# Knowledge Management Systems in Academic and Government Settings

And Content Generation Methods

By Tanya Nguyen Forum for Information Professionals February 3, 2017

### Help employees become 20% more efficient.



### Outline

- 1. My Background
- 2. Definitions
- 3. Questions
- 4. Why does knowledge have to managed?
- 5. Literature Review
- 6. University of Alberta Libraries and Service Alberta KM Tools
- 7. Challenges
- 8. Future Direction

### My Background

### Education





KM

?









### Knowledge Management (KM)

- "It is the process of gathering data, information and knowledge created within an institution for the usage of the enterprise itself. (Semertzaki, 2011, p. 50)
- "KM is an ongoing process or cycle in an organization which starts with acquiring relevant knowledge resources and continues through their proper utilization." (Agarwal & Islam, 2014)

## KM Perspectives

Human Resources Management: "knowledge can only be in the minds of people'

Librarians: 'Knowledge is in documents'

Information System Management: "knowledge management is Information management with the word *information* changed to *knowledge*'

Knowledge Engineers: 'knowledge is something which can be captured in computer applications

Knowledge is of two kinds: We know a subject ourselves, or we know we can find information upon it. - Samuel Johnson



### Knowledge, Information, Data



#### Knowledge

Actionable Information

- Understanding;
- Learning;
- Practical experience
- Acquaintance or familiarity
- (Turban & Frenzel, 1992)

#### **Information**

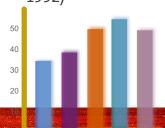
Organized/analyzed data

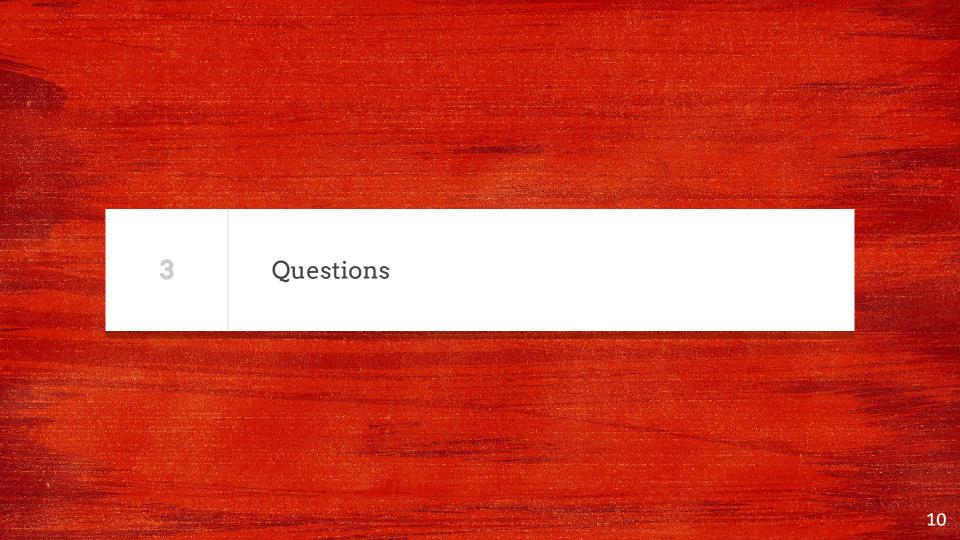
- Data organized so is is meaningful to the receiver of information
- (Turban & Frenzel, 1992)

