

UKSG one-day conference  
*a problem shared*

London  
November 2011



the shared solution

Ken Chad

Ken Chad Consulting Ltd

@kenchad

[ken@kenchadconsulting.com](mailto:ken@kenchadconsulting.com)

Te: +44 (0)7788 727 845

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

# SCONUL's Higher Education Library Technology (HELibTech) wiki

The screenshot shows the top navigation bar of the SCONUL Higher Education Library Technology wiki. The logo on the left reads "Higher Education Library Technology" with "SCONUL" in a smaller font. On the right, the user "KenChad" is logged in, with links for "My Wikis - 4", "My Account", "Help", and "Sign Out". A "wikispaces" logo is also present.

Below the navigation bar, there are several buttons: "★ Shared Services", "PAGE", "DISCUSSION (1)", "HISTORY", "NOTIFY ME", and "EDIT".

The main content area features a sidebar on the left with links: "Wiki Home", "New Page", "Recent Changes", "Manage Wiki", and a "Search Wiki" box. Below these are sections for "Home" and "Who uses what systems:". The main content area has a heading "Shared Services" and a paragraph starting with "STOP press" and a link to "A Problem Shared?". The text discusses "Understanding shared services and the drive for efficiency in scholarly communications" and mentions a "UKSG One-Day Conference: London. 16 November 2011". It states that "Shared services" are increasingly talked about in the scholarly communications sector, with examples like "centralised or consortial procurement" and "collaborative cataloguing". A "Table of Contents" button is located at the bottom right of the main content area.

<http://helibtech.com/Shared+Services>

definition  
rationale  
issues & barriers  
kinds of opportunities  
kinds of services  
impact  
what do we do?

# definition

'Typically they describe a model of **providing services in a combined or collaborative function, sharing processes and technology**. In the private sector this is usually within the same group of companies, but in other sectors it will most often be between separate entities. The most sophisticated models involve establishing a completely new organisation, run and managed as an autonomous business. The traditional definition of a shared service concentrates on **bringing together 'back office' functions**, often from geographically disparate areas, into a separate organisation. However, a broader definition could offer wider opportunities.'

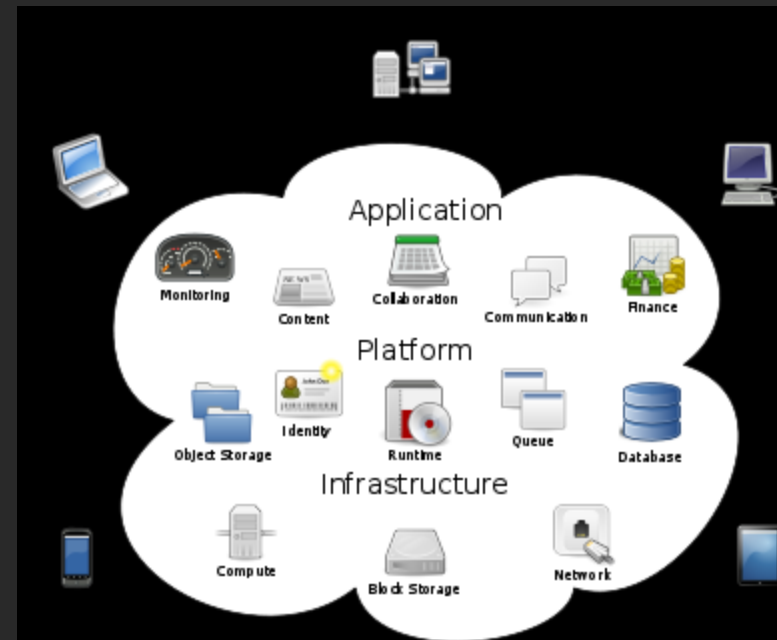
Shared services: the benefits for higher education institutions. HEFCE Circular letter number 20/2006  
[http://www.hefce.ac.uk/pubs/circlets/2006/cl20\\_06/](http://www.hefce.ac.uk/pubs/circlets/2006/cl20_06/)

the cloud...

we need to be clear on some terminology. Marketing machines are in full force around "cloud," with each purveyor of high-tech wares offering a definition of cloud computing that best suits its purposes, resulting in a general lack of clarity about what cloud computing really entails. Rather than letting vendors define the term, we can refer to the emerging consensus driven largely by the broader community, which helps break cloud computing into three smaller components:

Infrastructure as a service: IaaS  
Platform as a service: PaaS  
Software as a service: SaaS

The Future and Challenges of IT Shared Services. By Shel Waggener.  
Educause Quarterly. Volume 33, Number 1, 2010  
<http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/TheFutureandChallengesofITShar/199394>

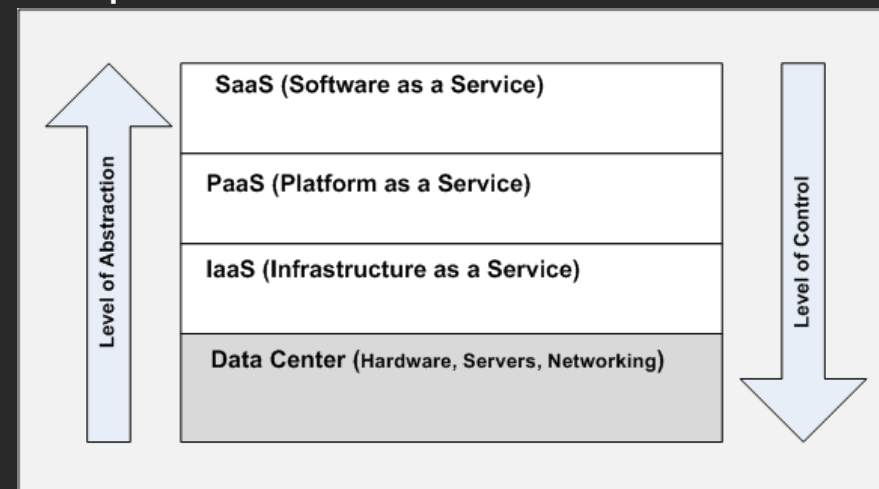


**Infrastructure as a Service (IaaS)** -computing resources (compute, storage, and network) are exposed as a capability. Instead of owning, managing or controlling the underlying infrastructure, you rent the infrastructure, as a service. An example is Amazon Elastic Cloud Compute (EC2).

**Platform as a Service (PaaS)** - In this case, programming platforms and tools (such as java, python, or .NET) and/or building blocks and APIs for building cloud-based applications and services are made exposed as a capability. Examples include Amazon Simple Storage Service (S3), Azure Storage, and Force.com.

**Software as a Service (SaaS)** – In this case, applications are exposed as a service running on a cloud infrastructure. Examples include Salesforce.com and Microsoft Office Online.

Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS)  
JD Meier (blog) 11 Feb 2010  
<http://blogs.msdn.com/b/jmeier/archive/2010/02/11/software-as-a-service-saas-platform-as-a-service-paas-and-infrastructure-as-a-service-iaas.aspx>



# rationale



'To ensure we maintain our trajectory to reduce the deficit, by achieving sustainable savings and making Government efficient, we must **simplify and standardise back office services and functions.**'

Government Shared Services: Strategic Vision Cabinet Office July 2011

'increased efficiency and end-user support will demand new approaches including shared services, commercial partnerships, and outsourcing.'

Study of early adopters of shared services and cloud computing within Higher and Further Education. By Mark Clark, Gill Ferrell, Paul Hopkins. HE Associates Ltd 1st May 2011

<http://www.jisc.ac.uk/media/documents/programmes/flexibleservicedelivery/Feast%20Final%20Report%20May2011.pdf>

[the] future of library systems is 'toward libraries collaborating, cooperating, sharing resources among different libraries. And we see that in things like consortia, state-wide library systems, all kinds of ways that libraries have right now of working together for economic reasons, and it just makes so much sense in today's environment.'

Quoted in: 'The Future of the ILS.' By David Rapp. Library Journal 1st April 2011  
[http://www.libraryjournal.com/lj/home/889595-264/the\\_future\\_of\\_the\\_ils.html.csp](http://www.libraryjournal.com/lj/home/889595-264/the_future_of_the_ils.html.csp)

'at a time of pressure on university resources, it is critical that technology is used in a collaborative and cost-effective way, to deliver services that will benefit the sector. Cloud computing has the potential to do this in ways which will serve the academic community leading to improvements in research, teaching and administration.'

