How Dealing With 2020 Changed Us

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Disclaimer:

The views, thoughts, and opinions presented are my own and do not necessarily reflect any official position of the U.S. Census Bureau, or the U.S. Department of Commerce.

How Dealing With 2020 Changed Us

FedCASIC
2021

- **Automation**

- **The People Interaction**

- **Time**

Automation

- What automation?
- What has it done?

Automation

- Video was here (too big to email)

Automation

- What automation?
- What has it done?
- Automation helped save the 2020 Census
- But where is automation going for surveys?

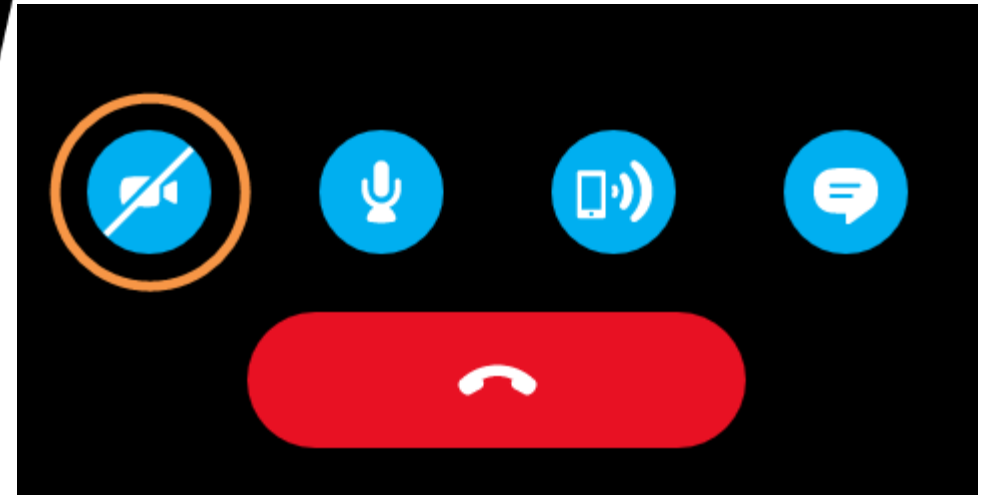Automation

Big Data?

Automation

Automation

?

The People Interaction

- Surveys have long required **people** to contact possible respondents (particularly for non-response)
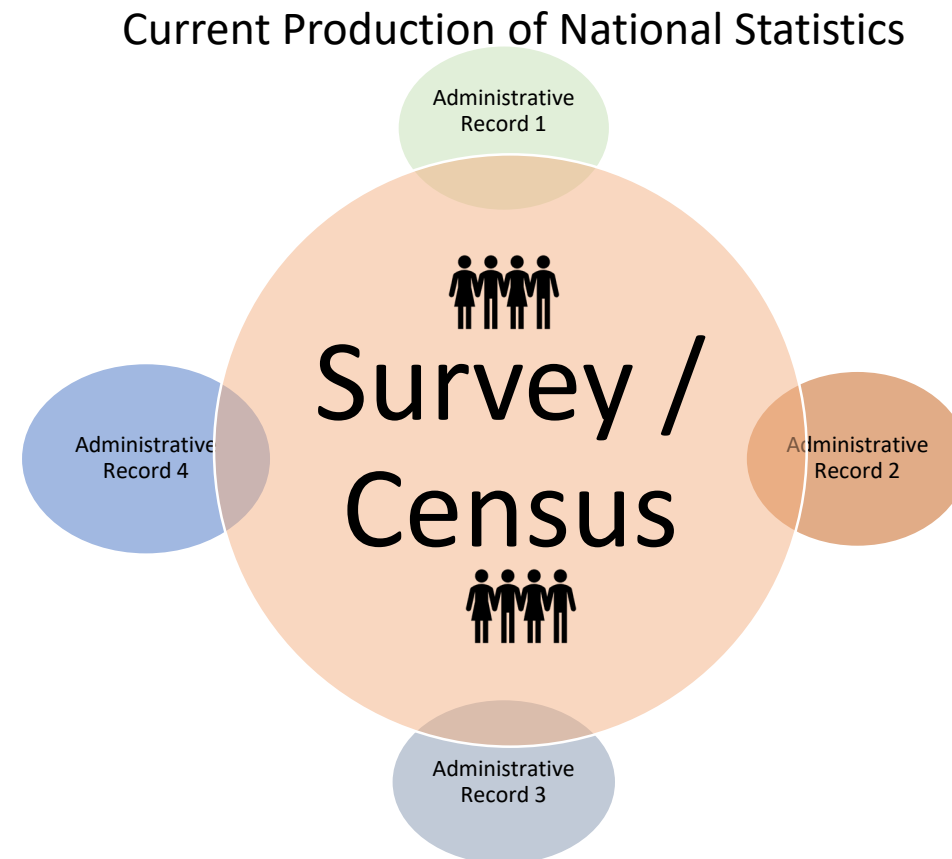- What did that look like in COVID for the 2020Census?

