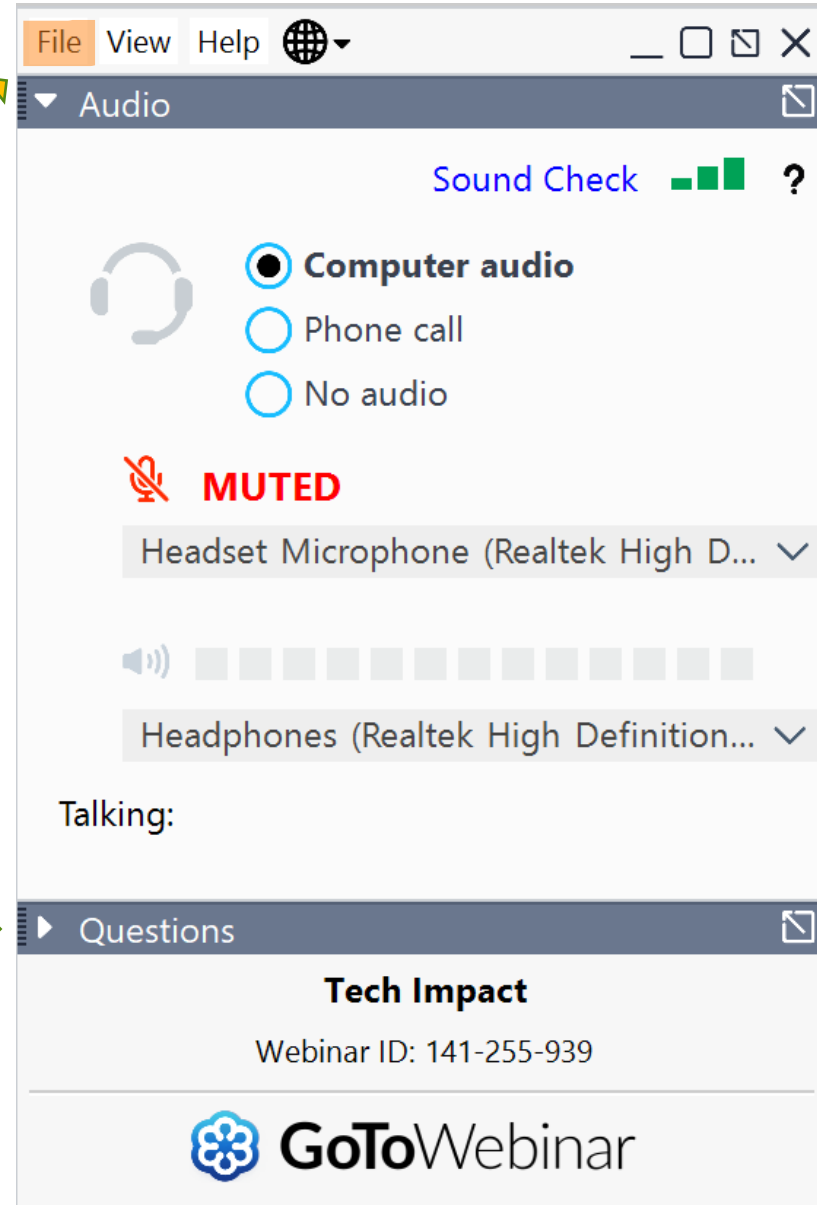# TECHIMPACT®

ADVANCED DATA

Data Quality

GOTOWEBINAR INTERFACE

If you cannot hear us speaking, go to:

File->Preference->Audio and check your audio settings.

Type all comments/questions into the "Questions" panel.

Your interface may display slightly differently.

File View Help

Audio

Sound Check ?

○ **Computer audio**
○ Phone call
○ No audio

MUTED

Headset Microphone (Realtek High D... ∨

Headphones (Realtek High Definition... ∨

Talking:

Questions

Tech Impact

Webinar ID: 141-255-939

GoToWebinar

TECHIMPACT®

OUR MISSION IS TO EMPOWER COMMUNITIES AND NONPROFITS TO USE TECHNOLOGY TO BETTER SERVE OUR WORLD.

TECHIMPACT®

We do this by delivering tech services, education, and training that help nonprofits and communities thrive.

NONPROFIT TECH SERVICES:

- Managed IT Support
- Cloud Services
- Strategic Consulting
- Security & Compliance
- Data Support
- Application Selection
- Collaboration Strategy & Implementation

NONPROFIT EDUCATION & TRAINING:

