



行動與雲端科技在圖書館的應用

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圖書資訊學研究所 / 圖書館

內容大綱

- ▶ 行動通訊服務簡單說
- ▶ 圖書館行動通訊服務
- ▶ 雲端科技簡單說
- ▶ 雲端與圖書館
- ▶ 結語



行動通訊服務簡單說

Mobile Web

- ▶ The World Wide Web which is access through a mobile device ranging from a cellular phone to an iPod Touch
- ▶ 透過行動載具來取用WWW的資源與服務
- ▶ 姑且翻譯為“行動網路”或“行動通訊服務”

一份針對MWC 2010的觀察

- ▶ Android phones
- ▶ LTE (Long Term Evolution) deployments
- ▶ Debate over flat rates
- ▶ Return of Windows Mobile
- ▶ Mobile device management
- ▶ Mobile cloud computing
- ▶ Green strategy of the industry
- ▶ Google embracing mobile
- ▶ apps and app stores
- ▶ M-Learning and M-Health
- ▶ Femtocells (yet again!)
- ▶ Mobile advertising
- ▶ Location-based services
- ▶ SIM-based solutions
- ▶ Mobile payments

行動載具功能特性

(Kroski 2008)

- ▶ 藍芽
- ▶ 相機
- ▶ 桌面同步
- ▶ 可下載的內容
- ▶ 電子郵件
- ▶ 遊戲
- ▶ GPS
- ▶ 即時通訊
- ▶ 線上TV
- ▶ 記憶卡插槽
- ▶ 行動辦公室相關應用

- ▶ 音樂
- ▶ 手機充當Modem
- ▶ MMS多媒體訊息傳遞
- ▶ 工作小幫手(計算機、行事曆...)
- ▶ 四頻
- ▶ QWERTY鍵盤
- ▶ SMS文字訊息
- ▶ 免持聽筒對談
- ▶ 影音
- ▶ 聲控播號
- ▶ 上網

GPS and Game



2009年第三季我國行動上網觀測

- ▶ 2009年第3季台灣的行動通信用戶數為2,661萬戶，手機門號人口普及率為 115.2%
- ▶ 2G手機門號數為1,037萬戶，3G用戶為1,484萬戶，較上一季成長 9.1%，占全台手機門號數比例從52.0%上升到55.8%
- ▶ 平均每個門號每月使用簡訊數為16.6則。開通行動上網功能之總用戶數本季約為1,760萬戶，占行動通信用戶比例提升至66.1%

行動通訊服務的種類

(Kroski 2008)

- ▶ Email
- ▶ Text Messaging
- ▶ Ring Tones & Wall Paper
- ▶ Music & Radio
- ▶ Software & Games
- ▶ Instant Messaging
- ▶ Social Networking

- ▶ Social Mapping Networks
- ▶ Media Sharing Social Networks
- ▶ Search
- ▶ Multimedia Search
- ▶ Local Search
- ▶ Shopping Search

行動通訊服務的種類(續)

- ▶ Visual/Camera Phone Search
- ▶ Voice Search
- ▶ Mapping
- ▶ Widgets
- ▶ E-Books
- ▶ Audio Books
- ▶ Mobile TV/Video
- ▶ Travel Information

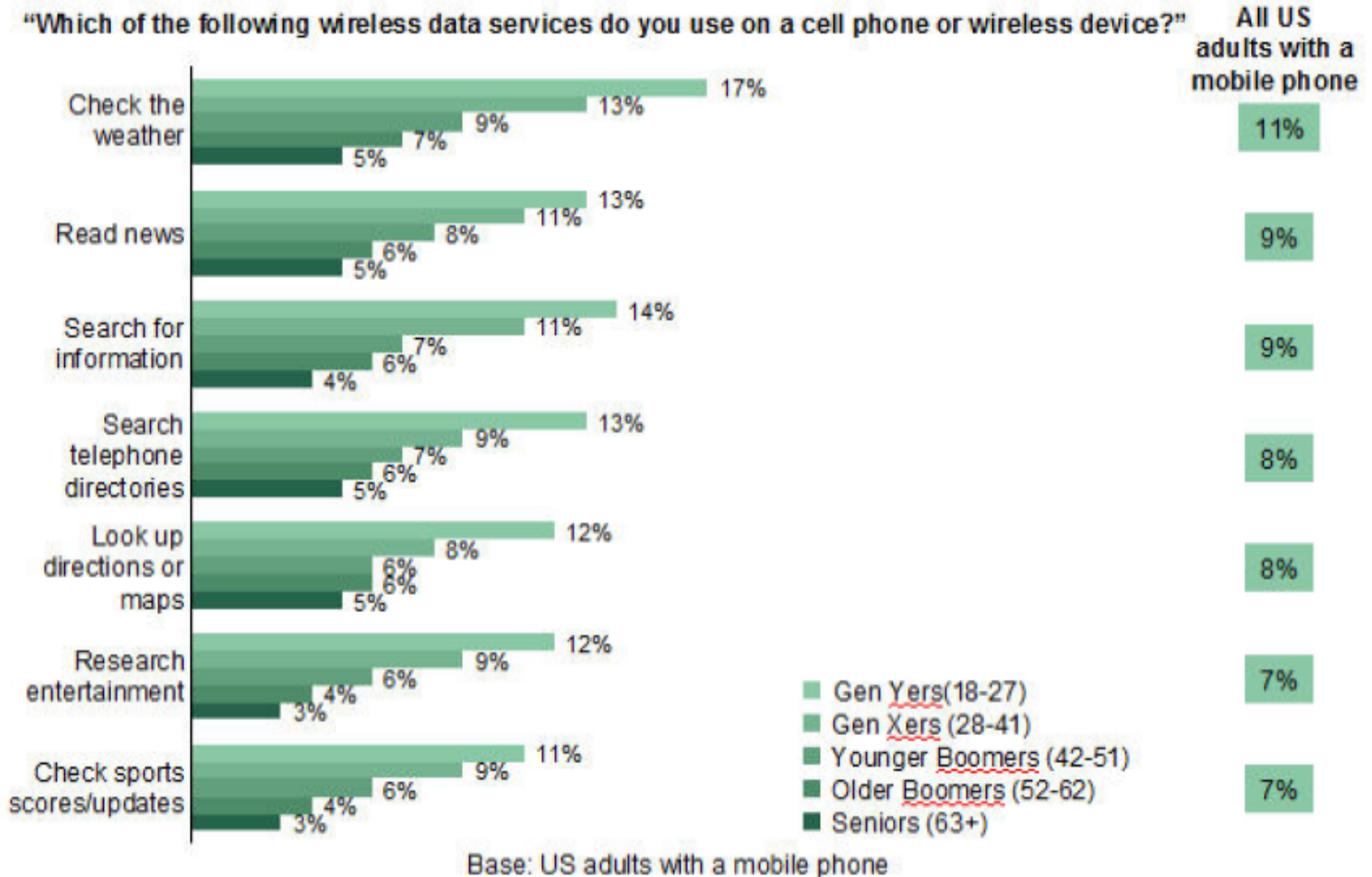
- ▶ Browsers
- ▶ News
- ▶ Blogging
- ▶ RSS Feeds
- ▶ Food Ordering
- ▶ Microblogging
- ▶ Mobile Web Quickpicks
- ▶ iPhone Only Applications

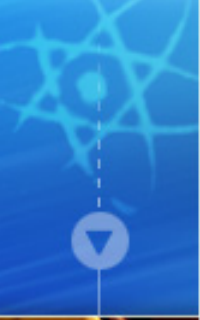
Social Network and Microblogging



人們如何利用行動通訊服務

(Kroski 2008)





圖書館行動通訊服務

圖書館行動通訊服務的種類

- ▶ 圖書館的行動網站/行動館藏目錄
- ▶ 行動化數位館藏
 - ✿ 行動裝置上的影音隨選系統
 - ✿ 行動化電子書、有聲書
 - ✿ 行動化資料庫、電子期刊
- ▶ 圖書館利用指導
- ▶ 利用簡訊發送通知
- ▶ 利用簡訊方式的參考服務
- ▶ QR Code






圖書館行動網站與行動館藏目錄

▶ Mobile Library Websites and MOPACs (Mobile OPACs)

▶ Examples

- ✿ [Ball State University Libraries](#)
- ✿ [University of Richmond Libraries](#)
- ✿ [OPLINMobile](#)
- ✿ [University of Virginia Libraries](#)

BALL STATE University Libraries

-  1 Reference Links
-  2 CardCat Mobile
-  3 Mobile Journals
-  4 Videos
-  5 Collections
-  6 Services
-  7 Information

About • Mail Us • Site Search



UR LibMobile

- [Search Library Catalog](#)
- [Library PC Availability](#)
- [Library Laptop Availability](#)
- [UR RefMobile](#)
- [Library Hours](#)
- [Contact Information](#)
- [Comments](#)

UNIVERSITY OF VIRGINIA

Library

Library Info: (434) 924-3021 (call now)

1. Library Hours
2. Library Home Page (text-only)

Library News & Events

- Brown Library hosts Chesapeake Bay Sustainability Game
- University Librarian's Statement on Equal Treatment and Non-discrimination
- Clemons Paper Clinics
- U.Va. Library Acquires Unknown Slave Narrative
- Declaring Independence: Creating and Recreating America's Document Exhibit
- Flowerdew Hundred

