

# From IM / Archivist to Risk Manager: How to transformation your role to focus on risk management?

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## Agenda

How did we get here?

What are the trends?

What are some risk management tools?

What are the next steps?

Why should I care?

How do I plan for success?

What are the key takeaways?





#### **About HELUX**

- A Microsoft Preferred Partner in Content Services specializing in SharePoint, M365, and Cloud technologies
- Using AI and machine learning, our THEMIS product suite re-imagines DT and IG / IM to improve compliance, risk management, and governance
- Visit <a href="www.helux.ai">www.helux.ai</a> for more information









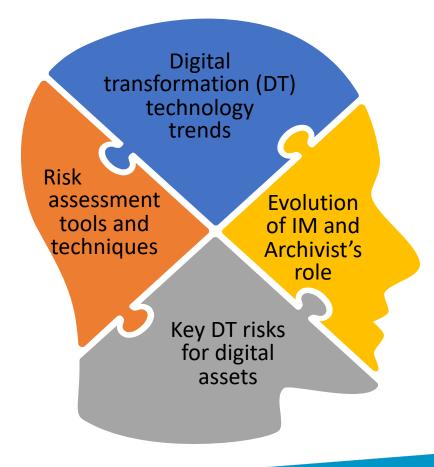








# **Learning Objectives**







# How did we get here?

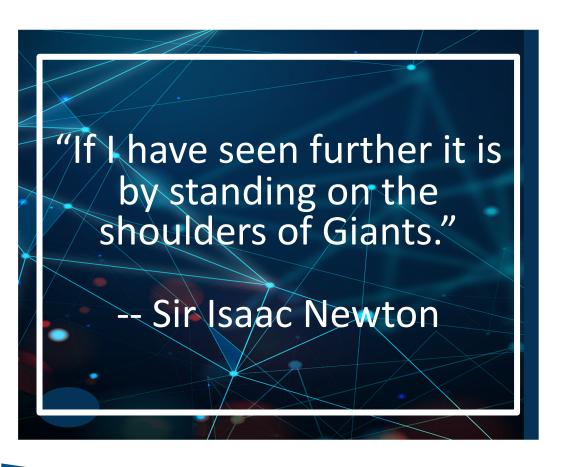
Where are we now?







## Technological change is constant



- Yesterday's discoveries sowed the seeds for new discoveries today
- Today's discoveries sow the seeds for new discoveries tomorrow
- Hominids using tools and learning to control fire was technological "game changer"

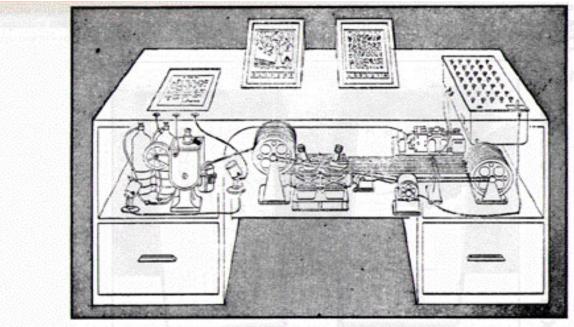




### The Internet ... 50 years in the making

Vannevar Bush proposed the "Memex" machine in 1945, 50 years before Netscape's IPO and Microsoft's IE

- A hypertext-augmented microfilm machine that can link microfilms to one another
- Documents with hyperlink and hypertext were groundbreaking technologies in 1960s
- Other technology breakthroughs eventually led to TCP/IP, the Internet, and the World Wide Web



