

By using the data and software analysis to study the user experience & the option for the service platform in library field.

## 利用數據與軟體瞭解 讀者行為使用分析與服務平台選項

周韻 Jeremy Chou  
EBSCO Information Services  
Sales Director of Taiwan, Hong Kong, Macau

**First, let's go back to 2007..**



**AirBed & Breakfast™**

Forget hotels.

**NETFLIX**



# 使用者/ 用戶體驗

# User Interface VS. User Experience



**VS**



# 6-layer breakdown of user experience:



Where do my UX problems stem from? Is it something in the **visual design**, or could there be something missing in my understanding of the **audience needs**?

[by Amy Yee | March 17, 2015 | Enterprise Strategy](#)



“ User research is key to our work at EBSCO. Through user research, we are able to derive insights about **user habits and preferences**, inform our product development and help our customers support their users. ”



Kate Lawrence  
Vice President of User Research at EBSCO



# 用戶行為研究方法

For seeing the larger picture, **one method stands out** from the rest

## 使用性測試

Classic research method to identify obstacles in a UI. Now – [usertesting.com](http://usertesting.com)

## Video Diary Studies

Perfect for teenagers, international users, allows freedom, flexibility within a task framework

## 卡片分類法

Suitable for navigation analysis



## 脈絡調查

Ethnographic, user-driven research method

## 問卷調查

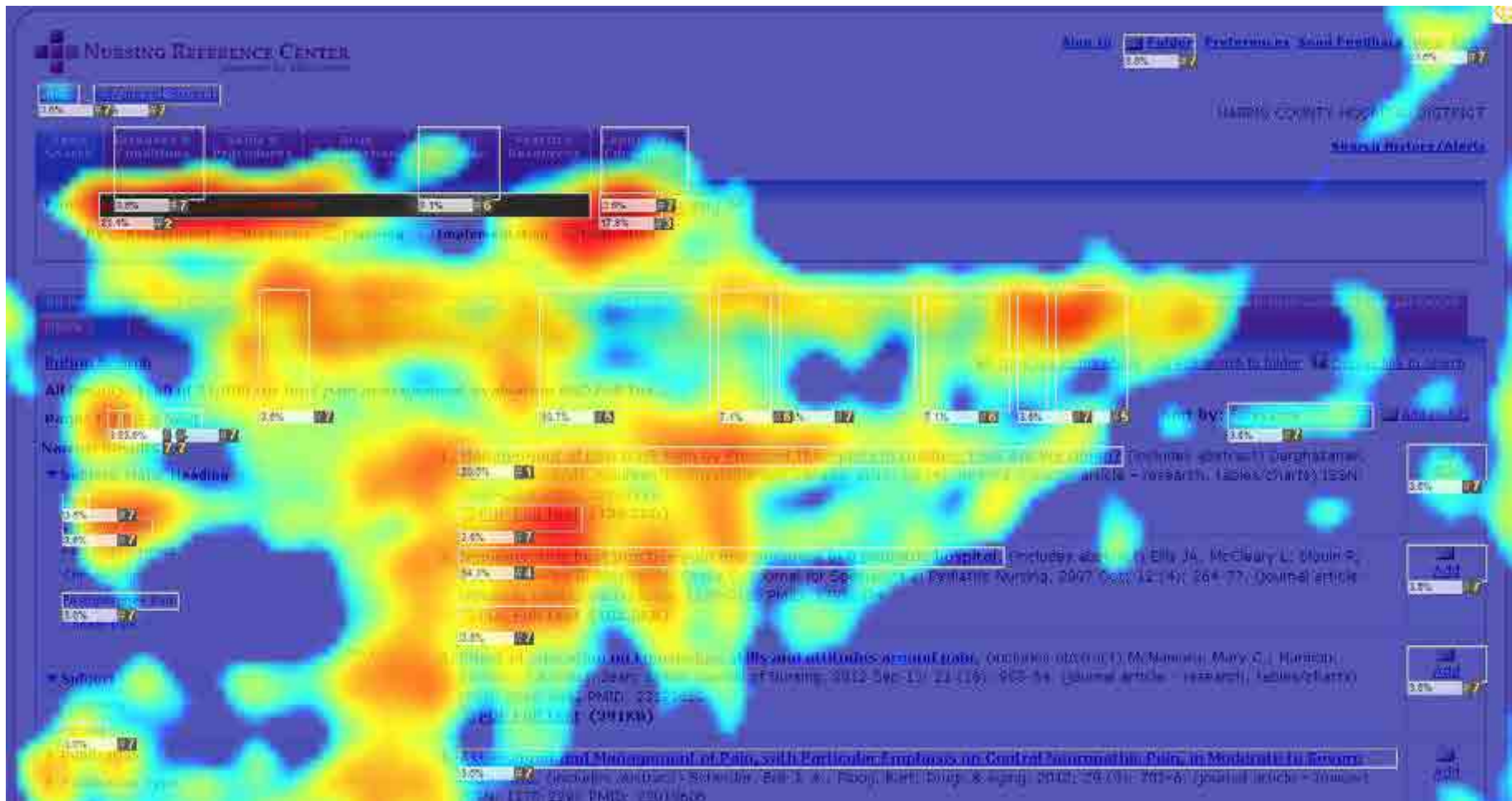
Powerful tools such as Qualtrics let us create heat maps and other visuals to process feedback

## 焦點用戶訪談

Speaking with our customers and probing beyond what a survey can reveal



### User Research in context: Heatmaps (熱圖/熱度圖/熱區圖)



# 調查結果: 大學生檢索習慣



## Google

How Google influences the search habits of today's college students



## Motivation

What makes students “make the turn”?