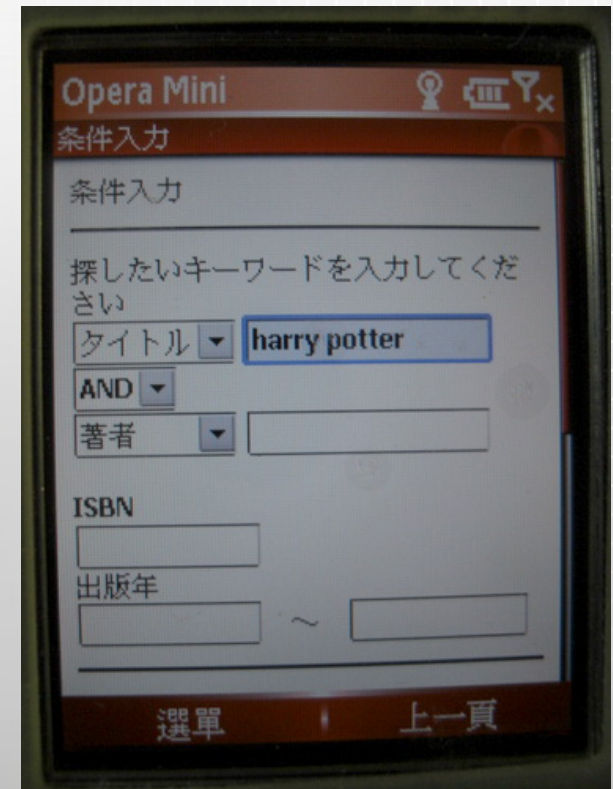
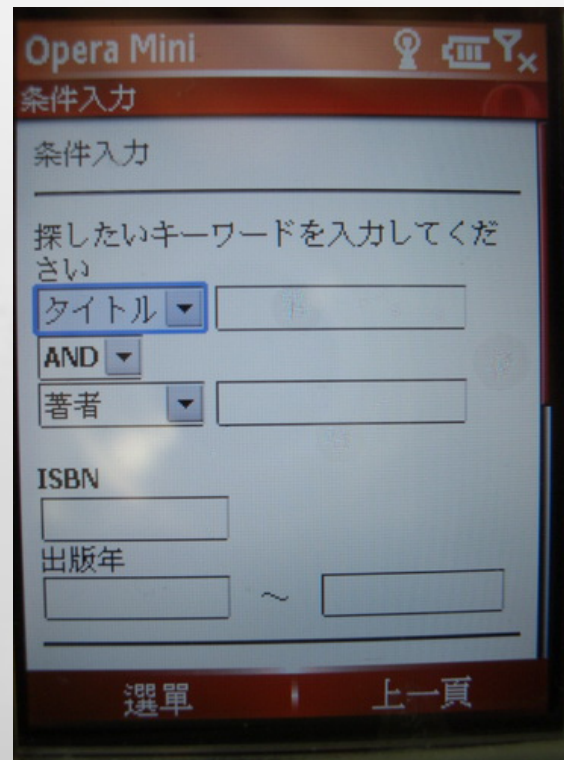
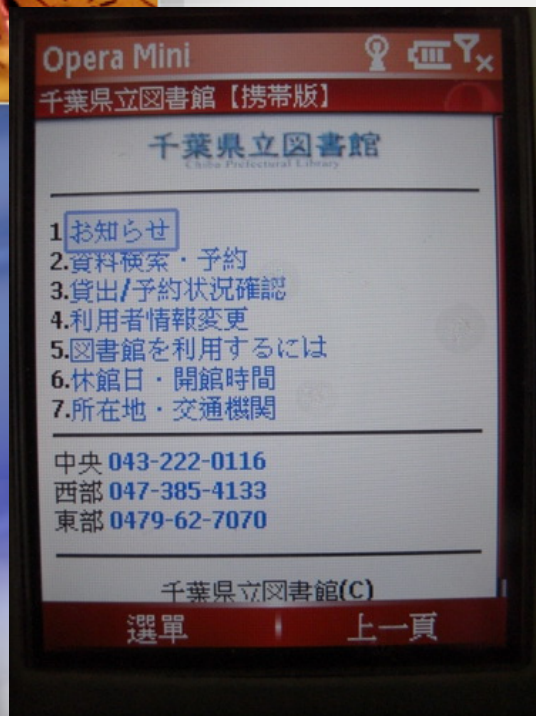
3. Exhibitions
4. Directions to Alderman Library
0. Home Page

General Information: (434) 924-0311
© 2010 / webmaster@virginia.edu
Full site | Text-only

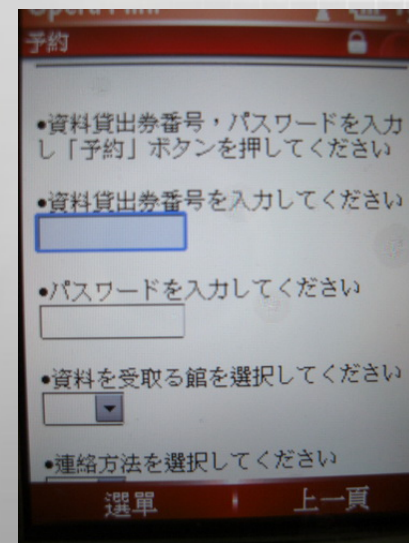
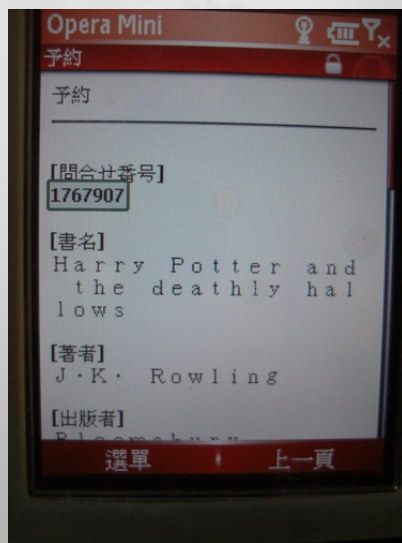
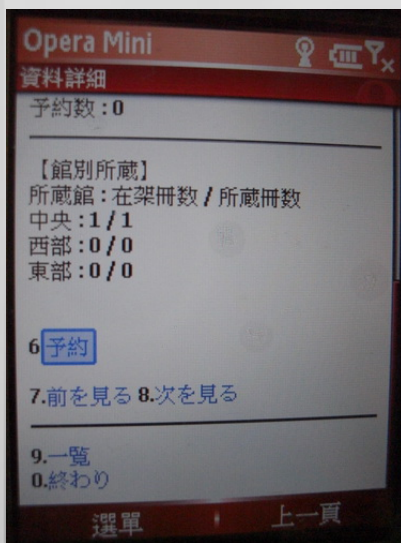
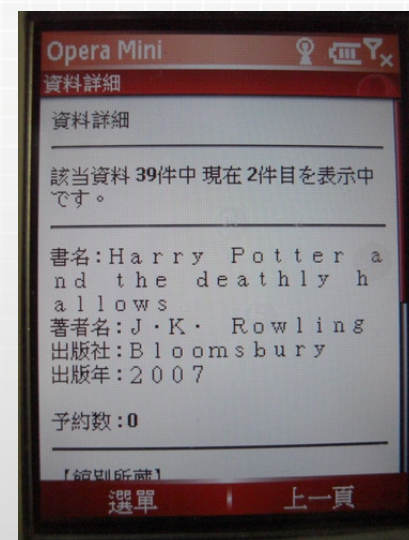
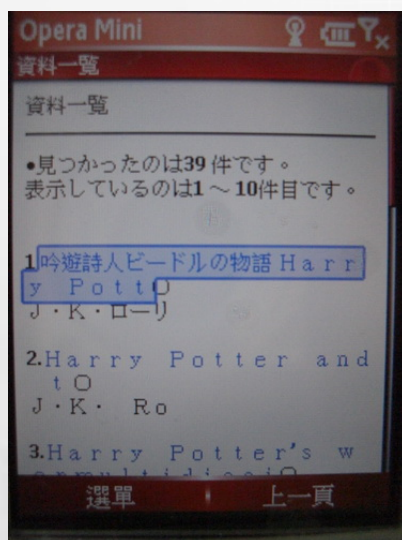
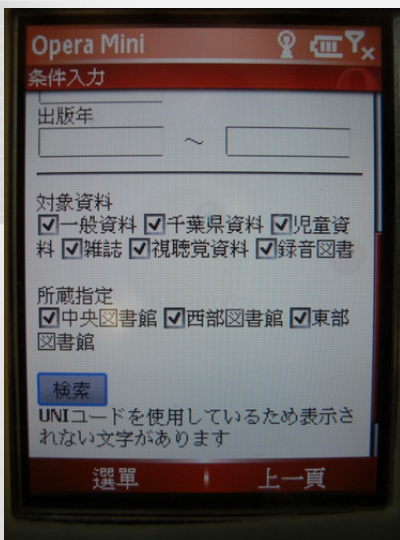
設計行動網站的小技巧 (Kroski 2008)

- ▶ 保持簡單
- ▶ 在桌上型電腦進行客製化
- ▶ 廣泛測試
- ▶ 加入檢索功能
- ▶ 優使性
- ▶ 清除不需要的影像
- ▶ 提供適合行動通訊使用的內容