#### **Data**

Fact and figures

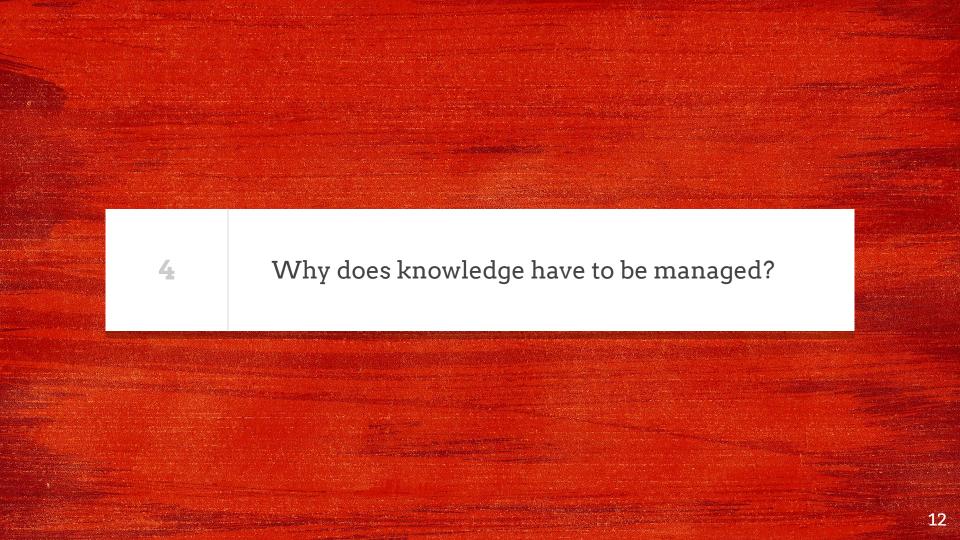
- numeric/alpha numeric strings with no meaning.
- (Turban & Frenzel, 1992)





### 3 Questions

- How does the KM tools used at the University of Alberta Libraries (UAL) and Service Alberta (SA) map onto the KM cycle?
- What are the some of the challenges when implementing or maintaining KM?



### Why does knowledge have to be managed?

- It transforms the stored knowledge and makes it a valuable source.
- It improves customer service and efficiency.
- It streamlines operations and reduces costs by eliminating redundant or unnecessary processes.
- It facilitates more informed decision-making.



### History of Knowledge Management

Knowledge management originated from:

- Information Management
- Quality Management
- Human Capital

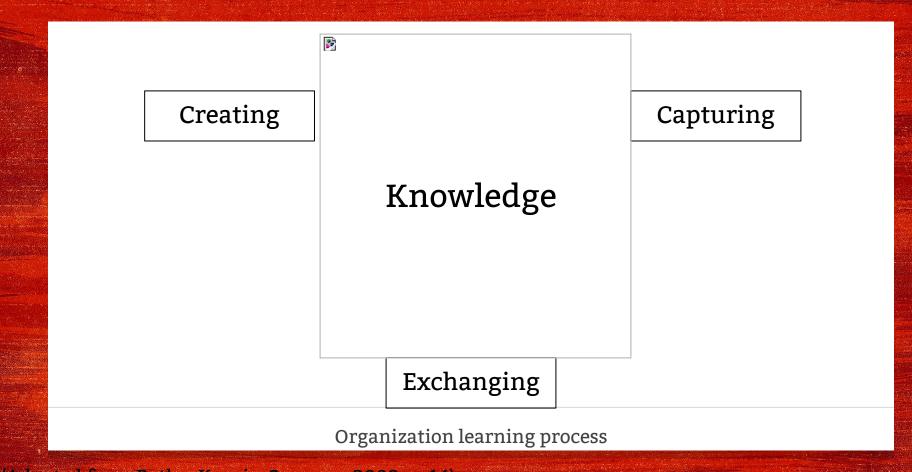
#### Varieties of Knowledge

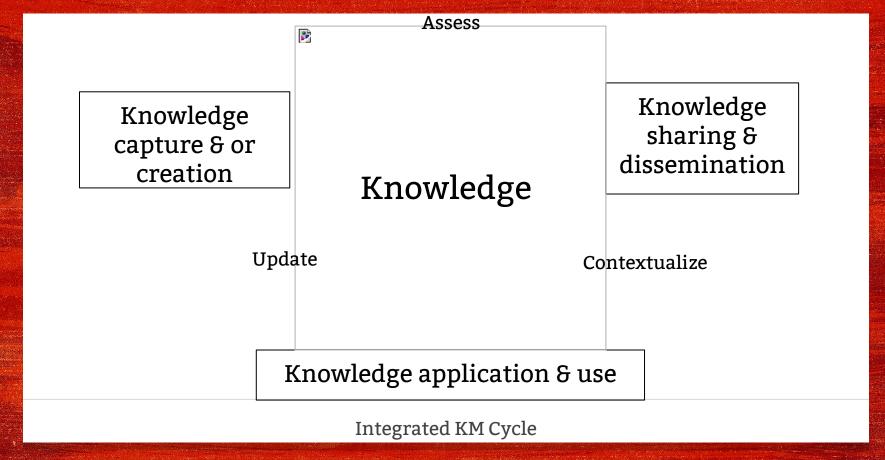
#### **Tacit**

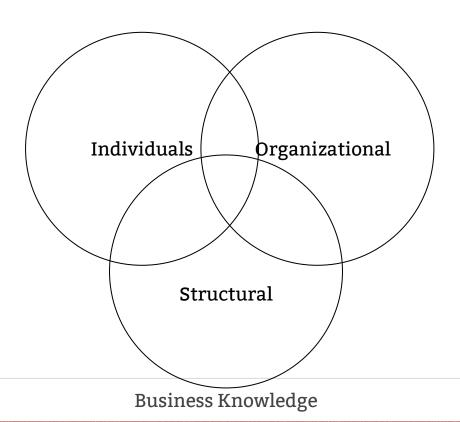
- In one's head
- E.g. the experience of customers, and memories
- Others?

#### **Explicit**

- In the form of artefacts
- E.g. books, documents, databases, and policy manuals
- Others?







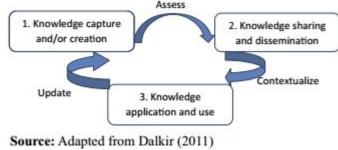


### Approach

Access how the University of Alberta Libraries Service Alberta use of knowledge management tools falls in the KM cycle phases:

- Creation and Capture
- Sharing and Dissemination
- Application and Use

Adapted from Dalkir (2011)



#### 1. Creation and Capture by UAL



#### **Technology Tools**

- 1. Google Drive
- 2. Public Service Portal

#### Non-IT Tool

1. Binder

#### 2. Sharing and Dissemination by UAL



#### **Technology Tools**

- 1. Google Drive
- 2. UAlberta Gmail
  - a. Personal
  - b. Delegated
- 3. Chats
  - a. Google Hangout
  - b. LibraryH3lp
- 4. Social networking

#### Non-IT

- "Collaborative physical workspace" (face-to-face)
- 2. "Community of practice"

(Agarwal & Islam, 2014, p. 335)

#### 3. Application and Use by UAL



#### **Technology Tools**

- 1. Event scheduling
  - a. Google Calendar

#### Non-IT Tools

1. Workshops

### Service Alberta - KM Background Info.

Utilizes a knowledge base software called **RightAnswers** (RA) - repository of "solutions"

 Required 'clean up' as solutions contain broken links, missing metadata, dated information, orphan documents

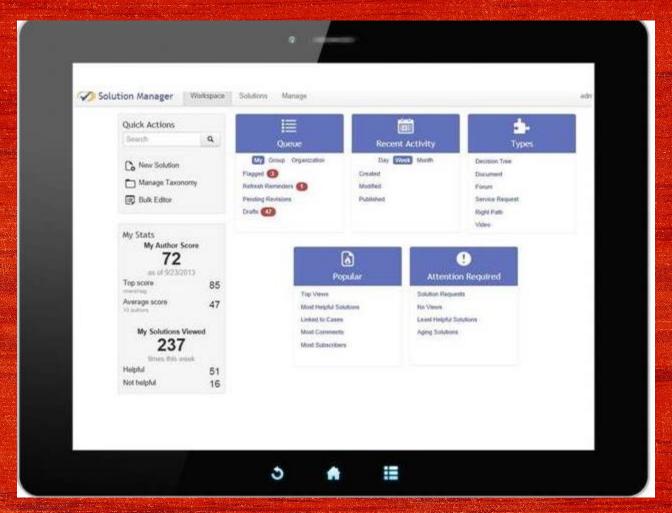
### Work in Progress...

