WILL PELICAN FLY?



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A description is given of the JISC-funded PELICAN project and its results. PELICAN lasted from November 2000 to October 2001. The project focused on possible charging algorithms for publishers giving licences to Higher Education Institutions to digitise and then disseminate chapters. Three possible charging models were developed. These models are described. Each of them represents a possible way forward for scholarly electronic publications.

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Introduction

PELICAN was a JISC-funded project that ran from November 2000 to October 2001. Preliminary results from the research have appeared elsewhere. PELICAN (which is an acronym for Pricing Experiment Library Information Co-operative Network) was about the business models that could be applied for the dissemination in digital form of chapters from, and entire texts from, student textbooks in higher education. *Serials* is, of course, devoted to matters of concern to those involved with serials, but whilst PELICAN was about textbooks, there is good reason to think that some of the lessons learned in PELICAN could be applied to the serials market.

For various reasons, UK universities have not been happy about the existing methods for obtaining such digitised textbook materials. This was partly due to the complexity of dealing with the Copyright Licensing Agency's (CLA) CLARCS service something that is bound to improve now that the Universities UK/CLA Copyright Tribunal case has ended with such stinging criticism of CLARCS by the Tribunal. It was also partly due to the high charges levied by publishers for permission to digitise their textbooks. As a result of this dissatisfaction, JISC, the Joint Information Systems Committee (the body that controls policy on dissemination of electronic information in UK higher and further education) decided to commission some research, namely PELICAN. At the time JISC awarded the contract, its remit was confined to higher education, and therefore our research focused on that sector. A brief check confirmed that the issues involved in further education are very different, but we were unable to explore them in the time available. I was the Project Head, with two Research Associates, Rachel Hardy and Iris Rubbert, and we

were assisted by Carolyn Rowlinson and Peter Kemp of Stirling University, and by an Advisory Committee comprising members from all major stakeholder groups.

The research team carried out a series of interviews with key stakeholders in the publishing, librarian and academic communities, inviting them to comment on the current ways of doing things and to suggest alternative administration and pricing systems. We asked our respondents to think as imaginatively as possible regarding business models, and we ended up with a variety of ideas. Transcripts were analysed using Atlas/ti software. We then presented our preliminary results to a conference in London, and as a result, refined our models somewhat.

Our three models

We quickly identified the principal requirements that stakeholders had for any pricing of such texts. They form an unsurprising list: simplicity and predictability, ease of administration, perceived fairness, and familiarity (in that similar pricing models are already known and understood by the stakeholders). Our aim was to develop one or more charging model(s) that would satisfy everyone. The proposed models were for permission granted to the higher education institution (HEI) to obtain, store and disseminate to its own registered bona fide staff and students digitised materials, and for the recipients to make a single print-out of the materials. This is referred to as "the minimum". Rights holders, of course, might choose to offer further permissions beyond the minimum.

Pricing model 1

Pricing model 1 involves a basic administrative system of purchasing units against a subscription fee. The HEI has full control over the subscription rate it chooses. The units would be for a year and could be topped up if required. The units cannot be carried over to the next year because of a practical problem: HEIs' budgeting systems are not geared up to this type of carrying over from one year to the next. Thus, the HEI must be careful not to overspend on units at the start of the year. An advantage of this system is that costs

could easily be devolved, e.g., each department could purchase a number of units to spend, or the students could be charged individually.

Table 1 shows the basic model, with imaginary figures:

Table 1: Subscription for pricing model 1

No. of units	Fee per annum	
100	£50	
500	£225	
1000	£400	
1500	£550	

The HEI would decide the number of units required and thus the fee to pay. Table 1 shows that a discount is offered for more units purchased, encouraging HEIs to purchase more. We commend this idea, but of course it is not an essential component of the model.

This model allows the publisher to retain complete control over pricing. We propose that each text available under the system would be assigned a number of units by the publisher, according to the revenue they felt was required. Each item available is then added to a catalogue or database (run by a central administrative body), to which all HEIs that subscribed would have access.

The HEI would search the catalogue and select the texts required based on the unit price quoted. We anticipate that the publisher will have to provide the number of units required under various scenarios. For example, imagine a publisher decides to add a chapter to the database of items for which it is giving HEIs the "minimum" permission. The text is submitted with corresponding units assigned by the publisher. The publisher might decide on three levels of pricing. The first is if the text is to be used only by a class of up to 50 students. Another if it is to be used only by a class of up to 100 students, whilst the third, "Open Access", means that all students in the subscribing HEI can access the text. This would be appropriate for general texts likely to be of use to a wide range of students, or for texts used by very large classes. Table 2 shows a short extract showing how the database would look.

This model offers several advantages in addition to the obvious one of simplicity. The HEI

Item	Up to 50 students	Up to 100 students	Open Access
Research Methodology Chapter 5	5	10	20
Information and Publishing Chapter 3	8	12	30
Publishing Economics Chapter 7	10	15	25

Table 2: Pricing of texts, pricing model 1

has full control over how much it is spending on these electronic texts. The units are purchased at the beginning of the year; the library can therefore budget for the resources. It makes the process simpler, rather than paying small amounts each time an individual text is required.