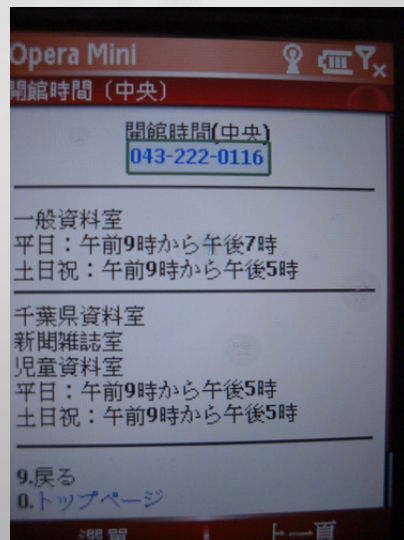
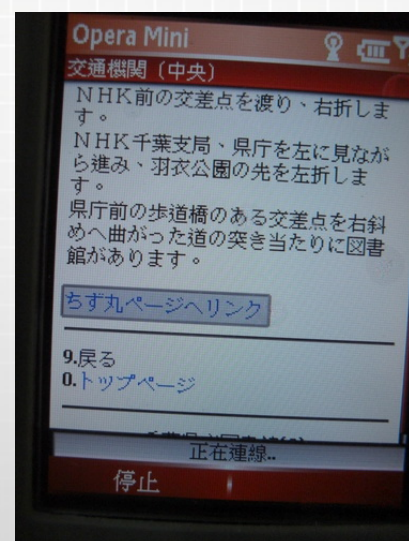
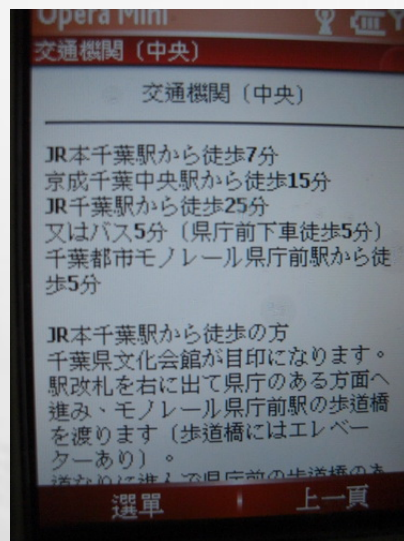
千葉県立図書館【携帯版】網頁：首頁及館藏查詢畫面



千葉県立図書館【携帯版】 網頁：館藏查詢、檢索結果與預約畫面



千葉県立図書館【携帯版】網頁：圖書館所在位置訊息畫面



行動化數位館藏

▶ Mobile collections

▶ Examples

- ✿ 由圖書館提供事先已安裝有聲書的iPod Nano，提供讀者借出
- ✿ Overdrive已經與超過7500家圖書館合作提供有聲書、電子書、影音、音樂

eNYPL

eNYPL Home > **My eList**

eNYPL | eSearches | My eAccount | My eList | Help | Login |

in All Fields ▾ in All Formats ▾



Please note: Titles added to your eList will remain there for 30 minutes before they are returned to the library's collection. Please be sure to complete your checkout within this timeframe to avoid losing access to these title(s).



True Notebooks

Lending period: 21 days

eNYPL WMA Audiobook

Plays on:



Remove

What Got You Here Won't Get You There

How Successful People Become Even More Successful

Lending period: 21 days

eNYPL WMA Audiobook

Plays on:



Remove

Software Downloads

OverDrive® Media Console™
Adobe® Digital Editions
Mobipocket® Reader

Browse Audiobooks

Browse eBooks

Browse Music

Browse Video

Browse Children's

Browse Young Adult

Browse by Subject

Browse eNYPL Collection

Continue Browsing

Proceed to Checkout

臺北市立圖書館 數位影音平台



臺北市立圖書館
Taipei Public Library

Taipei Public Library

Information
Information

Knowledge
Knowledge

0110001100
0110001100

圖書館首頁

數位平臺首頁 | 置書車 | 我的帳戶 | 登入 | 輔助中心 | English

Download by
OverDrive

快速查詢

所有欄位



進階查詢

下載數位媒體
導覽



開始

快速指引

線上求助-常見問題解決方法

借閱幫手

支援設備(相容設備)

有聲書

所有有聲書

文學作品

兒童讀物或青少年小說

更多

電子書

您個人電腦或帶著走的影片!，借出影片，並且下載標準版到個人pc或行動版到行動裝置上觀賞使用



1

2

3

4

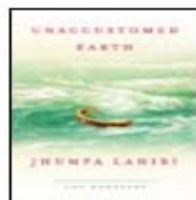
5

6

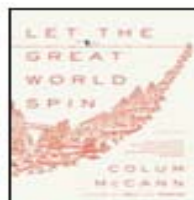
||

新到電子書

[全部清單](#)



[Unaccustomed Earth](#)
Jhumpa Lahiri



[Let the Great World Spin](#)
Colum McCann



[Halloween Tricks and Treats](#)
Better Homes & Gardens



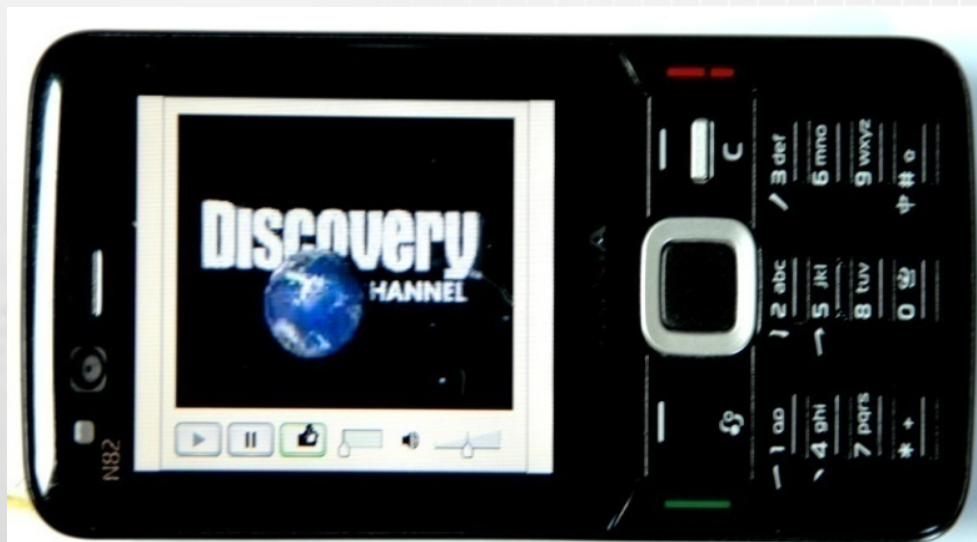
[Going Bovine](#)
Libba Bray

新到有聲書

[全部清單](#)



亞東技術學院圖書館MVOD系統



行動化圖書館利用指導 / 語音導覽

▶ Mobile library instruction / Mobile Audio Tours

▶ Examples

- ✿ 可供安裝至iPod和其他行動載具之MP3檔案
- ✿ Podcasts instructions
- ✿ iTunes University
- ✿ Arizona State University's Library Channel on iTunes U



iTunes University

All iTunes U for "Arizona State University"



Ask a Biologist
Arizona State University



Essentials of Advertising
Arizona State University



Geography of Europe
Arizona State University



The Birth of the Modern
Arizona State University



Cultural & Social Anthropology
Arizona State University



Jazz + Culture
Arizona State University



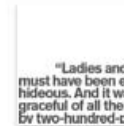
Religion and Conflict
Arizona State University



Linguistics Lectures
University of Arizona



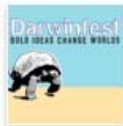
Strategies for Success
Arizona State University



The English Channel
Arizona State University



Science Studio
Arizona State University



Darwin Distinguishes
Arizona State University



Brief Calculus
Arizona State University



The Library Channel
Arizona State University



The Living World: BIO 10
Arizona State University



Bar Prep
Arizona State University



Ethnic Relations in the
Arizona State University



Communication, Terrorism
Arizona State University



Construction + Culture
Arizona State University



Exercise Science + Wellness
Arizona State University



President Barack Obama
Arizona State University



The BEYOND Center
Arizona State University



Conference on Climate
Arizona State University



Knowledge@WPCarey
Arizona State University



iPopping Podcasts: On Science
Arizona State University



Southwest Home History
Arizona State University



Health-E
Arizona State University



Student Success Center
Arizona State University



Sustainability: The World
Arizona State University



Standards-based Teaching
Arizona State University

Washington State University Libraries

Give To The Libraries
Hours & Locations

Ask a Question
Research
About the Libraries
Services
News & Events

BOOKMARK

加入書籤 / 分享

- Email
- Print
- Google
- Ask
- Digg
- Friendster
- Favorites
- Facebook
- Baidu
- Twitter
- MySpace
- 查看更多

AddThis

Podcasts and Videocasts from the WSU Libraries

RSS XML FEED

"How To ..." – Help with Library Resources and Tools

Choosing your search words: This videocast takes you through the process of choosing search terms, the words that you will use to search the catalog, indexes and google. Recorded by librarian Betty Galbraith in August 2009. 8 min in length.



Writing a Research Paper: This covers the research process for writing a paper. Recorded by librarian Betty Galbraith in August 2009. 9:41 in length.