The People Interaction

- Surveys have long required people to contact possible respondents (particularly for non-response)

- What did that look like in COVID for the 2020Census?

- What are some of the possibly lingering societal impacts of 2020?
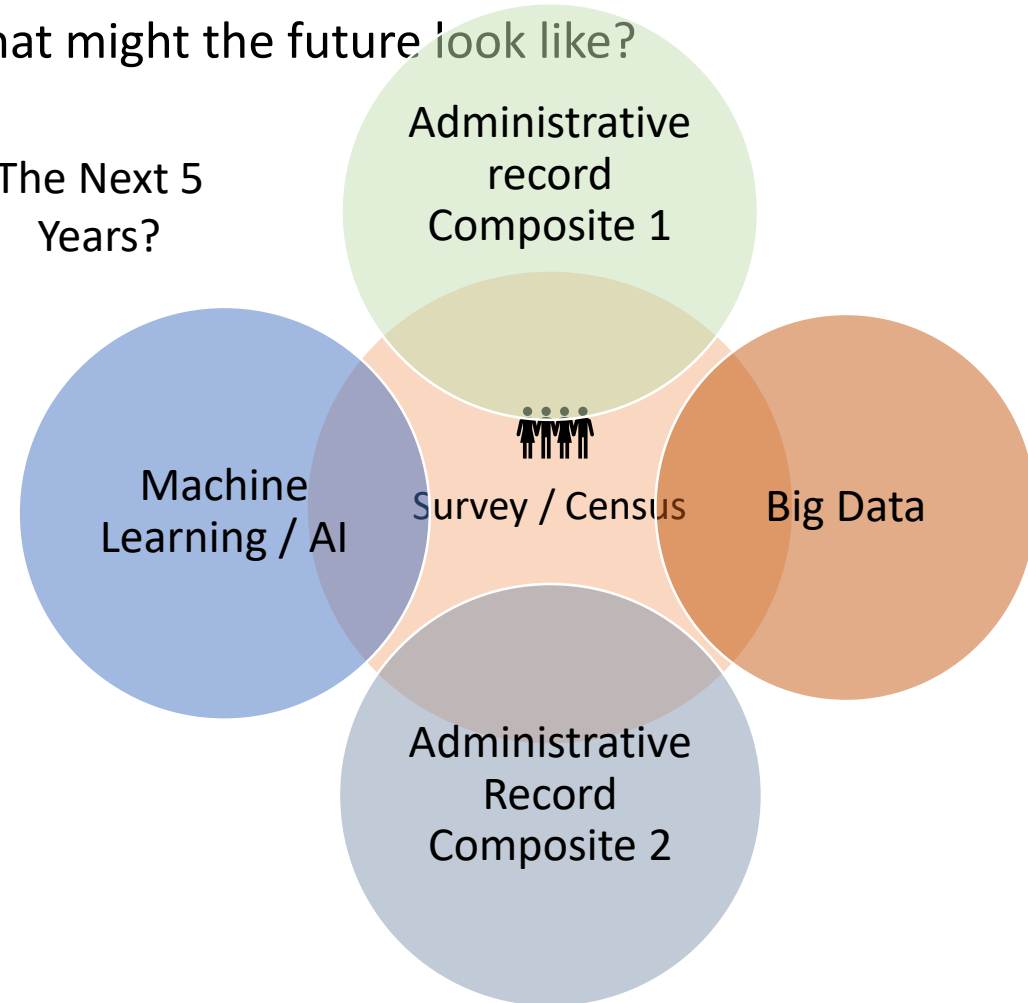
The People Interaction

- Surveys have long required people to contact possible respondents (particularly for non-response)

- What did that look like in COVID for the 2020Census?