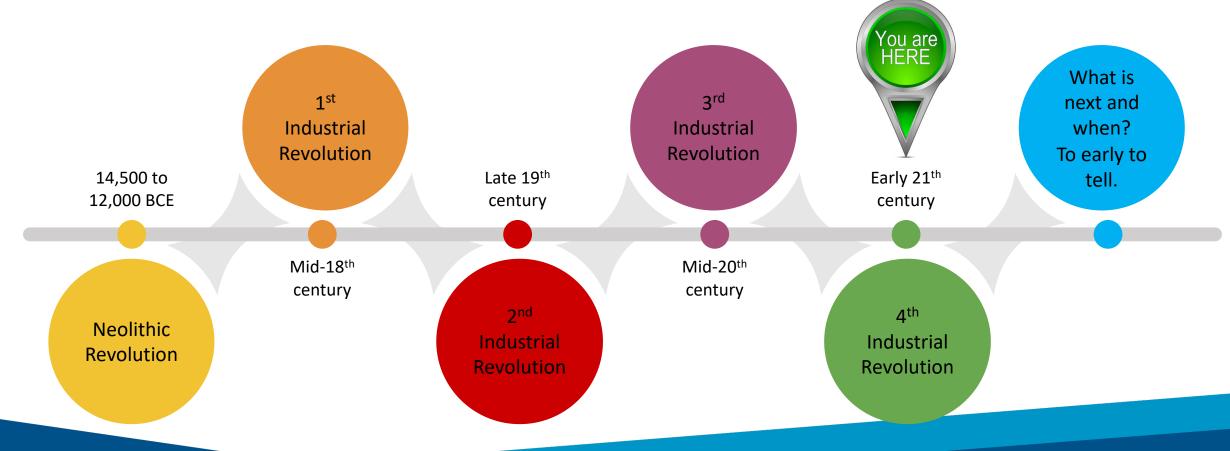
Memex in the form of a desk would instantly bring files and material on any subject to the operator's fingertips. Slanting translucent viewing screens magnify supermicrofilm filed by code numbers. At left is a mechanism which automatically photographs longhand notes, pictures and letters, then files them in the desk for future reference (LIFE 19(11), p. 123).

Source: https://history-computer.com/Internet/images/memex.jpg



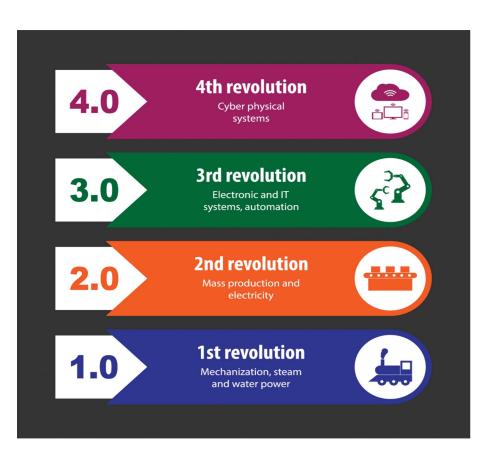


# A selective timeline of technological revolutions





# Digital transformation and the 4th Industrial Revolution



- In the 1<sup>st</sup> industrial revolution, steam power technology was the game changer
- In the 2<sup>nd</sup> industrial revolution, electricity for manufacturing and production technologies were the game changers.
- In the 3<sup>rd</sup> industrial revolution, the transistor and its use in electronic devices was the game changer
- Today, we are witnessing the 4<sup>th</sup> industrial revolution, which is the digital transformation our society

Microsoft Partner



#### What is the Fourth Industrial Revolution?

"The Fourth Industrial Revolution represents a fundamental change in the way we live, work and relate to one another. It is a new chapter in human development, enabled by extraordinary technology advances commensurate with those of the first, second and third industrial revolutions."

- Peter Drucker compared the Information Revolution to the Industrial Revolution and predicted that computers and information technologies would be transformative
- Digital transformation technologies are the foundation for the Fourth Industrial Revolution

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# Why should I care?

Will this help me understand?







### **Content Explosion**

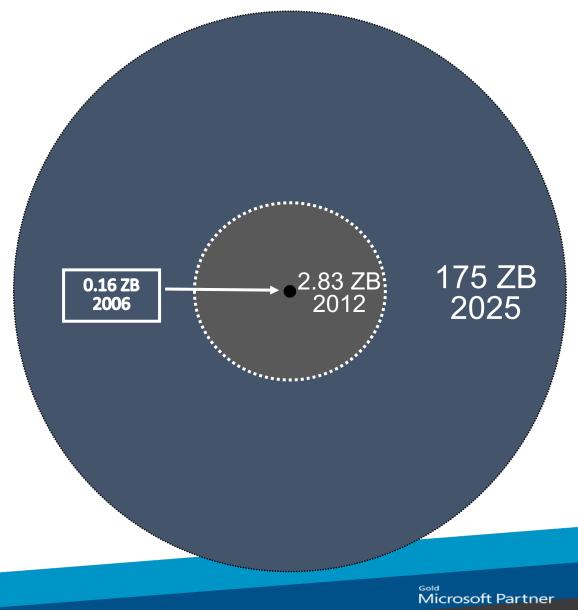
- Content is generated by humans and connected devices, including smart devices, IoT, drones, AV, etc.
- Social media is increasingly important for organizations, and another source of content
- All this content needs to be indexed so that it is searchable and findable
- Can it be a source of potentials risk?





