

The Cloud is Calling – Or is it Zombies of Death?

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Background & context

Inspiration...



What Factors Determine Cloud Computing Adoption by Colleges and Universities?

Bill Klug
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Factors in cloud adoption



Survey says...

- ✓ Complexity
- ✓ Institutional Size
- ✓ Technology Readiness
- ✗ Relative advantage
- ✗ Compatibility
- ✗ Perceived Barriers
- ✗ Regulatory Policy
- ✗ Service Provider Support

We say...

- ✓ Complexity
- ✗ Institutional Size
- ✓ Technology Readiness
- ✓ Relative advantage
- ✓ Compatibility
- ✓ Perceived Barriers
- ✓ Regulatory Policy
- ✓ Service Provider Support

Where is the disconnect?



Library & CIEL case studies

- Authentication
- Learning management system
- Digital preservation
- Media hosting
- Integrated library system
- Institutional repository
- Et cetera...



CIOs take heed...



“If the institution does not create a cloud strategy, it may inherit an ‘accidental strategy’ formed around consumer choice. Consumer adoption of cloud services is creating a situation where the ‘cloudification’ of institutional services will take place with or without institutional leadership.”

Katz, R. N., Goldstein, P. J., & Yanosky, R. (2009). Demystifying cloud computing for higher education. *EDUCAUSE Center for Applied Research Bulletin*, 19, 1-13.