David Sweeney, HEFCE Director for Research, Innovation and Skills  
Shared services in cloud computing to be funded by HEFCE  
<http://www.hefce.ac.uk/news/hefce/2011/cloud.htm>

**\ the current funding model for IT/IS is unsustainable** as Gartner studies [Source: Gartner IT Key Metrics Data 2010] show that 70% of IT budget is spent on systems maintenance; hence only 30% is available for productivity enhancement. With rapid changes in the user-environment arising from pervasive 'smart' device technologies and user-expectation fuelled by experiences in social network spaces then more resource is needed to be spent to speed innovations to support agility and new delivery paradigms.

The requirement is for computing solutions delivering cutting-edge performance, enhanced availability, 99.999% reliability, and significant and rapid scalability, all delivered for less (including support staff costs); **hence shared services and cloud paradigms.**

Study of early adopters of shared services and cloud computing within Higher and Further Education. By Mark Clark, Gill Ferrell, Paul Hopkins. HE Associates Ltd 1st May 2011

<http://www.jisc.ac.uk/media/documents/programmes/flexibleservicedelivery/Feast%20Final%20Report%20May2011.pdf>



Bezos on [Amazon Web Services]

The problem was obvious. We didn't have that infrastructure. So we started building it for our own internal use. Then we realized, "Whoa, everybody who wants to build web-scale applications is going to need this." We figured with a little bit of extra work we could make it available to everybody. **We're going to make it anyway—let's sell it.**

Levy: What was the internal argument against it?

Bezos: Stick to the knitting.

Levy: I'm going to guess that you don't find that argument convincing.

Bezos: No. The common question that gets asked in business is, why? That's a good question, but **an equally valid question is, why not? This is a good idea, we have a lot of skills and assets to do this well**, we're already going to do it for ourselves—why not sell it, too?

*'Jeff Bezos Owns the Web in More Ways Than You Think'. By Steven Levy. Wired December 2011 13 November 2011*

# issues and barriers

(apart from VAT 😊)

‘Making shared services happen will demand **leadership and drive** from those at the top of the organisation.

In sharing services, the underlying **processes will usually need to be simplified and standardised** before they are consolidated in a single shared service.

Parties to the collaboration ...will need to **migrate to a common technology platform** ...to remove the complexity and inefficiency that multiple systems might cause’

Sharing the Gain: Collaborating for Cost-Effectiveness  
Chartered Institute of Public Finance & Accountancy (CIPFA), 2010. ISBN 978 1 84508 221 5



Experience in the sector as a customer or partner of shared services is high; **however few institutions have deep experience of being a service provider to others** and internal staff may not readily adapt to the necessary cultures of being a service provider where accountabilities are significantly different.

Adopting services from a provider similarly requires a different culture with staff needing to acquire skills in contract negotiation, contract management and the skills to liaise between the provider and end-users.

Different models for shared services have arisen to accommodate the diversity of requirements and approaches; at the heart of these services is a requirement for a clear and operative governance model.

Study of early adopters of shared services and cloud computing within Higher and Further Education. By Mark Clark, Gill Ferrell, Paul Hopkins. HE Associates Ltd 1st May 2011

<http://www.jisc.ac.uk/media/documents/programmes/flexibleservicedelivery/Feast%20Final%20Report%20May2011.pdf>

Although the logic for the application of shared services to the public sector is strong, **governance and cultural issues are significant barriers.** The successful adoption of shared services requires transformational projects and programmes with a heavy emphasis on enabling cultural and behavioural change.

‘Government shared service: strategic vision.’ Cabinet office. 2011

“an immense accumulation of commodities,”  
Karl Marx

A key issue for shared services is the potential for savings through economy of scale ..... **Economy of scale is particularly relevant when delivering commodity services**; a significant question therefore is which services are commodities and **which could be commoditised effectively.**

Study of early adopters of shared services and cloud computing within Higher and Further Education. By Mark Clark, Gill Ferrell, Paul Hopkins. HE Associates Ltd 1st May 2011

<http://www.jisc.ac.uk/media/documents/programmes/flexibleservicedelivery/Feast%20Final%20Report%20May2011.pdf>

Providing a single approach to IT solutions is very difficult given the diverse constituencies of a higher education campus. Discussions about solving the economy-of-scale issue frequently lead to complaints about the dreaded "centralization" of IT services and the perceived loss of features and autonomy.