- What are some of the possibly lingering societal impacts?

- What might the future look like?

Current Production of National Statistics

The People Interaction

- Surveys have long required people to contact possible respondents (particularly for non-response)
- What did that look like in COVID for the 2020Census?
- What are some of the possibly lingering societal impacts?
- What might the future look like?

The Next 5 Years?

Administrative record Composite 1

Machine Learning / AI

Survey / Census

Big Data

Administrative Record Composite 2

The People Interaction

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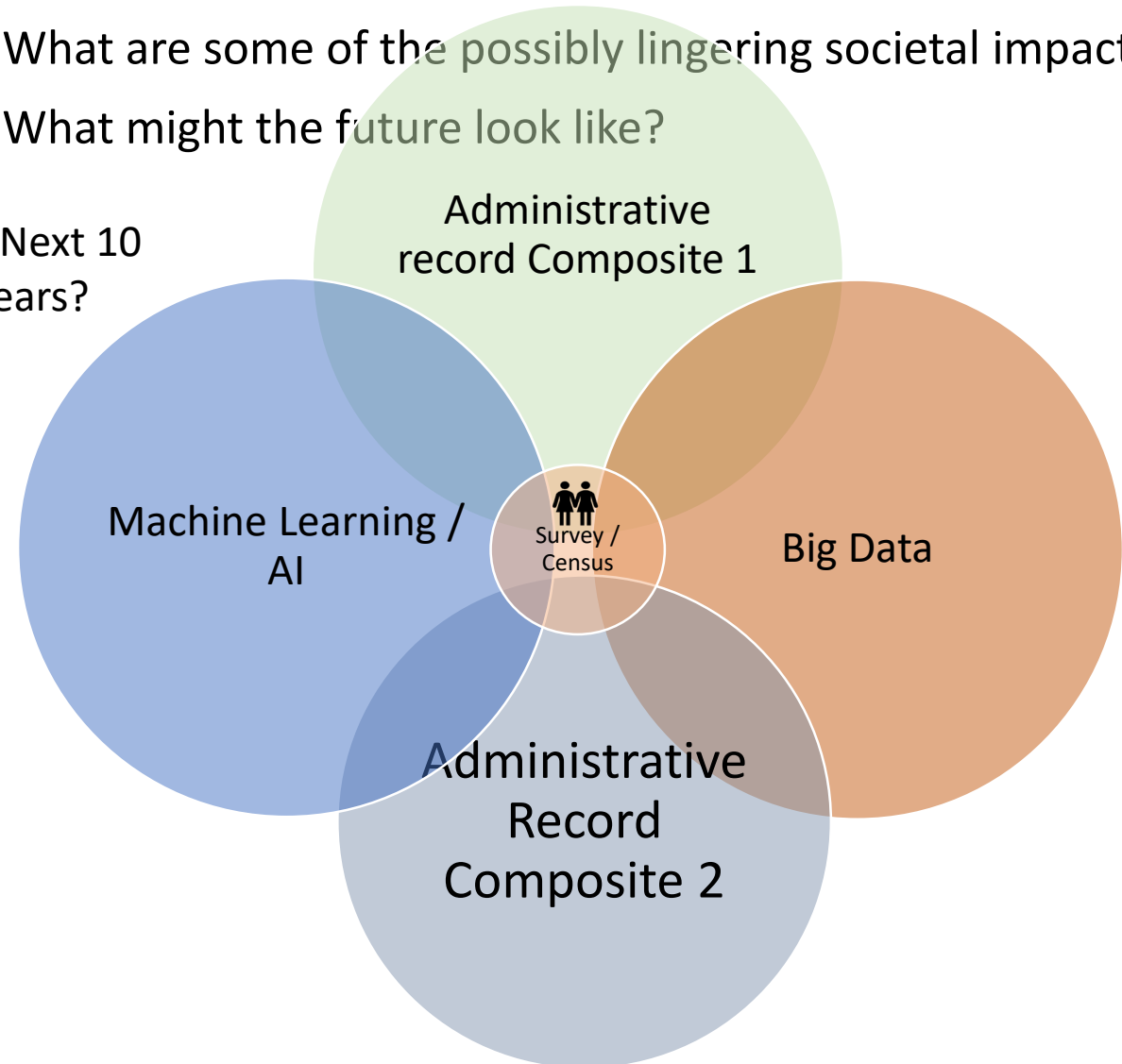- What might the future look like?