LISTEN



RIGHT CLICK TO
SAVE AS MP3

Working Library Indexes from Off-Campus: This tutorial will walk you through working a library index from off-campus, so that you can go to the index in such a way that your computer company that supplies it knows that WSU has paid for your access. Bring up your web browser before starting the podcast. Recorded by librarian Betty Galbraith in June 2009. 3:46



LISTEN



RIGHT CLICK TO
SAVE AS MP3

Choosing Search Terms: This offers help with selecting search terms for more effective searching of library catalogs, indexes, and the internet. Recorded by librarian Betty Galbraith in April 2007. 2:30 in length.



LISTEN



RIGHT CLICK TO
SAVE AS MP3

Narrowing Searches Using the AND Command: This explains how to use the search command AND to combine several research elements into one search, for more effective searching.



LISTEN



RIGHT CLICK TO
SAVE AS MP3

行動化資料庫

▶ Mobile databases

▶ Examples

- ✿ Endnote (Pocket PC with X1.0.1 release)
- ✿ Factiva (news DB), Westlaw, PubMed

National Library of Medicine

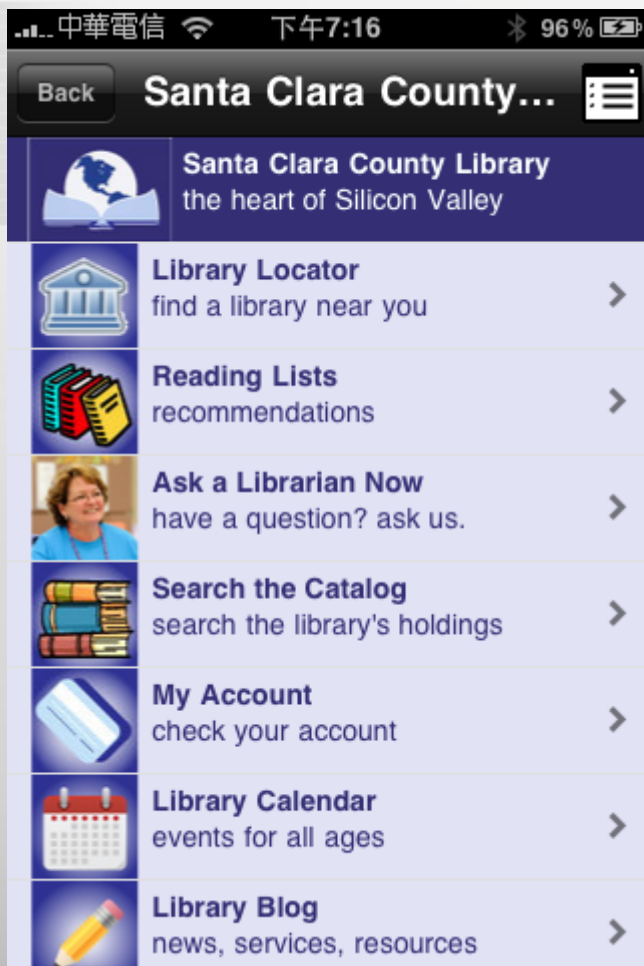
The world's largest medical library

PubMed for Handhelds

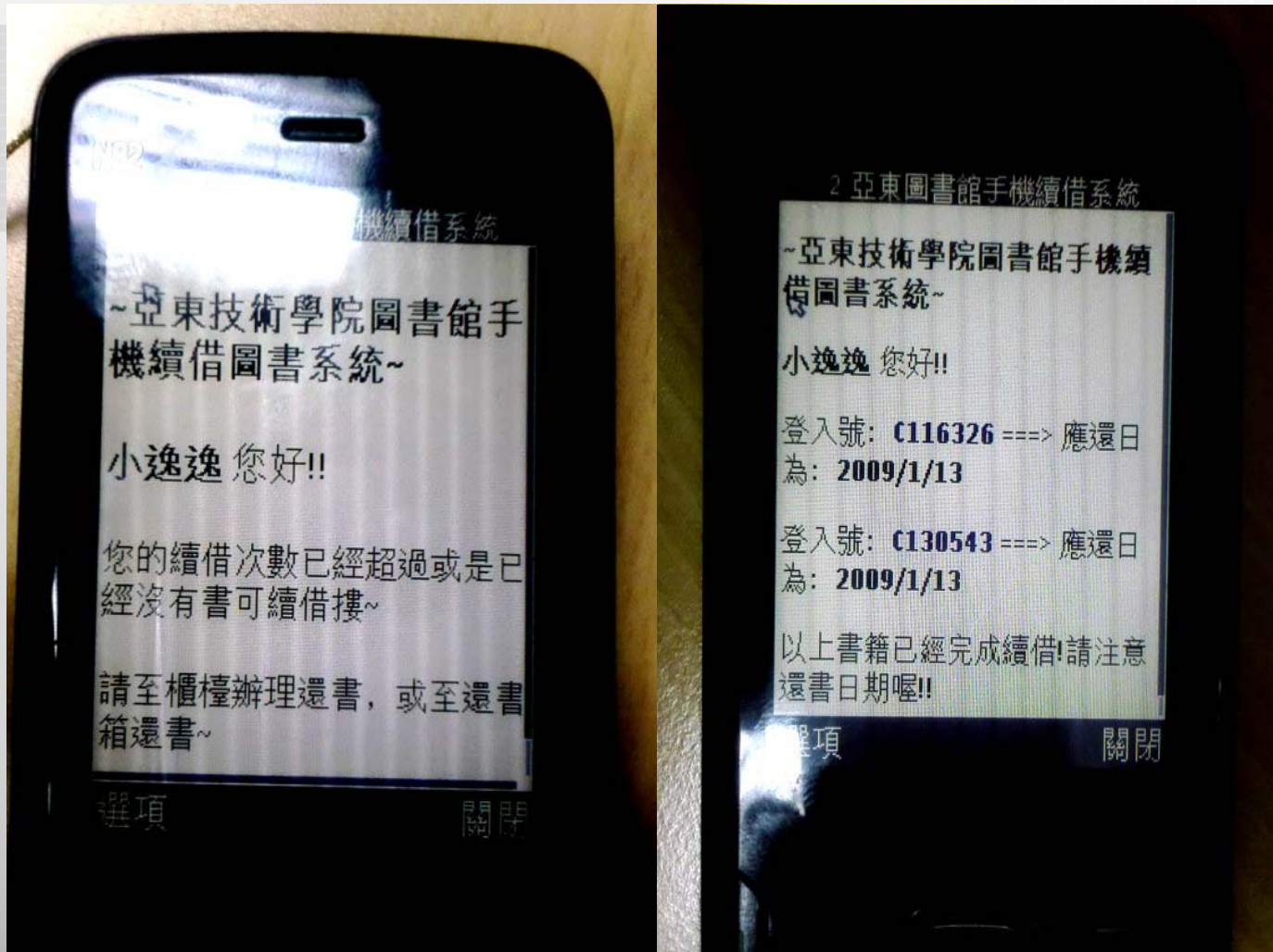
- [PICO](#) search
Patient, Intervention, Comparison, Outcome
- [askMEDLINE](#)
free-text, natural language search
- MEDLINE/PubMed
Search [MEDLINE/PubMed](#)
Read [Journal Abstracts](#)
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Search case reports for disease associations

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SCCL Mobile and SPL Mobile



亞東技術學院圖書館簡訊通知服務



亞東技術學院圖書館M化簡訊服務平台

圖書館M化簡訊服務平台 ~

<< 小逸逸 >>您好歡迎您!!

服務項目說明	費用	簡通知發送時段	是否啓用服務
◆ 即時圖書館訊息手機簡訊通知	NT : 0 元	08 : 00 ~ 20 : 00 (圖書館開館時間)	<input checked="" type="checkbox"/>
◆ 圖書逾期手機簡訊通知	NT : 0 元	12 : 00 ~ 13 : 00 (中午時段)	<input checked="" type="checkbox"/>
◆ 推薦新書到館手機簡訊通知	NT : 0 元	12 : 00 ~ 13 : 00 (中午時段)	<input checked="" type="checkbox"/>
◆ YOD新片上架手機簡訊通知	NT : 0 元	12 : 00 ~ 13 : 00 (中午時段)	<input checked="" type="checkbox"/>
◆ 圖書逾期 E-MAIL 通知	NT : 0 元	24 : 00 ~ 01 : 00 (午夜時段)	<input checked="" type="checkbox"/>
◆ 貼心行動簡訊小秘書	-	使用者可自定時段	(建構中)

以上服務將傳送於您的手機號碼 (中間不可有連字號或空白) :

0916971162

E-MAIL 服務將傳送至您的 E-MAIL 信箱 :

