DALHOUSIE UNIVERSITY
FACULTY OF MANAGEMENT

Connecting Through Digital Transformation

https://enterprisersproject.com/sites/default/files/images/cio_digital_transformation_resource.jpg

Dr. Sandra L. Toze,

Director, School of Information Management

What is Digital?

Credit: https://www.flickr.com/photos/detleflagrand/

McKinsey July 2015 – What Digital Really Means

https://www.mckinsey.com/industries/high-tech/our-insights/what-digital-really-means

1. Creating value at the new frontiers of the business world
   - Re-examine what you do? How can it be disrupted?
2. Creating value in the processes that execute a vision of customer experiences
   - Use new capabilities (data, automation, interactivity) to enhance customer experiences and relationships
3. Building foundational capabilities that support the entire structure.
   - Focussing on the organizational and technical processes that allow you to be agile and respond

The Changing Definition of Digital

The changing definition of digital

How does your organization define digital?

"Digital refers to all technology innovation-related activities."	32%
"Digital is synonymous with IT."	29%
"Digital refers to all customer-facing technology activities."	14%
"Digital refers to all the investments we are making to integrate technology into all parts of our business."	14%
"Digital goes beyond technology alone to reflect a mindset that embraces constant innovation, flat decision-making, and the integration of technology into all phases of the business."	6%
"Digital refers to all data and analytics activities."	5%

Source: PwC, *2017 Global Digital IQ® Survey*
Base: 2,216

52% of companies rate their Digital IQ as strong.

In our last survey it was 67%, and before that 66%.

Source: PwC, *Global Digital IQ® Surveys*
Bases: 2,216 (2016), 1,988 (2015), 1,393 (2014)

What is Digital Transformation?

*"What we've learned, both through our surveys and in our own experience with clients, is that the **human experience** is vital to raising an organization's Digital IQ. Businesses must think critically about how their digital initiatives will affect the experience of customers and employees, as even the most well-intentioned initiatives can have unforeseen impacts on people."*