### The Zettabyte\* Era

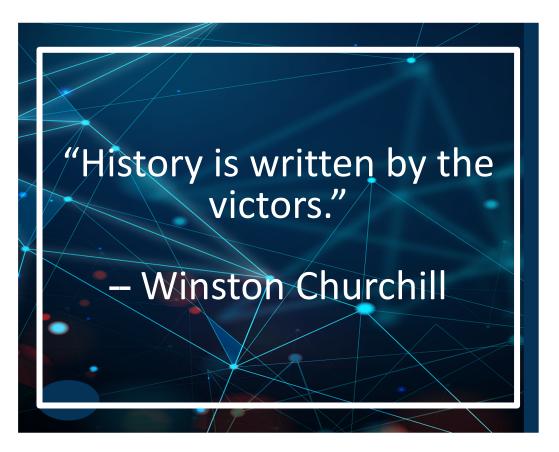
- The volume of digital data is increasing
- The number of devices creating digital data outnumber of humans
- Data must be managed and archived, along with guaranteeing its veracity and validity
- \*1 ZB = approx. 18.6 billion Blue-ray discs or 250 billion DVDs







## Accountability, Transparency, and Integrity



Accountability
Transparency
Integrity



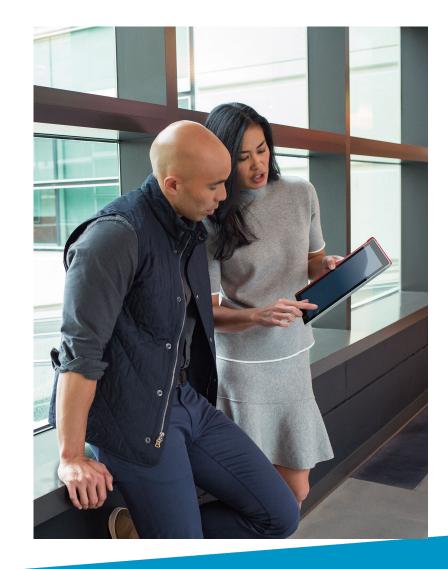
Source: https://www.arma.org/page/principles





# What are the trends?

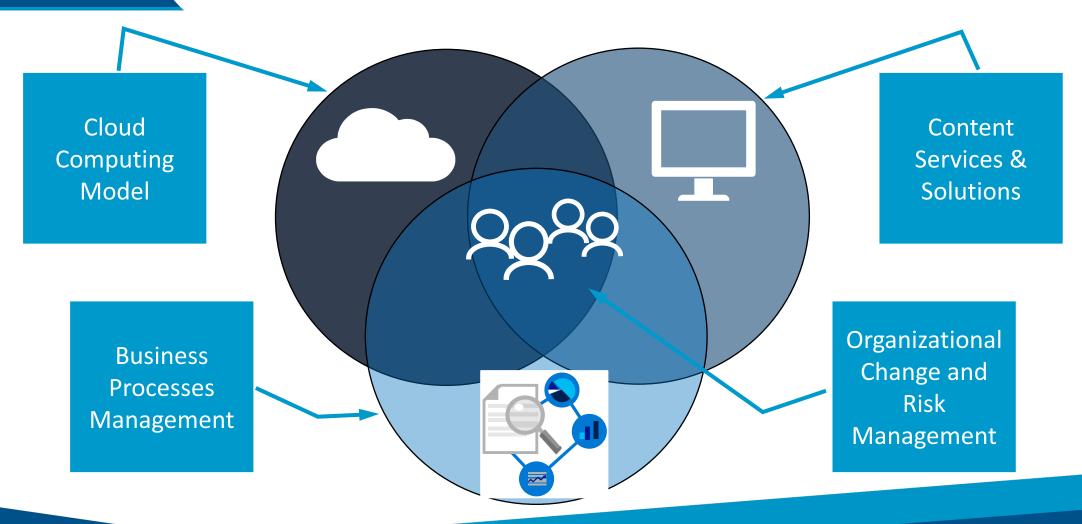
Are you ready to change?