- Reports
- Consumer Guides
- Assessments
- Workbooks & Articles
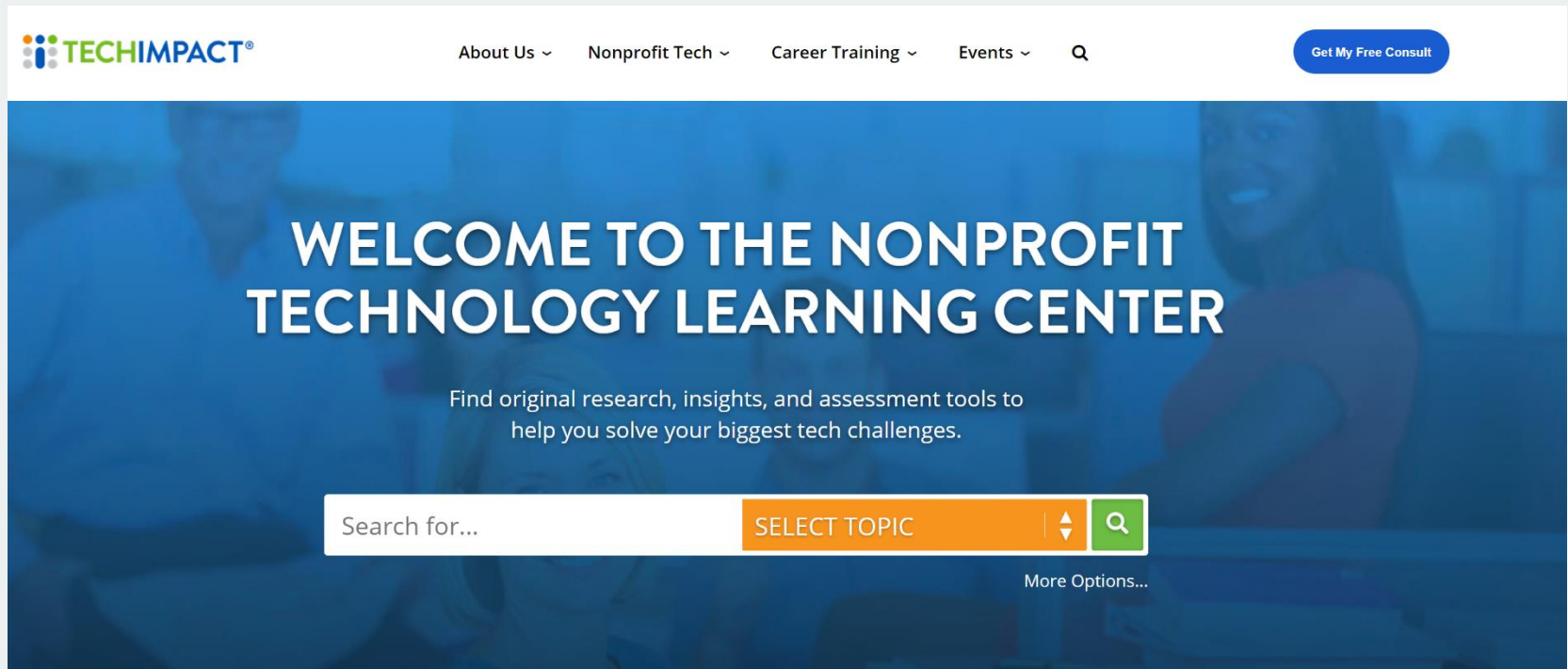- Online Training
- Free Webinars

WORKFORCE DEVELOPMENT:

ITWorks & CXWorks: Free IT and Customer Experience training programs

PunchCode:
12-week immersive programming bootcamp

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TECH IMPACT'S TECHNOLOGY LEARNING CENTER

www.techlearningcenter.org

Course Page:

https://offers.techimpact.org/course-page-advanced-data

LEE BRODERICK

Senior Consultant/Project Manager

I work with non-profit organizations to improve their use of data, define data requirements and develop strategic technology plans. I am skilled in Salesforce admin and development and in Data Exploration, helping partners to better articulate their outcomes through the use of data visualization tools such as Power BI.

