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Digital media trends: Tamil DOI Server - the vital link?

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Abstract

The recent trends and developments in the area of Information, Communication and Technology (ICT) and the digital divide have necessitated professionals to keep themselves abreast of the changing times to bridge the gap. With vast amount of information available both online and offline, the scope of info creators and protectors like librarians, content developers / web writers has resulted in the professionals taking up different roles so as to manage the resources resolutely. Especially in the business of e-publishing and e-books in relation to e-commerce for the same, the need of the hour is to build a bridge between the content creator and the library.

Some of the major issues is that of choosing of suitable technology and production of e-books, addressing the font and technical problems of the end-users as they pay for the content and also reproduction of the same. This paper tries to highlight the problem faced by the authors in creating information and also archiving the same, which is the need of the hour for large publication houses, and also discuss a viable solution for the same.

Introduction

With the widespread penetration of communication and access to technology, any individual with a PC, modem and subject knowledge has started harnessing information and hosts it on the Internet. In an era of information, there has been a tremendous growth of e-books and e-publishing model. The advantages of e-publishing being the speedy process, retrieval, dissemination of information and also the development of networking model across library and information center. Access and exchange of information has been made simple through the network for end users.

Changing roles

In these testing times, the publishing houses and publishers are exploring the possibility of using the Internet as a vehicle to reach and tap the potential customers abroad. They are making things simple, easy and better in terms of click and read concept for readers worldwide.

This model is slowly but steadily catching up with the readers and the readers too have welcomed such an initiative. Websites like www.manasarovar.com have set up an exclusive e-publishing and e-books website where people can not only purchase some titles, but also can request their novels to be published both in print as well as e-books form.

Similarly the roles of librarians too have changed from acquisition of books to choosing their media for storage and helping convert the yesteryear book material into digital format.

As far as the content developers or web writers are concerned, they have become an integral part of an organization in content management and also as someone who provides the vital link between organization and its browsers or public in general as they are expected seen as someone who can deliver the needs of the end-users.

Organizing Electronic Information:

From an online newspaper perspective, since the volume of content is huge and the flow of information being round the clock, an informational professional plays a varied role from that of a librarian to a project manager, where he has to plan the choose, test and decide the hardware, server for storing data, software for easy access, retrieval and content management.

Once the basic plan is ready, the next step is to organize the content so as to present it in a readable format. This may be in the form of text, document, HTML, PDF, stored in database or a combination of these. Electronic information may be divided into two types, namely streaming content and non-streaming content. Streaming content is that where the multimedia components like real time audio/video, movies, video-conferencing etc are used to present interviews, audio/video features, songs, movie clips etc. The non-streaming format includes text, pictures, graphics, etc presented in the form of static or dynamic pages.

In case of Internet as a media, the storage and presentation of the content namely streaming and non-streaming differs as the streaming content has to be stored in a media server like real player, media player, while the non-streaming content goes to database server. Therefore one has to chose the mode of delivery and create content accordingly.

Continuing problems

Browsers find problems accessing language websites due to font problem. Users find the font problem extensively across the globe. This problem is found because of non-standardization of fonts as the character set differs from operating system to operating system. Ultimately the sufferer is the end-user who is forced to see junk characters resulting in disappointment to them and loss of revenue for the publishers.

The other problem is that of the non-availability of a search facility or a language search engine, where no solution has been found till now though extensive research has been undertaken. Therefore, at the time of information explosion, the need of the hour is tapping the potential of the professionals and choosing the right technology to stand up to the challenges that lie ahead so as to move to the digital era.

Therefore the need of the hour is a standard language browser that supports the various language fonts that are used world over. This may help organizations providing language content penetrate and reach more audience without causing any hitch to them.

E-publishing - the future money-spinner?

Fig. 1 below is a typical example of an E-publishing website where books are classified and being sold online. This apart, the publishers also undertake printing and publishing orders from prospective authors and also do the marketing for them.