# Digital transformation themes







## Digital transformation trends



- Artificial Intelligence as a Service
- Blockchain as a Service
- Content as a Service
- Data as a Service
- Infrastructure as a Service
- Platform as a Service
- Ransomware as a Service
- Software as a Service



- Archival Services
- Auto-classification
- Customer Experience
- Data Management
- E-Discovery
- Employee Experience
- Information Architecture
- Information Governance
- Integrated Collaboration
- Intelligent Capture
- Knowledge Management
- Records Management
- Repository Neutral Content

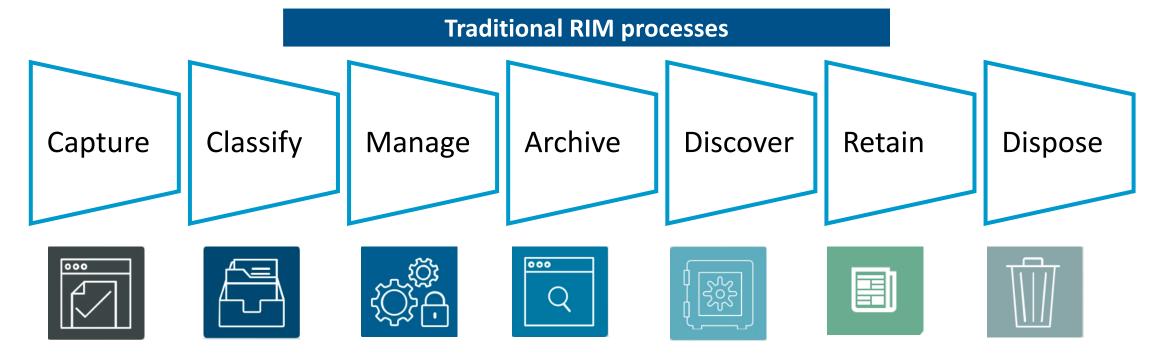


- Artificial Intelligence
- Big Data Analytics
- Blockchain
- Content Marketing Platforms
- Content Services Platforms
- Customer Data Platforms
- Cybersecurity
- DevOps
- Digital Asset Management
- Digital Experience Platforms
- Digital Rights Management
- Edge Computing
- Electronic Document and Records Management
- Robotic Process Automation





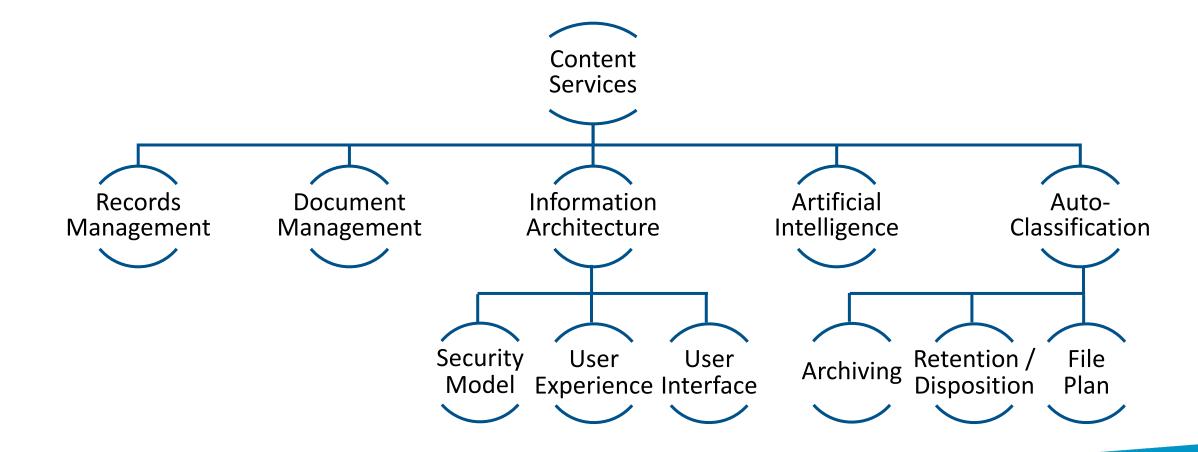
#### From RIM to...