## Wikipedia

What we can learn from student use of Wikipedia



## How I learned

High school, college – where, how and when students are learning about information literacy



## How I Choose

Which results on the search results page are appealing to students and why



## The Library Website

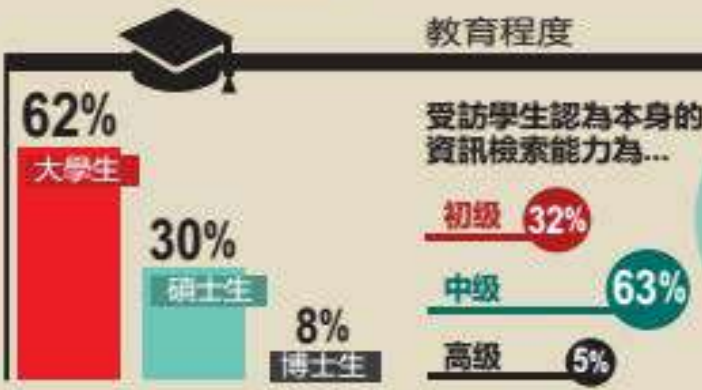
What's working and what's not



# 中國大陸高等教育學生調查

# 研究過程行為探討

2015-2016 EBSCO 對於534位中國大陸學生的問卷調查



**當開始進行研究時...**

- 83%** 的學生會在截止日的兩星期前開始準備一份要求5-10頁的研究報告
- 77%** 的學生會在截止日的30天前開始準備一份要求10頁以上的研究報告

**56%** 的受訪學生表示沒有接受過任何相關教育訓練

## 學生認為進行研究讓他們感到...



## 「階段性的」研究過程



\*\*與之前針對美國學生的研究調查比較起來, 美國學生在研究過程只注重兩個重要時間點: 一是研究剛開始時, 另一個則是報告截止日前。

**83%** 的學生會使用圖書館的電子資源來做研究搜尋  
**37%** 使用紙本



## 學生面臨的痛處

- 使用外語研究資源
- ➔ **語言**  
77% 學生使用超過一種語言檢索, 並且有 89% 學生使用線上翻譯工具
  - ➔ **全文使用問題**  
學生無法下載大部份期刊文章的全文, 並且常常在搜尋引擎上搜尋文章名稱, 希望能夠找到全文
  - ➔ **大量的檢索結果**  
學生接收大量的結果常常感到不知從何下手
  - ➔ **在校園外的使用問題**
  - ➔ **不清楚圖書館提供哪些資源**
  - ➔ **缺乏研究技巧**

# 中外文翻譯與專業權威建議

Integrating the best translation services + library thesauri to aid search suggestion

EBSCO Discovery Service

Keyword: 中国文学史 Search

Basic Search Advanced Search Search History

Refine Results

Current Search

Find all my search terms:  
中国文学史

Expanders  
Also search within the full text of the articles

Search Results: 1 - 20 of 88 Relevance

Consider also searching for the English term(s): History of Chinese Literature

1. 菅原道真の诗字...

Ex.  
Google Translate API

Ex.  
Spanish and French  
Library authorities

Search Results: 1 - 20 of 14,362

4 thesauri entries found; top 3:

1. Topic (Spanish): <b>Programación neurolingüística</b> Scope: Aquí se asientan las obras acerca de un conjunto de procedimientos desarrollados por Richard Bandler, John Grinder y otros, por el cual la experiencia subjetiva se puede organizar para definir y para lograr un resultado deseado del comportamiento Used For: PNL (Psicología) See Also: Cambio (Psicología) (broader term); Psicoterapia (broader term); Reencuadre (Psicoterapia) (narrower term); English Term(s): Neurolinguistic programming source: unam	2. Topic (French): <b>Programmation neurolinguistique</b> Used For: PNL, Programmation neuro-linguistique See Also: Changement d'attitude ; Changement de comportement (broader term); Psychothérapie (broader term); English Term(s): Neurolinguistic programming source: bnf, frameur
--	---

1. Tubeless PNL in the supine position.  
Sırt üstü pozisyonunda tüpsüz PNL. By: Wahab, Osama Abdel; Sherif, Hammouda; El-Karamany, Tarek. Photographs, 3 Charts. DOI: 10.5152/tud.2012.030.

PDF Full Text (3.9MB) Cite this... ABNT Cite this... Source Data



# 檢索結果分類

New Search For Educators Curriculum Sign In Folder Languages Help

explora An EBSCO Experience Obama Search Springfield Library

Search Results: 1-10 of 29,495 for "Obama" Filter

Results Magazines Videos Primary Documents Biographies ...More

**Obama's Libya Debacle.** Academic Journal

By: By: Kuperman, Alan J. Foreign Affairs, Mar2015, Vol. 94 Issue 2, p68-77, 12p.

