### BCNET ANNUAL HIGHER EDUCATION

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### Steps to Data Governance in Higher Ed

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# Why data governance?

- Manage risk
- Improve data quality
- Satisfy auditor requirements
- Increase compliance
- Reduce security threats
- Report on data exposure to applications
- Highlight data ownership questions



### Data Governance isn't..

- Change management
- Data cleansing or extract, transform and load data (ETL)
- Data warehousing
- Database design
- Database management and administration



### Data Governance Defined

• "is the specification of decision rights and an accountability framework to encourage desirable behavior in the valuation, creation, storage, use, archival and deletion of data and information."

Helen Sun, Oracle May/2011



# DG in the context of IDAM

- Where is sensitive data ?
- Who owns it ?
- How is access granted ?
- Who can see the data ?
- What are acceptable uses of this data ?





### **A TALE OF THREE SCHOOLS**



### Our Data Governance Journey

- BCIT Sabrina
- UBC Sebastian
- UVIC Tracey

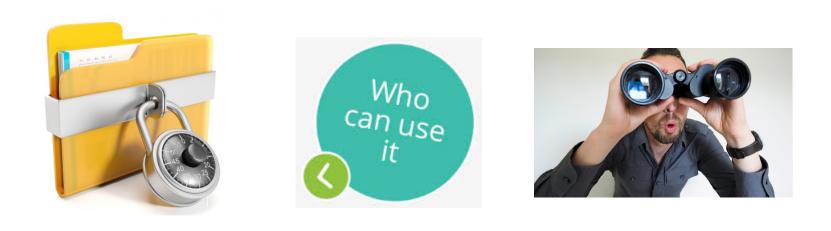








### How did data governance conversation start at BCIT?



Data ownership?

Who or what systems?

Who can see the data? What purpose?



### British Columbia Institute of Technology







### British Columbia Institute of Technology

Who is part of the IDM governance team?

- Information technology services
- Education
- Financial Services
- Human Resources
- Library Services
- Registrar's Office
- Safety, Security + Emergency Management (SSEM)
   Conference 2016

What does this group do?

- Provide appropriate access for all employees
- Insure protection of access to BCIT information assets
- Reduce risk of unauthorized access
- Clearly communicated policies and procedures

### Outcome of the Governance committee ?

#### Goal:

Better protect BCIT's information assets through the implementation of processes and a system to manage BCIT identities and system access.

#### Projects:

- Implement a process for managing contract employees' system access
- Revise Institutional policies and procedures to align with system access rules and requirements
- Standardize and document departmental system access procedures and processes
- Implement role-based standard systems access
- Implement role-based non-standard systems access
- Automate system access request process
- Provide single place to view system access information











### IAM DG BCNET

#### **UBC Identity and Access Management**

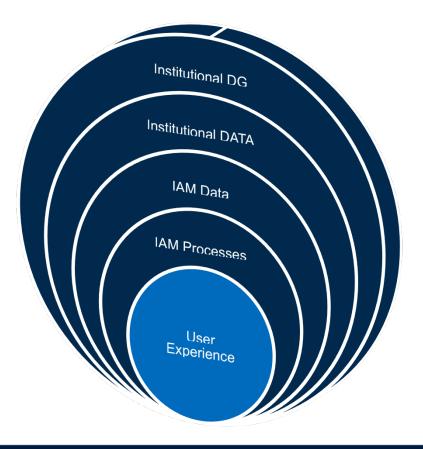




# **Data Governance VS IAM Data Governance Challenges.**

From a UX perspective the need for IAM Data Governance usually out paces the need to Institutional Level DG.

Yet IAM-DG is a subset of the Institutional, adding to the complexity IAM data typically lives outside its ecosystem.



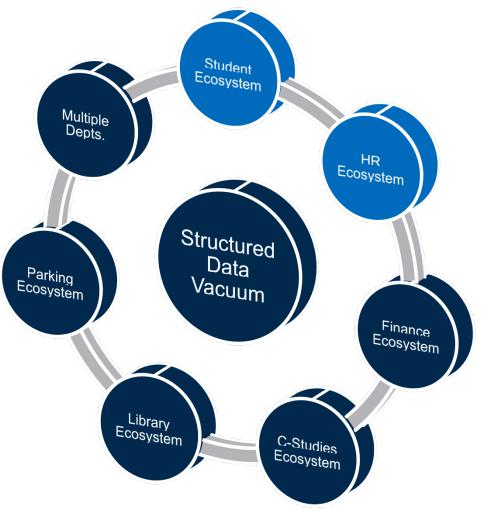


#### **UBC Story**

As IAM@UBC moves toward a brokering agent relationship for identity data across the institution; data consistency, structure, and behaviour become evermore paramount.

More than any other silo, IAM crosses traditional boundaries. (ie, Student Data and Finance Data rarely intersect)

If there is no institutional impetus such as ORG Wide ERP then silos will continue to function independently.