"... manage [digital] assets from creation or receipt through processing, distributing, sharing, using, accessing, organizing, storing and retrieving, and disposing of them." Source: "Records and Information Management Core Competencies 2nd ed., p 4, ARMA



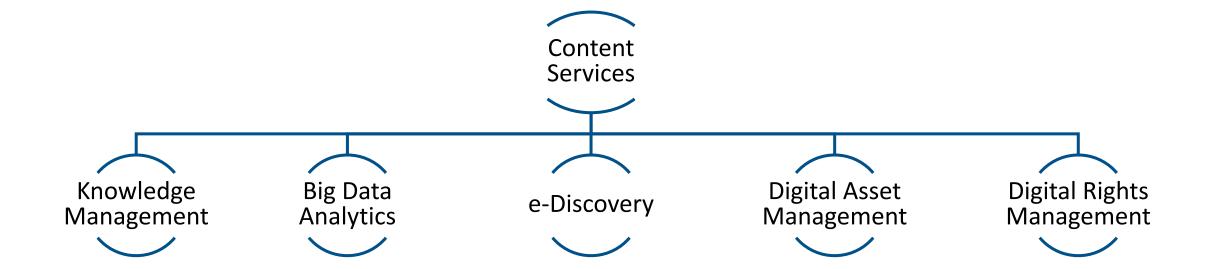
## ... to Content Services ... plus ...





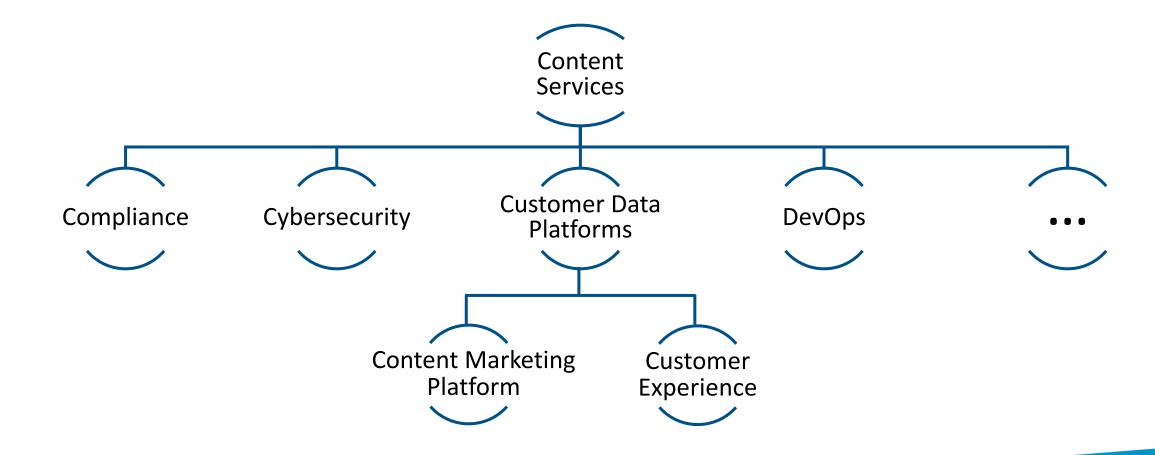


#### ... more services ...





#### ... to stakeholders







# How do I plan for success?

What do I need to know to better manage risks?









- Are you ready to adapt to new business environment?
- Are you ready manage the risks of DT?
- Are you ready to seize new opportunities?
- •Are you ready to TRANSFORM?





In the past, organizations preserved paper and microfilms in filing rooms and records centers

Now organizations need to preserve and safeguard digital content on servers







# How is making pizza similar to cloud computing?

Make the pizza yourself or order it

Build the infrastructure and software yourself or order it on demand







## In other words, build versus buy

On Premise **Dining Table** Soda Electric / Gas Oven Fire Pizza Dough Tomato Sauce **Toppings** Cheese

Infrastructure as a Service **Dining Table** Soda **Electric / Gas** Oven Fire Pizza Dough **Tomato Sauce** Toppings Cheese Take & Bake

**Platform** as a Service **Dining Table** Soda Electric / Gas Oven Fire Pizza Dough **Tomato Sauce** Toppings Cheese Pizza Delivery

Software as a Service **Dining Table** Soda Electric / Gas Oven Fire Pizza Dough **Tomato Sauce** Toppings Cheese Restaurant

On Premise **Applications** You Manage Data **Vendor Manages** Runtime Middleware 0/5 Virtualization Servers Storage Networking "Pay all of it"