An essay is presented on U.S. military intervention in Libya during the administration of U.S. President Barack Obama. The author reflects on the devolution of Libya into a failed state following...

**Biographies** (9) View All

- Barack Obama**  
Columbia Electronic Encyclopedia, 6th Edition, 2014, p1-1, 1p; Reading Level (Lexile): 1470
- Barack Hussein Obamaack Obama**  
Hutchinson's Biography Database, 2011, p. 1, 1p; Reading Level (Lexile): 1370
- Who Is BARACK OBAMA?**  
Junior Scholastic, 2/2/2009, Vol. 111 Issue 11, p11-11, 8p; Reading Level (Lexile): 900

**The Repudiation of Barack Obama.** Periodical

PODSHORETZ, JOHN. Commentary, Dec2014, p1-3, 3p. (Editorial) J. Foreign Affairs, Mar2015, Vol. 94 Issue 2, p68-77, 12p.

The article presents the editor's comments on the political defeat of the Democratic Party and, by extension, President Barack Obama in the U.S. 2014 midterm elections. The editor asserts that th...

**Obama's Libya Debacle.** Academic Journal

By: Kuperman, Alan J. Foreign Affairs, Mar2015, Vol. 94 Issue 2, p68-77, 12p.

An essay is presented on U.S. military intervention in Libya during the administration of U.S. President Barack Obama. The author reflects on the devolution of Libya into a failed state following...

**Barack Obama**  
President of the United States (2009--)

**Born:** August 4, 1961  
**Birthplace:** Honolulu, Hawaii, United States

The first African American elected president of the United States. Obama has also worked as a US Senator from Illinois, a lawyer, community organizer, author, and law school professor. He was awarded the Nobel Peace Prize in 2009.

**Early Life**  
Barack Hussein Obama (bah-BAHK too-SAYN oh-BAH-mah) was born in Honolulu, Hawaii, on August 4, 1961. [More](#)

