

# HeadLine

Hybrid Electronic Access and Delivery in the Library Networked Environment

News  
letter

## The HeadLine Personal Information Environment

During Phase One of the HeadLine project we identified what users would want from the HeadLine system (see the Spring Newsletter for more details). The focus of Phase Two is to design and build a Personal Information Environment (PIE) that will meet these requirements and demonstrate a working model of the hybrid library in action.

### Portals

Another strand of research fed into the design of the PIE and this was into commercial portal sites. Portals such as My Yahoo are amongst the most popular sites on the World Wide Web and their success lies in uniformity of interface (they all look the same so it's fairly easy to find the information you want) and customisability (users can edit them to present information that's useful to them). The HeadLine team spent structured time looking at portals and identifying useful features that could be adapted for use in the hybrid PIE. The team decided to take on this combination of customisability and uniformity for the HeadLine PIE to make it easy to use and suit the varying requirements of all its users.

The screenshot shows a web browser window titled "My PIE page (for someone called Peter) - Netscape". The page content includes:

- Left-hand 'Navigation' Section:** A vertical menu with "MY PIE" highlighted, "All Resources PIE", "Economics Dept Page", "Courses:" (with sub-items "Economics 101" and "Computing for Economists"), "Search facility" (with a search box and "Submit" button), and "UNICORN WebCat" and "Library Catalogue" links.
- Right-hand 'Resources' section:** A list of resources under "Pete's Exam Papers" (0200 Economics of Social Policy, 0221 Principles of Econometrics, 0210 Macroeconomic Principles), "Saved Searches", "My Reading Lists", "My Journals", and "My News Sources". Below these are links to "The Independent", "Financial Times", and "The Guardian", each with a "Full Text from 1990 onwards" option.

Annotations with arrows point to various features:

- "Left-hand 'Navigation' Section" points to the vertical menu.
- "Other PIE Pages, which this user can access" points to "All Resources PIE" and "Economics Dept Page".
- "Search within resources from the right hand section" points to the search facility.
- "Right-hand 'Resources' section" points to the "Pete's Exam Papers" header.
- "Expanded list" points to the list of exam papers.
- "Collapsed lists" points to "My Reading Lists" and "My Journals".
- "Link to resource instance - click to access resource directly" points to "The Independent" link.
- "Search, add to my PIE, help and training options for resources" points to the icons next to the news sources.

### The main features of the HeadLine PIE are:

**Standard pages** which are easy to navigate containing familiar links and layout on each page - making it easy to locate and access material whichever page you're using

**Subject views** to support taught courses with links to reading lists, course packs and recommended resources

**Choice of all resources** to support independent research

**Search facility** with the option to search within resources where this is technically possible

**Customisable by user:** the user has a 'My PIE' page where he or she can group favourite or most used resources from the other pages. Users can also change the look and feel of the overall PIE

**Customisable by institution:** logos and links to institutional pages can be included to brand the PIE to its location. The content can also be customised at institutional level and subject pages fixed by the partner site so that the user always has an accurate and up-to-date view of the recommended resources in a particular subject area.

**Ease of updating for admin maintenance:** although the same resource may feature on several pages of the PIE, the system is based around a relational database so that every

resource needs to be updated once only; this makes maintenance straightforward and easy.

**Library mediation of resources:** the PIE will link to useful features such as FAQs and advice on how to get the best results from electronic databases, as well as enabling users to book themselves onto training courses for some resources. The PIE can also offer current awareness alerting services to let users know when new material is available on certain topics.

**Hybridity:** the PIE will make use of the SHERLOC shelfmark and facilities locator to help users locate books on the shelf and facilities located in the library.

**One stop shopping:** the aim of the PIE is to provide a uniform interface to all resources offered by the library and although many services have their own interfaces and search rules, the PIE aims to provide guidance to help users find and use them effectively.

**Location specific results:** on logging into the PIE the system will determine (by user input or IP address monitoring) where the user is and present services first that the user can access from where he or she is - with the option to see which resources would be available from other locations.

## The PIE Portal Model

### Portals and the World Wide Web

The rapid expansion of Internet use following the development of the Web shows its success as an interface. Today, the most popular sites are taking the ideas of uniformity and customisability a stage further: they are portals to the information available on the Internet. There are many portals now in existence, and they comprise most of the top ten sites in order of popularity.

### The PIE Portal Model

The HeadLine portal technology, the PIE, is intended to give a flexible, configurable portal system, where the institution running the hybrid library can customise large portions of the system. It is based around the idea of items and item types.

### Items and Types

Each possible object that might appear in the interface is called an item, from a Web page down to a link to a single electronic journal article. Each item has a type, and this determines its appearance. Each type has an associated piece of HTML (in most cases a table) which is used to display it. (This mimics the way that other portals appear, with multiple embedded tables used to structure material on the page). Each page displayed to the user is thus built up by knowing which items are "children" of the other items which make it up. For example, a page item could have a variety of list items as children, a list item could have Web links as children, and so on. In the screenshot (right), there is a page item ("Economics PIE"), containing a list item ("Course materials") containing Web link items (links to pages with exam papers, reading lists and so on).

### Institutional configuration

As well as users having pages which they can control totally, the PIE allows the creation of pages which are determined on an institution or department wide basis. The user will be unable to change the content of these PIEs and so there is potential to get tutors directly involved in the content of these pages, and to link into teaching resources such as lecture notes, coursework etc. These will be presented to the students for whom they are appropriate, so that course packs can be made instantly

accessible. This human assisted merging between the user metadata and the resource metadata is one of the main areas in which the HeadLine project aims to experiment.

### Access to Resources

HeadLine's ultimate aim is that the portal model can also be extended to mediate access to resources. Many of the electronic resources, particularly those on CD, have strongly proprietary interfaces; the difficulties these cause users are powerful motivations for the hybrid library in the first place. Some of them do not have a Web interface, even in 1999. In others, many users consider the Web interface difficult to use. Headline will attempt to iron out as much of this as is possible in the time available, although specific solutions which will stop working as soon as a publisher changes the interface to their information are probably not worth developing. But by using mechanisms to appear to the service to be a user client (HTTP spoofer), it will be possible to mediate sessions between the Web browser and the electronic service in many cases.



## Background to the Project

HeadLine (Hybrid Electronic Access and Delivery in the Library Networked Environment) is one of five Hybrid Libraries projects funded under the Electronic Libraries (eLib) Phase 3 programme of the UK Higher Education Joint Information Systems Committee.

**Project Partners are the London School of Economics, London Business School and the University of Hertfordshire.**

This three-year project began in January 1998 and aims to design and implement a working model of the hybrid library, in actual academic environments in the subject areas of Economics and Business Studies. In accordance with the aims of the Hybrid Libraries programme, the project will present the user with a wide range of library resources, regardless of physical form, via a common Web-based interface.

The project aims to take users from Resource Discovery to Resource Access, and will use a Personalised Information Environment to provide a tailored responsive service to its users.

This is one in a series of HeadLine Newsletters, each focusing on a Hybrid Library Issue. Please note that the project does not guarantee that all the features mentioned above will be provided. To receive regular copies of the newsletter and invitations to try out new technologies please join the headline-users mailing list at <http://www.mailbase.ac.uk/lists/headline-users/>

**For more information or copies of this newsletter please email: [headline@lse.ac.uk](mailto:headline@lse.ac.uk)**

