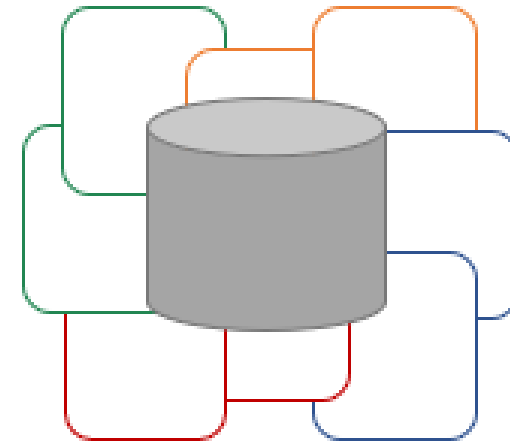


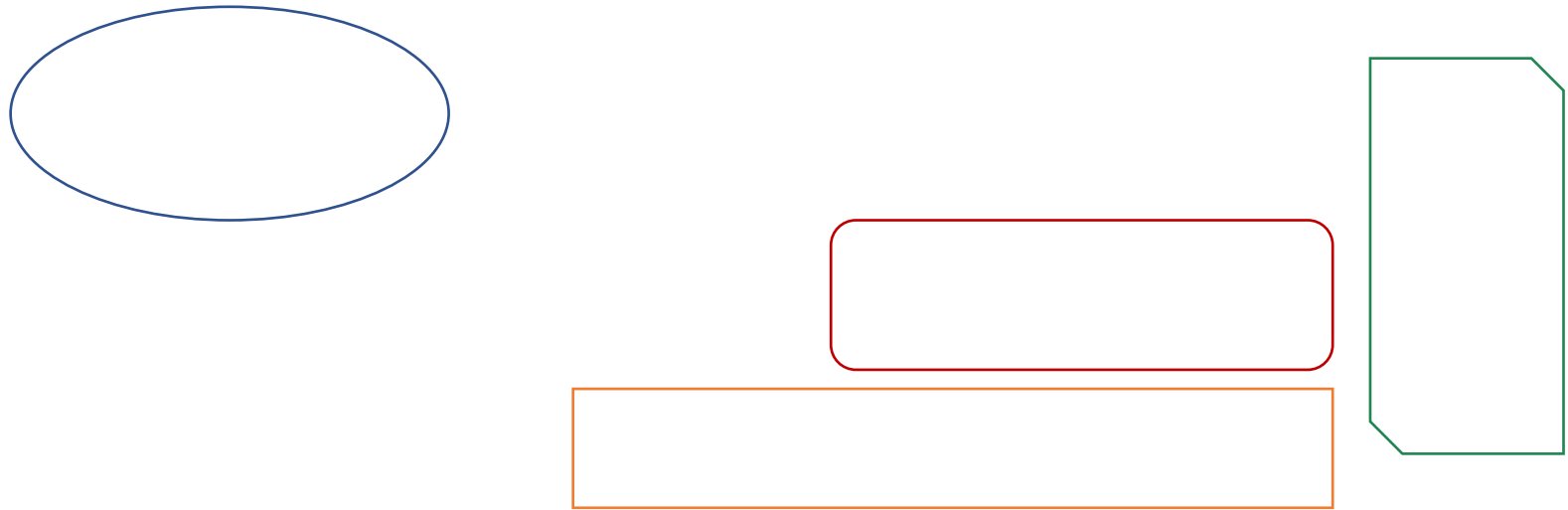
# Universal Data Model

By: William Leach - 5/3/2021



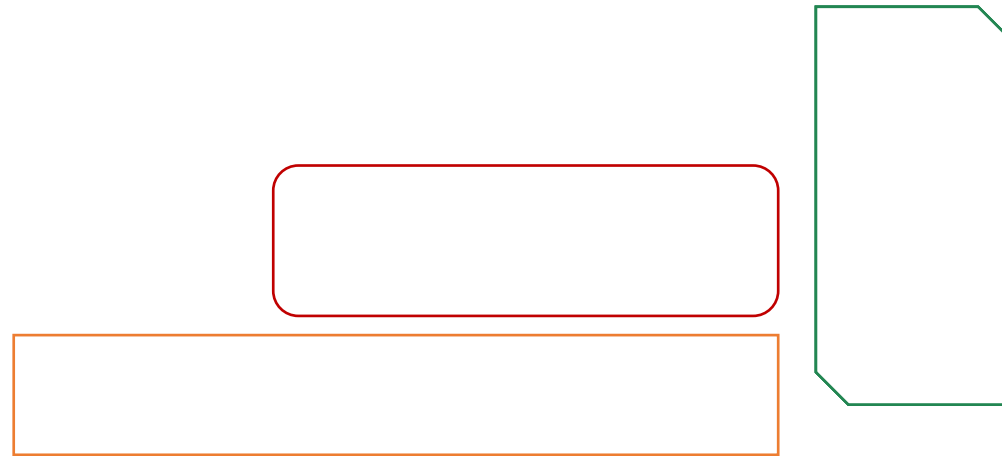
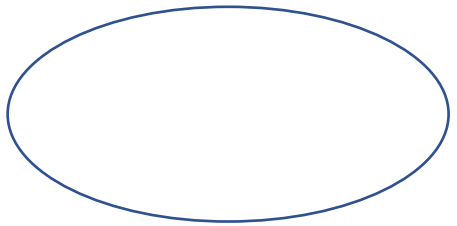
# Problem #1