Infrastructure as a Service **Applications** Data Runtime Middleware 0/5 Virtualization Servers **Storage** Networking "Pay for the pipes"

**Platform** Software as a Service as a Service **Applications Applications** Data Data Runtime Runtime Middleware Middleware 0/5 0/5 Virtualization Virtualization Servers Servers Storage Storage Networking Networking "Pay and go" "Pay to consume"

Source: Colin Smith, Cistel Technology Inc

Made at home



# Understanding Business Continuity Management (BCM)

# **Key Concepts and Terms**

- Business Imperative
- Business Recovery
- Business Resiliency
- Business Response
- Business Resumption
- Disaster Recovery

- Business Continuity Management Program
- Business Continuity Management
   Team
- Business Continuity Maturity Model
- Business Continuity Plan
- Business Continuity Policy
- Business Continuity Steering Committee





# A Business Continuity (BC) Plan

"The documented plan that define the resources, actions, tasks, and data required to manage the disaster prevention, emergency preparedness, disaster response and recovery, and business resumption process in the event of a business interruption."

Source: Glossary of Records Management and Information Governance Terms, 5th ed., ARMA

"Documented procedures that guide organizations to respond, recover, resume and restore to a predefined level of operations following disruption."

Source: BCI Glossary of Business Continuity Terms, Business Continuity Institute, https://www.thebci.org





## The 4 R's of BC planning

Respond

Recover

Resume

Restore

Approve with business owners an action plan that is ready to respond and incident resulting in outage for one more mission critical systems

Identify and prioritize with business owners the recovery of missions critical processes and systems

Confirm with business owners the criteria to quickly resume minimal operations after recovering mission critical processes and systems

Confirm with business owners the key indicators to restore normal operations to pre-defined levels



# **Business Continuity Planning Perspectives**

Transform into superheroes who protect today's organizational memory and knowledge for posterity







# **Business Continuity Planning Perspectives**

IG / IM and Archivist practitioners need to view BC planning from multiple angles, not just from a RIM perspective







## **Understanding Business Impact Analysis (BIA)**

# **Key Concepts and Terms**

- Application Recovery
- Incremental Backup
- Maximum Tolerable Period of Disruption
- Minimum Business Continuity Objective
- Recovery Point Objective
- Recovery Time Objective

- High Availability
- Mirror Site
- Mirroring
- Off-site Storage
- Redundancy
- Service Level Agreements
- Service Level Objectives
- Warm site





#### What is a BIA?

"... the process of determining the criticality of business activities and associated resource requirements to ensure operational resilience and continuity of operations during and after a business disruption. The BIA quantifies the impacts of disruptions on service delivery, risks to service delivery, and recovery time objectives (RTOs) and recovery point objectives (RPOs). These recovery requirements are then used to develop strategies, solutions and plans."

Source: Gartner Glossary, Gartner, https://www.gartner.com/en/glossary





## Recovering from an incident

#### **Recovery Point Objectives (RPO)**

Determined based on the acceptable data loss in case of a disruption of operations. It indicates the earliest point in time that is acceptable to recover the data. The RPO effectively quantifies the permissible amount of data loss in case of interruption.

#### **Recovery Time Objectives (RTO)**

The period of time following an incident within which minimum levels of services and/or products and the supporting systems, applications, or functions must be recovered after a disruption has occurred.





# What are some risk management tools?

What can I learn to use?