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AGENDA

1. Course Sessions & Goals

2. Data for Beginners Recap

3. Data Quality and Impact

4. Dirty Data: What Is It & How to Fix It

COURSE SESSIONS & GOALS

ADVANCED DATA COURSE SESSIONS

Earlier Class → Definition

Our Focus → Quality

Analysis
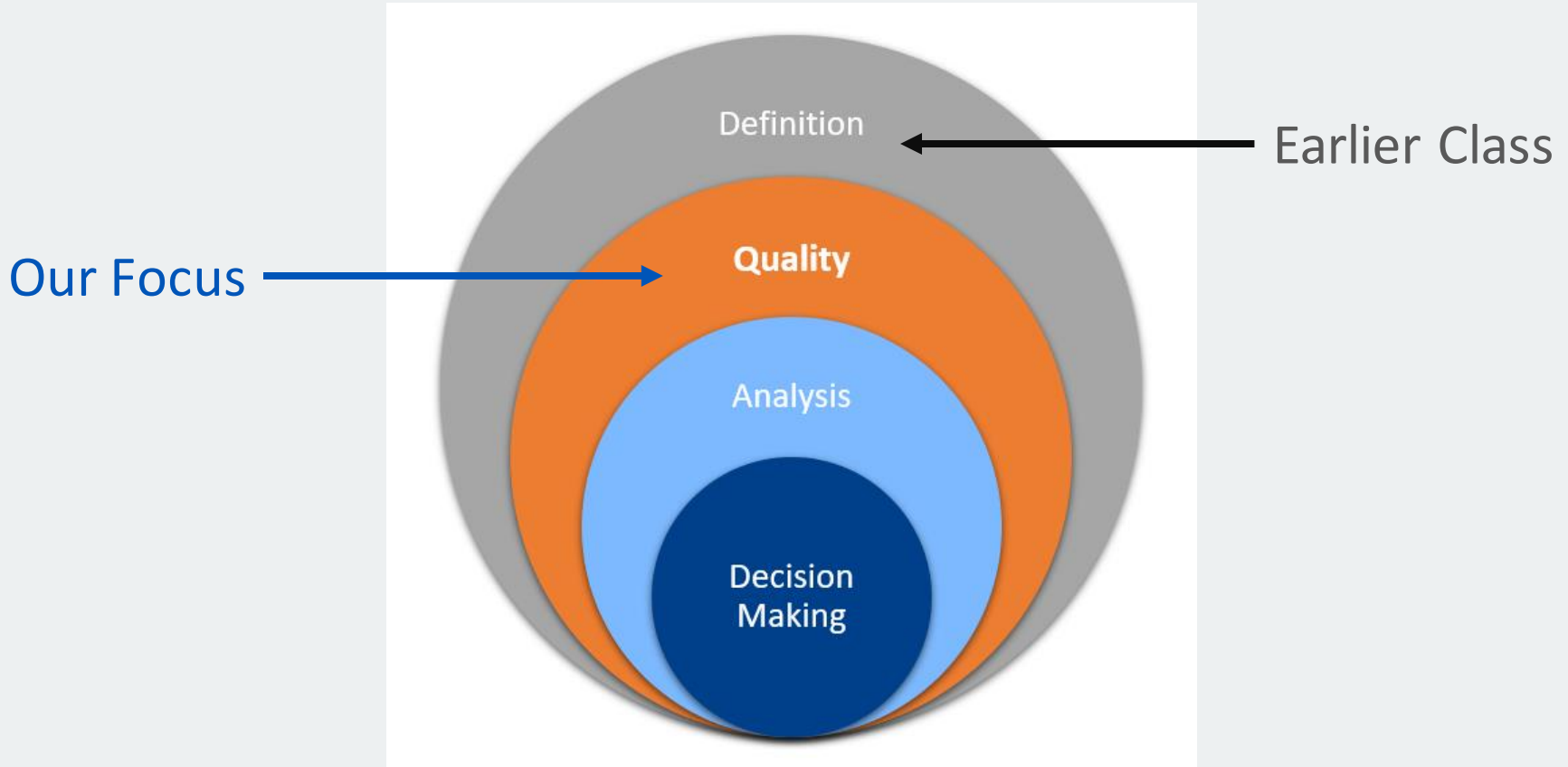
Decision Making

Session 1: Data Quality

Session 2: Data Analysis/Visualization

Session 3: Data Driven Decision Making

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LEARNING GOALS FOR SESSION 1

Lay the foundation for the remaining sessions.

Teach you how to prepare your data.

TO THE POLLS!

Did you attend Tech Impact's Data for Beginner's course in May, 2020?

- Yes
- No

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DATA FOR BEGINNERS RECAP

DATA FOR BEGINNERS RECAP

Asking the Right Questions	Hunting Down the Data	Making Use of Your Data

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ASK THE RIGHT QUESTIONS

How can Data help you?

- Identify tactics to use

- Track implementation

- Track impact

- Serve as a warning system

- Demonstrate success

- Comply with funder or legal requirements

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HUNTING DOWN THE DATA

What are your existing data sources?

What type of data is in these sources?

Have you done this inventory?

Where does your program data sit?

MAKING USE OF THE DATA

Creating and using metrics

Focusing on outcomes

Getting buy in from your organization

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LET'S CHAT

What are your data sources?

DATA QUALITY AND IMPACT

DATA QUALITY

Data Quality impacts not only the data within a specific system but also the ability to combine data from different systems and data migration to new systems.