- Application forms to state and local agencies are complicated, dissimilar, and **require duplicate data entry!**



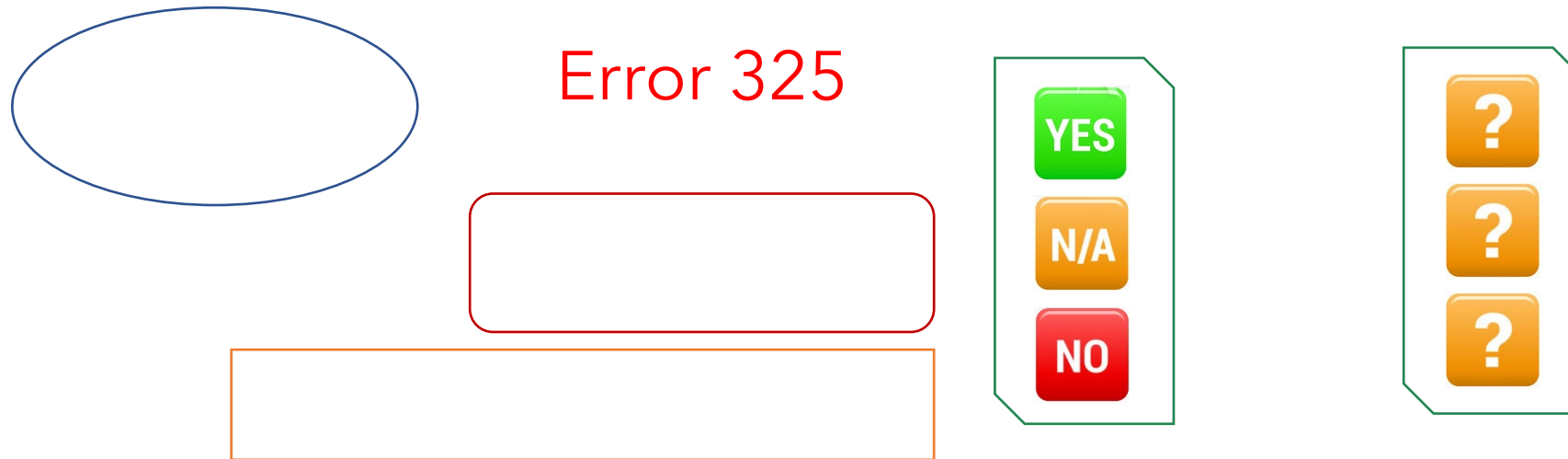
# Problem #2

- Regulation changes necessitate form updates, which cause **delays** in program implementation, **delays** in app. prep, and application data **re-entry**.