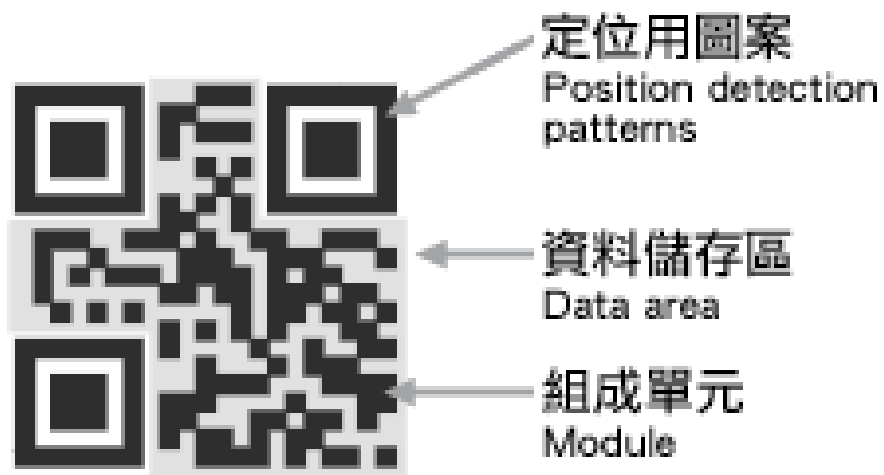
fa142@mail.oit.edu.tw

確定儲存

何謂QR Code

- ▶ QR Code，全名為Quick Response Code，是二維條碼的一種
- ▶ 二維條碼在結構上可分類為堆疊式(Stacked)和矩陣式(Matrix)兩種型態
- ▶ QR Code是一種矩陣式黑白相間的點狀或條狀圖形，也就是矩陣式(Matrix)結構的二維條碼。除了能表示文字、圖形、聲音等資訊(陳熙玫等，民97)，還具有高資料量負載能力、高安全性、高容錯性、可360度讀取、還可傳真複印等特性，其內含文字和圖像資訊，透過行動裝置掃描後，經解讀軟體辨識後，即可讀取出內含的資訊
- ▶ 那麼使用者要如何讀取QR Code呢？
 - ✿ 要有30萬畫素照相功
 - ✿ 必須安裝讀取條碼軟體

QR Code 樣式



QR Code 的50種Kuso應用

千葉県立図書館携帯電話サイト

- ▶ 千葉県立図書館の行動電話版的図書館網頁服務有：最新消息、館藏查詢/預約、借閱狀況查詢、讀者資料變更、圖書館相關訊息(借閱冊數、預約等)、開館/休館時間、所在地交通訊息、聯絡電話

携帯電話サイト



携帯電話機の
QRコードリーダーで
アクセスできます。

携帯電話サイトURL

<http://www.library.pref.chiba.lg.jp/m/>

韓國首爾大學圖書館採用手機讀碼

- ▶ 另外，首爾大學圖書館採用手機讀碼服務，學生可利用手機先下載個人專屬二維條碼，再利用個人專屬的二維條碼做為個人化網頁簽入認證及圖書館通行認證之用。只要開啓手機中的個人條碼，在行動通行讀取機螢幕上輕輕一掃，個人資料就會直接輸入各種申請表，不需要重新填寫，刷個人條碼可以直接借書、繳付罰款、選擇座位



University of Bath 圖書館書目記錄與 QR Code

result 2 of 37 for search "Harry Potter" in

The children who lived : using Harry Potter and other fictional characters to help grieving children and adolescents

Markell, Kathryn A.

Publisher: Routledge,
Publication date: 2008.
ISBN: 9780415957656

1 copy on the shelves.

Copy details

Shelf mark	No. of copies
362.78:393.7 MAR	1

Catalogue record

ISBN: 9780415957656 (hbk)

ISBN: 0415957656 (pbk)

Personal Author: Markell, Kathryn A.

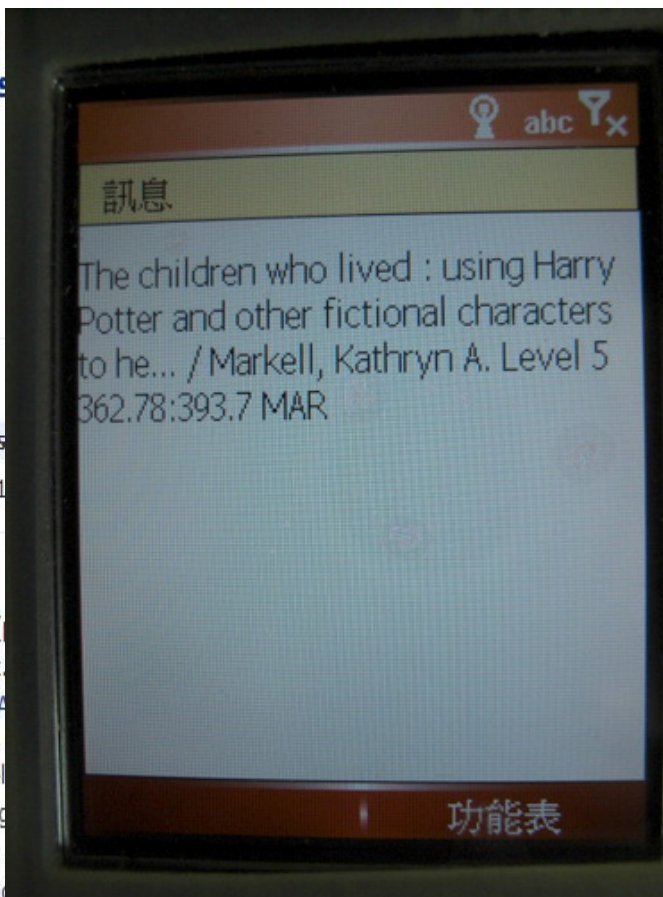
Title: The children who lived : using Harry Potter and other fictional characters to help grieving children and adolescents / Kathryn A. Markell

Publication info: London : Routledge, 2008.

Physical descrip: xxvi, 182 p. : ill ; 24 cm.

General Note: Book accompanied by CD-ROM.

Bibliography: Includes bibliographical references.



ters to help grieving



Save

- Place Hold
- Permalink for this result
- Find more by this author
- Find more on these topics
- Order online from BLACKWELL



What's this?

儲存該筆書目資料的題名、作者、索書號及架號所在位置

虎尾科技大學圖書館的播客學習系統

頻道總覽 (52)

教學資源 (8)

虎尾科大_圖書館資源 (4)

卓越計畫_數位學習展示 (4)

HD高畫質專區 (2)

3ds Max常見問題檢索 (11)

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推薦次數：0



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電子書

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推薦次數：0



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訂閱次數：6

推薦次數：0



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台灣史知識庫

節目：11 集

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udn數位閱讀網互動電子雜誌

節目：4 集

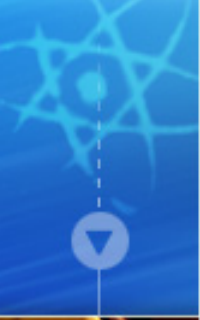
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節目：5 集

訂閱次數：6



雲端運算簡單說

何謂雲端運算

- ▶ 以下簡短影片可以清楚說明雲端運算的非凡之處及強大！
 - ✿ [Cloud Computing Show](#) – scalability, save money, instant





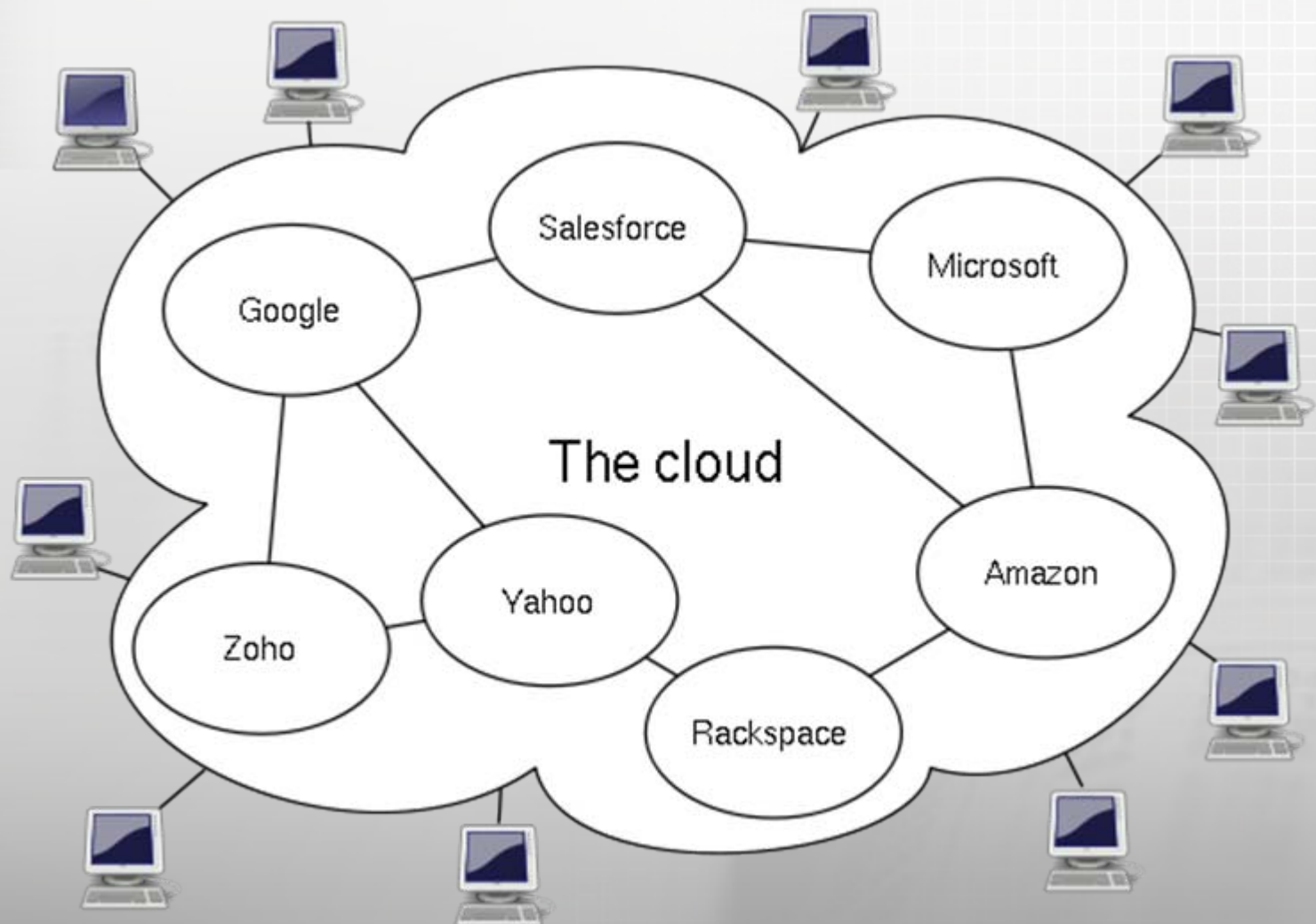
雲端運算(Cloud Computing)

