# Technology Leadership Academy

Module 4: IT, Cloud & Data Management



John Kenyon





# Review Module 3

Budgeting Return on Investment



Data Goal:

CLEAN

ACCURATE

**ACTIONABLE** 



### Poll



Currently Use Cloud - Software

Currently Use Cloud - Server or Storage

Have a designated Data Manager

**IT Basics** 

Data Management

Cloud



### **IT Basics**



Onsite & Offsite Backups, Restore Tested

Networked, Online Workstations

Documentation and Disaster Plan

Regular Maintenance & Upgrades

Investment in Resources - Human & Information

# Making Good Choices

**Never Start with Tools** 

List Your Needs in Priority Order

Check Idealware to Narrow Choices

Compare Needs Against Tools

Test Drive, Talk to Other Nonprofits, Consultants



# After People



Flickr Image: CIMMYT

**721641219924**5 

`860943702770539217176293176751 \*072113499999983729780 `03137838752886587 73192°



# Budgeting

- 1. People
- 2. Data

Current: 0 - 3%

Goal: closer to 10%





### **Data Silos**

**Donor Database** 

Programs Database

Bulk Email Program

Spreadsheets

**Address Books** 



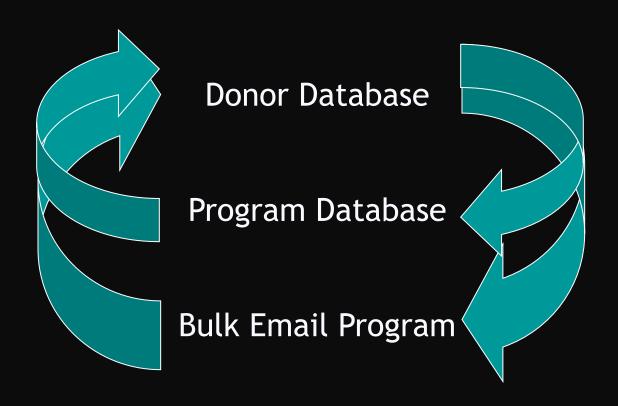
# Flickr Image: dsearls

# **Data Silos**



Lacks: Interaction - De-duping - Automation

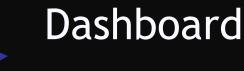
# Silos -> Integration



Interaction - De-duping - Automation

Donor Mgmt dbase Program dbase

Bulk Email Google Analytics Facebook Insights



Preferred Communication Method
Primary Area of Interest

### **Database Basics**



Maximize Investment: Training, Audit

Minimum Entry in 2 Systems

Dedicated Data Manager

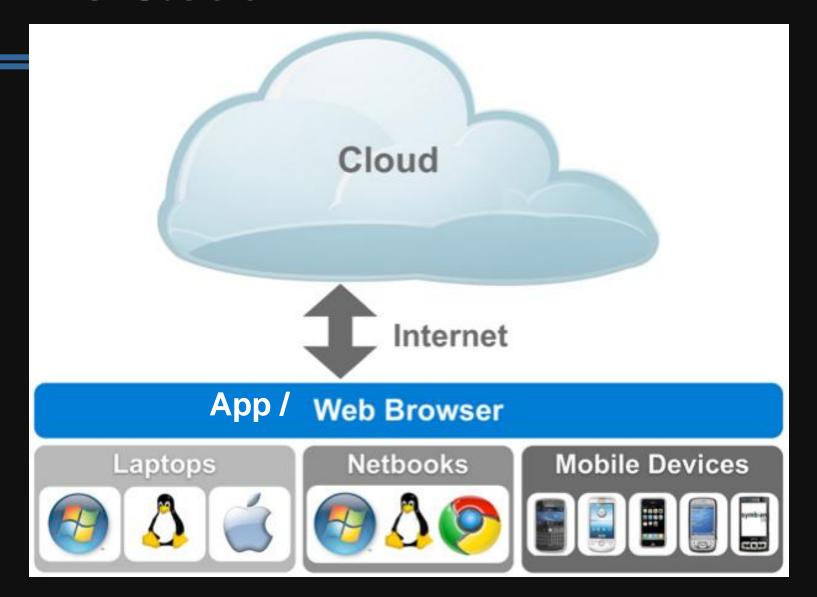
Garbage In - Garbage Out: S.O.P.'s

Systems for Moving Data, Safeguarding Data

Map Business Processes

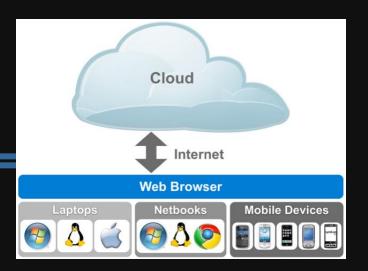


# The Cloud



### The Cloud

Scalable service accessed via Internet



**Gmail** 

Facebook

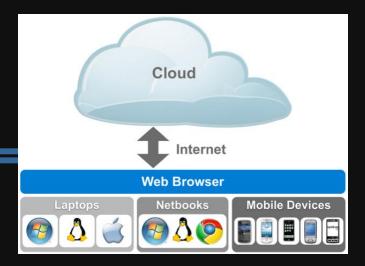
**Twitter** 

MSOffice 365

Salesforce

Survey Monkey

# Strengths



Sharing

Collaboration

Working Remotely

Scaling (add/remove people or space)

# Use Examples

Cloud

Internet

Web Browser

Laptops

Netbooks

Mobile Devices

Diagram of the content of the c

Replace servers

Board or work teams sharing docs vs. mailing/paper

Bulk emailing, creating/distributing surveys

Data Repository with greater accessibility

Video conference with multiple locations