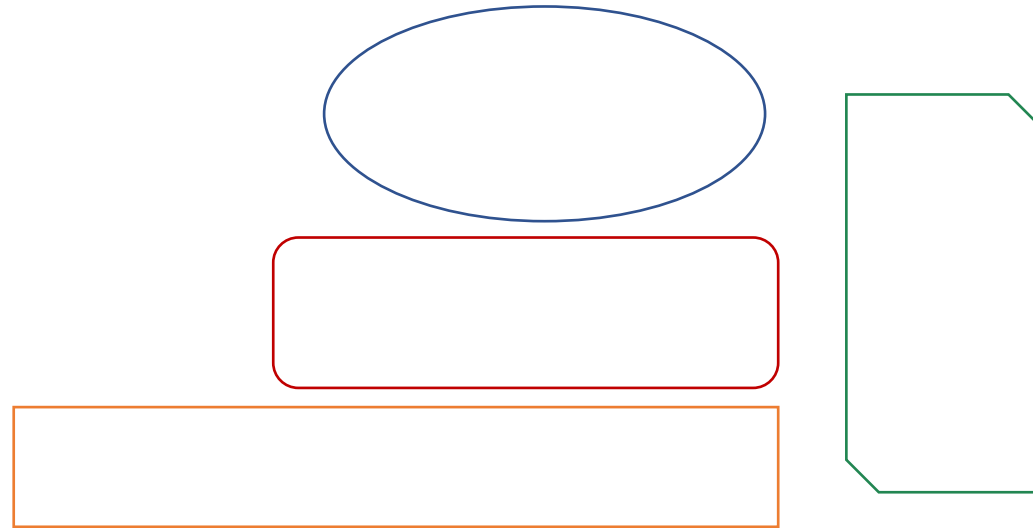
# Problem #3

- Application forms **don't communicate calculable errors** and don't communicate what is applicable to your project.



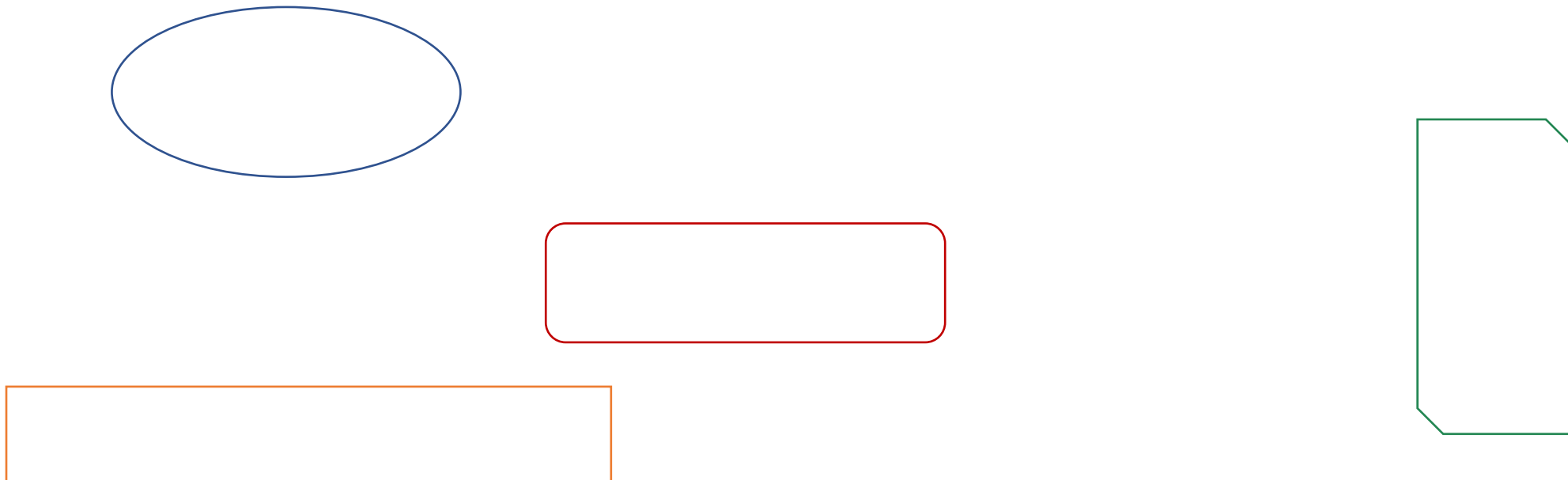
# Problem #4

- Application forms **aren't structured data** and can't share information with each other.



