

Records in the Cloud: preliminary results

**Dr. Basma Makhoulf Shabou, Professor & RiC researcher
Geneva School of Business Administration, University of
Applied Sciences Western Switzerland**

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Agenda ...

- RiC project : Context
- Team
- Objectives
- Methodology
- Results : Overview of preliminary findings
- Future activities



<http://www.recordsinthecloud.org/>

Cloud Computing (CC) is a reality in private and public companies

- Global market of public CC will reach 31,9 billion dollars in 2017 against 18,3 billion in 2012 according to Analysis Mason (2013)



Records in the Cloud

4-year collaboration: 2012-2016,
Social Sciences and Humanities Research
Council of Canada (SSHRC)

Our Team ...

International and
interdisciplinary
team

From UBC, Canada

Researchers



Luciana Duranti

Principal Investigator

Professor, School of Library, Archival
and Information Studies (SLAIS), UBC



Victoria Lemieux

Co-investigator

Assistant Professor, School of Library,
Archival and Information Studies
(SLAIS), UBC



Anthony Sheppard

Co-investigator

Professor, Faculty of Law, UBC



Ron Cenfetelli

Co-investigator

Associate Professor, Sauder School of
Business, UBC

Our Team ...

Many universities
& Cloud Security
Alliance

From the USA,
Sweden and
Switzerland



Erik Borglund

Collaborator

Associate Professor, Department of
Information Technology and Media,
Mid-Sweden University



Barbara Endicott-Popovsky

Collaborator

Professor and Director, Center for
Information Assurance and
Cybersecurity, University of
Washington



Richard Marciano

Collaborator

Professor, School of Information and
Library Science, University of North
Carolina at Chapel Hill



Basma Makhlof Shabou

Collaborator

Professor, School of Business
Administration, University of Applied
Sciences Western Switzerland



Yale Li

Collaborator

Research Director, Cloud Security
Alliance, Seattle Chapter

Objectives

To identify and examine in depth the **management, operational, legal, and technical** issues surrounding the storage and management of records in the cloud

- to educate CC users or eventual CC users
- to explore and understand the CC providers practices ;

To determine what **policies and procedures a provider** should have in place for fully **implementing** CC options

- to detect, identify, analyze and respond to incidents;

To develop **guidelines** to assist organizations in **assessing the risks** and **benefits** of outsourcing records/archives storage and processing to a cloud provider

- to define element to consider when writing contractual agreements, certifications and attestations,
- to integrate adequately CC considerations in information governance programs.

Methodology

Qualitative Research

→ Inductive and iterative

3 Data Collection strategies

- 1) Deep analysis of literature including :
 - The contributions of IT, RM, Diplomatic, Archival science, Informatics, legal science to security and outsourcing information processing and storage
 - Relevant law and case law, regulations and standards;
 - Studies on the maturity and evolution of CC practices (Users and Providers)
- 2) Online survey for CC Users
- 3) Semi-structured interviews of CC Providers

Results :
An Overview of preliminary findings

Literature: Explored domains

Extensive Literature Review

- CC architecture
- CC security
- CC and privacy
- CC and legal admissibility of records
- CC and data/information/records qualities controlling

Literature : Previous Researches

- InterPARES
 - 1 – 1999-2001
 - 2 – 2002-2006
 - 3 – 2007-2012
- Digital Records Forensics : 2008-2011
- InterPARES Trust Project (ongoing)
- QADEPs Project 2012-2013

