

The Economics of Access to Literature and Information

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Abstract

This paper will focus on the importance of cost and economics as a factor in access to information and literature. Both the broader macroeconomic context and the more focused microeconomic (South African) environment will be referred to. The following aspects will be explored:

- An examination of the assumption that the economic development of a nation is linked to the ability to access information;
- The cost of books in South Africa
- The advent of the electronic revolution and the many paradigm shifts that the Internet and electronic media have initiated and the effects on the publishing industry
- An examination of the “information as commodity” paradigm (linked to Copyright and Intellectual Property developments)
- Identification of innovative solutions to the access crisis, driven by those that adhere to the “Information for the social good” paradigm
- The effect that these solutions could have in the publishing industry in South Africa

Introduction

This part of the paper will focus on another aspect that is integrally linked to the ability to access literature and information – that of cost and economics. Both the broader macroeconomic context and the more focused microeconomic (South African) environment will be referred to. We will examine the assumption that the economic development of a nation is linked to the ability to access information and test whether this is a valid assumption. From there, we will take a brief look at the issue of the cost of books, specifically in South Africa. The advent of the electronic revolution and the many paradigm shifts that the Internet and electronic media have initiated and the effects on the publishing industry, will be outlined. We will explore the “information as commodity” paradigm and briefly look at the related Copyright and Intellectual Property developments before weaving these seemingly disparate threads together to form a picture of innovative solutions that have arisen in response to the information access

crisis in South Africa. These solutions have arisen from the popular notion that information should be freely available for societal good, rather than commodified. Finally, we will ponder the effect that these solutions may have on the traditional book publishing industry in South Africa.

Development is Linked to Access to Information

Before we explore the economic issues surrounding access to information, we need to examine an underlying assumption: that access to information leads to sustainable development. There has been some research into this concept that does find a linkage.

Arising from the World Summit on the Information Society (WSIS), the International Institute for Sustainable Development (IISD) published online a scoping study to provide a platform for research on the linkages between sustainable development and the information society. Willard and Halder, in their report for the IISD, identified analytical frameworks which support the notion that there are definitive links between the information society (and by extension, access to information) and sustainable development. The frameworks identified included: environmental information systems, eco-efficiency and innovation, negative environmental impacts of the information society, modifying consumer demand and values, access to information and public participation and poverty reduction. They note that, specifically with regard to access to information:

Right to know legislation is based upon the logic that better information enables decision-makers to make better decisions; broad access to information promotes better decisions by mobilizing demand for sustainable solutions to problems; and access to information empowers citizens to taking a more active role in providing improved environmental performance independently of the state (Willard and Halder, 2003).

Manuel Castells also examines what he calls the informational economy and how it links to the process of globalisation. He defines the phenomenon of the “network enterprise” where to be economically productive, access to the network of information is essential (Castells, 1996, p 66 – 200). He concludes his extensive study by stating: “The information technology revolution induced the emergence of informationalism, as the material foundation of a new society. Under informationalism, the generation of wealth, the exercise of power and the creation of cultural codes came to depend on the technological capacity of societies and individuals, with information technology as the core of this capacity” (Castells, 1998, p 336).

It can be seen from the research that access to information and information technology is a vital component for a society to be included in the new global networked world. Lack of access leads to exclusion from this society, exacerbating the cycles of poverty, disease, crime, violence and misery. Access to information is thus a pivotal factor in bringing the developing world into the global arena.

The Price of Books

Taking this as a point of departure, we look briefly at the price of books in South Africa. Achal Prabhala, the Coordinator of the Access to Learning Materials project in South Africa, has conducted some preliminary research into the price of books in South Africa. In a presentation given to the *Access to learning materials in South Africa: integrating intellectual property rights and the development agenda* conference held in Johannesburg on 24 and 25 January 2005, Prabhala presented the results of a price comparison, taking into account regional income and expenditure patterns. He revealed that Nelson Mandela's book, "The long walk to freedom" retails as follows:

In the USA –	ZAR 70
In the UK –	ZAR 80
In India –	ZAR 75
In South Africa –	ZAR 150 (Prabhala, 2005)

This is rather shocking, given that this book was written by the most prominent South African and published locally first. It is also an essential learning text for South Africans. This example indicates that there is a problem with regard to the cost of books in South Africa. Consumers and civil society have taken the matter up in a number of different forums and we will return to this point later.