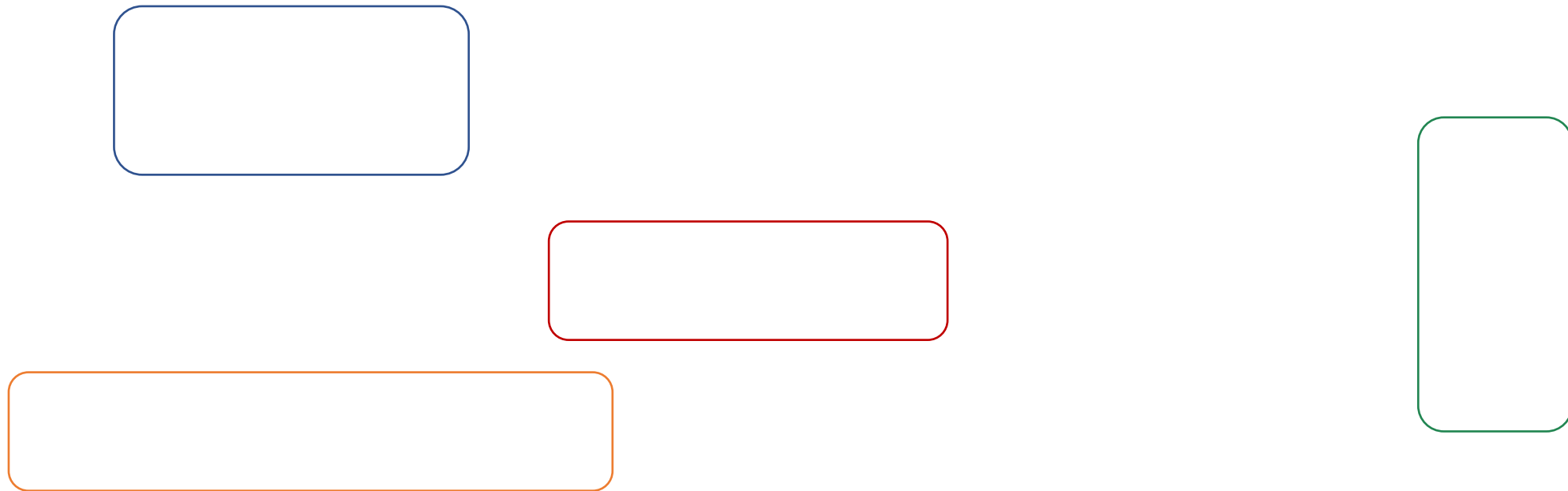
# Proposal 1

- Agencies should collect **structured data** from applicants



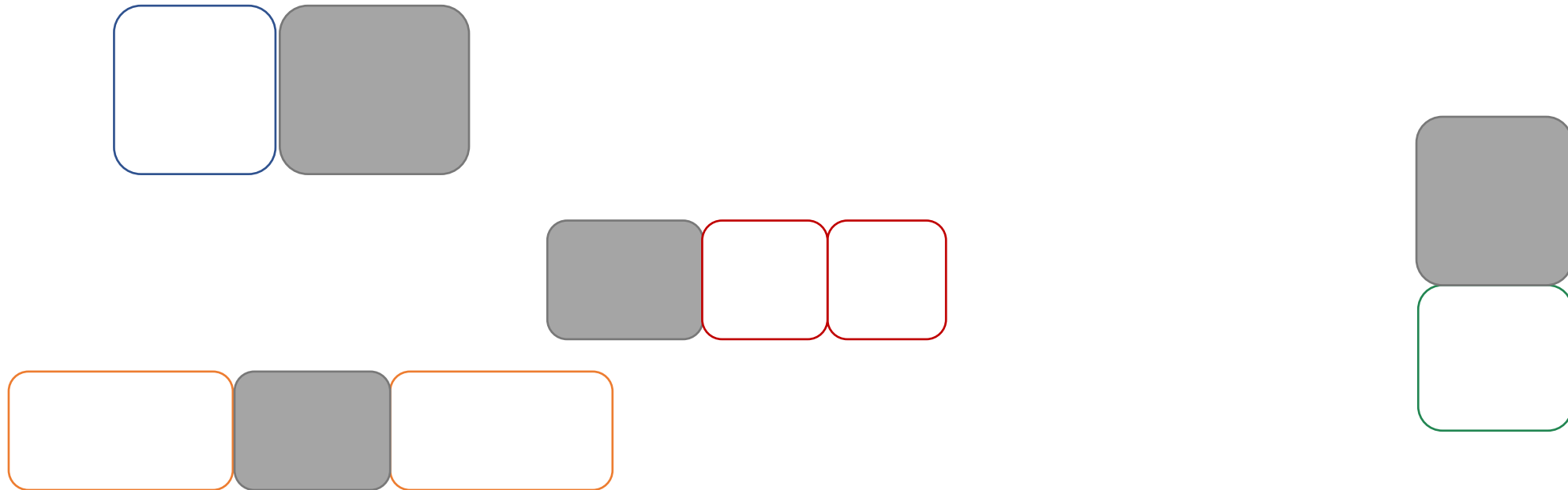
# Proposal 1

- Agencies should collect **structured data** from applicants



# Proposal 2

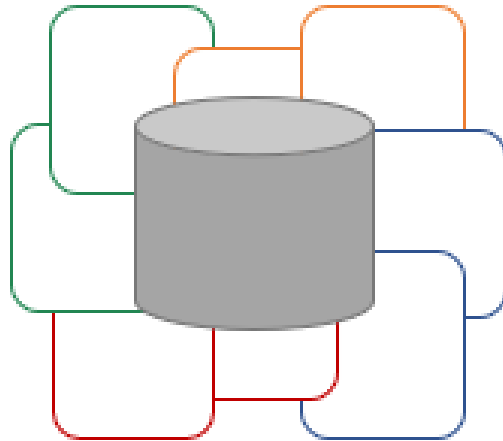
- Agencies should separate underwriting data, program data, and raw data into **specialized spreadsheets**





# Proposal 3

- Agencies should adopt a **single underwriting spreadsheet** and multiple program supplements that **share data**.