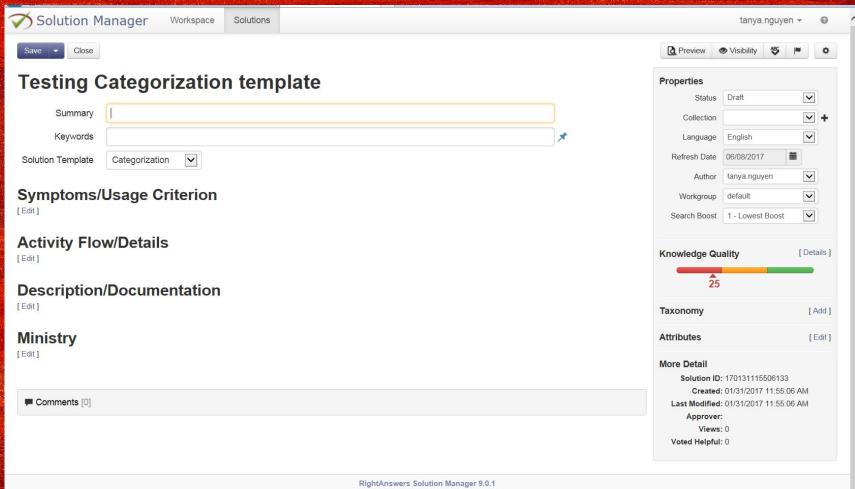
- Was only accessible to one ministry...now in the works for allowing all Government of Alberta ministries access.
- Was using RA7 <u>now</u> upgrading to RA9

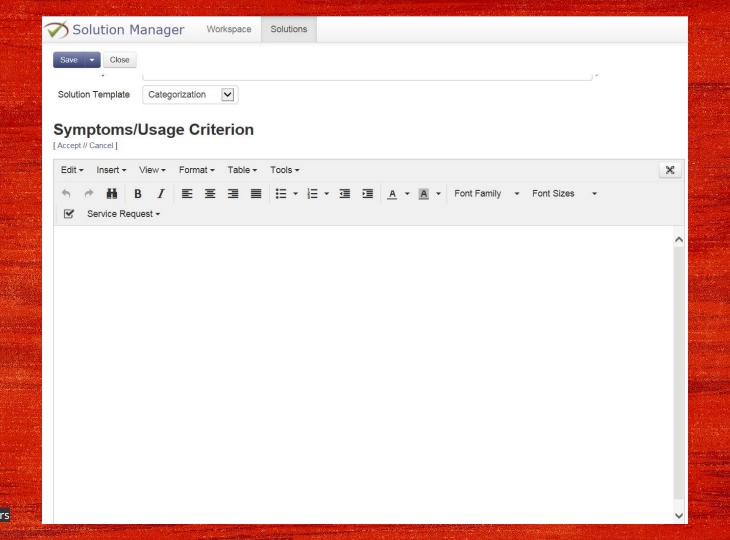
### What is a knowledge base?

"In KM, is a software or platform used to collect, organize, and facilitate access to information (usually generated by your employees)" (Forrestal, 2015, p.3)

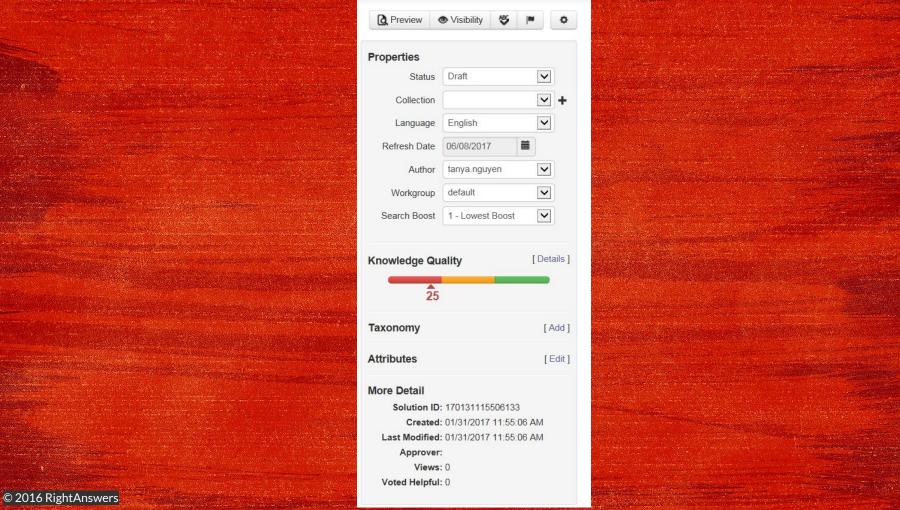
"...a good knowledge base does not just act as a repository of information, documents and files, but adds functionality to help users organize and put that information in context, by connecting to related information or resources..." (Forrestal, 2015, p.3)