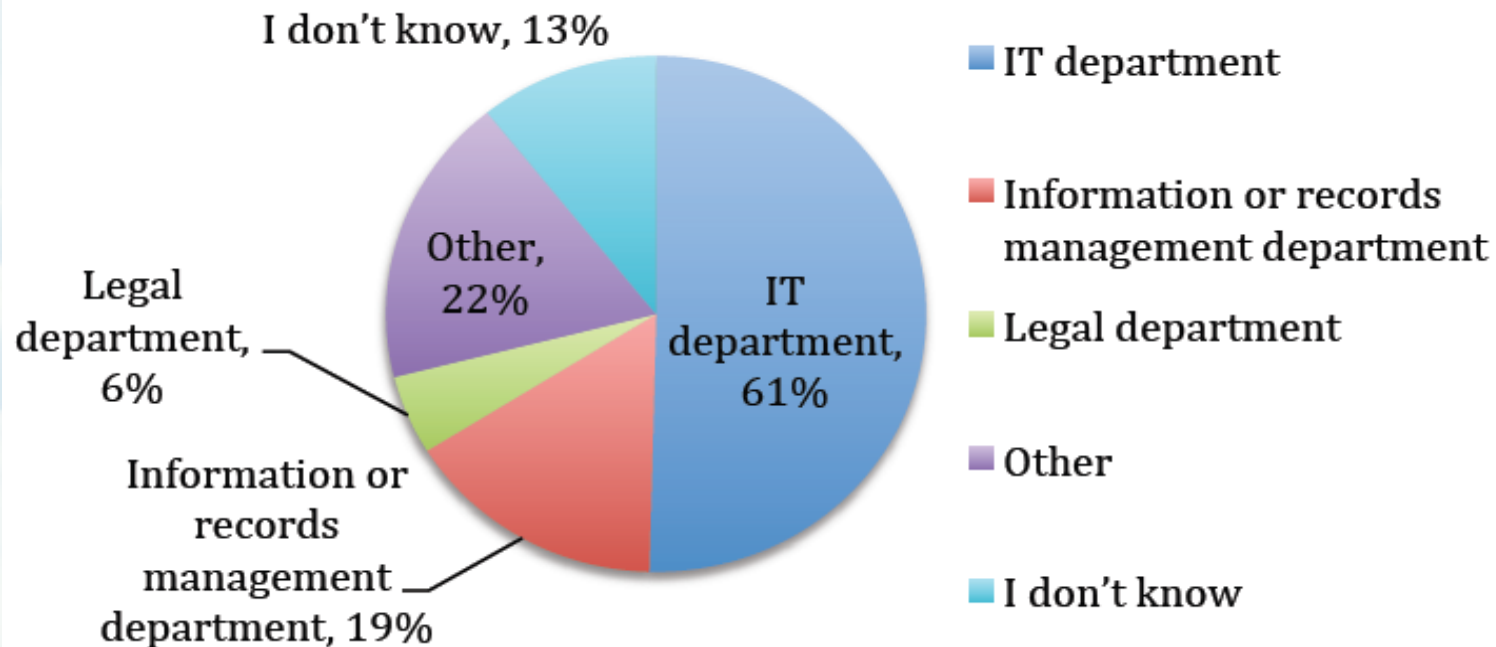


Cloud User Survey

- Over 353 respondents
- Online survey questionnaire
- Available for one month

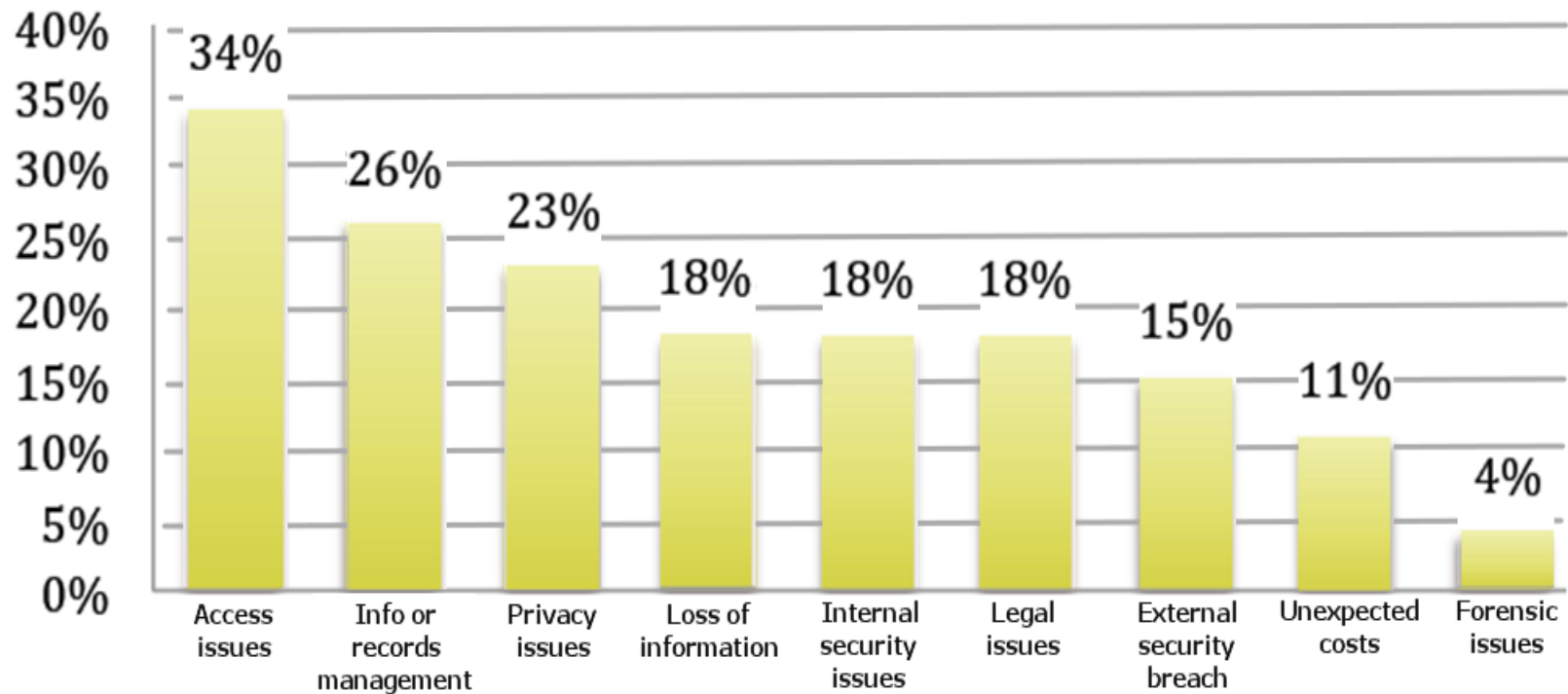
Users survey: Main results (1)