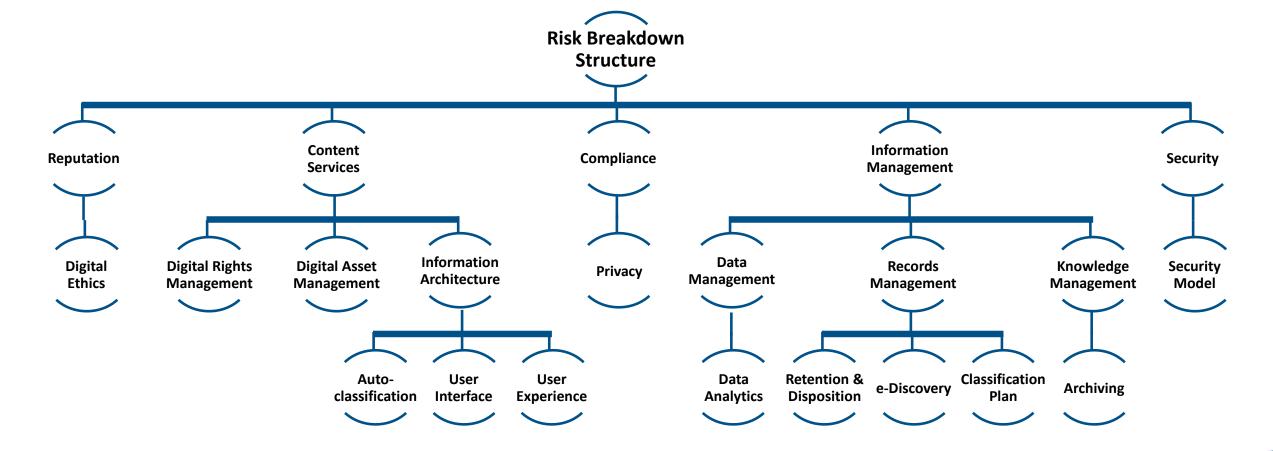
Over the past five years, and especially due to the COVID-19 pandemic, rapid business transformation has become a necessity for organizations to keep up with the evolving workplace." Organizational Transformation Series, PMI

Over 70% of largescale transformation projects fail





#### Risk Breakdown Structure (RBS)



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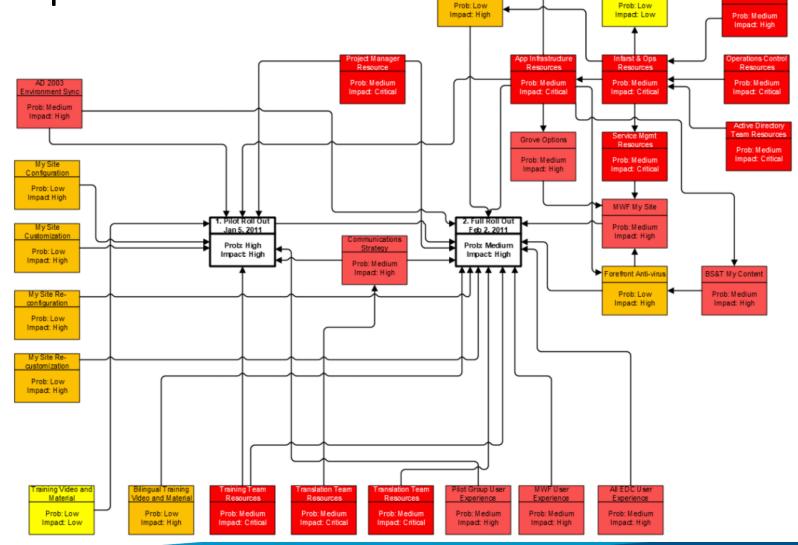
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### Risk Maps

## Four step to develop a risk map

- Consider set of events from different perspectives
- For each event identify triggers and controls
- For each event identify consequences and mitigation strategies
- Define probabilities for risk nodes





twork Resou



#### A basic BC Plan Outline

#	Section	Sub-sections Sub-section S
1.	Introduction	<ul> <li>Purpose</li> <li>Objectives</li> <li>Authority</li> <li>Date and Distribution List</li> <li>References</li> <li>Related Documents (e.g., emergency management plan, building evacuation plan)</li> </ul>
2.	Operations	<ul> <li>Mission and Key Activities</li> <li>Team Roles and Responsibilities</li> <li>Plan Activation Procedures</li> <li>Operations Center</li> <li>Alternate Site Plans</li> <li>Communications Plan (management and staff, customers, suppliers, media, regulators, etc.)</li> </ul>
3.	Critical Business Functions	<ul> <li>Conduct Audits (e.g., description of business functions, RPO, RTO, priority level, key processes, key dependencies, vital records, key staff, etc.)</li> <li>Categorize systems according to four risk categories:         <ul> <li>critical functions</li> <li>essential functions</li> <li>necessary functions</li> <li>desirable functions (this can be suspended for the duration of the emergency)</li> </ul> </li> </ul>
4.	Recovery Plan	<ul> <li>Recover Procedures</li> <li>Recovery Location</li> <li>Dependencies</li> <li>Other Considerations</li> <li>Recovery Steps (including step details, additional resources, and responsible party)</li> </ul>
5.	Appendices	<ul> <li>Organizational Chart and Delegations</li> <li>Disaster Impact Assessment Form (completed during the disaster or disruption)</li> <li>Emergency Lease Form</li> <li>Essential Staff Contact Information</li> </ul>