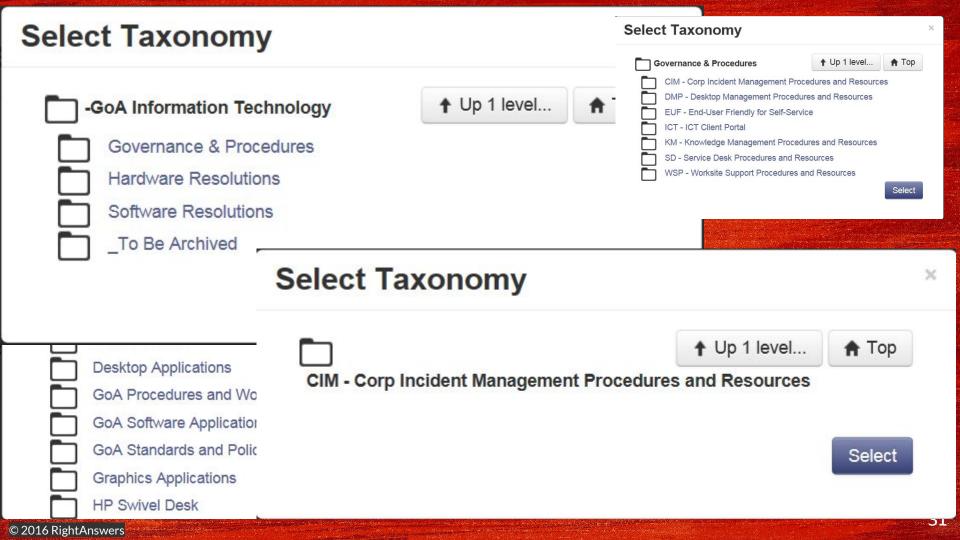






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1. Creation and Capture by SA



#### **Technology Tools**

- 1. Microsoft SharePoint
- 2. Microsoft Visio



#### **Technology Tools**

- Chat
  - Lync
- Video conferencing

#### Non-IT

"Collaborative physical workspace"

#### 3. Application and Use by SA

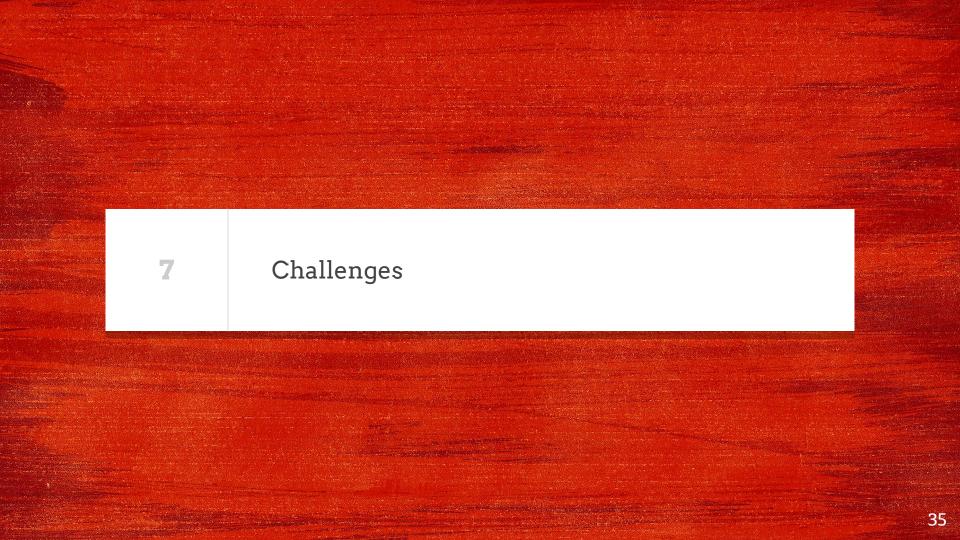


#### **Technology Tools**

- Content management
  - a. MS Sharepoint Server

#### Non-IT

Taxonomy



### Challenges

- 1. Information
  - a. Current? Information needs?
- 2. Technology
  - a. Costs?
- 3. People
- 4. Vendors

(Foy, 1998)



#### **Automatic Content Generators**

#### Meet Bob.

Bob is very competent.





Bob outperforms other people by generating one great knowledge article per hour.



#### Meet Bob's replacement.

Automated Content Generation Software

Information Foundation for Information Technology (2017) Retriev



Bob's replacement generates millions of knowledge articles in the time it takes Bob to create just one, for a fraction of the cost.



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### Any questions?

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