- ▶ It uses Web services for our computing needs which could include using software applications, storing data, accessing computing power, or using a platform to build applications. (Kroski, 2009)
- ▶ It is Internet-based computing, whereby shared resources, software and information are provided to computers and other devices on demand, like a public utility. (Wikipedia)

雲端運算(Cloud Computing)

- ▶ It is a style of computing where **scalable** and **elastic** IT-enabled capabilities are delivered as a service to external customers using Internet technologies (Gartner, 2009)

Cloud Computing Logical Diagram



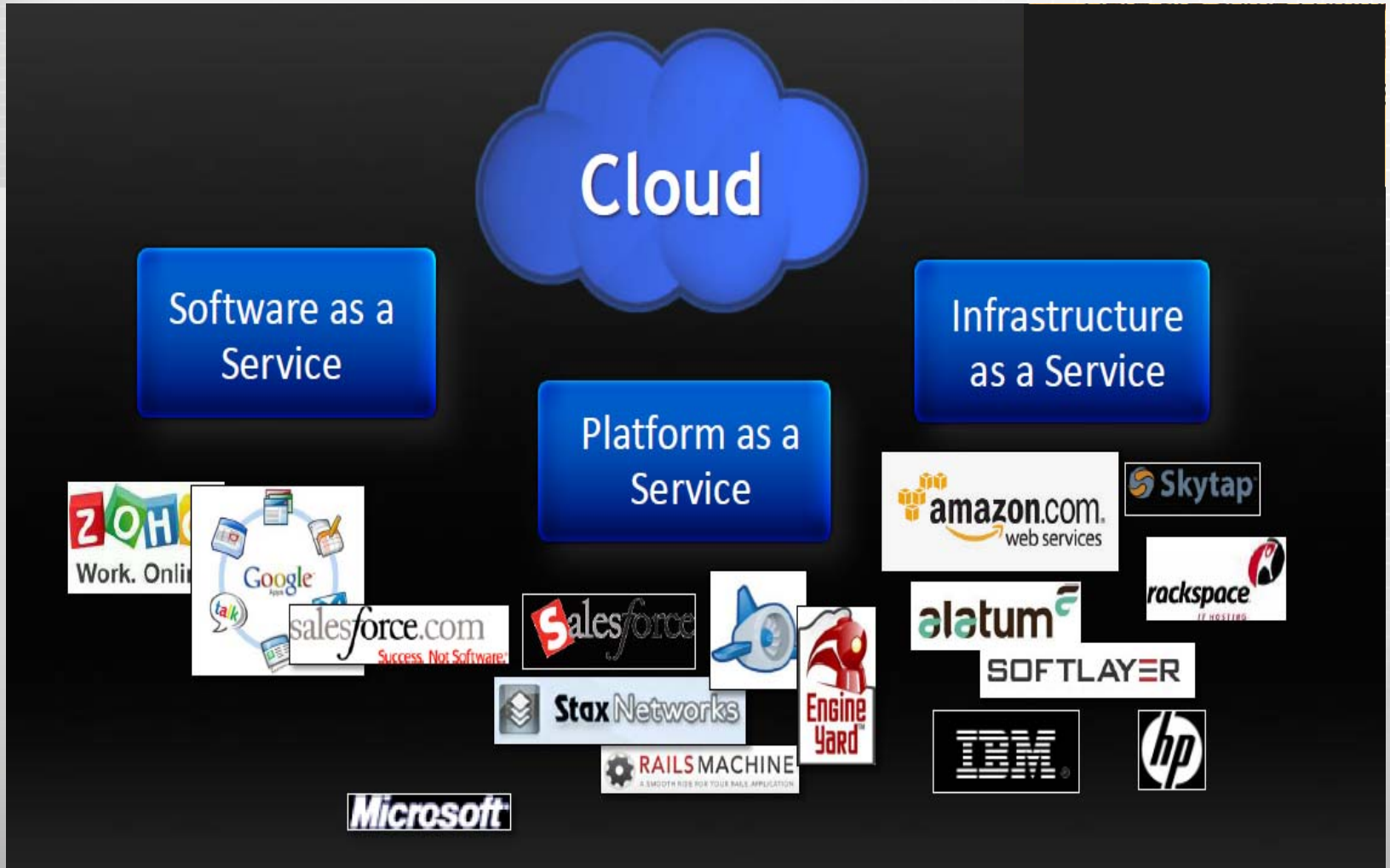
爲何叫“雲端”

- ▶ The term *cloud* is used as a metaphor for the Internet, based on the cloud drawing used in the past to represent the telephone network, and later to depict the Internet in computer network diagrams as an abstraction of the underlying infrastructure it represents. (Wikipedia)

雲端運算的特性

- ▶ 靈活(Agility)
- ▶ 價格低廉(Cost)
- ▶ 設備與地點無關(Device and location independent)
- ▶ 多組織租用(Multi-tenancy)
 - ✿ 基礎建設集中管理(Centralization)
 - ✿ 尖峰時段容量增加(Peak-load capacity)
 - ✿ 利用與效率(Utilization and efficiency)
- ▶ 可靠度(Reliability)
- ▶ 可擴展度(Scalability)
- ▶ 安全保護(Security)
- ▶ 維護(Maintenance)
- ▶ 用量度量(Metering)

Major Types of Cloud Services



Software as a Service

- ▶ Applications or software is delivered as a service to the customer who can access the program from any online device
 - ✿ Free SaaS: Hotmail, Google Apps, Skype, and many 2.0 applications
 - ✿ SaaS with charge: SalesForce, ILS
- ▶ Little customization or control available with these applications.
- ▶ Subscribers benefit from low initial costs, have access to support services, and needn't worry about hosting, installing, upgrading, or maintaining the software.

Google Family



http://gapps-setup.com/images/google_apps.jpg

- ◆ Google 應用服務可以縮減 IT 成本，並且提高目前員工的生產力
- ◆ Gmail、Google 文件、Google 協作平台以及其他更多功能
- ◆ 每位使用者每年 \$50 美元

- 我的工作區
- 文件
- 相關演講與報告
- 新增工作區
- 與我共用
- 文件
- 刪除的項目

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<input type="checkbox"/>	雲端運算及其在圖書館的應用	1分鐘前	claven@lib.nctu.edu.tw	2683
<input type="checkbox"/>	論文範本	星期六 上午 06:15	claven@lib.nctu.edu.tw	79
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Singers vs Wildcats	10/27 下午 7:00	Auburn Pie
Flames vs Hurricanes	11/07 下午 1:00	152nd St S
Vortex vs Wildcats	11/07 下午 4:00	Mercer Mid

依序按一下上方的 [新增] 與 [清單]，建立及共用您的清單
[取得更多資訊](#)

Platform as a Service

- ▶ A computing platform is provided which supplies tools and a development environment to help companies build, test, and deploy Web-based applications.
- ▶ Businesses don't need to invest in the infrastructure required for building Web and mobile applications.
- ▶ Example: Windows Azure, Google AppEngine, and (sales)Force.com
- ▶ Applications which are built using these providers' services are usually locked into that one platform



Google App Engine

- ▶ Lets you run your Web applications on Google's infrastructure.
- ▶ Applications are easy to build, easy to maintain, and easy to scale as traffic and data storage needs grow.
- ▶ No servers to maintain: upload applications and ready to serve
- ▶ Supports apps written in several programming languages.
 - ✿ JVM, Java servlets, JavaScript or Ruby
 - ✿ Python runtime
- ▶ Only pay for what you use. No set-up costs and no recurring fees

Windows Azure Platform

- Offers a flexible, familiar environment for developers to create cloud applications and services.
- With Windows Azure, you can shorten your time to market and adapt as demand for your service grows.
- Windows Azure offers a platform that is easily implemented alongside your current environment.
 - Windows Azure: operating system as an online service
 - Microsoft SQL Azure: fully relational cloud database solution
 - Windows Azure platform AppFabric: connects cloud services and on-premises applications
 - Microsoft Codename “Dallas”: information marketplace for data and web services

Infrastructure as a Service

- ▶ Also called Hardware as a Service
- ▶ Involves both storage services and computing power
- ▶ Amazon's Web Services
 - ✿ Elastic Compute Cloud (EC2): computing resources
 - ✿ Simple Storage Service (S3): data storage
- ▶ Most of these cloud services are available on a pay-per-usage basis, differing from the SaaS subscription model, enabling customers to scale up or down depending on their need at any given time and only pay for what they have used
 - ✿ Elastic web-based infrastructure for storage and compute

Amazon Cloud

Your Applications

Elastic MapReduce

Simple DB

RDS

EC2

S3

Virtual Private Cloud

SQS

Cloud Front

Amazon Physical Infrastructure

(Amazon, 2009)

Amazon Web Services

- ▶ **Elastic Compute Cloud (EC2)**: provides resizable compute capacity in the cloud
- ▶ **Simple Storage Service (S3)**: provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web
- ▶ **Virtual Private Cloud (VPC)**: provide a secure and seamless bridge between a company's existing IT infrastructure and the AWS cloud
- ▶ **Simple Queue Service (SQS)**: offers a reliable, highly scalable, hosted queue for storing messages as they travel between computers

Amazon Web Services (Cont.)