The Electronic Revolution

A vital development with regard to the production and publication of knowledge was the advent of the Internet. This development brought a revolution in the whole area of access to information, publication of knowledge and information sharing. An excellent summary of the multiple revolutions that this development brought about was outlined by James G. Neal, in his paper entitled "Electronic publishing and the future of library resource sharing" (Neal, 1998). Neal summarises these multiple revolutions as follows:

- The **personal computing** revolution, which individualized the ability to access, analyze and control information;
- The **electronic revolution** which saw the creation of vast amounts of information in digital format;
- The **network revolution** which saw the creation of complex telecommunications networks through which information could be stored and transmitted;
- The **"push" revolution** which resulted in the customized packaging and delivery of information to users;
- The **self-service revolution** where user-initiated and controlled activities are becoming commonplace;
- The **partnership revolution** whereby higher levels of collaboration and cooperation (as seen in the rise of library consortia) are essential to continue service delivery;

- The **authorship revolution** whereby anyone at minimal cost, and bypassing traditional publishers, can post information to millions of potential readers, via the Internet;
- The **intellectual property revolution** which is threatening fair use rights and creating conflict between information providers and information consumers;
- The **digital preservation revolution** which is creating concern over information integrity (electronic information being created and then lost, or captured in an inaccurate manner);
- The **“information as commodity” revolution** whereby information is seen as a commercial source of profit, rather than property held in common for societal good;
- And finally, **the knowledge management revolution** which is creating a new and different relationship between researchers, librarians and information technologists.

Many of us will recognise and be familiar with these multiple simultaneous revolutions which resulted essentially from the birth of information in electronic format and have had a massive impact on the publishing industry. I have highlighted this aspect, because it is a vital thread to weave into the economics of information access when we look at the new developments in knowledge publication that diverge from the traditional publishing industry.

Information as Commodity

When it comes to providing affordable access to learning materials, there is a prevailing ideological clash being played out. The paradigm of “information as commodity” is diametrically opposed to the paradigm of “information for societal good” (meaning free, or affordable and universal access to information – public domain information). Many (but not all) traditional publishers of paper format were part and parcel of this “information as commodity” paradigm. The advent of information in electronic format has the potential to take one of two directions.

The first is the increasing monopoly of publishers on digital formats, providing online access to databases of scholarly information to only those who can afford it and inhibiting the free flow of information by introducing a plethora of complex digital copyright legislation. This contributes to the further exclusion of those already marginalised in developing countries, as outlined by Castells in the earlier discussion.

The second possibility is that the advent of electronic information has the potential to return to the “information as societal good” paradigm, which would empower those who are currently marginalised, by providing them with free and affordable access to information, through the Internet. The rapid development of information technology can even bypass the typical problems posed by lack of infrastructure – such as inadequate telephone lines - broadband access could bypass this problem altogether.

The international academic community has become increasingly concerned over the social impact that high-cost access to scholarly information is having. Thus, there has been an international movement towards what is termed “Open Access”. The Budapest Open Access initiative has pioneered the move by scholars to publish their research openly on the Internet, through institutional online repositories, bypassing traditional publishers altogether. The technology to create these repositories has been made freely available in the form of open source software.

Research on changing research practices that have risen as a result of digital information has been conducted. In 2003, the Department of Education, Science and Training within the Commonwealth Government of Australia, produced an in-depth report examining the changing nature of the production of knowledge, research and research practices, in response to the new digital environment. In their executive summary, the authors state:

In the context of the emerging knowledge-based economy, innovation and the capacity of the national innovation system to create and disseminate scientific and scholarly information are increasingly fundamental determinants of national prosperity...This makes the infrastructure supporting research communication and collaboration, information search and access, and dissemination and publication a key element of the national innovation system. It is essential, therefore, to provide cost-effective access to, and dissemination of scientific and scholarly information in support of research and its economic, social and environmental applications (Houghton, 2003).