WHAT IS YOUR DATA ARCHITECTURE?
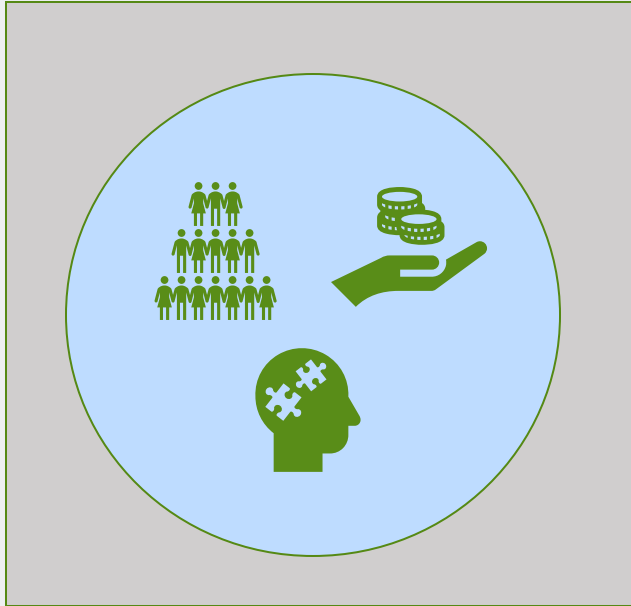
Centralized - CRM, Donor Data, Program Data in one system?
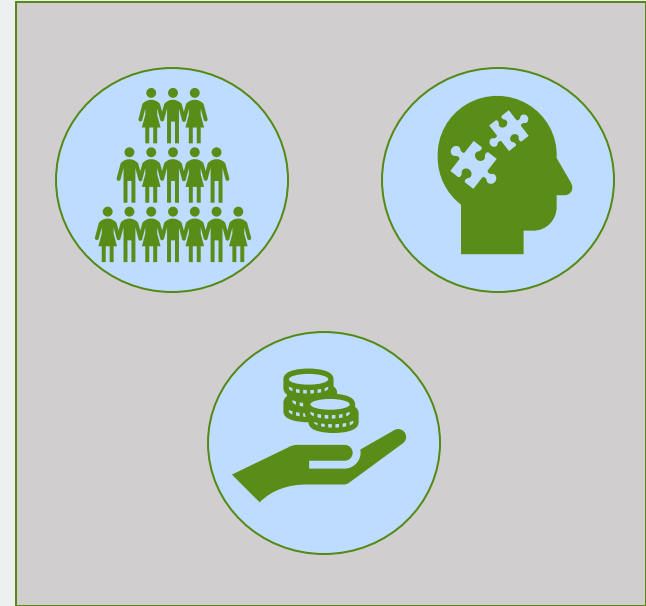
"Best of Breed" - Different databases housing different data

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TO THE POLLS!

What is your current data architecture?

- Centralized
- "Best of Breed" (different databases)
- Excel
- Other

DATA WAREHOUSING
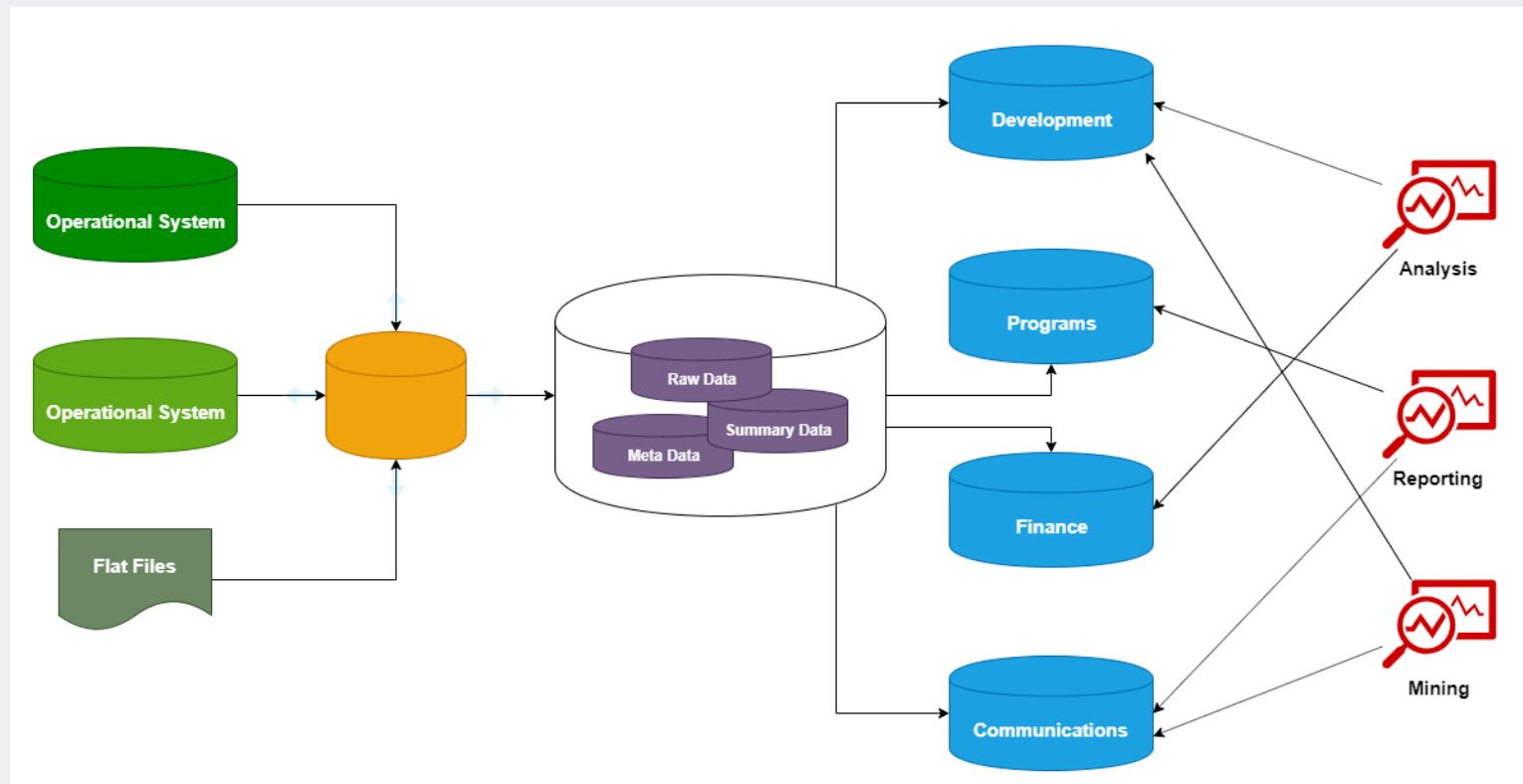
Wikipedia definition "central repositories of integrated data from one or more disparate sources. They store current and historical data in one single place that are used for creating analytical reports"