- **CloudFront**: integrates with other AWS to give developers and businesses an easy way to distribute content (static and streaming content) to end users with low latency, high data transfer speeds, and no commitments
- **SimpleDB**: provides the core database functions of data indexing and querying in the cloud
- **Relational Database Service (RDS)**: provides a relational database in the cloud
- **MapReduce**: enables businesses, researchers, data analysts, and developers to easily and cost-effectively process vast amounts of data

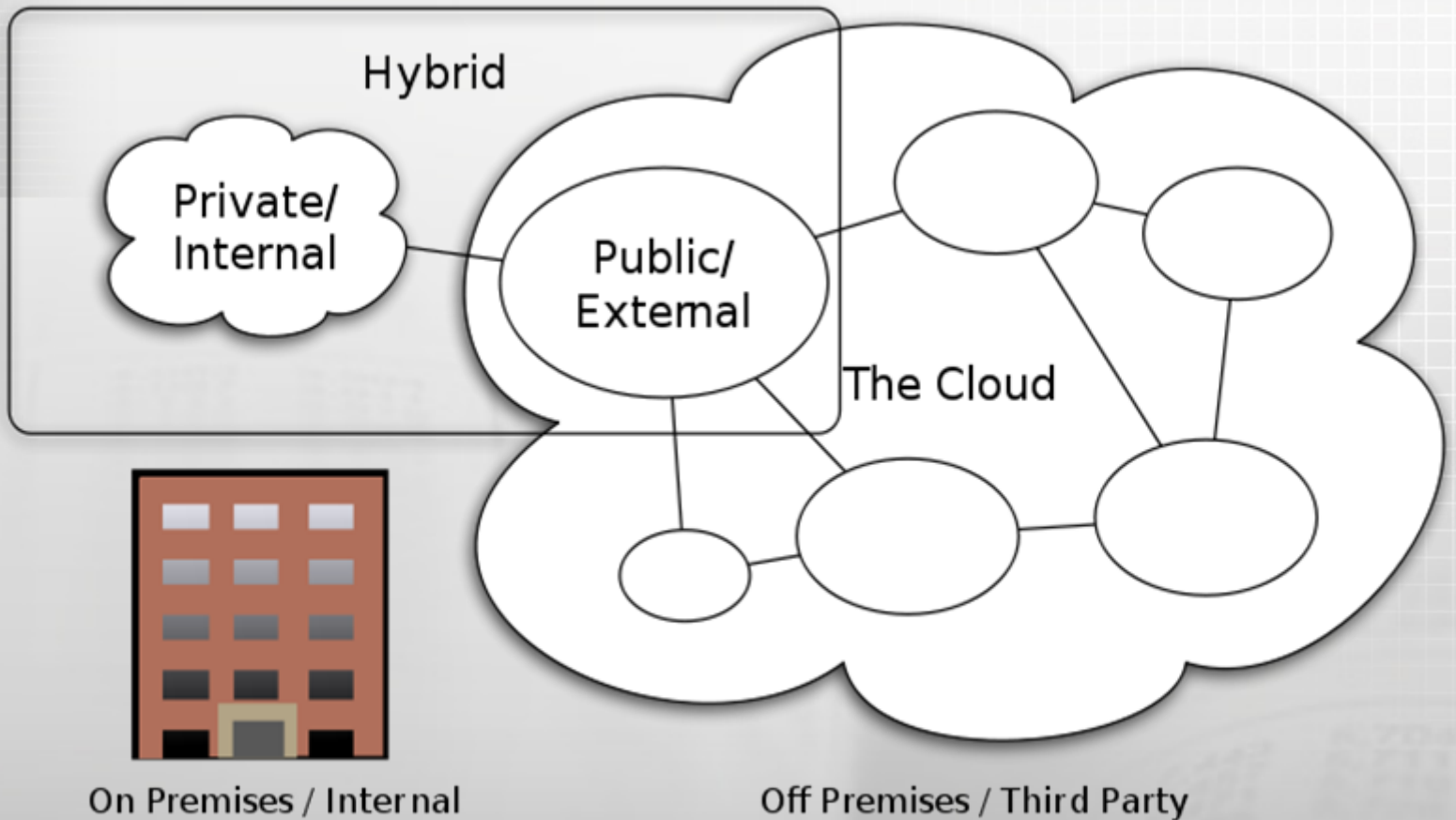
Characteristics of AWS

- ▶ **Flexible**: enables organizations to use the programming model, os, databases, and architectures they are already familiar with. In addition, this flexibility helps companies mix and match architectures in order to serve their diverse business needs.
- ▶ **Cost-effective**: organizations pay only for what they use, with no up-front commitments or long-term commitments.
- ▶ **Scalable and elastic**: businesses can quickly add and subtract AWS resources to their applications in order to meet customer demand and manage costs.
- ▶ **Secure**: builds services in accordance with security best practices, provides appropriate security features in those services, and documents how to use those features.
- ▶ **Experienced**: leverage over fifteen years of Amazon's experience in delivering large-scale, global infrastructure in a reliable, secure fashion

AWS Cases

- ▶ A large enterprise quickly and economically deploys new internal applications, such as HR solutions, payroll applications, inventory management solutions, and online training to its distributed workforce
- ▶ An e-commerce web site accommodated sudden demand for a “hot” product caused by viral buzz from Facebook and Twitter without having to upgrade its infrastructure
- ▶ A pharmaceutical research firm executes large-scale simulations using computing power provided by AWS
- ▶ Media companies serve unlimited video, music, and other media to its worldwide customer base

Deployment Models



Cloud Computing Types

CC-BY-SA 3.0 by Sam Johnston

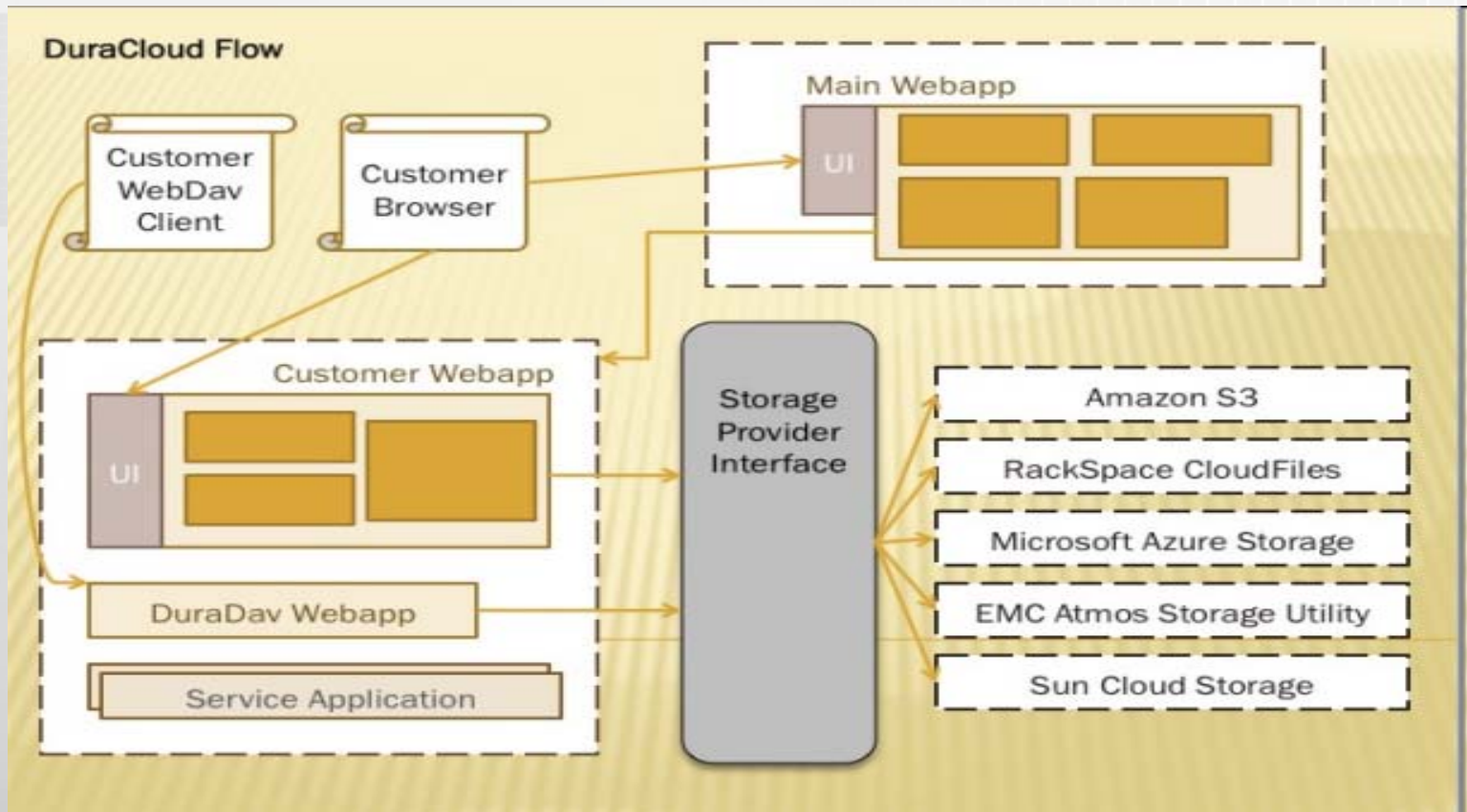
Issues

- ▶ Privacy
- ▶ Compliance
- ▶ Legal
- ▶ Open source
- ▶ Open standards



雲端運算於圖書館之應用

DuraCloud



Hosted by the new DuraSpace organization created by the merging of the DSpace Foundation and the Fedora Commons

(Kimpton and Payette. 2009)

雲端存儲 CDL's web archives

- ▶ 加州數位圖書館提供存檔工具及儲存
- ▶ 主題/事件網路檔案（目前包括**18**個主題，由不同機構建立）
- ▶ 收錄網站瀏覽 + 全文檢索



web archives

yesterday's web • today's archives

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The California Digital Library provides the Web Archiving Service to enable librarians and scholars to create archives of captured web sites and publications. The archives below were created using CDL web archiving tools and services.

