

Electronic Publishers: Innovation and Evolution. New Challenges in the European Context

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Abstract

European publishing is developing in a highly competitive international environment. What innovating strategies should be adopted by those publishers who are concerned with maintaining the interest of their public and who wish to inject a new dynamism into their business operations? We shall evoke the principal theories of innovation to see how they can be applied to this particular subject. Firstly, the paper summarises the European political and economic contexts for electronic publishing. Secondly, it examines the factors that contribute to the publisher's expertise and then looks at different strategic paths that combine to map out the way forward for the evolution of the publishing profession, especially in the European context.

In conclusion, this paper will set out some recommendations concerning new services that could be offered by publishers to their users in order to improve the quality of their experience.

Key words :

Electronic publishing- Innovation- Experience- Publishing strategy- Europe.

1 Scope and Issues. Discussing innovation: transformation or stagnation

The development of electronic publishing is dependent on a good understanding of the risks and rewards that are associated with the introduction of innovation to business strategies, products and practices. European publishing has a long tradition, but this is based on experiences and points of reference that must be adapted to the new electronic age. In effect, some publishers are quite reluctant to adapt, because of the current technical, legal and economic constraints on their firms. A highly competitive international environment could explain their reluctance to plunge into activities that they judge to be of uncertain outcome. The difficulties of the European production and in particular French electronic publishing¹ find their origin in the situation that has characterized the printed edition for several decades now. For example: overproduction of titles, geographical and economic hyper concentration of the principal operators, arrival of large international trusts (Reed Elsevier, Bertelsman, Chapman and Hall), disparity of the laws concerning royalties, pre-eminence of English as the international scientific language. These facts disadvantage the European development of this branch of industry.

But it is these very circumstances combined with the huge variety of products offered by the Internet, which should now compel them to redefine their objectives. This transformation is vital because it is not only a question of changing from paper to electronic format but also of delivering products that have been conceived in an entirely different way. Changing medium should be considered by publishers as a new culture of designing and distributing information's contents. As a matter of fact, many of the so-called multimedia publications do not yet effectively take advantage of the hyperlinks facilities. These publications are merely an electronic reproduction of printed models called "papyrocentrism", a term coined by Steven Harnad². However, a real revolution is taking place with the development of a vast range of multimedia products and services based on the digitalization of information. This change is particularly important for all the actors implicated in the chain of intellectual electronic production : authors, producers, publishers and users.

What strategy will be adopted by those publishers who are concerned with maintaining the reliance of their authors, the interest of their public (costumers, readers) and making use of recent information methods to inject a new dynamism into their business operations? They have to get involved in the innovation process, not

only concerning the form of the publications, but also in the methods of work and in the conception of their social role.

In effect, innovation is not only an economic mechanism or a technical process, but it is also, and most importantly, a social phenomenon, because it allows individuals and societies to express their creativity, their needs and their desires. There is a link between technical and human aspects of this development, particularly in the fundamental changes that electronic publishing brings to the ways in which knowledge is disseminated. First we shall call to mind the principal theories of innovation of Joseph Schumpeter³, Everett Rogers⁴, Norbert Alter⁵, Peter Drucker⁶ and the analysis of Patrice Flichy⁷ since they are appropriate to this particular subject. Joseph Schumpeter and Peter Drucker brought new ideas in applying the concept of innovation to the economic context, and the theories which consider the social role in innovation are also particularly relevant : Everett Rogers developed the model of diffusion which shows that the users of an innovation adopt it gradually, according to 5 different phases. In France, Michel Callon and Bruno Latour⁸ completed these approaches with their model said "model of the traduction" which postulates that intermediaries between the technic aspect of the inventions and the users are indispensable. This point of view was developed in an other way by Patrice Flichy who makes a link between the " technical frame" and the "use frame". All those theories may be applied to the publishing domain with great profit : actually the very role of the publisher is to improve the diffusion of information whether in paper or electronic context.

Furthermore these theories show that innovative businesses are recognisable by their ability to think ahead, to develop strategies, to integrate technological change and to draw on organisational skills. This implies the acceptance of risk, an aptitude for co-operation and a commitment to change. The development and the use of Information and Communication Technologies are essential components of innovation, but a firm must also change its organisational approach and its production, management and distribution methods. These thoughts seem particularly apt to the field of electronic publishing where progress depends on the development of innovative strategies, especially in European countries like France that have to gain some ground against international competition.

2 The political and economic context : towards a digital Europe

.The politics of publishing at the European level

The European political and economic contexts for electronic publishing have to be examined. Politics of digitalization of cultural heritage are spreading in several countries. In France in addition to the websites and the cultural CD Rom of our prominent museums Le Louvre and Orsay, we can give as example online data bases which have this mission of conserving heritage. For instance Gallica⁹ which provides classical literary books or Joconde¹⁰ gathering various renowned pictural works. Yet, we notice that the elaboration of Europe at a cultural level is at less as complicated as the european construction from the political point of view.