WHEN YOU ARE COMBINING DATA…

How do you match the person to their data?

Lee Anderson Cooper

Excel: Lee Cooper / lcooper@work.email / Date of Birth 12/3/1959

salesforce: Lee A Cooper / lcooper@work.email

apricot core: Lee Cooper / leecooper@home.email

RE blackbaud: L. A. Cooper / lcooper@home2.email / Date of Birth 12/3/1959

Bitfocus: L. Anderson Cooper / leecooper@home.email / Date of Birth 12/3/1959

Blue Sky eLEARN: Lee Cooper / lcooper@work.email
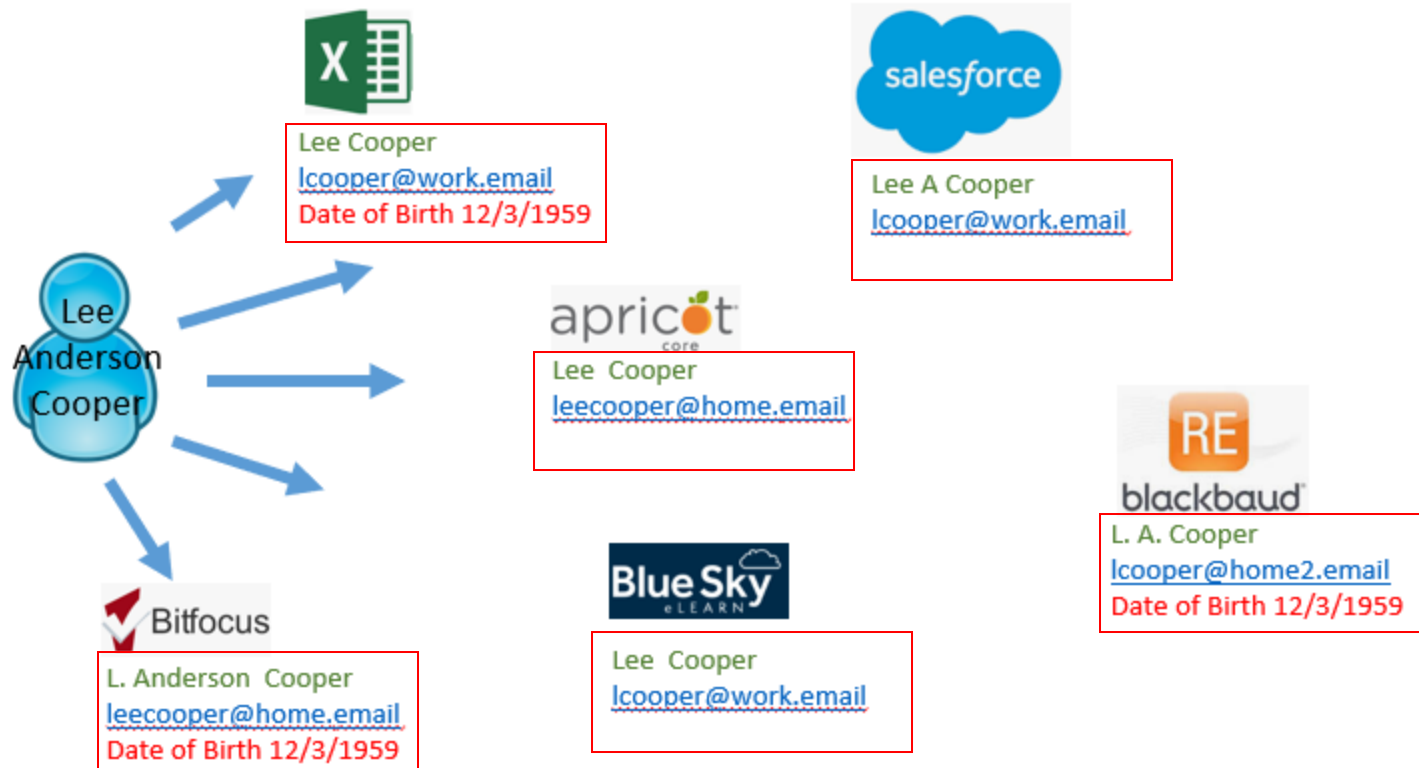
There has to be a way to correlate data from one system to another - a client ID, unique First-Last Names, DOB or Email.