# Proposal Extra A

- Forms could **calculate and communicate** underwriting errors and program deficiencies.



# Proposal Extra B

- Application forms could **dynamically generate** application checklists.

A diagram illustrating a dynamically generated application checklist. It shows a rounded rectangular container with four rows. Each row contains a colored button (green for 'YES', orange for 'N/A') followed by a horizontal line representing a checklist item. The buttons are: YES, N/A, YES, YES.



# Proposal Extra C

- Application forms could **auto-populate** application attachments.

[Project Name]  
[units]  
[user input]  
I, [applicant]  
e-promise  
[user initials]



# State Agency Benefits

## 1. Saves time:

- a) Updating
- b) Publishing
- c) Reviewing
- d) Reporting
- e) Recording
- f) Handling appeals
- g) Processing 8609s



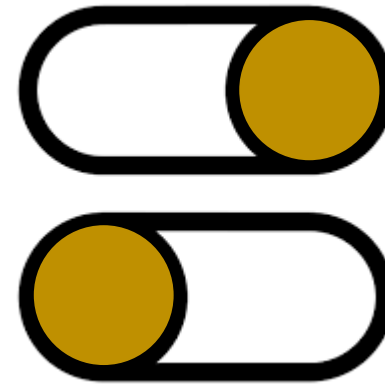
**Time is Money**



# State Agency Benefits

## 2. Enables:

- a) Agency coordination
- b) Joint applications
- c) Joint reviews
- d) Change detection
- e) Review automation
- f) Multi-agency queries
- g) Data-driven decisions



**Features Sell**



# State Agency Benefits

## 3. Reduces:

- a) Applicant errors
- b) Typographical errors
- c) Training requirements
- d) Deployment time
- e) Redundancy



**Less is More**



# Developer Benefits

**LSS**  
**PLS**

**Less Please**

## 4. Less:

- a) Data entry
- b) Updating
- c) Wondering
- d) Worrying
- e) Training
- f) Waiting





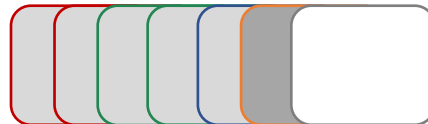
# Developer Benefits



## Sooner Rocks

### 5. Streamlined:

- a) App publication
- b) Data entry
- c) Attachments
- d) Error detection
- e) Award process
- f) Data analysis



# Societal Benefits

Faster housing delivery

Data driven policies

Lower housing cost

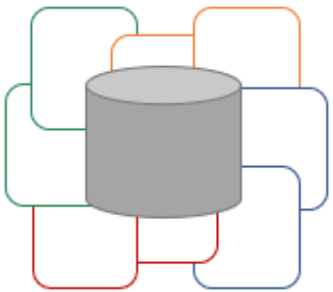
Better access to data

Better program outcomes



# Universal Data Model Proposal Recap

1. Collect **structured data** from applicants
2. Separate underwriting and program spreadsheets
3. Ensure all spreadsheets **share data**

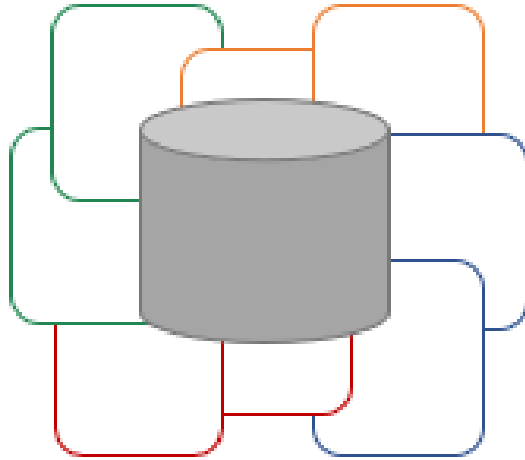


- A. Calculate and **communicate errors**
- B. Dynamically generate checklists/review-lists
- C. **Auto-populate** application forms/reports



# Universal Data Model

## Help Wanted



1. Share feedback to improve proposal
2. Express your support in a letter
3. Offer to be an advisor or beta tester