Indeed, we must appreciate that the complexity of the European Union which includes 25 countries with different languages and cultures makes it difficult to find common policies satisfying to all. Nevertheless, several initiatives such as the Budapest initiative, The Declaration of Berlin have been carried so as to introduce some regulations in the publishing processes.

European Commission takes a keen interest in publishing : after the Bangemann report on The Information Society (Bangemann 1994), several initiatives have been taken, particularly concerning cultural and economic strategies. Information Society Technologies (IST) Programme is a priority in the thematic of the Framework Programme for Research and Development (6th PCRD). The diffusion of culture is considered as a politic challenge by the European institutions: as we can read on the official European website Cordis : " Interactive Electronic Publishing as a "new" sector : the economy has the potential to energize and animate many aspects of the digital revolution by improving the creation and delivery of information in industry, government and the home."¹¹ The main objective that emerges is the growth of a European multimedia industry to match the professional, social and cultural development of European citizens.

. The emergence of a new economic model.

It is also apparent that the development of electronic publishing is introducing several changes in line with a new economic logic. Obviously the diffusion of documents on Internet vastly reduces the costs of

publication and of distribution. However, it is proving to be very difficult to tease out an economic model that is relevant to the funding of electronic content.

In effect a situation of strong competition animates the markets of electronics: the editors are confronted by powerful challengers, those involved in various branches of industry: online services, manufacturers of computer equipment and software, operators of telecommunications, of cables and satellites, and also banks. Many current producers who are competitors of the « classical » publishers have no direct economic interest in the content of what they disseminate (JM.Salaun)¹²: either they make their money in other ways (by selling hardware, software or services) or they are proponents of the free dissemination of information on the Internet. Access is totally free to numerous documents because they are produced by public institutions (National Libraries, or Ministries of Culture for instance), research organisations and laboratories, or individuals who simply want to communicate their ideas to as many recipients as possible. Consequently, traditional participants in the publishing sector, especially in scientific sectors like French publishers Bordas, Dunod, Gauthier-Villars, are faced with competition which is not easy to master. In his report on the electronic book, Alain Cordier¹³ showed that the only protection facing this situation are the laws on intellectual property. But we have to point out first that the adaptation of laws to the electronic environment is long and difficult to set up due to the multiplicity of parameters which have to be taken into account : the law on the Society of Information edicted in France in 2001 took several years before being elaborated. In addition, the disparity of the juridic dispositions concerning the intellectual protection is an obstacle considering the international use of the electronic online productions.

3 Publishing strategies : stakes and evolutions

We shall start this part by summarising the factors that contribute to the publisher's expertise which adds significant value to the process of disseminating knowledge. Then we shall look at the different strategic paths which combine to map out the way forward for the evolution of the publishing profession.

. The publishing function : the expertise that increases value

The fresh expertise of electronic publishers is necessarily based on the skills they already had in their activities as publishers of the printed word. The foundation of modern publishing has been based on the principle of management in the different tasks which have to be carried out in the chain of production :

- At the conceptual or symbolic level, the publisher is a link between the authors and the editorial profile. This mediation takes place between the symbolic, creative aspect of the project and the practical aspects which are concerned with the delivery of the real product. The publisher who is well in control of the transition from subject to object when he creates books can undoubtedly play the same role for multimedia products. Some adaptation is nevertheless needed since those who participate in the production are more numerous and the technical parameters are no longer the same.

- The publisher ensures the correlation between production on the one hand and the expectations and practical demands of the public on the other hand. Moreover, he is concerned with ensuring the quality of his publications and makes his selection according to the editorial policy of his firm. The proliferation of information makes the role of the publisher as a mediator of knowledge all the more indispensable.

- The publisher is also a mediator in the distribution and marketing processes which have adopted different routes since the development of networks.

. Inter-professional co-operation

A professional interrelation in the field of the informational mediation is being set up and it is obvious that not only that is very significant for the future of these businesses but that moreover that corresponds to the major change of the organization of our society. We observe that if in the industrial society, the model of the firm is founded on the hierarchical principle of the pyramid and on the units of time, place and function. With the advent of the numerical networks, these classical principles disappear¹⁴. The model of the pyramid leaves the place to that of the network (the human network joining the numerical network then), the unity of place is replaced by decentralization, the unit of time by asynchronous work, and the unit of function yields the step in front of the task sharing.

Seeking for alliance and cooperation is becoming vitally important in the context of the new type of information generated by the extension of electronic products. However it implies to reconsider the functions and the territories in the professions of information in particular those concerning the role of the mediators of

information. The new economy of information empowers the relationship between Librarians, Booksellers and Publishers. The success of this relationship depends closely on the capacity of this trio to cooperate and to work in a human network. Now, the borders between various functions or professions are less and less defined. With Internet, the differences between editors, librarians and booksellers are becoming blurred : their roles intersect and sometimes merge.