The Future and Challenges of IT Shared Services. By Shel Waggener. Educause Quarterly. Volume 33, Number 1, 2010  
<http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/TheFutureandChallengesofITShar/1993>  
94

what kinds of  
opportunities?

infrastructure

services

data

## Benefits of publishing cooperatives

The market challenges and structural constraints...render it difficult for small society publishers to compete individually. Publishing cooperatives can provide society publishers a practical response to their shared set of economic issues, structural constraints, and strategic market challenges.

**Federated publishing cooperatives — with shared services** cooperatives supporting multiple subject-oriented satellite cooperatives — **offer an alternative operating model for society publishers.**

Publishing cooperatives: An alternative for non-profit publishers by Raym Crow. *First Monday*, volume 11, number 9 (September 2006). [http://firstmonday.org/issues/issue11\\_9/crow/index.html](http://firstmonday.org/issues/issue11_9/crow/index.html)



The  
University  
Of  
Sheffield.

'The University Library is seeking to procure a unified library management system '

'work in concert with a vendor and other interested research library stakeholders to contribute towards the design, development and delivery of a next generation library system which will produce a **unified resource management approach to the full spectrum of library collections.**'

And

'The University Library has a **strategic preference and a clear business requirement for a born cloud based system.** The library places the utmost importance on the architecture for any new system being modern, fit for purpose & designed specifically to operate within a cloud environment'.

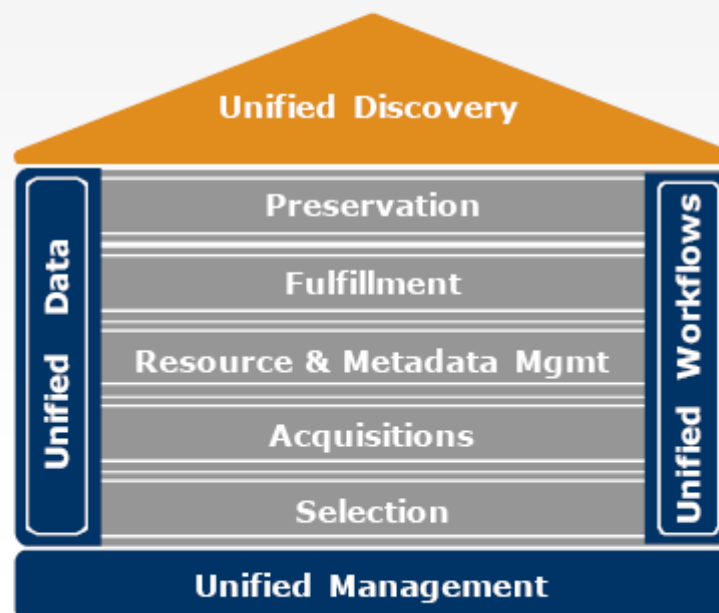
<http://www.publictenders.net/tender/103132>



## Consolidate the Frameworks



Turn format-based **vertical silos**  
to service-based **horizontal workflows**



## Collection Acquisition and Management at the Network Level

As library collections are increasingly shared, there may be significant advantages (in terms of both cost and efficiency) in **moving more acquisitions and licensing data and processes to the network level where they can be shared** among the ILS, ERM and repositories and with other libraries. Moreover, libraries are finding their ILS acquisitions modules inadequate for managing the acquisition of the newer parts of whole collections. There is already a clear need for the acquisitions of the three parts of the collection to be managed as a whole; moving data to the network, thereby enabling shared network services, is one solution.

'The Networked Library Service Layer: Sharing Data for More Effective Management and Co-operation'. By Janifer Gatenby. 30-July-2008 Publication: Ariadne Issue 56  
<http://www.ariadne.ac.uk/issue56/gatenby/>

'If it eventually delivers what it promises, full implementation of Alma should deliver **staggering cost savings; "50 per cent of the total cost of ownership"** according to Jo Rademakers of the Catholic University of Leuven'

'Streamlining workflow—cutting costs' By Elspeth Hyams CILIP Update May 2010

Subscriptions: £90 (UK); £98 (World); \$195 (N. America)

June 2010

**LIBRARY&INFORMATION  
UPDATE**

The essential briefing for the sector • [www.cilip.org.uk/update](http://www.cilip.org.uk/update)

# what kinds of services?

(I can't list them all)



Now any two salesforce.com customers can share data and information with zero integration required

Unique Salesforce to Salesforce capabilities possible because of **multi-tenant Force.com Platform-as-a-Service**

customers will be able to securely connect and share information between individual salesforce.com deployments with the click of a button.