Tom Puthiyamadam, HBR May 29th, 2017

https://hbr.org/2017/05/how-the-meaning-of-digital-transformation-has-evolved

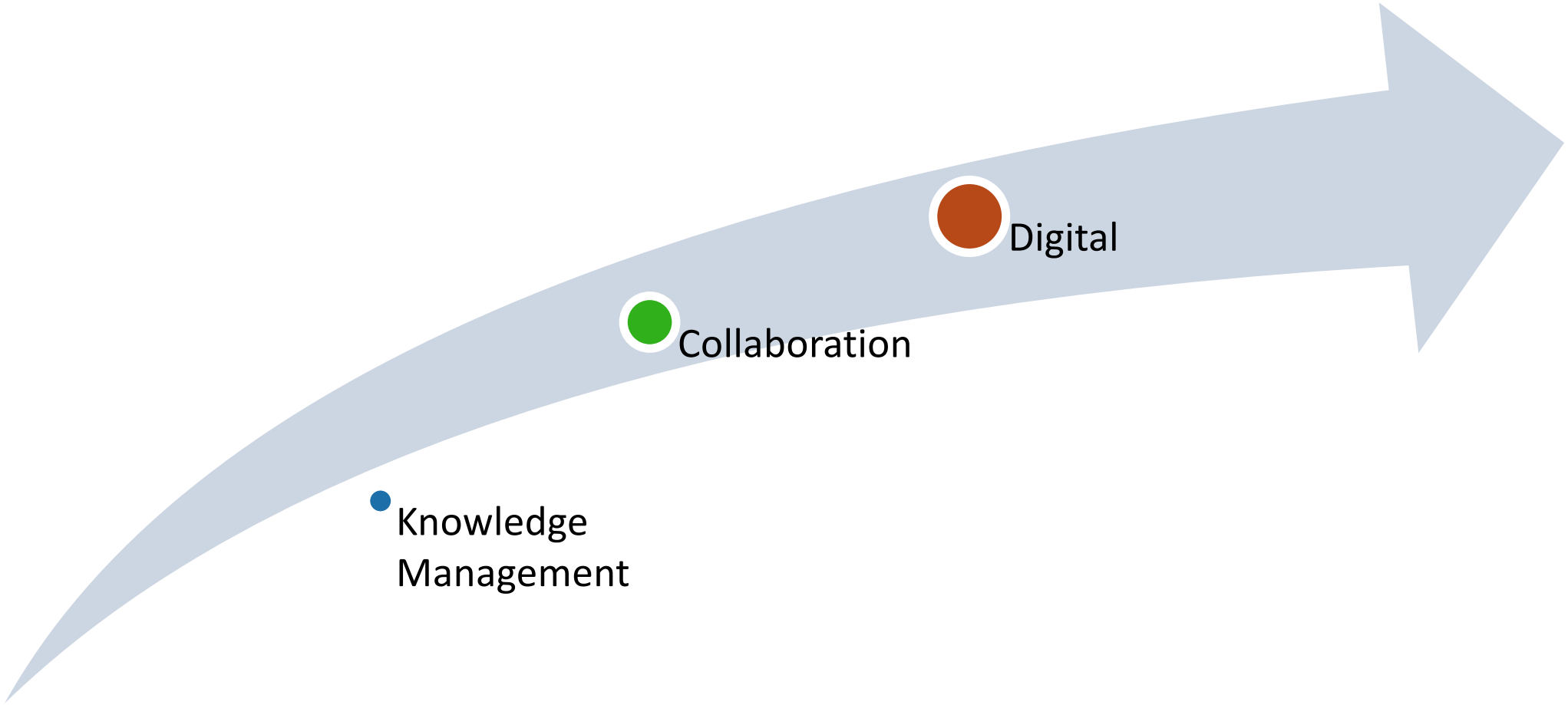
Understanding Digital Transformation

Trends over the past 10 years

- Digital transformation is most successful when there is a clear strategy
- Talk of innovation but few resources to support
- CIO role has become more strategic and visible
  - But may becoming more internal. Rise of the Chief Experience Officer?
- CEO's strong champion's of digital
- Yesterday's technology investments become today's building blocks.
- People power – need to move people experience to centre stage

https://www.pwc.com/us/en/advisory-services/digital-iq/assets/pwc-digital-iq-report.pdf

Shift? Disruption? Continuum?



Information moves to the Centre

- Data, information and knowledge, and the skills to manipulate them, have moved to centre stage.
  - WHAT DOES THIS MEAN?
- This gives information professionals opportunities to expand our reach and enable new types of information and data sharing and services
  - HOW?
  - WHAT?
  - RISKS?

Opportunities with Digital

- We understand information – need to ensure we are part of the digital strategy team
- We are collaborative by nature
- We can create valuable information products and services
- We know how to teach
- We understand customer experience
- We can design services and systems that reflect what people want
- We can work with data
- We are agile

Tensions with Digital

- Aspects of big data –math/CS based?
- Continual need to demonstrate value
- Separation between internal records and external data is shifting
- IT can drive change
- Automation/AI - risks

Shifting to an Information Governance (IG) Framework

http://www.doculynx.com/information-governance/

Defining Information Governance

"A strategic framework composed of standards, processes, roles, and metrics that hold organizations and individuals accountable to create, organize, secure, maintain, use and dispose of information in ways that align with and contribute to the organizations goals". (ARMA International)

"Information Governance is the activities and technologies employed to maximize the value of their information while minimizing the associated risks and costs" (Information Governance Initiative- IGI)

What does IG bring to the digital agenda?