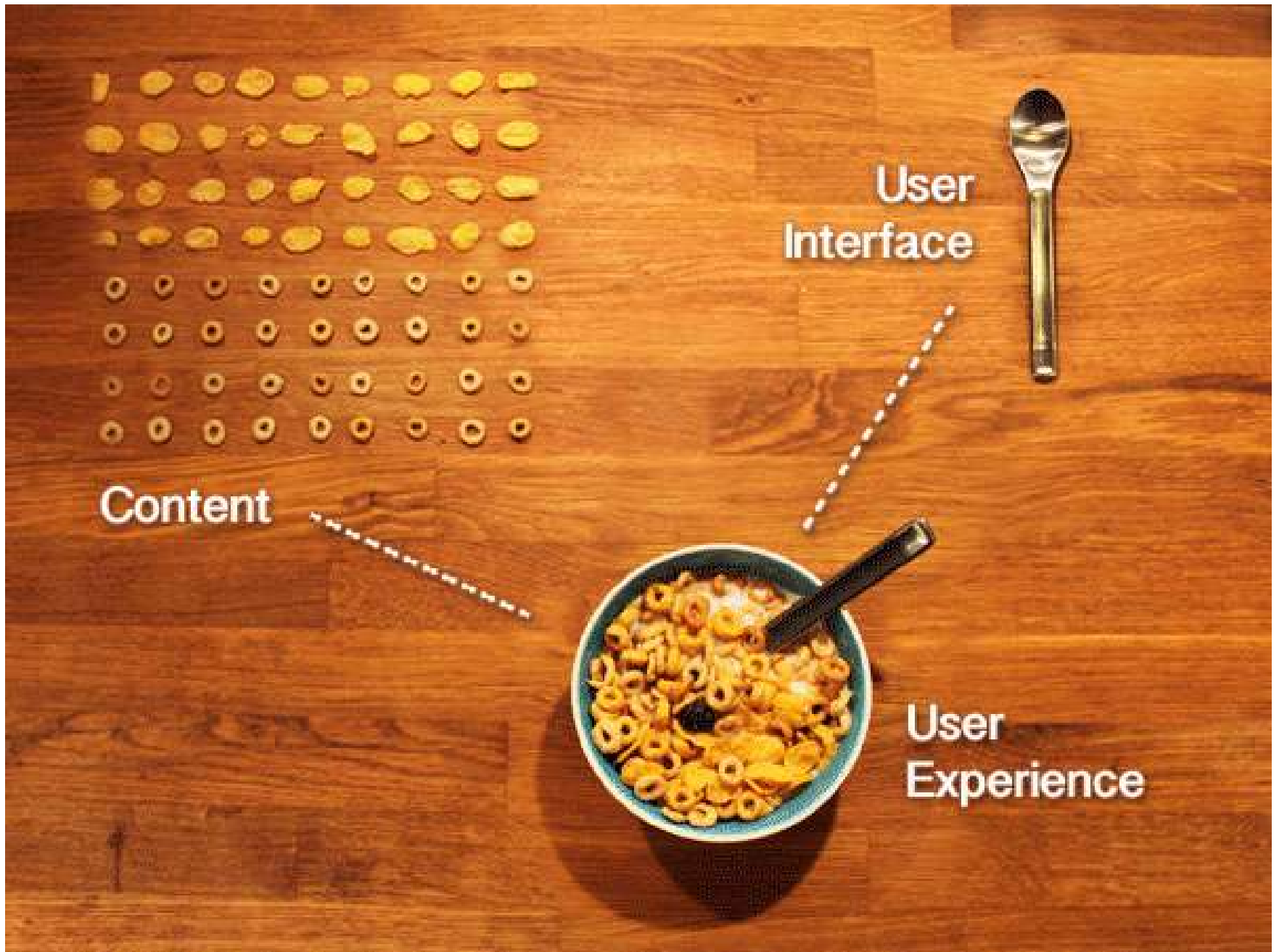
**Images** (35) View All

**Associated Press Videos** (887) View All

# 檢索分析/ Top Search Terms Report

[Customize Services](#) [Authentication](#) [Local Collections](#) [Reports & Statistics](#) [Database Title Lists](#)

Search Term(s)	Frequency
(mh "lung neoplasms+/di")	445
ti alzheimer's disease and ab gene expression	397
nobel prize in physiology or medicine	277
jsxinglinjsp	272
jn "renewable and sustainable energy reviews"	233
jn "international journal of heat and mass transfer"	220
web-infwebxml	210
jn "applied energy"	194
jn "international journal of hydrogen energy"	190
jn "ecotoxicology and environmental safety"	158
lung cancer	147
jn "schizophrenia research"	144
so ( clinical microbiology and infection ) and au shu	124
jn "ecological indicators"	118
de camping	114
so ( clinical microbiology and infection ) and au shu yl	114
jn "molecular immunology"	113
jn "science of the total environment"	112







API 應用程式介面  
APPs 應用程式

加入遊戲群

- Free Gifts
- Play!
- Invite
- Add Credits
- FAQ
- Forum

1929 / 8000

132 / 800

2476 / 3400

33 / 160

68521

0

39

5

16

1

29

5

22

5

21

7

19

5

16

17

10

0

All Friends

刊登廣告

無與倫比的全球視野  
收錄數千種英文以及來自亞洲、大洋洲、歐洲和拉丁美洲等本地語言的全文期刊，Academic Search Ultimate為學生在研究過能中提供更廣泛、更具國際視野的巨大優勢。資料庫整合全球各地區出版物以及研究資料，Academic Search Ultimate提供學生在尋找館全球視野下最全面的研究體驗

讚好

User-Friendly Searching with the most relevant results

EBSCO Discovery Service (EDS)是將所有圖書館資源整合為一的檢索平臺。透過EDS，您將能夠立即檢索最高品質且最符合您搜尋需求的圖書館資源。檢索結果能夠被引用並且包含全文連結

讚好



# 應用程式介面 (Application Interface, API)

Access EDS content via your own web site, portal, or application!

Developer's Console: Easily Test Data Output

**Services**

- Authenticate
- CreateSession
- Info
- Search
- Retrieve
- EndSession

The Search method is used to perform searches against the databases in the profile. It returns a result facets and abstracts.

To test the operation using the HTTP GET protocol, click the 'Invoke' button.

Parameters:	Value:	Default Value:	Notes:
Query:	<input type="text"/>		Required. The search terms. Format: '{op},{tag}:{term}', Exa
	<input type="text"/>		Example: AND,SU:Skiing
	<input type="text"/>		Example: Climbing
Search Mode:	all <input type="button" value="v"/>	all	Search mode to be used with
Results Per Page:	20 <input type="text"/>	20	The number of records retrieved (between 1-100).
Page Number:	1 <input type="text"/>	1	Starting page number for the r search (if page size = 10, and am expecting 10 records start
Sort:	relevance <input type="button" value="v"/>	relevance	The sort order for the search r method for a list of common s per database.
Highlight:	y <input type="button" value="v"/>	y	Specifies whether or not the s <highlight> tags.
Include Facets:	y <input type="button" value="v"/>	y	Specifies whether or not facet the search results.
Facet Filters:	<input type="text"/>		Facets to apply to the search previous search results. Format: {group_id},{tag}:{value} Example: 1,DE:Math,DE:Hist

```
<SearchResponseMessageGet>
- <SearchRequestGet>
  - <QueryString>
    query:1=AND.galapagos+fishes&sort=relevance&includdefa
  <QueryString>
- <SearchCriteriaWithAction>
  - <QueriesWithAction>
    - <QueryWithAction>
      - <Query>
        <BooleanOperator>AND< BooleanOperator>
      <Fi
      <To
      <Que
      <Ren
      <Query
    <Queries>
    <FacetFil
    <Limiters>
    <Expander
  <SearchCrite
- <SearchReque
- <SearchResult
  - <Statistics>
  - <Item>
    <TotalHits>
    <TotalSea
  - <Database
    - <Databa
      <Id>
      <Lab
      <Stat
      <Hits
    <Data>
      Population monitoring is a vital tool for conservation man
      have experienced habitat alteration because of human act
      between 1997 and 2010. The temporal analysis revealed
      areas have been most affected by introduced species or a
      study is required to test this idea. Other factors including
    <Data>
  - <Item>
    <Item>
      <Name>AbstractSuppliedCopyright< Name>
      <Label>
      <Group>Ab< Group>
    <Data>
      <i>Copyright of Oryx is the property of Cambridge Univ
      download, or email articles for individual use. This abstrac
      to all Abstracts.)
    <Data>
  - <Item>
  - <Item>
    <Name>AffiliationAuthor< Name>
    <Label>Author Affiliations< Label>
    <Group>Aulinfo< Group>
```