Department(s) manages the relationship with your cloud service provider(s) in your organization



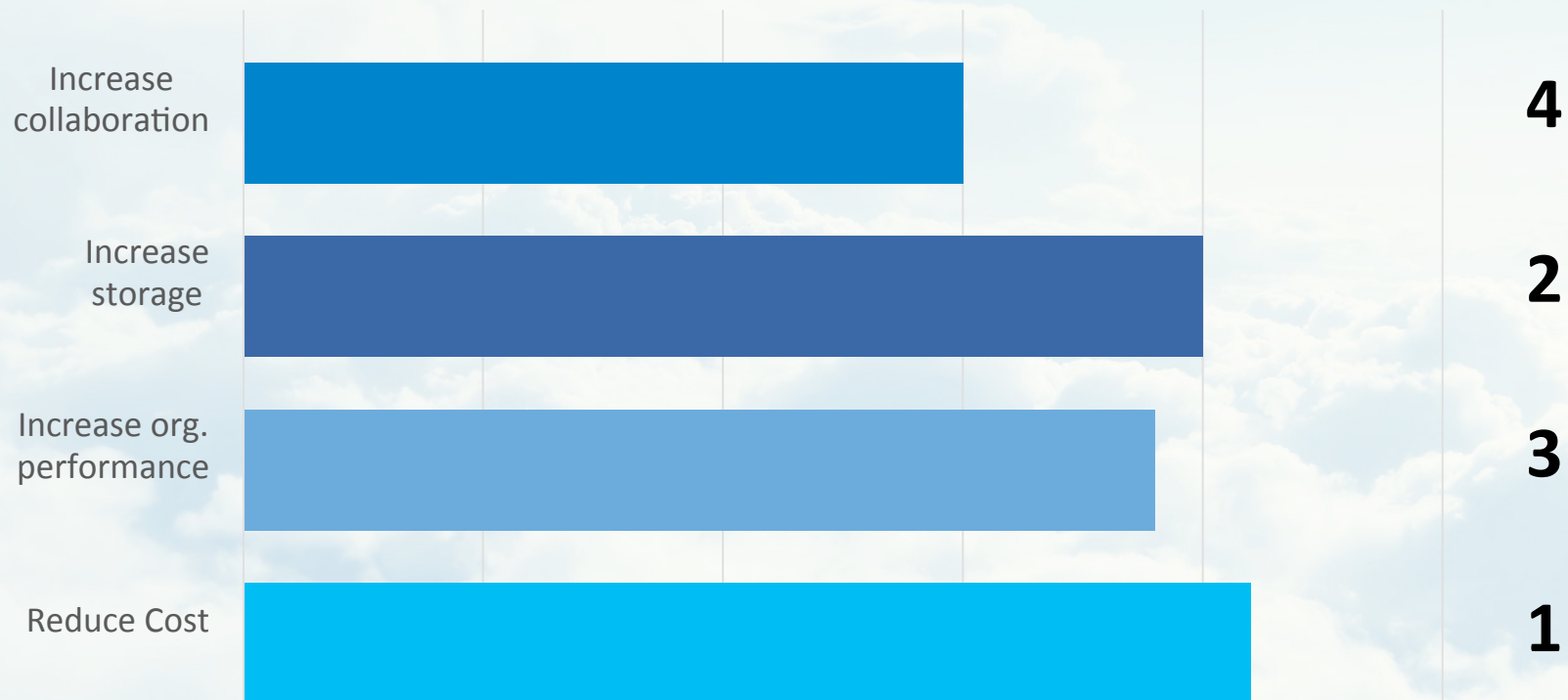
Users survey: Main results (2)