Thus it is that information consumers and/or producers are moving towards the idea of free access to that information that is seen as integral to learning, research and knowledge production.

Information as Commodity = Intellectual Property

Integral to the “Information as commodity paradigm” are the increasingly complex and restrictive intellectual property and copyright laws. Initially designed to give due financial return to the authors (knowledge producers), these laws now give most of the financial return to the publishers. In learning, students cannot afford to buy textbooks and other learning materials and the restrictions on copying mean that they are deprived of access altogether. This leads to a vicious cycle – they cannot complete their studies and become economically active, which means that the consumer market for buying books is shrinking. As my colleague has so eloquently outlined, the cultural exclusion of the vast majority of our society by the inadequate publishing of books in indigenous languages and relating to an indigenous world-view, further exacerbates the problem. The copyright debate is a vast and complex one, which does not need to be entered into here, but it needs to be mentioned, as the innovative developments over the past few years include solutions and ways around the restrictions, by re-thinking the whole way that copyright is structured. Copyright is seen by many in South Africa to be an additional barrier to access to information – especially learning materials.

Innovation Solutions to the Current Access Crisis

Globally, many of these initiatives began in developed countries, which illustrates that the increasingly rigid and punishing set of regulations that make information costly and difficult to access even in the developed world, will have a crippling effect on the developing world and countries like South Africa.

Creative Commons

In a presentation given to the Access to Learning Materials conference held in Johannesburg in January 2005, Heather Ford outlined what the Creative Commons licensing system is about, using an example of an academic named Richard.

Creative Commons is a non-profit organization that has developed a set of licenses to mark work as free to copy and share under conditions set by the copyright holder. Richard learned that using a Creative Commons license does not mean that the copyright holder gives up their copyright, but rather that it offers some of their rights to any taker, and only on certain conditions. These conditions are established by the copyright holder who must make three important decisions about how their work will be accessed by others:

1. Whether the work will be made available under **non-commercial or commercial** terms;
2. Whether **derivatives** will be allowed to be made of the work or not; and finally
3. Whether derivative works must be made available under the **same terms** that they were first used, **or not**.

Once the copyright holder has made their choice, the Creative Commons web engine delivers the appropriate license expressed in three ways:

1. Commons Deed. A simple, plain-language summary of the license, complete with the relevant icons.
2. Legal Code. The fine print that you need to be sure the license will stand up in court.
3. Digital Code. A machine-readable translation of the license that helps search engines and other applications identify your work by its terms of use.

Creative Commons licenses have since been used by a host of educational providers around the world. The University of the Western Cape's project uses Creative Commons to license educational content as free to copy, edit and share for non-commercial purposes and the world-famous Massachusetts Institute for Technology (MIT) has freed up its entire curriculum to educators around the world using the licenses. The Shuttleworth Foundation is using the Creative Commons to license its documentation and training resources, while authors like

Lawrence Lessig, Dan Gillmore and Cory Doctorow have made a number of their titles freely available on the Internet. (Ford, 2005).

Ford also elaborated that Creative Commons is not the only organisation that makes open content licenses freely available to the public. She cited the well-known Wikipedia.org, the largest encyclopedia in the world and one that has broad buy-in and support, despite severe criticism from traditional publishers. Wikipedia.org uses the GFDL (GNU Free Documentation License) to license its more than one million articles, which allows that the content is protected by copyright and the copyright holder grants permission to copy, distribute and/or modify the content according to a licensing agreement (Ford, 2005).

Ford explains that the GFDL is classified as a “copyleft” license for “free content” because it ensures that every person who receives a copy or derived version of a work, can use, modify and also redistribute both the work and derived versions of the work. The license stipulates that any copy of the material, even if modified, carry the same license. Those copies may be sold but, if produced in quantity, have to be made available in a format which facilitates further editing (Ford, 2005). Copyleft is often seen as “subversive” by the traditional publishing industry, but it is a reality that the popularity of this open model is vast and is likely to continue well into the future.