"Just as Facebook is revolutionizing how individuals connect, Salesforce to Salesforce is revolutionizing how companies connect and share business information

Salesforce.com Revolutionizes How Companies Share Information with Salesforce to Salesforce - The Multi-Tenant Business Network. Press Release 5 December 2007

<http://www.salesforce.com/company/news-press/press-releases/2007/12/071205.jsp>

The HE sector is an exemplar to the UK Government demonstrating a rich array of shared services across all areas of institutions operations. In particular the JISC and associated services are enviously viewed by other countries for their richness of provision and economy of operation.

Study of early adopters of shared services and cloud computing within Higher and Further Education. By Mark Clark, Gill Ferrell, Paul Hopkins. HE Associates Ltd 1st May 2011

<http://www.jisc.ac.uk/media/documents/programmes/flexibleservicedelivery/Feast%20Final%20Report%20May2011.pdf>

Thanks to \$385,000 from the Andrew W. Mellon Foundation, the libraries at Columbia University in New York City and Cornell University in Ithaca, NY, will begin

“the most expansive collaboration to date between major research libraries,” notably collaborative collection development. The libraries aim to develop “a joint program for identifying, purchasing, and managing world class collections of global resources,” said Anne Kenney, Cornell’s university librarian.

Columbia, Cornell Libraries To Partner on Collection Development, Acquisitions, Preservation.  
\$385,000 Mellon grant supports joint project called 2CUL  
Norman Oder -- Library Journal, 10/15/2009  
<http://www.libraryjournal.com/article/CA6701530.html>

# Ex Libris Alma

## The Next-Generation Library Services Framework



### CONSOLIDATE

Consolidate the frameworks



### OPTIMIZE

Optimize through collaboration



### EXTEND

Extend the range of services



## Web-scale Management Services

The first cooperative management service for libraries



## Kuali OLE

*Open Library Environment (OLE) - An Extensible Service-Driven Library Management System*

[OVERVIEW](#) [MODULES](#) [PARTNERS](#) [TIMELINE](#) [ORGANIZATION](#)

Kuali OLE seeks to develop the **first system designed by and for academic and research libraries** for managing and delivering intellectual information.

A community of partners will deliver an enterprise-ready, community source software package to manage and provide access not only to items in their collections but also to licensed and local digital content. Kuali OLE (pronounced oh-LAY, for Open Library Environment) features a governance model in which the entire library community can collaborate to own the resulting intellectual property.



Innovative Sierra Services Platform  
Local or Cloud-based Deployment

“ We see OCLC Web-scale Management Services as a way to bring improvements and efficiencies to our staff functions in the areas of acquisition, processing, and circulation support. Moreover, a web-based approach makes sense to us; we want to manage information, not hardware.”

Mark Roosa, Dean of Libraries, Pepperdine University (Web-scale pilot participant)





# WorldCat<sup>®</sup> Local

Single-search access to 881+ million items from your library and the world's library collections

## SerialsSolutions<sup>®</sup>

A ProQuest<sup>®</sup> Company

**The Summon<sup>™</sup> Service**  
**True Web-Scale Discovery**

EBSCO  Discovery Service

ExLibris  Primo



## BASE

Bielefeld Academic Search Engine

BASE is one of the world's most voluminous search engines especially for academic open access web resources. BASE is operated by Bielefeld University Library



This is an organisation made up of publishers, content providers and researchers ....to manage and map author identifiers to a common Orcid academic author ID (including authors, editors, publishers and anyone else involved in the scholarly publishing process). A kind of scholarly name identifier system in the cloud.



## Welcome to Discovery

### Towards a thriving metadata ecosystem

In 2010, the JISC and [RLUK Resource Discovery Taskforce \(RDTF\)](#) worked with stakeholders from the libraries, archives and museums to set out a [Vision](#) for making the most of our resources by effectively positioning their metadata for discovery and reuse within the global information ecosystem.