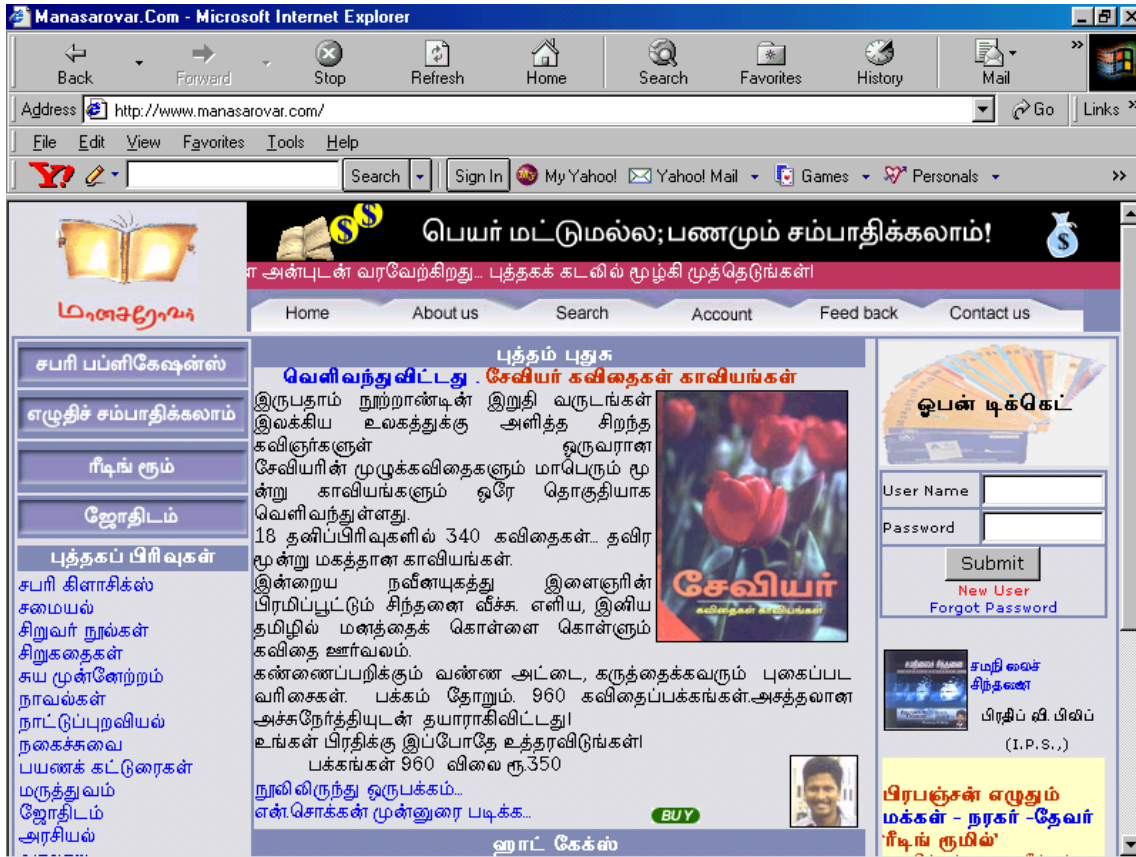


Figure 1

Whereas, the screen shot shown below (Figure 2) shows successful collaboration of the online media and the library in bringing out e-books based on the available content which are timeless in nature.

Future: Is E-publishing moving towards Digital Object Identifier?

A new concept known as Digital Object Identifiers (DOI) is slowly making a silent entry in the e-publishing/ e-commerce arena. DOI is different from URL or any other materials on the Internet. It is also different from commonly used identifiers of intellectual property like standard bibliographic and related identifiers (ISBN, ISRC, etc) because it is associated with defined services and is immediately "actionable" on a network. A DOI can be used to identify any intellectual property entity as covered by the WIPO - both physical and digital.

Just as it has become impossible to sell any physical products without a bar code or ISBN/ISSN number these days, it is becoming difficult to sell digital content without identification in an e-commerce marketplace. Having a systematic DOI enables e-com transaction to perform smoothly and efficiently in an online world, as it is purely computer-based. The impact of DOI is slowly being realized by publishers abroad while in India, publishers are yet to come into terms with e-publishing and selling over the Internet. Those websites that have moved into e-commerce have identified the potential of DOI in one-way or other and are benefiting from such a move.