Overview of VIU network & IT infrastructure

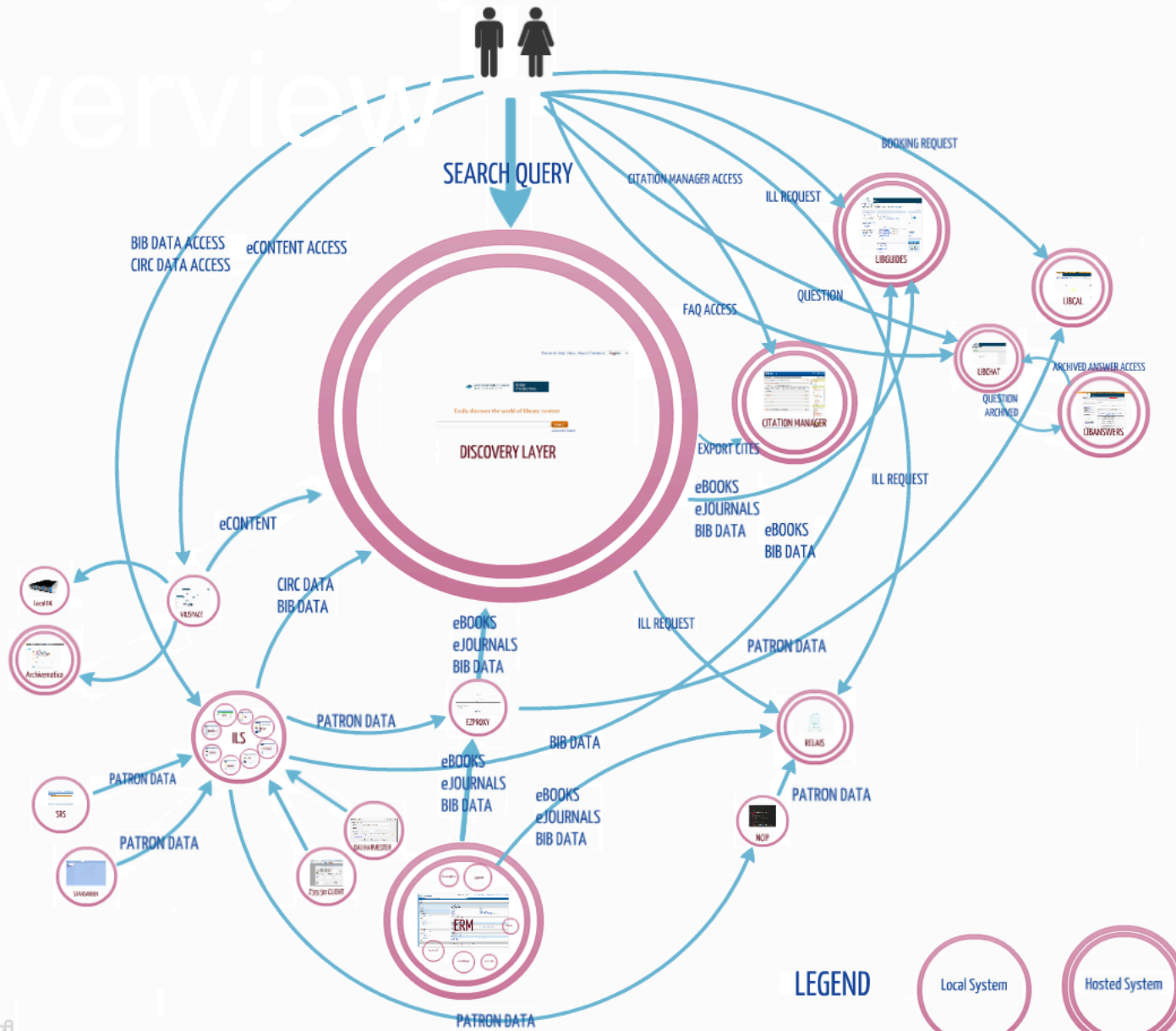


Cloud for academic enterprise systems: Library cases

Library systems



Overview



✓ Cloud ↔ Case fit



LibGuides & other SpringShare

- ❑ <http://libguides.viu.ca>
 - ❑ <http://libanswers.viu.ca>
 - ❑ <http://springshare.com>
-

Archivematica as a Service

- ❑ <http://coppul.ca/archivematica>
- ❑ <https://www.archivematica.org/en/>

- ❑ Complexity
- ❑ Institutional Size
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- ❑ Service Provider Support

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✓ Cloud ←||→ Case fit



Integrated library system

- ❑ <https://marlin.viu.ca/malabin/door.pl/0/0/0/60/792/X>

Proxy authentication

- ❑ <https://www.oclc.org/ezproxy.en.html>

- ❑ Complexity
- ❑ Institutional Size
- ❑ Technology Readiness
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- ❑ Service Provider Support

x Cloud ←|→ Case fit



DSpace (institutional repository)

❑ <http://viuspace.viu.ca>

❑ <http://dspace.org>

- ❑ Complexity
- ❑ Institutional Size
- ❑ Technology Readiness
- ❑ Relative advantage
- ❑ Compatibility
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- ❑ Service Provider Support