### **Human Side**

Requires training



Culture shift for teams, org

Involvement in security, backups

Show examples to open up thinking

# **Email Example**

- Server-based: Microsoft Exchange (TechSoup)
  - Cost of server: varies
  - Windows Server + CALs: \$55 + \$3/person
  - Exchange Server Standard + CALs: \$44 + \$5/person
  - Microsoft Outlook: \$6/person
  - Security, spam filtering: varies
  - Upgrade every 3-5 years
- Cloud-based: Google
  - \$50/person/year
  - Also includes calendar, docs

### Reported Major Advantages to Cloud Computing



### Administration

- Easier software access
- Easier disaster recovery
- Reduced system admin.
- Rapid deployment



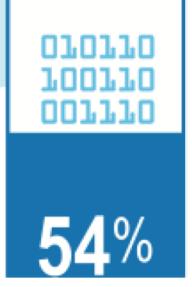
### Cost

- Low capital investment
- Fewer IT staff needed
- Transforms capital expenses to operating expenses



### **Partnership**

- Improved collaboration
- Easier to partner with other orgs.
- Rapid deployment



### Data

- Improved data security
- Better data organization
- Data under my control

### **Reported Major Barriers**



# Lack of Knowledge

- Inadequate training
- No management support for cloud
- No funder support



### Cost

- Monthly costs
- Setup costs
- Migration costs
- Internet costs



### Data security

- Data security concerns
- Data loss concerns

# 44%

### Lack of trust

- Cloud not ready to depend on
- Integration issues
- General lack of trust



# Noncontrollable externalities

- · Gov't. regulations
- · Unstable electric grid
- Lack of dependable Internet connectivity
- Foreign currency issues



### Availability

Internet may go down

Service provider may go down/out of business

Confidentiality

How well is data protected



### Security

Is service protected from unauthorized access?

### Privacy

Process and policies agree with yours/requirements?



### Availability

Uptime usually better than on-premise

Service provider may go down/out of business

Recovery period usually short/Notice given of closure

How long can you operate without it?

Important to keep copy in-hand



### Security

Generally better than most small/medium nonprofits

Requires org have good practices: Security levels, passwords

### Privacy

Must monitor internal processes to maintain

### Other Considerations



### Customization

Usually little or none

### **Updates**

Happen "on the fly"