# 新加坡國立圖書館 (National Library Board Singapore)

- OneSearch Portal through Discovery Service API
- Single stop for searching Libraries, Archives, Museums and Galleries

The screenshot shows the search results for the query "user experience". The search bar at the top contains the text "user experience" and a "Search" button. Below the search bar, the results are categorized into "Books", "Magazines & Articles", "Audiovisuals", "Images", "Newspapers", "Records & Papers", and "Websites". The "Books" section is expanded, showing three results. The first result is "Introduction to computer graphics programming on Apple II and IBM PC / Francis C.K.H.", the second is "Further programming in PROLOG : writing application programs / P.H. Hepburn", and the third is "What is user experience design? / Patricia Harris." The "Refine search" sidebar on the left lists various filters such as "Type", "Collection", "Subject", "Publisher", "Creator", "Series Title", "Language", and "Date".

user experience  Advanced Search

Refine search

Type

Book 103

Electronic Book 64

Audio Book 19

Digitised Book 2

Collection

Subject

Publisher

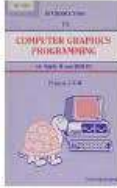
Creator


Series Title


Language

Date

Books  Showing 1 - 10 of 188 record(s)

 Introduction to computer graphics programming on Apple II and IBM PC / Francis C.K.H.  
Digitised Book, Francis, C. K. H., 1987  
This book will take you into the world of turtle graphics. The user needs not have any prior experience ...

 Further programming in PROLOG : writing application programs / P.H. Hepburn  
Digitised Book, Hepburn, P. H. (Philip Henry), 1949-, 1988  
Written by one of the few people who took notice of Prolog in its commercial infancy, this book benefits ...

 What is user experience design? / Patricia Harris.  
Book, Harris, Patricia, 1943 October 17- author.  
Includes index.

Magazines & Articles  
4 record(s) found

Audiovisuals  
98 record(s) found

Images  
No results found:

Newspapers  
24,651 record(s) found

Records & Papers  
No results found.

Websites

# 印第安那大學布魯明頓分校圖書館

- Use Blacklight (open source software) as the frontend to include both the OPAC and discovery service content.

Catalog + OneSearch@IU Results    Catalog Only Results    OneSearch@IU Results

All Fields ▼    library application interface    🔍

⚙️ Choose Search Type

## Search Results

You searched for: All Fields ▶ library application interface ✕ Start Over

### Catalog Results



1 - 10 of 695 results    [View all catalog results](#)

#### 1. Yahoo! User Interface Library 2. x Cookbook

Author: Snider, Matt

Publication Date: 2010

Language: English

Format:  Book  Online Resource

Copies At: Southeast, Bloomington, East, Northwest, Indianapolis, Kokomo, Fort Wayne, and Columbus

### OneSearch@IU Results

1 - 10 of 26828 results    [View all OneSearch@IU results](#)

#### 1. USPTO Published Patent application of Red Hat, Inc. titled as 'PROVIDING A USER INTERFACE LIBRARY FOR BUILDING WEB-BASED APPLICATIONS'



Academic Journal

Published In: Plus Patent

News. 21 de Febrero de 2015.

Publication Type: Academic Journal

Availability: Please log in to see full-text options

#### 2. ABB freelance control system application program interface communication technology research and application





# 應用程式 (Applications)



# 加州理工學院圖書館 (Caltech Library)

- **Course Reserves Apps: search by TOPIC**

New Search Home Contact Us Course Reserves Find eJournals Citation Linker Sign In Folder Preferences Language Ask-A-Librarian Help

Caltech Connect Searching: LibSearch

Keyword thermodynamics Search

Basic Search Advanced Search Search History

Caltech Library

Search Results: 1 - 50 of 785,306

教師指定參考資源/參考書

Relevance Page Options Share

**Looking for Course Reserves?**  
There are [course reserves](#) available for thermodynamics.

1. **Thermodynamics [electronic resource] : For Physicists, Chemists and Materials Scientists / by Reinhard Hentschke.**

By: Hentschke, Reinhard. IN: Springer eBooks; Berlin, Heidelberg : Springer Berlin Heidelberg : Imprint: Springer, 2014. X, 304 p. 127 illus., 7 illus. in color. online resource. Language: English, Database: Caltech Library Catalog

Subjects: Thermodynamics; Physics; Mass transfer; Physical Chemistry; Engineering Thermodynamics, Heat and Mass Transfer; Numerical and Computational Physics; Statistical Physics, Dynamical Systems and Complexity; Physical chemistry; Statistical physics; Heat transfer; Heat engineering; Dynamical systems; Electronic books

eBook

Location	Call No.	Status
World Wide Web	QC310.15-319 Text Call #	View Catalog Record