Koha Express



- ▶ LibLime推出ILS服務 Koha Express
- ▶ 在LibLime雲端計算平台上提供以SaaS的解決方案
- ▶ 提供如 Z39.50, MARC21 ...標準
- ▶ 靠著1000個Koha圖書館及LibLime創造的相關文獻，提供免費的社區支援

使用雲端服務圖書館的例子

- ▶ OhioLINK圖書館聯盟正在使用Amazon's Web Services託管一小部分它們的數位公共資源
- ▶ 哥倫比亞區公共圖書館（District of Columbia Public Library）正在使用Amazon的EC2服務託管它們的網站，它們也在使用Amazon的S3服務，備份ILS

使用雲端服務圖書館的例子 (續)

- ▶ 東肯塔基大學圖書館 (**Eastern Kentucky University Library**) 正在使用Google Docs收集網站表格，它們也把Google Calendar當作培訓和會議的日曆排程，它們還用Google Analytics來收集網站、圖書館書目資料以及部落格資料的內容
- ▶ 科羅拉多州甘尼森的東部州立大學 (**Western State College in Gunnison, Colorado**) 正在為其ELibrary使用Google's App Engine，它們還把兩個Microsoft Access的資料庫——編目 & 流通，以及政府出版物管理——移值到了這個服務上

(Kroski, 2009)



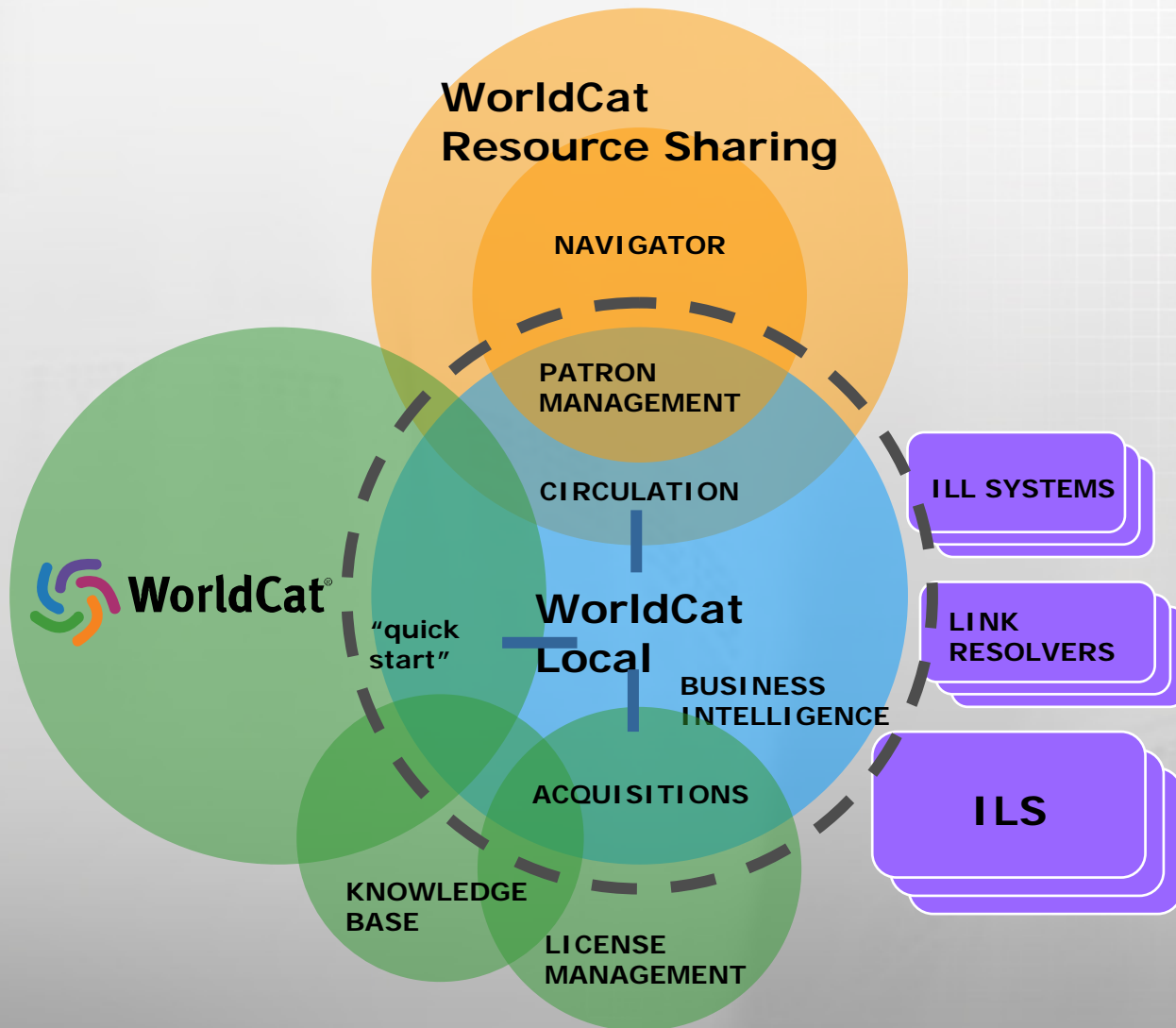
OCLC Web-scale Management Services

OCLC雲端圖書館管理系統

▶ Web-scale management services (2009/4/23)

- ✿ Circulation and Delivery
- ✿ Print and Electronic Acquisitions
- ✿ License Management
- ✿ Self-Configuration
- ✿ Workflow
- ✿ Cooperative Intelligence

Web-scale Management Services





Web-scale Management Services

- ▶ Web-scale Circulation and Delivery
- ▶ Web-Scale Print and Electronic Acquisitions
- ▶ Web-Scale License Management
- ▶ Web-Scale Self-Configuration
- ▶ Web-Scale Workflow
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Worldcat Local



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<input type="checkbox"/> Biological Sciences	<input type="checkbox"/> Government Documents	<input type="checkbox"/> Medicine	<input type="checkbox"/> Political Science
<input type="checkbox"/> Business & Economics	<input type="checkbox"/> Health Facilities, Nursing & History	<input type="checkbox"/> Medicine By Body System	<input type="checkbox"/> Preclinical Sciences
<input type="checkbox"/> Chemistry	<input type="checkbox"/> Health Professions & Public Health	<input type="checkbox"/> Medicine By Discipline	<input type="checkbox"/> Psychology
<input type="checkbox"/> Communicable Diseases & Miscellaneous	<input type="checkbox"/> History & Auxiliary Sciences	<input type="checkbox"/> Music	<input type="checkbox"/> Sociology
<input type="checkbox"/> Computer Science	<input type="checkbox"/> Language, Linguistics & Literature	<input type="checkbox"/> Performing Arts	<input type="checkbox"/> Unknown Classification

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<input type="checkbox"/> 1600-1699	<input type="checkbox"/> 1925-1949	<input type="checkbox"/> 1990-1994	<input type="checkbox"/> 2002	<input type="checkbox"/> 2006
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> 1950-1959	<input type="checkbox"/> 1995-1999	<input type="checkbox"/> 2003	<input type="checkbox"/> Other
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Series Praktische Theologie und Kultur ; 16
Subjects Art and religion. | World War, 1914-1918 Religious aspects. | Meidner, Ludwig, 1884-1966. | Beckmann, Max, 1884-1950. | Dix, Otto, 1891-1969.
Notes Thesis (doctoral) - Eberhard-Karls-Universität, Tübingen, 2005. | Includes bibliographical references (p. 329-343).
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Taiwan

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結語

- ▶ 加值應用無所不在～創意、想像力、實踐力
- ▶ 科技始終來自於人性、應用始終來自於需要
- ▶ 行動載具已逐漸成爲人們生活不可或缺的一環，圖書館當思考行動通訊服務的提供
- ▶ 圖書館與雲端服務
 - ✿ 圖書館需負起保存資訊內容的責任
 - ✿ 保護讀者資訊
 - ✿ 保護圖書館中敏感的資訊，不能把這些資訊交給雲端
 - ✿ 使用雲端服務來減少自己的IT支出並且增加效率

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