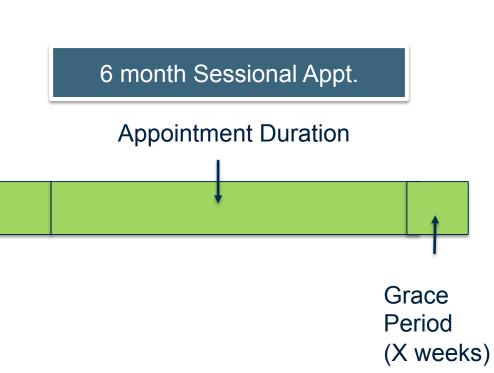
#### **UBC Example of IAM Data requiring Governance.**

Governance

Should classify work as "lead" or "lag"

Early ID (Up to 6 months)

- What the Grace Period should be?
- Who should it be applied against?
- Periodic Review.
- Should it apply to all systems?





#### Example of Technical Debt as a result of lax governance

- Need for Job Ranking in HRMS
- Approval for Insertion into consumption
- No formal review processes, or ownership was set initially so it defaulted to IAM/IT
- After discussions it was determined that it would be owned by Compensation, Faculty Relations, and HR.
- IAM simply became a consumer

Name	Empl#	Job Title	Job Code	Dept	Ranking
John Smith	1234	Admin Assit	98765	Housing	30
Jane Hill	3421	Ex Admin	89234	Arts	9
Sally Brown	8278	Dean	67868	Arts	6







# UVic story...



- External audit results
- Access management concerns deprovisioning
   Employee role-change
   Employee termination
  - Shared accounts
- Develop an access-certification program with a focus on select ERP resources



## **Access Certification Program**

- "Custom-engineered"
- Oracle reports
- Employee-position reporting
- Issue access reports to Supervisors
- Trouble-tickets to manage



# Challenges

- Response rate
- Administrative overhead
- Highest-value ERP resources only
- Employees w/o supervisors ?





• There's got to be a better way!



#### of Victoria Identity Logged in as **spadmin** | Edit My Preferences | Help | Logout Dashboard Define Monitor Analyze Manage System Setup Certifications Manager Certifi 4 3:34:27 PM PDT] Tasks Owner Corey Scholefield Access Reviews Completed 1/3 (33%) Identities Completed 10/29 (34%) Create Date 9/9/14 3:34:27 PM PDT 139/733 (19%) Exclusions 0 Items Completed [View/Edit Certification Options] 8 **Decision Statistics** Additional Entitlements **Policy Violations** Roles Approved = 139 Remediated = 0 There is no data for this chart. There is no data for this chart. Allowed = 0 Open = 594

Access Reviews							
Filter by Name <b>Q</b> Advanced Searc	1						
Description	Percent Complete	Phase	Phase End	Tags	Certifiers	Due	Sign Date
Manager Access Review for Garry Sagert	0% (0 of 204)	End	11/9/14 3:34 PM	11/9/14 3:34 PM		10/9/14 3:34 PM	
Manager Access Review for Scott Thompson	100% (139 of 139)	End	11/9/14 3:34 PM		Scott Thompson	10/9/14 3:34 PM	09/09/14 03:38:01 pm
Manager Access Review for David Wolowicz	0% (0 of 390)	End	11/9/14 3:34 PM		David Wolowicz	10/9/14 3:34 PM	
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Open 
Approved 
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Allowed

Open Approved Remediated Allowed

#### University Identity DEVELOPMENT

Dashboard Define Monitor Analyze Manage System Setup

#### Access Review Details

Manager Access Review for Scott Thompson					
Signed Off on	9/9/14	CurrentPhase	End		
Owner	Scott Thompson	Percent Complete	139(139 (100%)		
Signed By	Corey Scholefield	Revocation Completion	010 (100%)		
Access review is complete.					

Filter

Legend:	Approve 📵 Re	oke 🛞 Allow Exception	🔶 Action Required						
Decision	Identity	First Name	Last Name	Description -	Application	Account Name	Status	Risk Score	Changes Detected
•		Angela	Hong	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	259	New User
•		Brenda	Gerth	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	255	New User
•		Anne	Knudsen	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	256	New User
••		Robert	Fleming	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	254	New User
•		Hulya	Saydam	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	258	New User
•		Corey	Gibbings	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	256	New User
•		Rizwan1	Bashir1	Value BAN_FINANCE_C_Q on CLASS_CODE	Banner Access - FINANCE ()		Complete	291	New User
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- 1. Identify a champion/sponsor
- 2. Evaluate the risks
- 3. Develop a strategy
- 4. Develop a program
- 5. Prioritize based on business needs
- 6. Monitor, measure, improve



### **Best Practices**

- 1. Take a holistic approach, but start small
- 2. Obtain executive sponsorship
- 3. Define data-stewardship during an early stage
- 4. Establish quantifiable benefits through building a business case
- 5. Establish, collect, and report on metrics to measure progress
- 6. Link and build in incentives to award and reinforce participation



# **IDAM Action Items**

- Improve visibility to data / entitlements / access rights
- Establish Governance
  - Certify access / revoke accounts / permissions
  - Schedule access reviews
- Streamline delivery of access
  - Automation / roles / approvals
- Simplify audit reporting





### **QUESTIONS & DISCUSSION**