2. **Thermodynamics / H.J. Kreuzer, Isaac Tamblyn**

By: Kreuzer, H. J., Singapore ; Hackensack, N.J. : World Scientific, c2010 xii, 225 p. : ill. (some col.) ; 23 cm Language: English, Database: Caltech Library Catalog

Subjects: Thermodynamics

Book

Location	Call No.	Status
SFL basement books	QC311 .K74 2010 Text Call #	on shelf Place Hold

3. **Thermodynamics : principles characterizing physical and chemical processes / J.M. Honig**

By: Honig, Jurgen M. Amsterdam ; London : Elsevier/Academic Press, 2007 xv, 452 p. : ill. ; 25 cm Language: English, Database: Caltech Library Catalog

Subjects: Thermodynamics

Location	Call No.	Status
----------	----------	--------

Refine Results

Current Search

Limit To

Full Text Only

Scholarly (Peer Reviewed) Journals

Caltech Has It

Print Books

1808 Publication Date 2018

Show More

Limit by Format

All Results

Academic Journals (601,696)

Books (74,662)

Magazines (64,920)

Reviews (39,816)

eBooks (29,531)

Show More

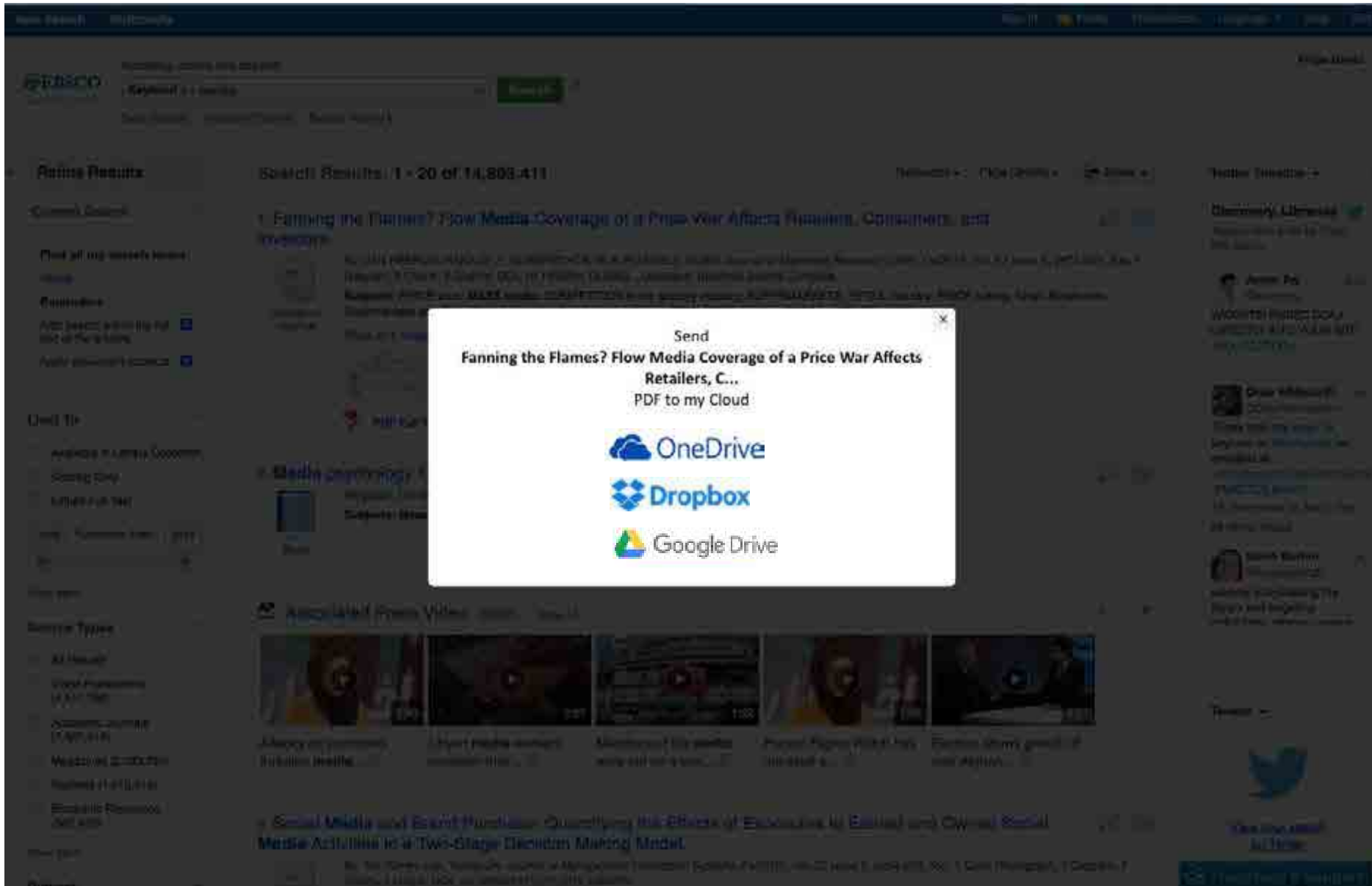
Limit by Subject

Limit by Publisher

Limit by Publication Title



# Users want to be able to save to Cloud Drive.



# Impact Factor Apps

## Scientific Journal Rankings - Impacto

Country Search: **PLoS One**  
 Country: United States  
 Subject Area: Biochemistry, Genetics and Molecular Biology | Medicine | Agricultural and Biological Sciences  
 Subject Category:

Quartile (Q1 means highest values and Q4 lowest values)

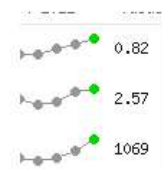
Category	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Medicine (miscellaneous)	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1
Biochemistry, Genetics and Molecular Biology (miscellaneous)	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1
Agricultural and Biological Sciences (miscellaneous)	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1	Q1

Indicator: 2006-2013 value

SJR: 1.72  
 Cites per doc: 2.68  
 Total cites: 173872

Publisher: Public Library of Science. Publication type: Journals. ISSN: 19326203  
 Coverage: 2006-2013  
 H Index: 127  
 Scope:

## Impacto SJR



show full scope

www.scimagojr.com  
 journal title  
 code below and our html page:  
[//www.scimagojr.com](http://www.scimagojr.com)

ite this website?

veloped by:



powered by

SJR indicator vs. Cites per Doc (2y)



## Categories

- All »
- Analytics »
- API Plugins »
- Content Spotlights »
- International »
- Library & Catalog »
- Medical »
- Search Add-ons »
- Search Boxes »
- Try It In Beta »

## Apps

Showing 1 - 24 of 178

Platform: Show All



### Academic Search Authority

Use Thesaurus or Subject Terms derived from article subject headings that are



### API interface for Yordam ILS

Integrate EBSCO Discovery Service into your library's Yordam ILS interface.



### Arab Database Results

The app enables searches of Arab databases.



### Ask a Librarian

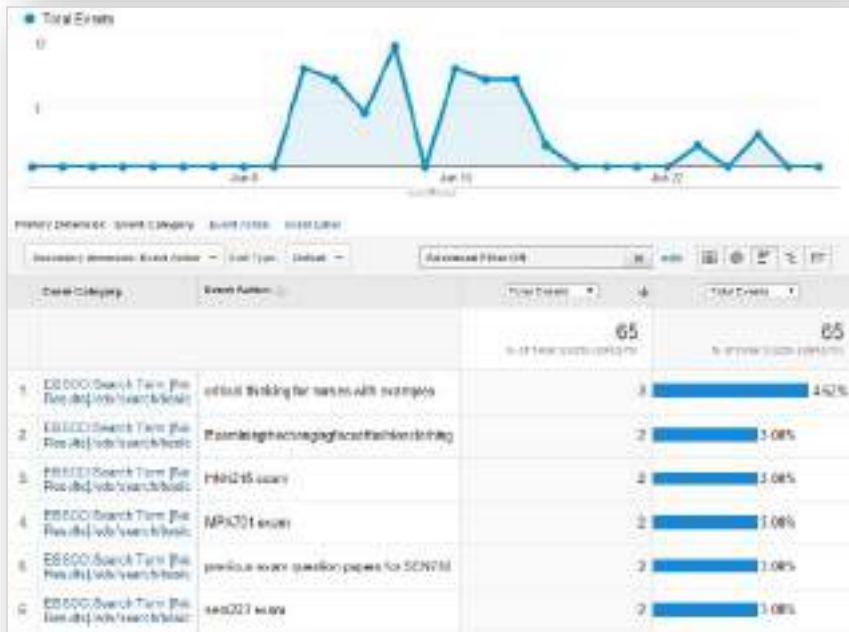
Allow chatting directly with a librarian through instant message with Ask a Librarian.

# 即時的使用者/用戶分析

Home | Accessing GA Reports | Get GA Tracking ID | Extend Event Tracking

**EBSCO** | Google Analytics

This App enables standard Google Analytics tracking and also provides event tracking for selected tra...  
 Start creating a new Google Tracking ID and enter it in the tracking ID field. Then select the events to...  
 pass it into bottom branding in EBSCO Admin. Select all or required screens to resume tracking.



Industry standard in digital analytics, most widely used on the Internet, freemium service

**“Software is eating the world.”**

–Marc Andreessen, VC



2011, Aug. WSJ

PARTNER CONTENT

SANGEET PAUL CHOUDARY, GEOFFREY PARKER AND MARSHALL VAN ALSTYNE

# OUTLOOK 2014:

## Platforms are eating the world



*Image: manoftaste.de/Flickr*



# Will Platform Businesses Eat Library Systems?

## Amigos Online Conference

Reimagining the ILS. 15/09/2016

Ken Chad

Ken Chad Consulting Ltd

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Tel: +44 (0)7788 727 845

[www.kenchadconsulting.com](http://www.kenchadconsulting.com)