**Cloud for academic enterprise
systems:**

**The Centre for Innovation
and Excellence in
Learning**

CIEL System Goals



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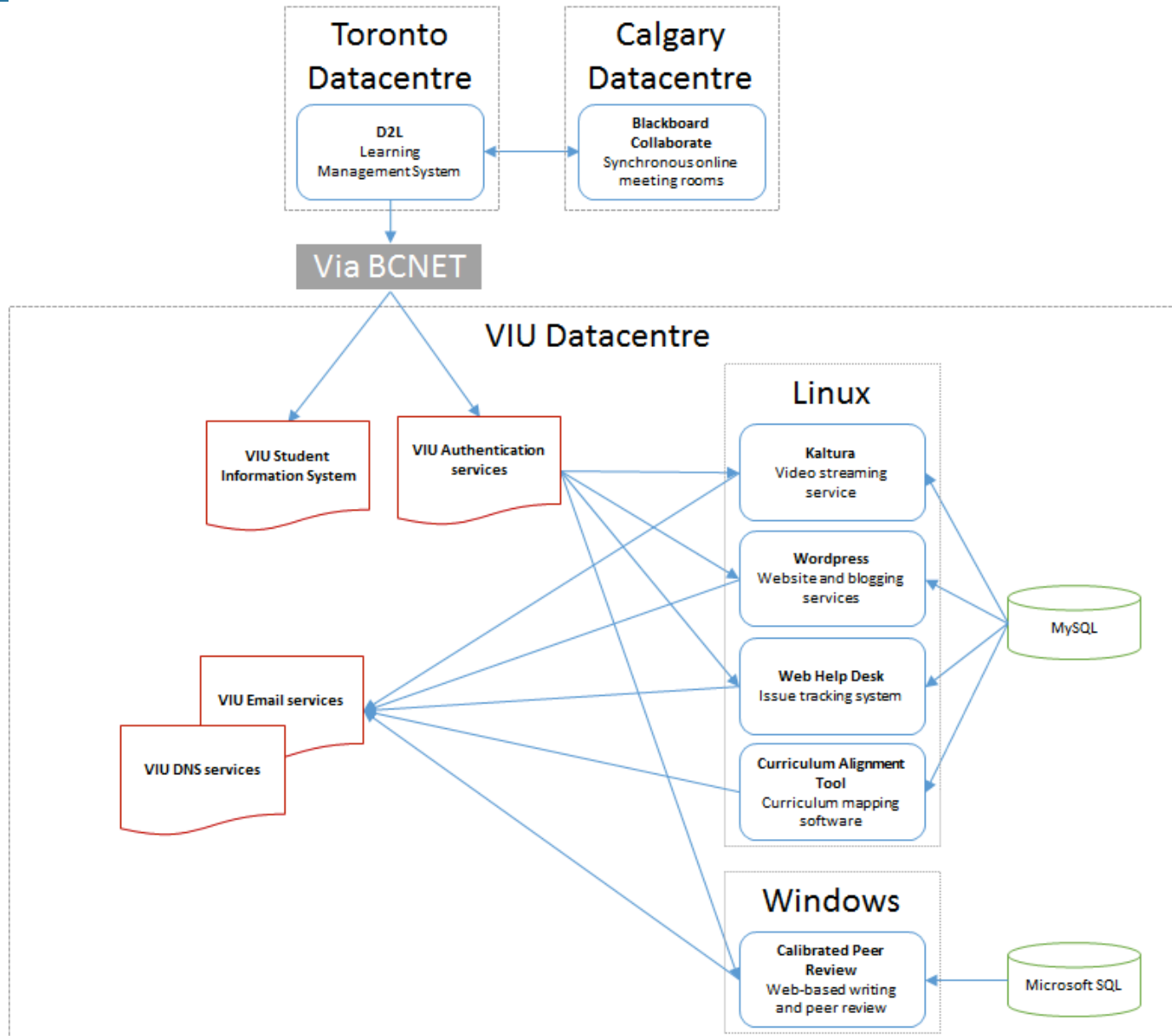
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Cloud ↔ fit



- CIEL responsible for a number of VIU teaching and learning systems (LMS, streaming video, blog, etc)
- Hybrid approach to cloud adoption
- Typically we administer the application
- Intermediary between cloud support and local support
- Always somewhat reliant on local IT (network, authentication, etc.)
- Publishers push to connect to their cloud from LMS

CIEL Systems Map





IT perspectives on cloud: Benefits, cautions, implications

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Critical questions & considerations regarding cloud for academic IT services

Toward cloud strategy



Our compiled critical questions & considerations at

<http://bit.ly/BCNetZombies>

are intended as the basis for a responsive, evolving decision aid, and not as prescriptive elements.

Relative significance of factors in cloud adoption, and availability and completeness of the information varies **per case**.

Strategic “relative advantage” considerations

- Strategic importance in the provision of academic service
- Attractive or enhanced functionality and features
- Shared services potential: support collaboration with external partners
- Who benefits from our use of the cloud?

Technical considerations



- Existing solution(s) and their state
- Availability of a range of service providers? Relative advantages
- Open Access compatibility
- Administration: how much configuration can be done locally (how much can we / do we want to do?)
- Interface: ease of customization, flexibility, look and feel, terminology
- Service provider support: client and technical, responsiveness
- Service provider location and access to data
- Stability of service provider: commercial/organizational, technical
- Local expertise required / available: IT and academic service unit
- Security implications / risk to network

Social considerations



- Open Access compatibility (also above)
- Who benefits from our use of the cloud?
(also above)
- Fit within business unit and IT culture

Legal considerations



- Privacy:
 - Fit with ethical responsibilities
 - Compatibility with regulatory environment
 - Security implications / risk to network (also above)
- Intellectual property: implications for copyright, author rights

Financial considerations



- Shared services potential: support collaboration with external partners (also above)
- Costs: surfacing institution-wide implications
 - Savings: on local infrastructure, expertise, and services, if any
 - Improve capacity: address local capacity deficits, deferred maintenance, through specialized cloud service contracts
 - Re-skilling, deprecated skills & change management
 - Accounting for internal cost shifts - reflected in which cost centres and why, duplicated costs, approvals etc.



**Questions,
contributions,
thanks**