Issues that your organization experienced using cloud computing



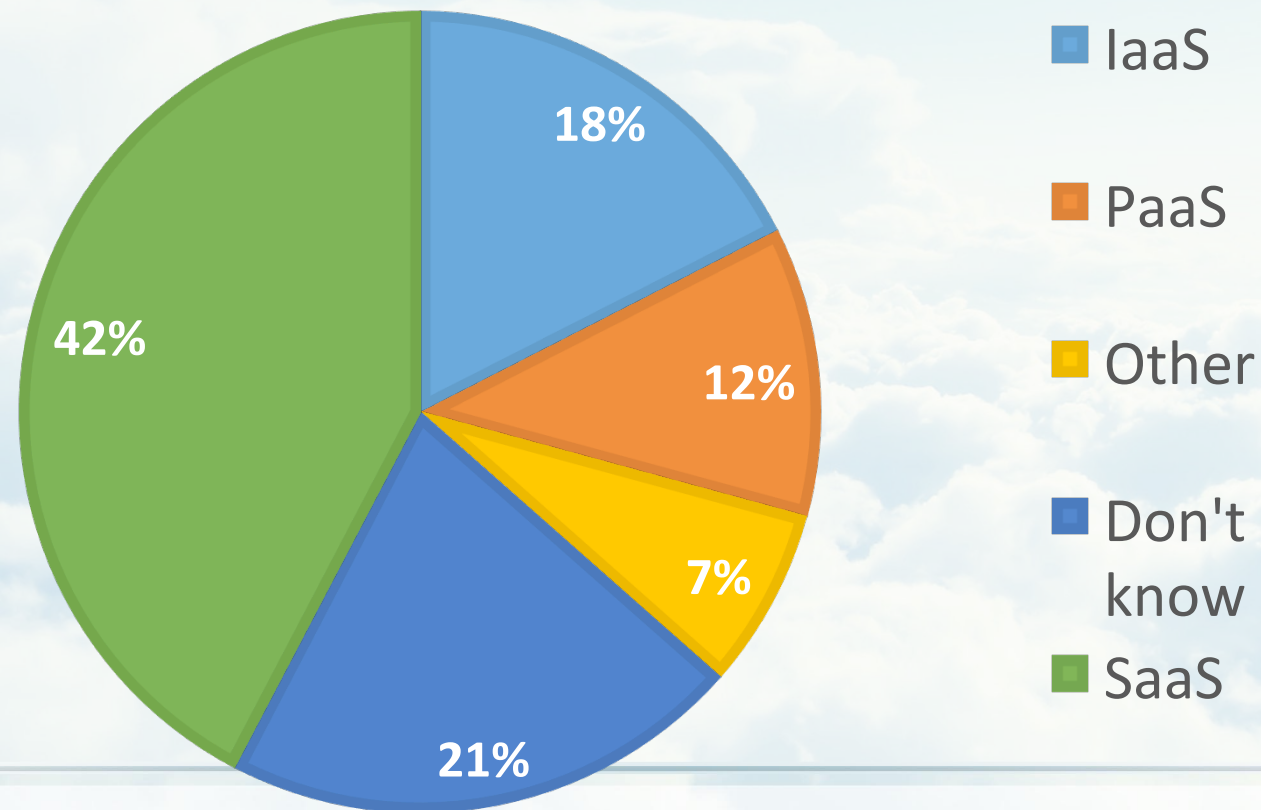
Users survey: Main results (3)