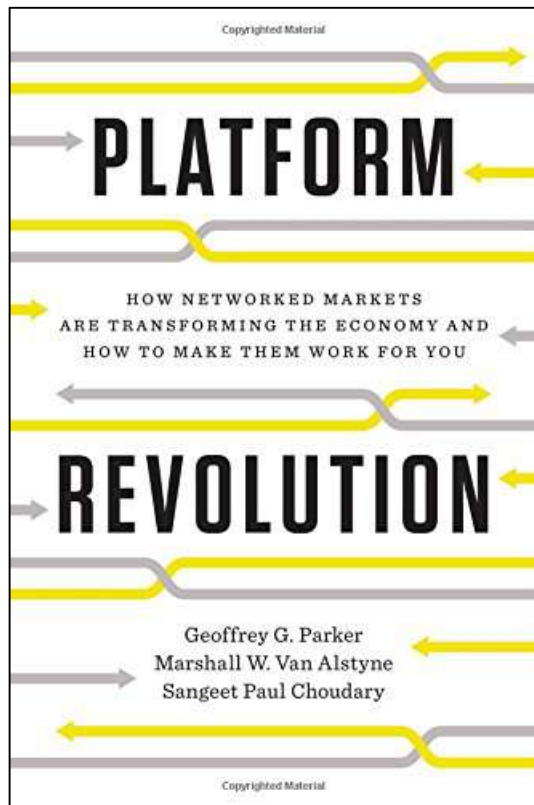
**Kenchad**consulting helping create more effective libraries.....





# 平台與系統





“a vibrant and healthy platform is dependent on the **value created by partners who are outside the platform itself**. If a platform is too closed , then partners cannot or will not contribute”

一個活躍/健全的平臺其所仰賴的價值，是取決于外部夥伴給予及建立。如果一個平臺太封閉,夥伴們無法有所貢獻。

# 世界已經在演化 (The world has evolved)



Amazon Echo是一款結合智慧人工助理Alexa的音響，具有高效的收音工程，可以讓用戶輕易以自然語音操作，連接到 Amazon 的各大平臺與合作夥伴。

**圖書館服務平台(LSP)的承諾尚未達成/做到.**



# 模組化的應用程式

建立在開放、可擴充的平台上



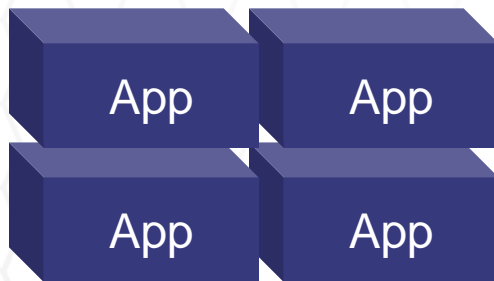
**Like a SmartPhone**

App marketplace  
Customized solutions by library  
Microservices architecture

# Modular Apps

built on an open, extensible platform

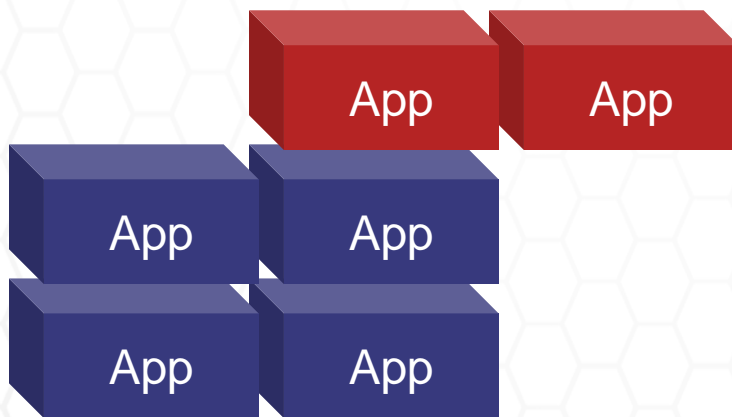
# 基礎應用(BASE APPLICATIONS)



- Acquisitions 採購
- Cataloging 編目
- Circulation 流通
- Data Conversion Tools 資料轉移/轉檔工具
- Knowledgebase 知識庫
- OPAC Functionality
- Resource Sharing 資源共享
- Serials Check-In
- Union Catalog 聯合目錄

# 擴充(EXTENSIBLE)

Extend into new areas



- Content Management Systems
- Data Mining
- Grant Management
- Institutional Repositories
- Learning Management Systems
- Linked Data Triplestore
- Predictive Analytics
- Research Data

平台選擇  
**PLATFORM**  
of choice



- APIs throughout
- Completely open
- Anyone can build apps



圖書館本地管理

**HOSTING**

by libraries



Any library may load  
and operate FOLIO code locally

**Completely free  
for the library,**

except for staff and  
hosting / server expenses

# Consumerization (消費化)

is the specific impact that **consumer-originated technologies can have on enterprises**. It reflects how enterprises will be affected by, and can take advantage of, new technologies and models that originate and develop in the consumer space, rather than in the enterprise IT sector. Consumerization is not a strategy or something to be “adopted.”

**Consumerization can be embraced and it must be dealt with, but it cannot be stopped.**

天下雜誌

PLATFORM  
REVOLUTION

# 平台 經濟模式

從啟動、獲利到成長的全方位攻略

1. 請幫EBSCO Taiwan按讚
2. 請幫「大家熟悉的Jeremy」文章按讚，並留下對於EBSCO今天分享主題的感想(字數不限)
3. 小編會抽出10位幸運得獎者



Thanks!

Any questions?