WHAT IS THE COMMON THREAD?

HIGH QUALITY DATA

They should be built upon high quality data!

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DIRTY DATA:
WHAT IS IT
& HOW TO FIX IT

DATA QUALITY BEGINS WITH CLEAN DATA

BENEFITS OF DATA CLEANING

Removes errors

Promotes consistency

More efficient & accurate analysis

Accurate grant reporting and outcomes

Easier/less expensive data migration

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INDICATIONS OF "MESSY DATA"

Sending a duplicate Acknowledgement Letter or sending it to the wrong address.

Participant counts don't seem right.

A lot of manual work is done "fixing" the data in Excel.

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LET'S CHAT

What are other examples of messy data indicators?

WHAT MAKES DATA DIRTY?

Formatted Incorrectly

Incomplete

Incorrect

Duplicates

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EXAMPLE: INCORRECTLY FORMATTED

Name	Address	DOB
Harry Potter	4 Privet Drive, Little Whinging, SURREY	July 31st, 1980

X

First Name	Last Name	Street Address	City	State	DOB
Harry	Potter	4 Privet Drive	Little Whinging	SURREY	31-Jul-80

✓

EXAMPLE: INCOMPLETE

First Name	Last Name	Street Address	City	State	Postal Code	DOB
Harry	Potter	4 Privet Drive	Little Whinging	SURREY		31-Jul-80

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EXAMPLE: INCORRECT

First Name	Last Name	Street Address	City	State	Postal Code	DOB
Harry	Potter	4 Privet Drive	Little Whinging	TX	75001	31-Jul-80

EXAMPLE: DUPLICATES

	RECORDS	PAIR VIEW			
	ORGANIZATION NAME			**BILLING CITY**	**PHONE**
☐	Association Of Corporate Counsel			Washington	2022934103
☐	Association Of Corporate Counsel			Washington	2022934103
☐	Acc Foundation			Washington	2022934103

▼ 155	75%	100%	88%	2	3

	RECORDS	PAIR VIEW			
	ORGANIZATION NAME			**BILLING CITY**	**PHONE**
☐	Techsoup			Gaston	(415) 633-9300
☐	Techsoup Global			San Francisco	
☐	techsoup global			San Francisco	(415) 633-9300

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	RECORDS	PAIR VIEW			
	ORGANIZATION NAME			**BILLING CITY**	**PHONE**
☐	Pennsylvania Association of Nonprofit Organizations - PANO			Harrisburg	(717) 236-8584
☐	Pennsylvania Association of Nonprofit Organizations			Harrisburg	(717) 236-8584
☐	Pennsylvania Association of Nonprofit Organizations				

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TO THE POLLS!

Which are your biggest data cleanliness issues?
(Choose all that apply)

- Duplicates
- Formatting
- Incomplete Data
- Incorrect Data
- Other

A CLEANING REGIMEN

Data Entry Practices
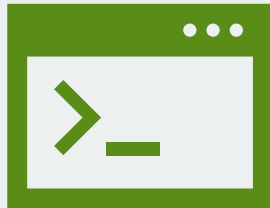
Utilize Available Tools

Monitor & Report on Errors

De-duplication

A CLEANING REGIMEN - Before & After

PREVENTION

REMEDIATION

Data Entry Practices

Monitor & Report on Errors

xyz   xyz

Utilize Available Tools

De-duplication

Before being saved in the database

After being saved in the database

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DATA ENTRY PRACTICES
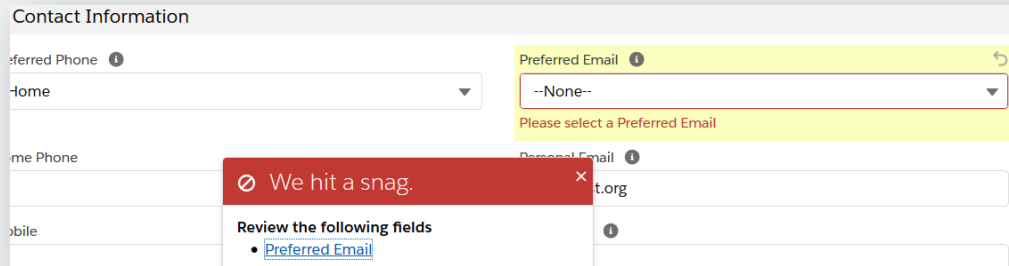
- ✓ Dates are entered as MM/DD/YYYY - Be consistent!

- ✓ Only one name in a First Name field (don't put John & Susan)

- ✓ Street address is all that is entered in the street field. Use city, state and zip code fields.