Organization's motivations for considering CC



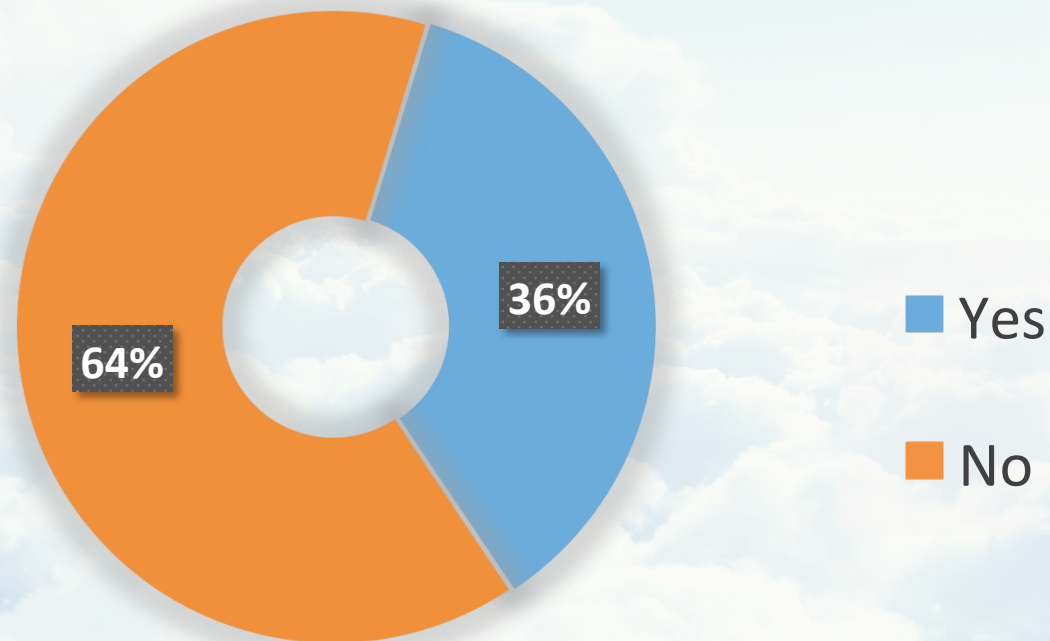
Users survey: Main results (4)

Type of Cloud Service in Use



Users survey: Main results (5)

SLA Negotiation



CC Provider Interviews

(ongoing)

- 8 semi-structured in-depth interviews
- Early findings suggest that providers are responding to Client concerns about:
 - data backup,
 - encryption of stored data,
 - access to client data, and
 - security agreements between cloud computing sub-contractors

Methodology : Difficulties

Data collection strategies	Difficulties and limits	Mitigations
Literature	<ul style="list-style-type: none">• Abundance of professional information but few academic studies	<ul style="list-style-type: none">- Explore intensively, in different domain, different approaches
User Survey	<ul style="list-style-type: none">• Basic and introductory questions• It doesn't cover fundamental questions. Ex. cc risks, pricing models, etc.	<ul style="list-style-type: none">- Complementary survey
Provider Interviewers	<ul style="list-style-type: none">• Small sample → needs to be developed	<ul style="list-style-type: none">- Collaboration with the large team of ITrust will help us to reach more participants in different contexts (countries, type of org. etc.)

Future Activities

- Continue Interviews with Cloud Providers (currently ongoing)
- Develop a new version for CC Users Survey
- Develop relevant collaboration and interactions between RiC and ITrust teams
- Study international law (air; maritime) as a possible model for cloud computing and jurisdictional issues
- Produce a series of tools to support risk assessment, legislative compliance, SLA negotiation, chain of custody maintenance, and information governance integration
- Participate to national and international Symposiums conferences (AAO

To read more about RiC Project ...

- Duranti, Luciana. Records in the Cloud: Towards InterPARES Trust. Fondazione Rinascimento Digitale. CULTURAL HERITAGE online: Trusted Digital Repositories & Trusted Professionals. Florence, Italy, December 11-12, 2012. Accessed June 2, 2013.
http://www.rinascimento-digitale.it/conference2012/paper_ic_2012/duranti_paper.pdf
- Analysis Mason, 2013:
<http://www.ictjournal.ch/fr-CH/News/2013/02/06/Suisse-le-cloud-public-representera-249-mios-de-dollars-en-2017.aspx>
- Dan Gillean, Dalian, Records in the Cloud: Towards an International Framework for Trust China, June 21, 2013,
- Valérie Leveillé, Records in the Cloud: Establishing trust and maintaining our documentary heritage. Poster, 2013
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Thank you

www.recordsinthecloud.org

luciana.duranti@ubc.ca

basma.makhlouf-shabou@hesge.ch