Information Governance (IG) is an emerging and evolving concept

- Provides a more purposeful approach to information that is required for the digital era
- A holistic concept - IG incorporates consideration of the policies procedures, and technologies that are essential to managing information and data through their life cycle
- Ideally an IG focus encourages behaviours in people and in institutions that foster an information-centred organizational culture

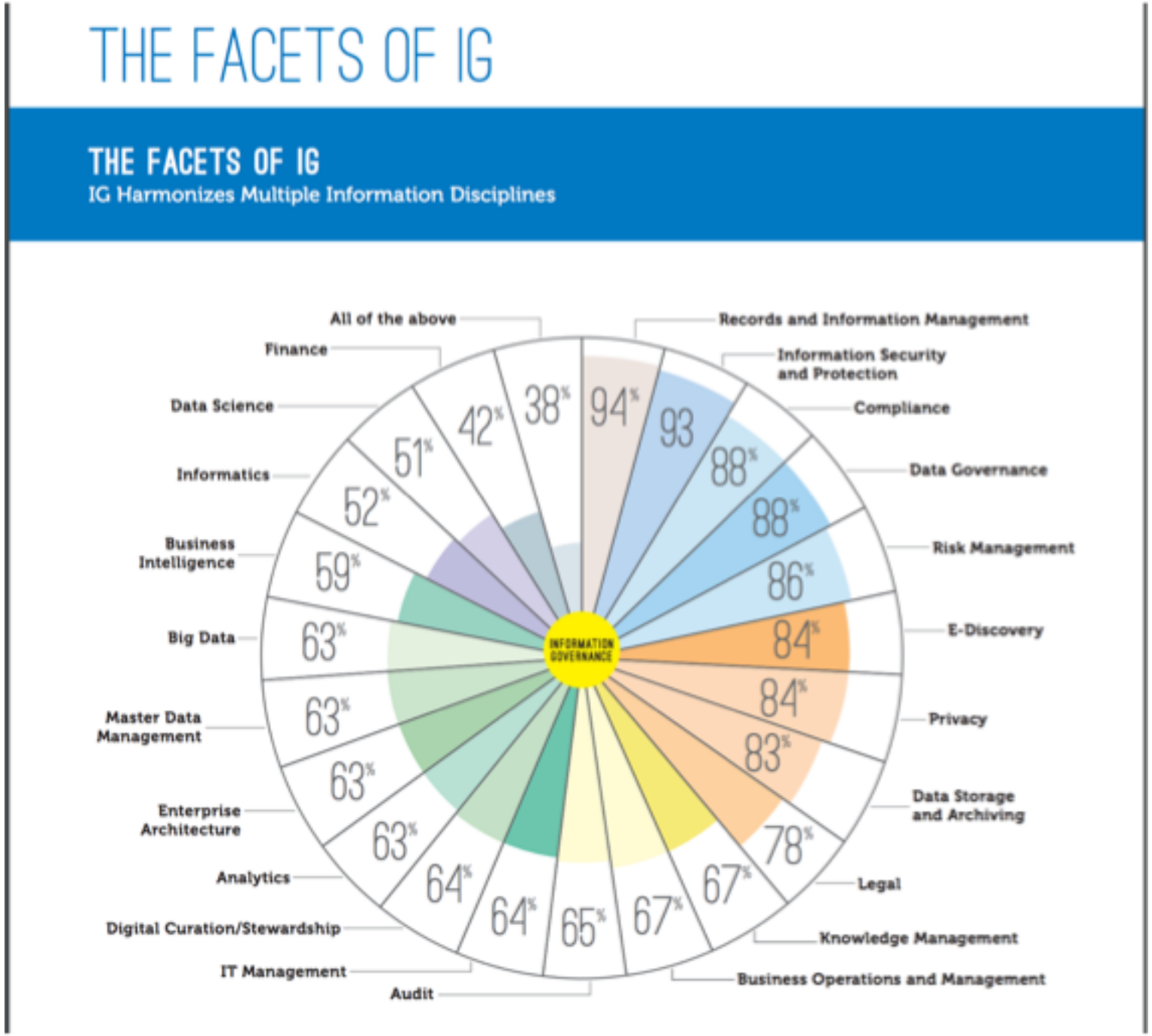
Defining Information Governance

Integrated Program that:

- Values information as critical asset
- Employs physical, technical & administrative safeguards to protect and manage information assets
- Educates and trains all employees on their roles and responsibilities
- Uses metrics to measure and improve performance

Fraioli, Finch & Harrison (2015) What in the World is ...“Information Governance”

THE FACETS OF IG



Information Governance Initiative, "Information Governance Initiative IGI State of the Industry Report 2016-2017" (Information Governance Initiative LLC., September 2017). Available at: https://iginitiative.com/wp-content/uploads/The-State-of-IG-Report-Volume-III-highres.pdf

Snapshot

- IG Practitioners continue to agree on the coordinating role IG must play.
- More than half of respondents thought IG had a role in every discipline in our pinwheel, with the one exception of finance (42 percent).

Drivers of IG

From IGI State of the Industry Report

1. External regulatory, compliance or legal obligations
2. Desire to mitigate risks associated with data that could have been defensibly deleted
3. Desire to reduce the cost of storage across the organization
4. External triggering events (e.g. lawsuit, data breach)
5. Routine, good business management practices
6. An internal technology restructuring or transition (e.g. move to the cloud)
7. Interest in mining business/organization value from information
8. Major business restructuring (merger or acquisition)
9. Need to solve a specific problem
10. Change of staff/leadership

"It's exciting to see the huge growth in the number of organizations that are now generating business value through their IG programs. It marks a true shift in the way IG is being integrated into the enterprise: automation is making it possible to extend governance further into key processes while making it transparent to end users." Stephen Ludlow Senior Director, ECM Product Marketing OpenText as quoted in IGI report

IG Projects

Practitioners' Rankings	IG Projects
1	Define and implement a corporate governance framework for IG
2	Update policies and procedures
3	Defensible deletion
4	Execute a comprehensive legacy data cleanup project
5	Data loss prevention
6	Implement legal hold tracking
7	Execute a big data analytics project