- ✓ Check for duplicates before entering data

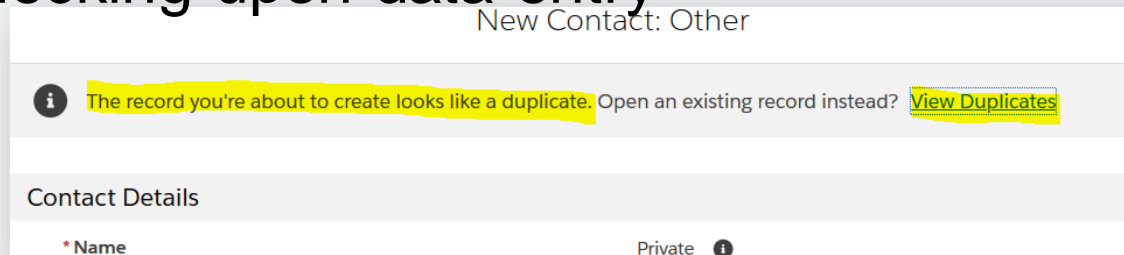Design others that may be unique to your Organization!

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UTILIZE AVAILABLE TOOLS

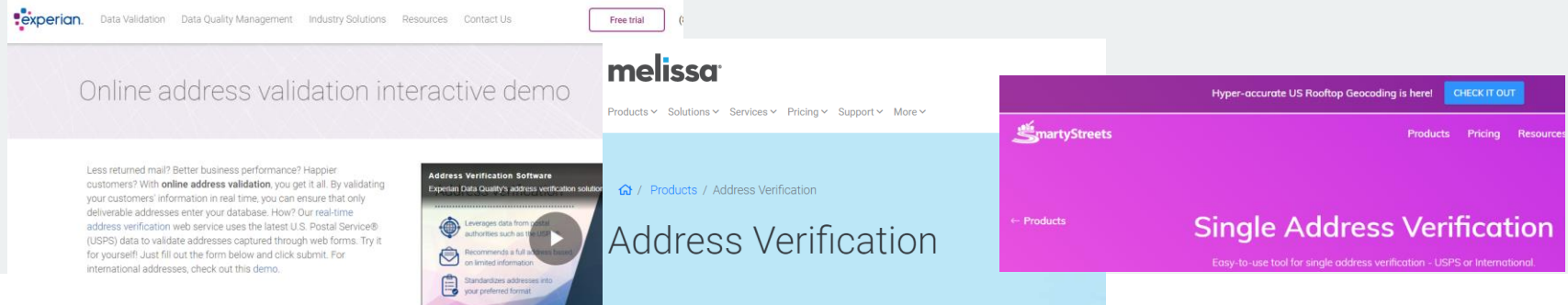Use validation rules or specific formatting to enforce data entry practices

Duplicate checking upon data entry

Use available address validation tools.

MONITOR & REPORT ON ERRORS

Create data quality reports in your database

Highlight records/users who didn't enter certain data

Use PowerBI to monitor the data

> Data Quality

Name		Description	
Contacts w/No DOB or Zip Last Wk	∨	Contacts created last week that have no Date of Birth or Zipcode	∨
Open Calls by Counselor-No Zip or DOB		See name	

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DE-DUPLICATION

Excel can be used
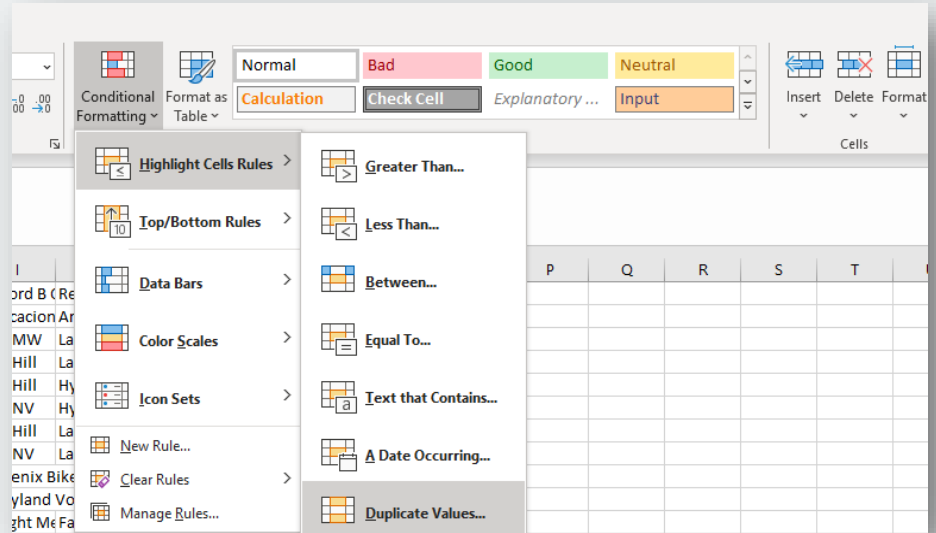
Depending on the database, there may be other tools available

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DUPLICATE TOOL OUTPUT

RECORDS	PAIR VIEW			
ORGANIZATION NAME		**BILLING CITY**		**PHONE**
Association Of Corporate Counsel		Washington		2022934103
Association Of Corporate Counsel		Washington		2022934103
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RECORDS	PAIR VIEW			
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Techsoup		Gaston		(415) 633-9300
Techsoup Global		San Francisco		
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Pennsylvania Association of Nonprofit Organizations		Harrisburg		(717) 236-8584
Pennsylvania Association of Nonprofit Organizations				

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TO THE POLLS!