Functions, look might change

Need to keep up internally on changes to support users

### Your Tasks



### Privacy

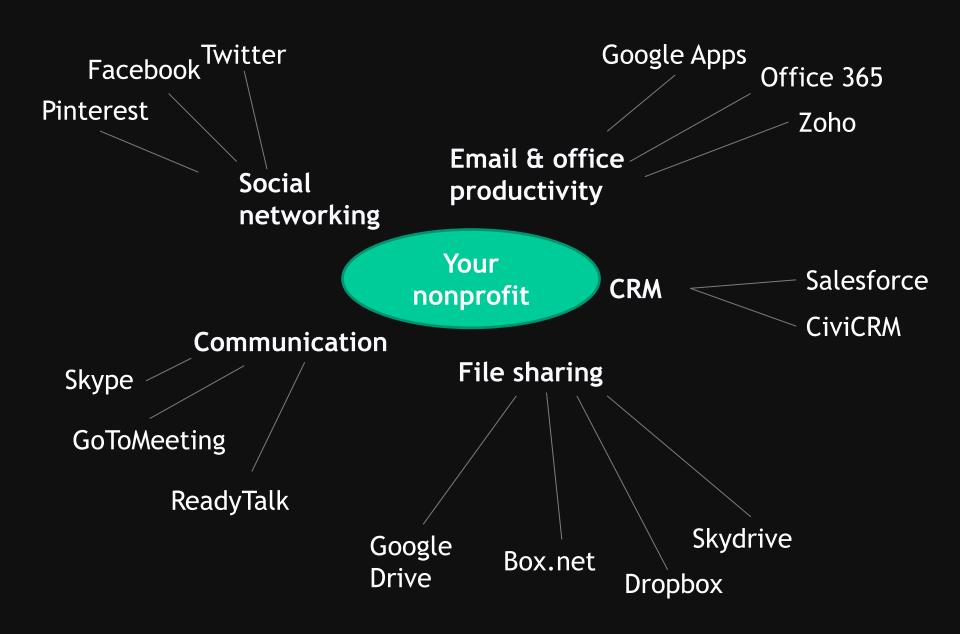
Fines/penalties on you, not provider
Reputational impact on you
May need to limit what data is in the cloud

Data in-hand

Regular backups, sync process

Exit strategy

Data movement, storage, upload/download





### John Kenyon - Nonprofit Technology Educator & Strategist

Nonprofit Technology consulting, training and writing about appropriate, effective solutions.



Google™ Custom Search

Search

Subscribe in a reader

Email Me

NAVIGATION LINKS

<u>Bio</u>

Rates & Terms

Services: Client List

Services: Consulting

Services: Training & Education

Services: Training: Highlights/Recent

Writing

תודה Dankie Gracias Спасибо Köszönjük Grazie Dziękujemy Vielen Dank Paldies Täname teid Obrigado <sup>Teşekkür Ederiz</sup> 감사합니다 Σας ευχαριστούμε Bedankt Děkujeme vám ありがとうございます Tack

www.johnkenyon.org



http://www.rgtech.com.au



Tony Nissen

# Data Management

New Australian Government Policy...



http://www.protectivesecurity.gov.au/



# Data Management

New Australian Government Policy...

"The Australian Government Policy and risk management guidelines for the processing and storage of Australian Government information in outsourced or offshore ICT arrangements"

# Data Management



ICT Arrangement	Unclassified information that is publicly available	Other unclassified information that is not publicly available	All information requiring privacy protections <sup>1</sup>	Security classified information
Offshore and Outsourced - Domestically hosted (onshore) public cloud	Agencies can enter into these arrangements following a risk assessment.  The handling, storage, transmission, transportation and disposal of information in these arrangements should be done in accordance with the Australian Government Information security management protocol.	Agencies can enter into these arrangements following a risk assessment.  Agency heads must also document that they have calculated and accept the associated security risks as per the guidelines developed by the Attorney-General's Department. <sup>2</sup>	Agencies cannot enter into these arrangements, unless:  1) relevant portfolio Minister agrees that sufficient technological or other measures have been implemented to mitigate the risk of unauthorised access, and 2) there has been consultation with, and agreement from, the Minister	These guidelines do not focus on the controls for Australian Government security classified information which are detailed in the Australian Government Information security management protocol and Information Security Manual.



### Source:

http://www.protectivesecurity .gov.au/informationsecurity/D ocuments/PolicyandRiskmanag ementguidelinesforthestoragea ndprocessingofAusGovinfoinout sourcedoroffshorelCTarrangem ents.pdf

### Question Time!

Don't be shy...

There are no stupid questions... Only good ones ©



### Question Time!

What barriers do you face around cloud adoption in your org?

What are fears/concerns and what are ways to allay those?



### Thank You!