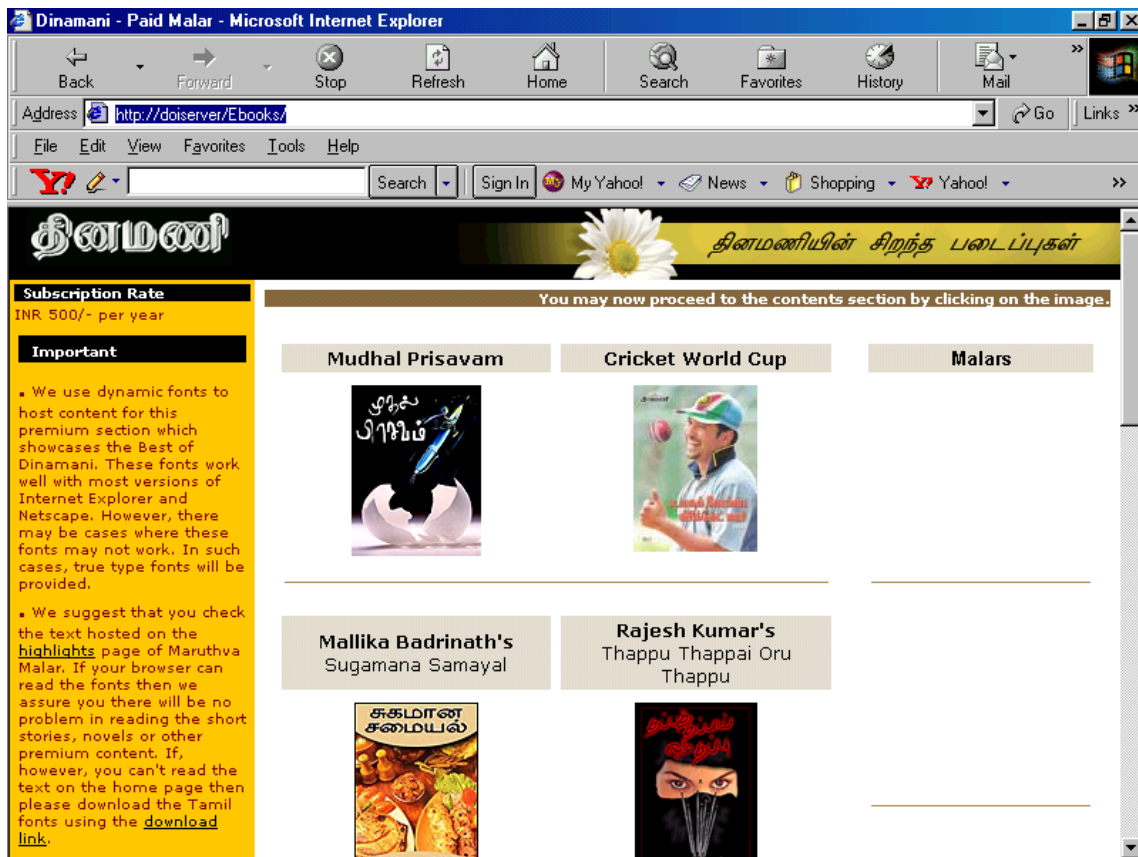


Figure 2

Making DOI work for publishers

The DOI concept works well for a paid content website. Publishers need to store their content in a server which has a number assigned by an agency. All the DOI numbers are stored in a directory, which has user details and addresses of the server and routes the requests made to the publishers and acts as an intermediary between the user and the rights-holder. When a publisher moves, changes server, or sells rights, the new location is updated in the directory, but the number remains the same, always attached to the same content. In this way one can avoid the annoying "File not found" error as associated with the Internet.

Ex: A user may locate an article online with an icon that says 'DOI'. If he wants to use the abstract, he has to click on the icon. From here, the DOI activates and starts searching for the abstract with a message "Go find this number, the route the request to the rights - holder's server. Then the directory software finds the number, gets the Internet address of the rights-

holder, and sends the user's request straight there. The user sees the right-holder's "response screen", but never the directory, which is always invisible. The directory resides on multiple redundant servers throughout the world to guard against any possible attack.

The database consists of the content or information provided by the vendor or information provider that was requested by the user. The publisher also maintains a response screen, which is the first thing the user sees after clicking the DOI icon. The response screen might comprise the content itself, or it might contain information about how to purchase the content.