Which of these practices are easiest to implement at your organization?

- Creating Data Entry Practices
- Using Available Tools
- Improving Data Quality Reporting
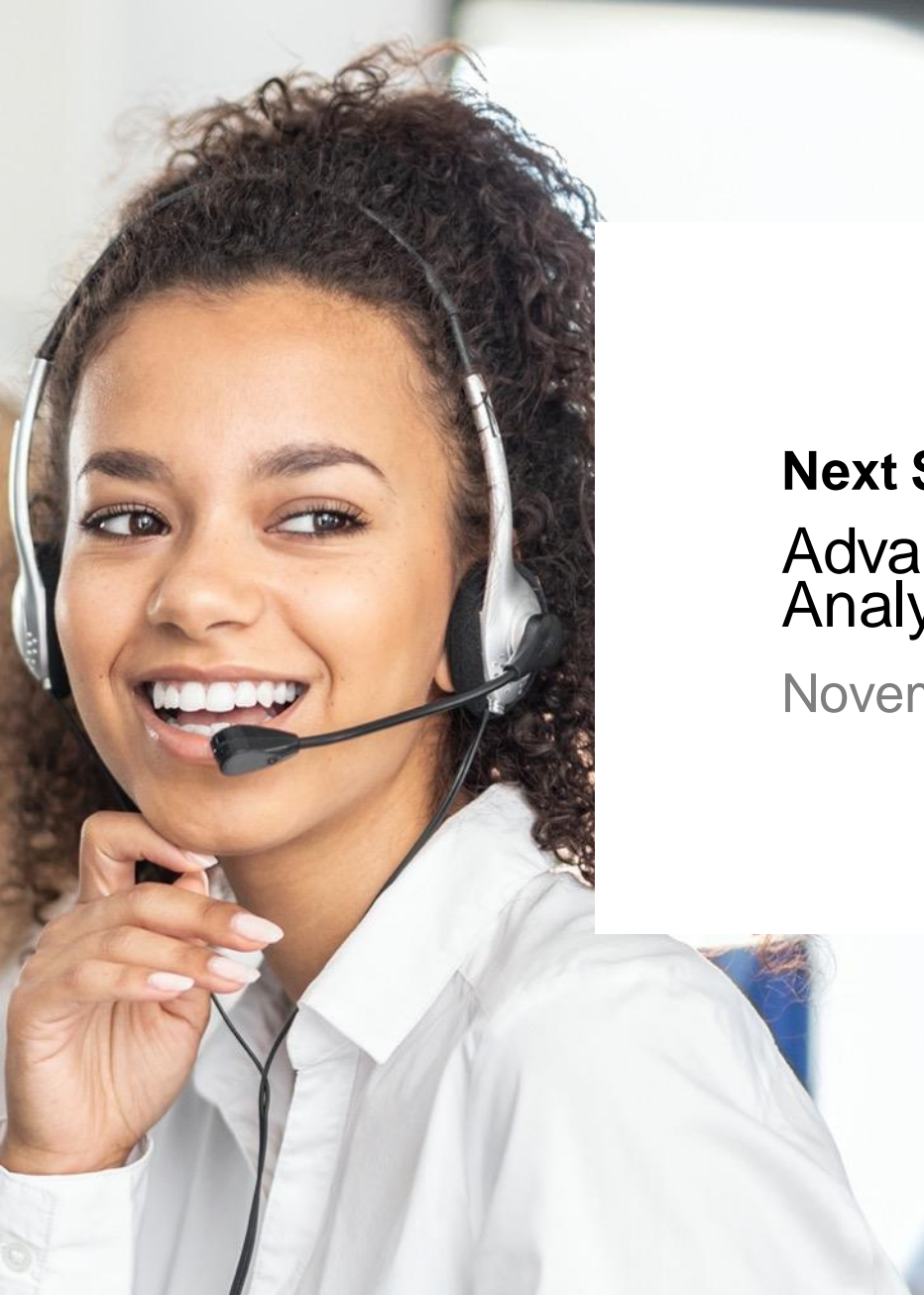- Creating a De-Duplication Process
- Other

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DATA QUALITY IS *EVERYONE'S* RESPONSIBILITY

HOMEWORK

Identify and bring 1-2 datasets that are simple and clean and has data that is important for you to analyze to Session 2.

Next Session

Advanced Data: Session 2: Data
Analysis and Data Visualization

November 12, 2020, 1-2:30pm Eastern

THANK YOU

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