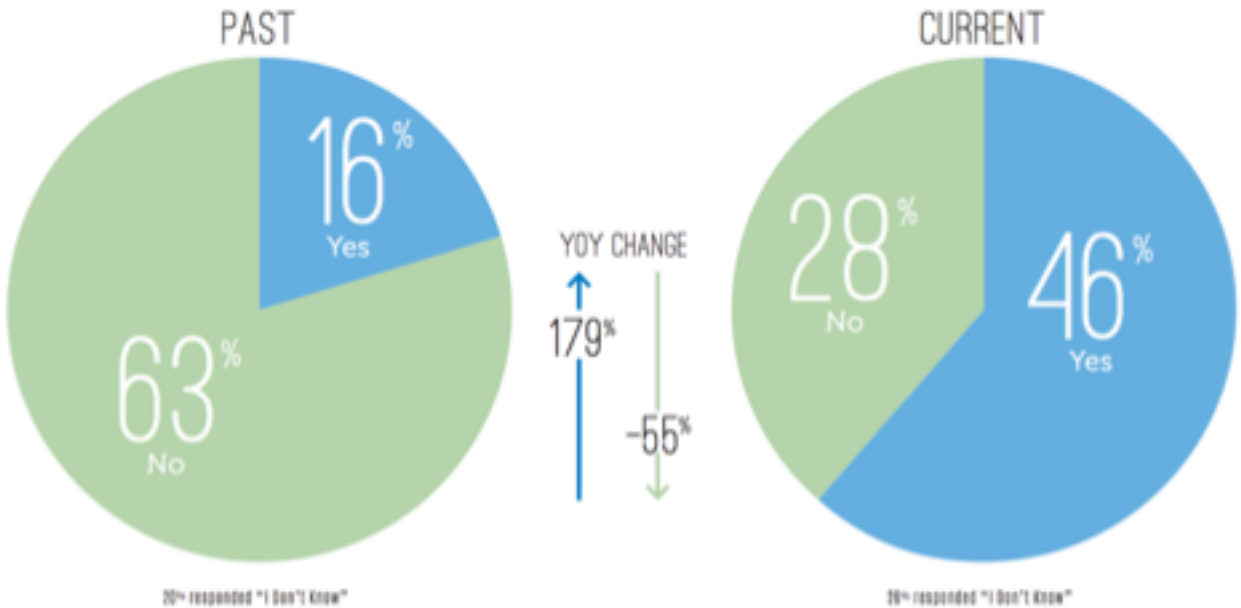
IGI Report – p 21

Barriers to IG Progress

Practitioners' Rankings	IG Barriers
1	Lack of understanding/awareness in the organization of the value of IG
2	"Siloing" or lack of communication/collaboration across various functional areas addressing information
3	Change Management (people or culture)
4	Insufficient funding
5	IG isn't adequately addressed during the planning phase of projects (gets addressed only ad hoc)

IGI Report – p 31

Is Your Organization Extracting Business Value From Its Information?



Snapshot

- 46 percent of respondents agreed that their organization is extracting business value from the information it holds.
- This is a massive 179 percent rise on last year's survey, when only 16 percent of respondents thought their organization was extracting value from its information.
- The number of respondents reporting that their organization was extracting no value from the information it holds was slashed by more than half (a 55 percent decline).

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Examining IG in Government – what can we learn?

- IG in digitized public administration "is about the capacity to make effective use of all the information resources (records, published, electronically held data) that lie at the heart of government and public administration" (Brown & Toze, 2017)
- Information=memory
- Information=raw material for current & future activities
- Much of it is sensitive
- Need for special handling to maintain its integrity and continued availability
- Information has always been central but its importance and role has not been well researched.

IG In Government

Factors to Consider

- The permanence of uncertainty
  - Speak of “digital” but still living in a multiple format world
  - Need continually access and consider the need to manage evolving and changing formats
- Changing nature of information
  - Data/information/knowledge – lines now more blurred
  - Emails/texts/tweets/websites
  - Co-created materials
  - Open data/big data
- Changing skills/competencies
  - All employees need more information/data literacy
  - Librarians & information managers need more specialized skills

State of IG

- Most Governments doing a good job with:
  - ✓ Policies
  - ✓ Standards
  - ✓ Security Focus
  - ✓ Privacy focus
  - ✓ Technology adaption
- Slow progress on
  - X Awareness
  - X Culture Shift
    - X Sharing Culture
    - X IG first
    - X Information Value
- Lack of coordination between facets of IG
- Overall IG vision not aligned with core strategy – Innovation, Data driven decision making

An Information Governance Research Agenda

1. Information as a core asset of digital public administration
   a) Blurring of lines between internally held records and published material
   b) Data becomes big data - New potentials for analysis and discovery
   c) Valuing Information – need for metrics for understanding how we can value information
   d) Information Ownership and accountability - Tension between legacy systems and hierarchical controls and electronic data
   e) Need to “map” the information ecosystem

An Information Governance Research Agenda

2. Information governance institutions and processes in the digital environment
    a) Information Leadership – CIO and beyond – management of IT but what about management of IM?
    b) Information and public service reform – ideally harness digital for innovation and collaboration, but work in progress?
    c) Information based services to the government and the public – e.g. shared services – IT but not IM?
    d) Evolving private sector role in digital public administration – i.e. vendors including cloud service providers, ED
    e) Decentralization of IM – but most employees little understanding/interest. Save everything – creating greater problems

An Information Governance Research Agenda

3. Digital Impacts on the information legacy and memory
   - Historical published material is still largely paper
   - How to integrate paper in a digital by default world?
   - Information-related administrative policies – new roles/categories and policies and standards for all
   - Need to align key information related policies to the digital age
4. Preparing for the digital future of public sector information
   - Future directions for ICTs
   - Working with Allied disciplines
   - Managing a permanent revolution

Moving Forward

- What are the goals of information governance in the Public Sector?
- What set of policies, tools and governance models will work best to support digital capacities including information sharing, mobile access, co-creation as well as big data and AI
- How will we know we are getting it right?