Ford also pointed out that the Shuttleworth Foundation is providing its TuxLab school projects with access to Wikipedia which is then updated on a daily basis. Educators at these schools are, in turn, being encouraged to contribute towards the Wikipedia project in the hope that we can develop high quality curricula that are freely available to all in a variety of local languages. The Shuttleworth Foundation sees the provision of such high quality resources as a cost-effective solution to the lack of up-to-date library resources in many South African schools – especially in the rapidly changing fields of science, mathematics and engineering (Ford, 2005).

We can thus see from the growing popularity of this innovative model that it provides a viable way of providing affordable access to literature and information.

Open Access/Digital Repositories

In South Africa, the Open Access movement emerged in 2004, facilitated by the South African Site Licensing Initiative (SASLI) and a conference was held in Pretoria on 29 to 30 July 2004. The aim of the conference was to engage librarians and the academic community in exploring the potential that Open Access could have to solve South Africa’s inequitable access to information problems. Another initiative, the South African Research Information Service project (SARIS), sponsored by the Ford Foundation, is also exploring alternative models to traditional publishing, in order to enable individual researchers to have affordable access to information. SARIS has held several consultative workshops around the country to explore different models and the outcome of their research is still to be finalised.

The Open Access movement is still young in South Africa and it remains to be seen whether it can be successfully harnessed to solve South African and African information access problems. What is noteworthy is that the international Open Access movement has been driven collaboratively by academics, librarians and governments. In South Africa, what is missing thus far is any participation by government and this is a very serious omission. As can be seen from the Australian example, it was government who has commissioned, supported and facilitated research into providing affordable access to information for their citizens. In South Africa, this has not been the case. It remains to be seen whether academics, librarians and civil society can engage the interest of government to participate in an issue (affordable access to information) that could determine the future of the country's development. Already, the Access to Learning Materials project, with the backing of civil society, learners and students' organisations, has met with the Department of Trade and Industry to outline the concerns of civil society.

Textbooks for Free: the FHSSI initiative

In response to the severe lack of access to educational resources in South Africa, a project has been piloted at the University of Cape Town by a group of philanthropic-minded scientists and physicists. They are writing, producing, printing and distributing text books to school children for free. At the Access to Learning Materials conference already mentioned, Rory Adams outlined that the pooling of intellectual capital on a voluntary basis and technology enabled the FHSST (Free High School Science Texts) project to produce and distribute textbooks in physics, chemistry and mathematics to school children at no cost to the children. He explained that the FHSST project is making use of the Gnu Free Documentation licensing system whereby all source code is free on the web and free copying and distribution is allowed (Adams, 2005).

It is very likely that more and more socially conscious people will engage in initiatives like this, to solve the crisis in access to learning materials. Production costs of an initiative like this are low and wealthy philanthropists with a social conscience and sound economic common sense, such as George Soros and Mark Shuttleworth, are very willing to bankroll the establishment of these initiatives, in order to break the deadlock of cost and copyright being a barrier to accessing information for the majority of our population.

Conclusion

If the book publishing industry in South Africa does not confront and engage with civil society's needs, it truly does face the prospect of becoming virtually extinct. This would be a tragedy of magnitude. With the advent of the Internet and the electronic revolution that Sheridan outlined, there are many ways to bypass the traditional obstacles that prevent the free flow of information to society. At present, civil society's will to do so is growing by the day. Most people do understand the crucial role that access to learning materials plays in educating our youth, enabling them to become economically and socially active and thus able to contribute to building a developed country.

A love of reading and a book culture usually accompanies economic and social development. Economically active people can afford to sustain a book culture, but impoverished people do not have that ability. The book publishing industry thus has a direct, commercial, vested interest in ensuring that there are concessions in cost with regard to learning materials.

Balance and moderation is required among all parties – knowledge producers, knowledge consumers and publishers. There is space for everyone and space for choice. There is space for books and space for online material. There is space for authors to make money from their work, or place their work in the public domain for free. Technology has opened up vast possibilities for us. Instead of being afraid of those new ways of thinking and distributing information and literature, we should embrace them all – the traditional and the new and innovative. All have their role in the human Diaspora of consciousness. Let us all work together to remove cost and copyright as barriers to access to information and literature. Let us do this so we can retain the book publishing industry as well. At the end of the day, nothing beats the sheer pleasure of reading a book! It is a pleasure every citizen deserves to experience.

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