The different sectors affected by the digital explosion are thus compelled to put in place strategies of alliance. Relationships have to be established between the publisher and specialists like multimedia architects, computer graphics experts and information technology experts.

Although the publisher doesn't even pretend to integrate any of these professions into his own business, he has nevertheless to be sufficiently aware of them to understand enough to be able to take final decisions. Several processes are also organized in partnership with other specialists in the dissemination of information (librarians, researchers, booksellers).

. Paper and electronic productions : Merging Strategies

This last point leads us to consider that these partnership operations between professions are associated with strategies between paper and electronic productions. These composite strategies may appear so as to share in increased benefits : then they take the form of financial agreements. But the objective of publishers is also to pay further attention to users' attitudes : it is the reason why we observe the sharing of contents between paper and electronic formats for Encyclopaedias, for example (Encyclopedia Universalis, Hachette, Encarta). But the most significant cases are noted in the ludo educative and pedagogical field. Bordas and Nathan had tested their electronic handbooks in four secondary schools. The evaluation dealt with both technical and educational aspects. It permits these publishers to enhance the interactivity of their school products. On the one hand, teachers can personalize the contents of the handbooks by adding links and attaching documents or annotations. On the other hand, pupils who seem to be motivated by the use of electronic handbooks can make notes while reading the handbook content.

.The new editorial formats

Indeed, publishers will have to ponder upon the opportunities presented by the new editorial formats. The recent failure of the new forms of publication like e-books asks several questions. What is the true product, the book itself, or the idea for which it is the vehicle? The issues arising from these new editorial formats can be expressed in the following two ways :

- What is the real importance and impact of the new phenomena, the e-book and electronic ink ? Their emergence might have led to conclude that the web is not really an editorial space but only a data base. But the disparition of the international leader Gemstar in 2003 makes us think it is not the case and also to constat that these "intermediary objects of reading" are very far from the potentialities offered by the portable computers.

- If the user is expected to read a book on his computer, it will be necessary to use new and improved means of presenting the text to allow him to navigate more easily through the succession of screen pages. It is also essential that some work is done on the structure of hypertext, and on the signposting of contents to facilitate and improve the research practice : publishers have to implicate themselves in these new processes of shaping the knowledge.

For the moment we can point out some innovative forms in the touristic informations domain. Many publishers such as Lonely Planet, Hachette, Le Guide du Routard develop their own editorial site which is complementary with the paper guides since it permits a permanent updating process of the information and gives additional services to the costumers. Nevertheless in the field of tourism the use of Internet is made before or after the journey itself. It is the reason why, due to the technological advancements, publishers wishing to make profitable their databases imagined a new editorial way : informations are from now on available on the new nomad objects which are portable phones or organizers like Palm pilots. Thus, publishers may wonder how they can approach nearer customers uses and also to intend the application of this new way at other domains.

Conclusion : Innovation in service and delivery

In conclusion, this paper will set out some recommendations concerning new services which could be offered by publishers to their users in order to improve the quality of their experience : they should innovate

- in the services they currently offer
- in the way they deliver these services
- by creating radically new services

Innovative 'publishing systems' will create new forms, multiplicity and combination of contents and new possibilities of interactivity. To be successful, the applications developments will have to be tested to facilitate the understanding of the customer's point of view whose principal problems are access, ergonomy, usability and interaction with the system.

Publishers are able to exploit and manage information differently in order to be more effective and closer the real preoccupations of the users. These last will more easily include the information they acquire in their activities. Delivering information in the office or at home could be an important added value.

The three important points in the electronic publishing chain are

- . From the point of view of the author to improve systems capable of creating innovative forms of multimedia contents
- . From the point of view of the publisher to improve systems capable of providing contents closely to the needs of the customers.
- . From the point of view of the customer to have the possibility of being actively involved in the information process and not to be only a passive receiver.

The new electronic publishing should be an **interactive electronic publishing**, allowing the intervention of the customer at each phase of the chain of publication, which involves

- . the creation of the contents
- . the production of these digital forms
- . the management of the transactions with the customers
- . the diffusion and delivery of the products (free or by e-commerce)

At a time when librarians, researchers and book sellers are widely agreed on the benefits of integrated services, publishers have yet to take this step. In spite of this, important ideas are emerging on the information horizon. These ideas offer particular opportunities for scientific and technical publishers who are experts in managing content and who could actively contribute to the deployment of the electronic campuses.

Organizing profiled customer data bases, providing selective information and co-ordinating forums of specialists are all interesting tracks which should lead publishers to reconsider their objectives in this world of rapidly changing information needs.

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