Translation to Law Libraries

"Law Librarians and legal information professionals are positioned at the crossroads of information science, law, business and education, and thus we are uniquely situated to make significant contributions to information governance" (Susan David DeMaine (2016) Preparing Law Students for Information Governance, Legal Reference Services Quarterly 35:2, 102-123

- Focusing on an IG approach helps librarians transition to consulting on and managing all information assets
- Also helps draw attention to an increasingly important aspect of the legal profession
  - Links between IG approaches and e-discovery
- Can play a leading role also in IG education with law students

Translation to Law Libraries

- Permanence of Uncertainty
  - As new digital tools and strategies expand things will continue to change
  - Still need for someone to be considering the larger picture
  - Ensure information we need and use today can be accessed tomorrow

Translation to Law Libraries

- Changing Nature of Information
  - As identified by Jordan Furlong (AALL Spectrum Jan/Feb 2016) there are at least 7 categories of information of use to law firms
    1. Public Legal Information
    2. Private legal Information
    3. Law Firm Business Information
    4. Law Firm Operations Information
    5. Legal Industry Information
    6. Client Information
    7. Market Climate Information
- Opportunity to work with and create value from all this information
- Need to link across information to understand trends and patterns
- Information into data – new roles

Translation to Law Libraries

Changing skills/competencies

- Increased need to teach new literacies
  - Working with structured and unstructured data
  - Information management strategies
- Opportunities to increase your own skills

IG Research Agenda Law Libraries?

Information as a core asset

- Blurring of lines between internally held records and published material
- Data becomes big data - New potentials for analysis and discovery
- Valuing Information – need for metrics for understanding how we can value information

IG Research Agenda for Law Libraries?

2. Information governance institutions and processes in the digital environment
   a) Information Leadership – need for Librarians to be involved with Digital Strategies
   b) Ideally harness digital for innovation and collaboration – increased role for librarians
   c) Evolving client/lawyer connections – librarians as consultants?
   d) Increased relationships with outside IT– i.e. vendors including cloud service providers – again role for librarians
   e) Decentralization of IM – librarians can create policies/train

IG Research Agenda Law Libraries

3. Digital Impacts on the information legacy and memory
   - How to integrate paper in a digital by default world?
   - Information-related administrative policies – new roles/categories and policies and standards for all
   - Need to align key information related policies to the digital age
4. Preparing for the digital future of legal professions
   - Future directions for ICTs
   - Working with Allied disciplines – to create solutions
   - Managing a permanent revolution

Final Thoughts

Digital Talent Gaps - Capgemini Digital Transformation Institute

Hard Digital Skills - range from data science through to data management – we posses many of them

Soft Digital Skills – change management, collaboration, comfort with ambiguity, customer-centricity, entrepreneurial mindset, data driven decision making, organizational dexterity, passion for learning

This describes most librarians!

Findings include gap in the soft digital skills is more pronounced than hard digital skills

See: https://www.capgemini.com/wp-content/uploads/2017/10/report_the-digital-talent-gap_final.pdf

Back to the Start…

“Information Governance is the activities and technologies employed to maximize the value of their information while minimizing the associated risks and costs”

To better understand the impact of digital, using this IG lens helps us consider information and our roles more holistically.

Helps position ourselves as central to both IG and Digital, see the opportunities, and minimize the tensions.

Questions?

School of Information Management
Kenneth C. Rowe Management Building
6100 University Ave, Suite 4010 (4th floor)
PO Box 15000, Halifax, NS B3H 4R2

Contact Sandra Toze
stoze@dal.ca
(902) 494-2488