An example of DOI and the rights management

A screenshot of the E-commerce and E books is shown below (Figure 3) for better understanding. The above examples shown are just the concept that can be used to promote e-books and also create an e-publishing model for language websites by the union publishers from all parts of the world which will result in availability of books online which can be easily purchased by people from various countries at a stroke of a key.



Figure3

Conclusion/ Suggestion

Taking our online media organization as an example on how rights management work, Tamil publishers, media houses and authors can come together and set-up an exclusive Tamil DOI server using a standardized Tamil software for Tamil audiences. This software can sit on the server of a content creator that is designed to ensure that it is secure (i.e. protected) distribution

of that content over the Web. The objectives are the prevention of copying or duplication and protect the content.

As a value added service, access to e-books and purchases through e-commerce can be done through the website. Language books classified under various heads can be chosen and online purchases can be made from the website.

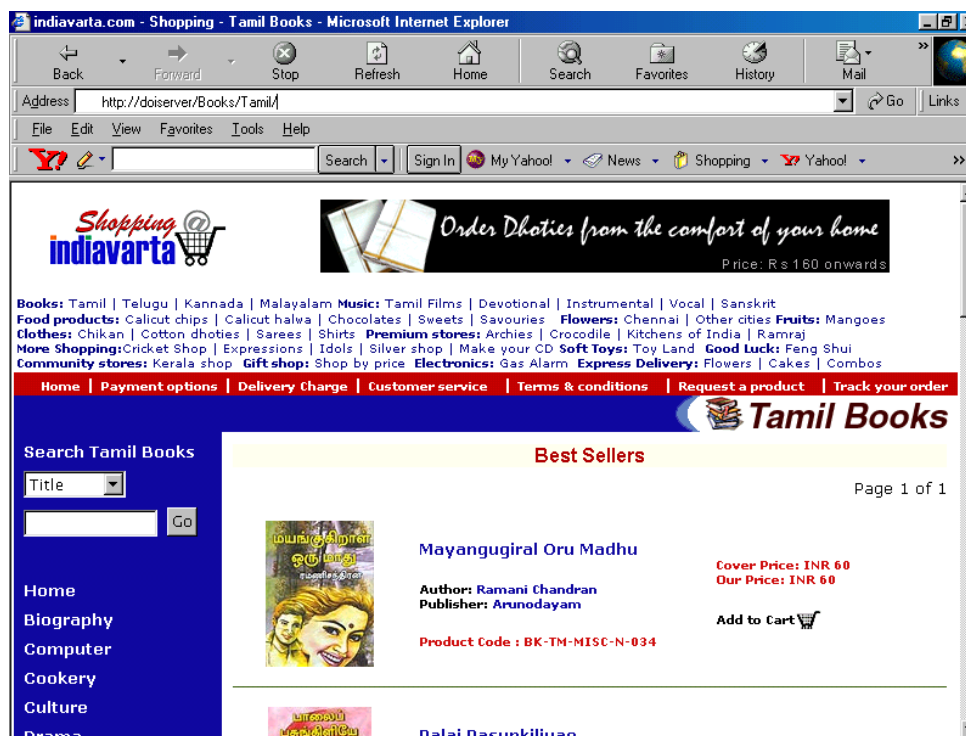


Figure 4.

The cover of the books can be scanned with a unique database number assigned for the books whereby a person selects and adds to his cart a book or range of books, he then has to make online payment and then the book is sent physically.

In the case of e-books, the user can go through the index of the content that is available and then can register to the website. By this way, one can and will not lose control over the products displayed and also protect the digital content. Control can be maintained for operations such as playing, printing, copying and saving etc.

Finally the idea of DOI needs to take off with the publishers. Identifiers are easy to be assigned though creating and maintaining a database needs some work. Once a DOI is set in place some of the advantages for the avid Tamil readers, researchers, and libraries at large would be that century old books, manuscripts and other Non book materials can also be included and identified and included in the database. With such a system, books that are out-of-print but available in a certain library can be identified. This may be a Herculean task for libraries, but in the long run it be immensely beneficial.

Therefore, the need of the hour is the organizations like Government, INFITT and other host of Tamil Organizations worldwide to come and sit together and understand the mechanism of how they work and try to come out with standards for a separate DOI concept for Tamil Publishers and works worldwide.

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