personality types for information seekers: neuroticism, extraversion, openness to experience, competitiveness and conscientiousness.

A psychoanalytical approach to marketing is aligned to motivational research, unconscious motives and repressed needs, and personalities (Rousseau, 2003, p 285). Psychographics or lifestyle research refers to detailed information regarding users'/consumers' activities, interests, and opinion (Rousseau, 2003, p 285-290). What do under-graduate students e.g. study, do for a living and do for leisure that can be aligned with what information service providers can offer?

Fourie (2013) noted librarians, authors, editors, students and professional associations as targeted by information service providers. The database content as such is mostly aimed at researchers and professionals. Although this is an excellent choice, under-graduate students and novices to a profession are the people whose interest should be drawn and loyalty hooked at the time when they start their studies. If database content is of little relevance to them, there is no encouragement for them to take information literacy skills and the use of databases in their assignments seriously.

With market segmentation the customer base is divided into subsets of users with common needs so that special strategies can be designed and implemented to target their needs and

desires using a variety of appropriate media and channels. Although clear segmentation is necessary between e.g. librarians, researchers and professionals, and especially under-graduate students, there should also be bridges to take under-graduate students from the requirements of assignments (often limited to short essays on a topic) on their entry level to academic education, to informed decision-making in professional contexts such as in evidence-based professional practices such evidence-based medicine, nursing, teaching or engineering.

From the point of view of an academic library the following market segments may be important: students (under-graduate & post-graduate), academics as researchers in a spectrum of disciplines and sub-disciplines, librarians promoting the use of the services, and perhaps newly qualified graduates (new professionals) moving into workplace. Established professionals, if not working in an academic context, may either have access to databases through an institutional library, or they may need to depend on free information resources available through the Internet. For newly graduates and established professionals their discipline, profession and work-related tasks (as often noted in studies of information behaviour) (Case, 2012) might offer points of departure to reconsider market segmentation.

Various methods of segmentation can be noted from the marketing literature including geographic segmentation, psychographic segmentation, behavioural segmentation, segmentation by occasions and segmentation by benefits. A market might also be considered in terms of demographics such as age, gender, language and cultural group. The information preferences of the Net Generation are often noted – but only in terms of their preference for the Internet, social media, ease of access and multi-tasking. However, it may help to get them involved in selecting reliable and authoritative information that might help with assignments – on their level. It might also help to involve under-graduate students in the design process and information organisation, and to acknowledge their contributions e.g. in tagging content. Why not ask them – the target group if it would make a difference? Technology can be used to reach millions of people, taking very briefly from their time. As for students' geographic locations – would it be possible to suggest content relevant to the local context? And what about cultural differences? Would it be possible to provide links to dictionaries, translation services (e.g. Google translation) or cultural contextualisation of content e.g. through Wikipedia (as point of departure)?

Bearing in mind that information service providers work for a profit, the market might also be extended to provide limited access and services to society at large – those who have entered workplace and cannot afford full subscription to information services. *African Electronic Journals (formerly SA ePublications)* e.g. provide free access to searching bibliographic records – excluding access to the full-text of articles.

3.2   Widening the target

When considering target groups and market segmentation, it is often argued that the segment must be large enough to earn profit, it must be stable enough not to vanish after a short time, it must be possible to reach them via institutional (or other) means, and the segments should respond to market stimuli. Standard practice (from a profit point of view) is to focus on the segments that hold the most potential for the future. A first guess would be academics and researchers. On the long term (life-long) the general population might be a better target – even if it is only for partial benefits. All facets of work, academic and everyday life and the different roles people need to take on can be considered. If starting with under-graduate students who are introduced to information service providers and databases as part of information literacy courses, the following comes to mind: Study needs, opportunities to get involved in research even if only as a participant, creating a job profile, building a professional portfolio, job-seeking and awareness of professional associations and industries of importance, workplace information literacy which would be more extensive than academic

information literacy, open access to journal articles, guidance on skills relevant to workplace e.g. budgeting, staff recruitment and future projection. Some information service providers such as Emerald and ScienceDirect are showing initiatives in this regard, but much more can be done. Products that can really serve as examples of addressing information needs form a student's point of view are *Access Engineering*, *Access Medicine*, *Access Physiotherapy* and *Access Science*.

3.3   Branding and loyalty – considering life-long learning and information use

Branding refers to projecting the core "brand" values to the outside world (Temporal, 2002, p. 37). It refers to market positioning, and creating an image or identity in the minds of the target market. What is the branding of information service providers? Are they trying to ensure loyalty to their services after completion of academic studies, and if so, how? The focus, however seems to be content: scope, type of material and databases – these are the entry points, leaving nothing for a under-graduate student to associate with expect that this is a search tool that needs to be used to get good grades…. and then to be forgotten.

3.4   Identify shortcomings and wish lists

Another means of ensuring that products meet the needs of the market, is critical analysis – focusing not on the strengths of products, but their shortcomings. When evaluating products and services the point of departure is often to confirm the value and quality of the product or service. Instead of using methods that can find confirmation of the quality of products and services, and how happy the customers are, methods might be explored to focus on shortcomings e.g. customers' wish lists and IRS utopias – thus taking a positive approach to shortcomings. If I was an under-graduate student, I would wish for tags indicating the level of content (e.g. introductory level, aimed at practitioners). I would appreciate an introduction to the research processes and methods applying to my field of interest, and links to experts in a particular discipline, sub-discipline or application – people who have a number of publications to their name and who are well-cited so that I can get a feeling of "who's who" in the subject field. I would be frilled if there is some stimulation for the creative use of information in my field – even if it is only a link to see how experts are using information to develop products, come up with initiatives or identify research topics. A great add-on would be advice on entering the job market, building a professional profile and using online resources (i.e. linking to the Web) to stay abreast, network and market myself.

3.5   Comparison with the competition

On-going comparison of products and services with what the competition is offering – i.e. other information service providers and Internet services, as well as related services can be a full-time job on its own. A quick review of services such as EbscoHost, Emerald, Proquest, and ScienceDirect showed remarkable differences.

4   Conclusion

There is no guarantee that if database and information service providers reconsider their target markets and their targeting, they will be able to counter preferences for using Google, Wikipedia and social media. Considering the long-term value for society as a whole (information literate societies, informed decision-makers and citizens), it might be worth the effort to reconsider market segmentation as well as branding and maintaining loyalty and widening the market. In addition critical assessment of not the strengths, but the weakness of products/services, and on-going comparisons with what the competition is offering, might offer useful insights. A good point of departure would be to invite creative input from under-

graduate students and professional new comers – they are the people who's loyalty need to be captured.

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