Our aim is that **Discovery** will help to mobilise and energise the community, engaging stakeholders to create a critical mass of open and reusable data, and explore what open data makes possible through real-world exemplars and case studies.

# impact

## Cloud Computing

**By 2016 ,all Global 2000 companies will use public cloud services.**

Cloud computing represents a shift in the relationship between the providers and consumers of IT-based solutions

**Gartner**<sup>®</sup>

**Nov 2010: Gartner Identifies Seven Major Projects CIOs Should Consider During the Next Three Years**

# the future of cloud computing: industry predictions for 2012'.



By Jeremy Geelan. Cloud Computing Journal. 10 November 2011  
<http://cloudcomputing.sys-con.com/node/2040343>

**IT managers will drive for private cloud adoption** will be issues of data sovereignty, privacy regulations, security concerns – on the back of high profile cloud outages. Underpinning the move to private cloud will be the existing investment made by enterprises in massive infrastructures making it difficult for enterprises to deal with how they transition out of these models. Understandably in some cases job protectionism is also at play with the push to manage internal private 'clouds'. **In time the larger enterprises will fail to realise the promised economies of scale with these models and there will be a shift to public cloud**

Scott Stewart @CIOmatters Top 100 Cloud Blogger & Research Director at Longhaus Pty Ltd

cloud computing will allow **everybody to be a service provider**. The infrastructure to do things is no longer a limiting factor. Focus will shift to application and business services.

Lauren C. States @lauren\_states  
VP & CTO, Cloud Computing & Growth Initiatives, IBM

in 2012, we will see the beginning of the dawn of **infrastructure irrelevance** as the unstoppable forces of consumerization shift enterprise spending priority away from the purely mechanical pieces of the data center into areas that help address the **surging demand from a new, savvy and empowered user base**

Christian Reilly @reillyusa Manager of Global Systems Engineering, Bechtel



PaaS is the future of cloud services and we will see some interesting **business model innovations** in 2012.

Krishnan Subramanian @krishnan. Industry Analyst covering Cloud Computing & Open Source. Open Source Evangelist

companies begin to understand that **collecting and using massive amounts of data isn't so hard any more.** The cloud makes processing all this information possible without having to build the infrastructure permanently in your data center. And it's pretty useful in making smart business choices.

Jay Fry @jayfry3 Vice President, Marketing at Stealthy Cloud/Mobility Start-up

so what do we do?  
time to rethink...?

or should we `stick to the knitting?

'The JISC invites tenders for an audit of the datasets that make up the digital infrastructure provided by JISC.

The overview will be use to identify gaps and efficiencies in the digital infrastructure' .....Examples include:

- Copac
- Suncat
- The Keepers registry
- Shared academic knowledgebase
- Openurl router
- JISC Historic Books
- Digimap
- Landmap
- Jorum

JISC ITT: Data Audit of the Digital Infrastructure. November 2011  
[http://www.jisc.ac.uk/fundingopportunities/funding\\_calls/2011/11/dataaudit.aspx](http://www.jisc.ac.uk/fundingopportunities/funding_calls/2011/11/dataaudit.aspx)

**34%**

of projects..were not aligned with..strategy

'Why your IT project may be riskier than you think.'