Source: Business Continuity Planning, The Handbook of Archival Practice, p 344





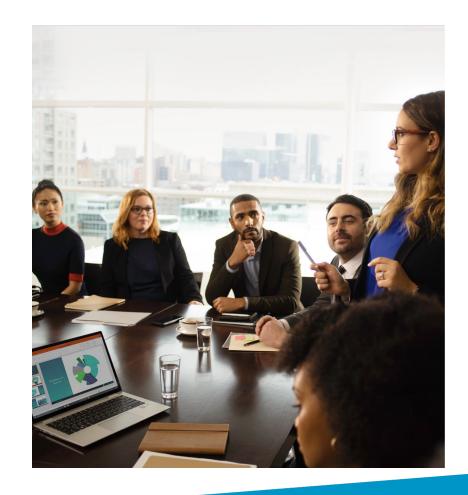
### A basic BIA methodology

- Define the scope of the BIA for the organization's key business processes
- Identify the key products, services, and activities for those business processes
- Assess the strategic, financial, operational and compliance business impacts
- Identify and prioritize the business impact on the mission critical systems and processes, and the steps to respond them
- Identify and prioritize the severity of the maximum tolerable period of disruption of the mission critical systems and business processes
- Estimate the time, effort, and resources required to recover mission critical systems and business processes
- Identify, based on the impact and severity, how quickly mission critical systems and business processes can resume operations
  - Identify, based on the impact and severity, the RPO and RTO of the information to resume minimal operations



# What are the key takeaways?

What should I remember?







It's not only about assessing risks related to paper records and other printer materials







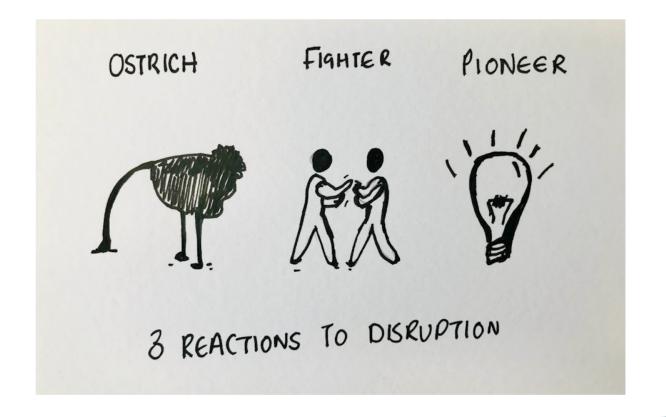
It's not only about assessing risks in the records center or in the archives







It is about constant technological change, so be ready for constant disruption

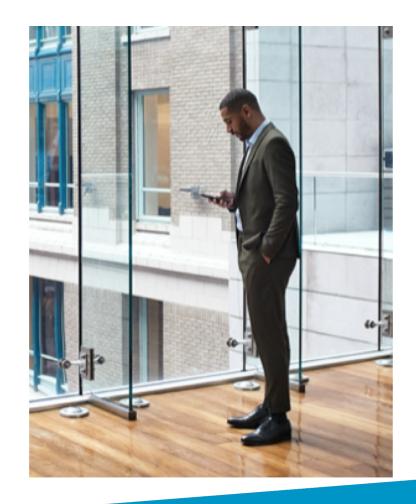


Source: Rethink Moments with Rachel, By Rachel Botsman





It's about mitigating or minimizing risks, and quickly resuming operations after an incident







It's about reducing risks to deliver services anytime, anywhere, and on-demand to support business operations







It's about assessing risks to digital assets from various business perspectives, including jurisdictional risks, operational risks, etc.







# What are the next steps?

How do I transform my role?



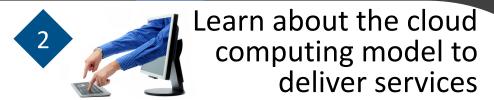


#### A roadmap to transform yourself

Learn about digital transformation trends and risks

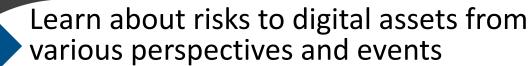








Learn about concepts and risks to content services





Learn to use risk tools to assess and report risks

Learn to empower your "risk" knowledge





### Thank You!! Any Questions?









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