The HEI has full control over which texts to choose based on the price; if a text is too expensive, it can search for an alternative. It also leaves control with the publisher whether or not the text is placed on the database. The publisher will also be able to monitor which texts are selected and which are not and alter its pricing accordingly. Publishers could also inspect the database to assess how their texts are priced compared to those of the competition. Prices and texts available can also be altered according to revenue gained and other market feedback. Each HEI pays one annual fee and can therefore budget appropriately. Each HEI can search the whole database, sees the price previous to purchase, and purchases accordingly.

Elsevier has introduced a "transactional allowance" charging model. In this model, the library pays in advance for a specified number of articles. Authorised users then have the facility to select articles from any of the titles available from ScienceDirect. In other research I have supervised, not to do with PELICAN, we found that librarians found it difficult to adopt this model because they cannot predict how many vouchers would suffice. We also noted that such a model might be difficult to reconcile with devolved budgeting. If a number of transactional subscriptions were taken, departments may wish to have exclusive rights to use a certain number of articles for which they have paid. Departments might be reluctant to share resources that have been purchased from a departmental budget. We noted that libraries might find themselves

purchasing additional articles because some departments had run out of units before the total unit allocation had been used up.

These are all issues that would have to be addressed should model 1 (or model 2, which incorporates model 1 in part) be adopted.

Pricing model 2

Pricing model 2 is a mixed model. It takes account of the different ways texts are used. Texts are split into two broad categories: core and supplementary. These correspond with two types of text on a reading list given by the lecturer to students. Some readings are required while others are background. For the core or required texts, model 1 pricing is used.

Each HEI would be automatically assigned a rank based on, for example, its full-time equivalent (FTE) student count or its central funding. The HEI would then pay a set fee for each "background" text to be made available to its students. Because all students have access, it would be relatively expensive. Thus, model 2 is based on model 1 charges for "core" texts, and a supplementary model (Table 3) for background texts.

HEI rank	Subscription charge per annum
1	£2000
2	£1500
3	£1000

Table 3: Charging for supplementary or background texts

The publisher would still retain control over pricing. The price of each text is related to number of users (if a core text), or to the ability of the HEI to pay (if a background text). The model retains all the ease of subscription associated with model 1.

Costs could be devolved to departments.

However, there are some difficulties with model 2. It may not encourage wide reading, especially if the HEI is in a high income band, and therefore has to pay a high price to acquire rights to background texts. Another difficulty is: who decides which texts would be "supplementary" and which "core"? For example, there may be the temptation to report certain texts as "supplementary" or as "core" when they are in fact not, to reduce the cost to the HEI. One way to address the problem is to offer value added features for the core texts only, e.g., offering downloading/printing as a (free) extra for core texts, but not making such facilities available for texts reported as background. The HEIs themselves would then come under pressure from students to change the status of background texts if the students found they were being unnecessarily restricted in what they could do with the digitised materials.

A final problem with the model is that it is not clear whether the charging by size of institution should be applied to core texts, supplementary texts, or both.

Pricing model 3

Pricing model 3 is value based. The same basic subscription system as model 1 is adopted. However, in this model, value factors are assigned to each text.

For example, here we have used size of the text (e.g., number of pages), the subject of the text (medicine, law, etc.), and the age of the text (in years) as the value criteria. These values are chosen to measure the value of a text. However, other criteria may be used. Any criteria employed are likely to be controversial.

Table 5 shows that if the subject of a text was

Text - subject, age and size	Zone	Units
Medicine, 0-2 years old, 20+ pages	1	20
Law, 2-5 years old, 10+ pages	2	15
Law, 5-10 years old, 10+ pages	3	10

Table 5: Model 3

for example, medicine, it was one year old and was 20 printed pages long, then it would be placed in zone 1, which would cost 20 units.

A crucial feature of this model is that the zone (and therefore cost in units) would no longer be in the control of the publishers. This would be a key disadvantage from the publishers' point of view, but might be appreciated by librarians and academic staff. Other features of Model 3 are that again costs could be devolved to the departments and payment is through subscription.

We also considered other ideas, including the idea that universities should pay large annual sums to a Reproductions Rights Organisation (a centralised body set up to administer such a system) for a blanket licence permission to have access to digitised texts. A blanket licence is one where you can assume you have the permission unless it is specifically stated you do not. In other words, from the publishers' point of view it is an opt-out system rather than opt-in – they have to specifically tell the RRO they don't wish to participate, otherwise it is assumed that they do.

We also provided some more detail on the sort of administration system that was needed, and suggested who might be suitable to run it.

Our recommendations

In the report², we made a series of recommendations to all stakeholders. These included further research into certain technical issues we identified as problematic.

The most important recommendation by far was that JISC, in co-operation with publishers and their associations, should initiate and subsidise a major one- to two-year experiment in trying out these models in practice. These recommendations went to JISC in February 2002. JISC responded by asking me to prepare a Management Summary for consideration by the relevant JISC Committee in May 2002.

I am also aware of at least two book publishers (O'Reilly with its Safari service³, and a major publisher of reference works) that have started to price, or are considering pricing, their electronic offerings along the lines of Model 1.

The time is ripe for some new thinking on the pricing of digitised materials, and PELICAN gives the stakeholders involved the chance to develop their ideas for new business models, not just in

book publishing but also journal publishing. The characteristics of scholarly journal publishing are, of course, very different to those of textbook publishing, but the basic requirements for simplicity, familiarity, fairness and predictability are common to both. I hope that the PELICAN research has thrown some light on possible new charging models, and that they might be applicable not just to digitised textbooks, but also in some cases to electronic serials.

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