By Bent Flyvbjerg & Alexander Budzier. Harvard Business Review. September 2011

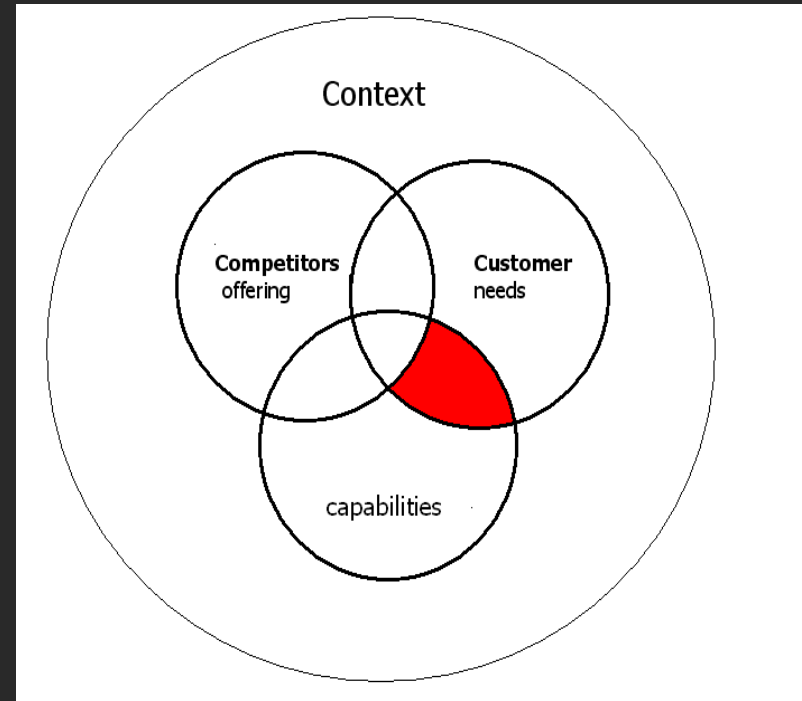
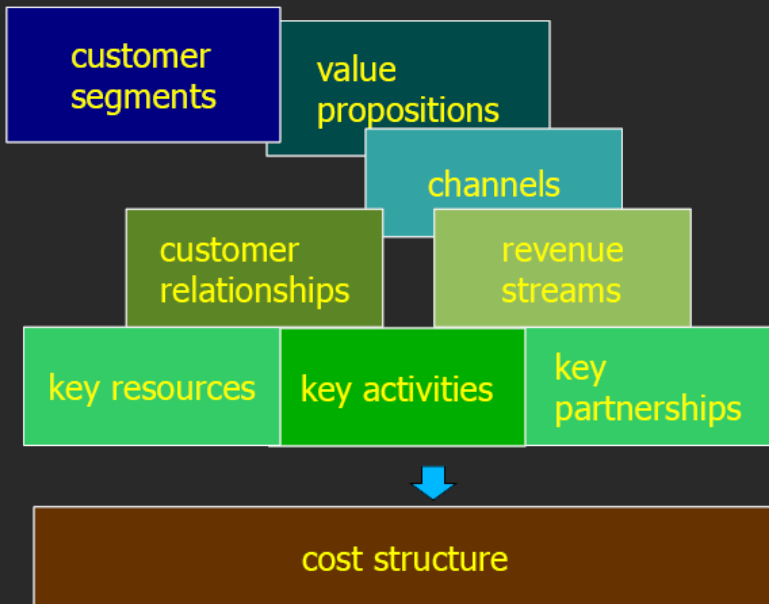
Citing: 'The art of project portfolio management.' By Sascha Meskendahl, Daniel Jonas, Alexander Kock and Hans Georg Gemunden

<http://mpm.tim.tu-berlin.de/fileadmin/docs/MPM-Artikel.pdf>



# strategy business models

business model building blocks



# kenchadconsulting

Home

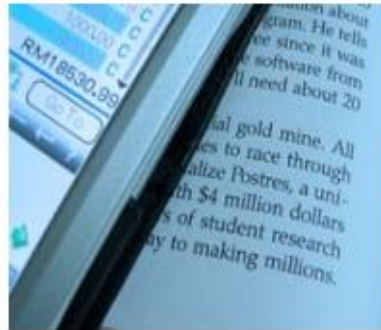
About

How We Can Help

Our Projects

Publications

Conference/Event Presentations



## What's the future for libraries?

*Open source, open data, cloud computing, 'unified resource management' (URM), new business models, disruptive innovations..it can be a confusing landscape...*

## Who we help

We work with businesses, libraries, government agencies, universities, local authorities--indeed anyone with an interest in libraries.

## What we do

Our services enable libraries to deliver improved services and reduce costs through more effective and imaginative use of technology

We review/audit library IT infrastructure and systems, help with strategy, requirements and the procurement of new and replacement systems

Ken Chad Consulting Ltd

Twitter : @kenchad    [ken@kenchadconsulting.com](mailto:ken@kenchadconsulting.com)

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

Tel: +44 (0)7788 727 845

UKSG one-day conference  
*a problem shared*

London  
November 2011



the shared solution

Ken Chad

Ken Chad Consulting Ltd

@kenchad

[ken@kenchadconsulting.com](mailto:ken@kenchadconsulting.com)

Te: +44 (0)7788 727 845

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