The Next 10 Years?

Administrative record Composite 1

Machine Learning / AI

Survey / Census

Big Data

Administrative Record Composite 2

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The People Interaction

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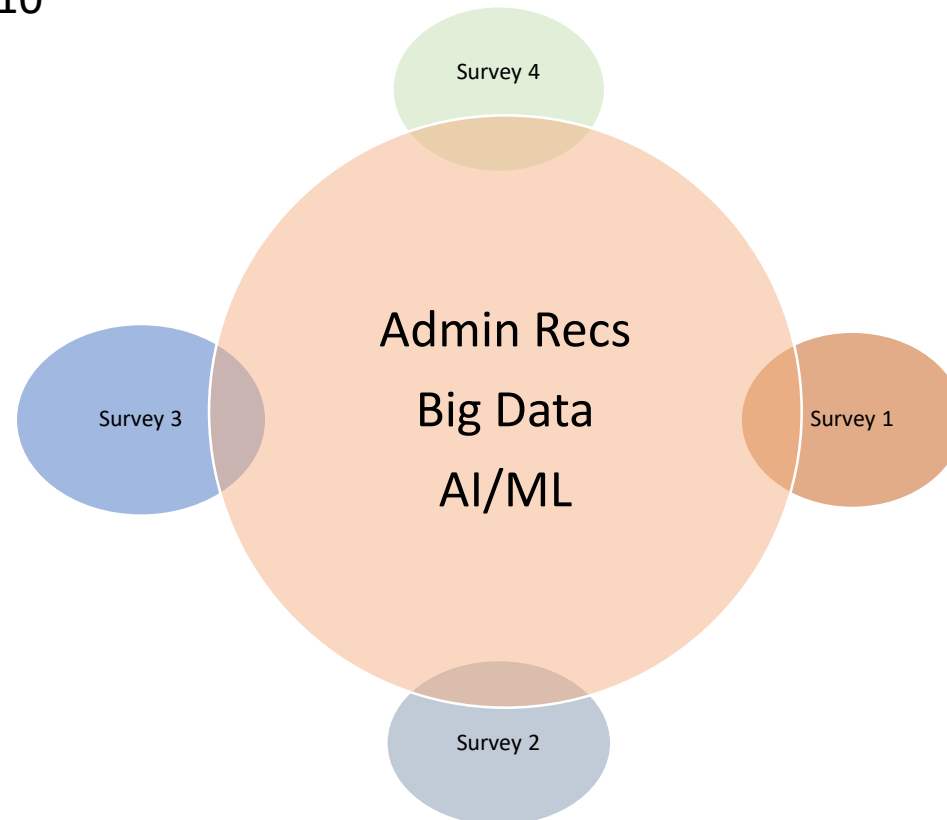
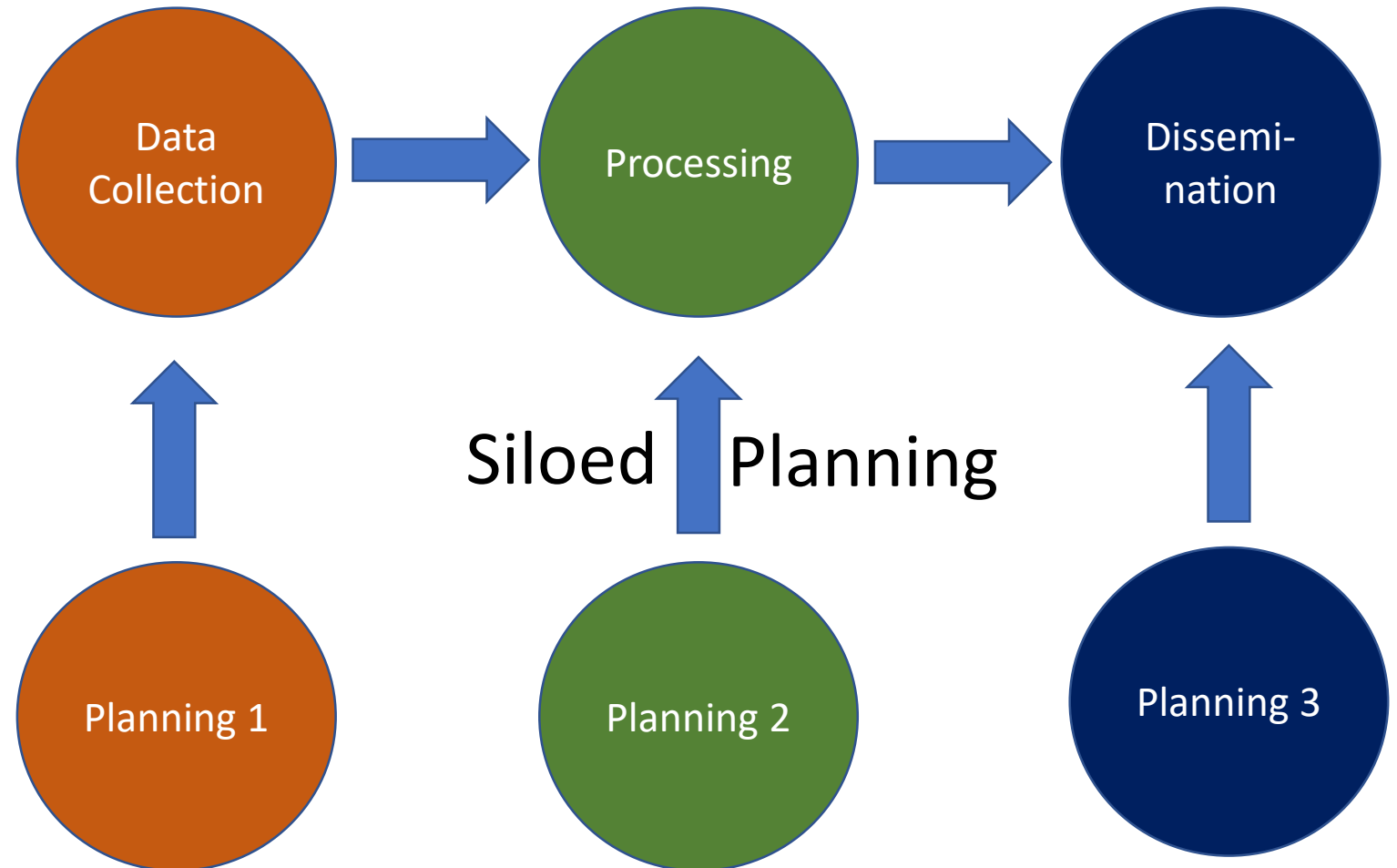- What might the future look like?

The Next 10 Years?

Time is the Issue

Simple Survey Lifecycle

Linear Approach

Time is the Issue

Data Collection → Processing → Dissemi-nation

Planning 1

Planning 2

Planning 3

Siloed Planning

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Time is the Issue

- Shouldn't we be able to process a Census faster than we did in 1890?

- Is technology limiting us? (No!)

- Can we track not only cost and progress, but also content and data quality in real time during data collection?

- Can we refine administrative record use and on-the-fly imputation?

- Can we get to a final answer for each address more quickly?

- What would it take to have accurate census results in, say, 30 days (or less) after data collection ends?
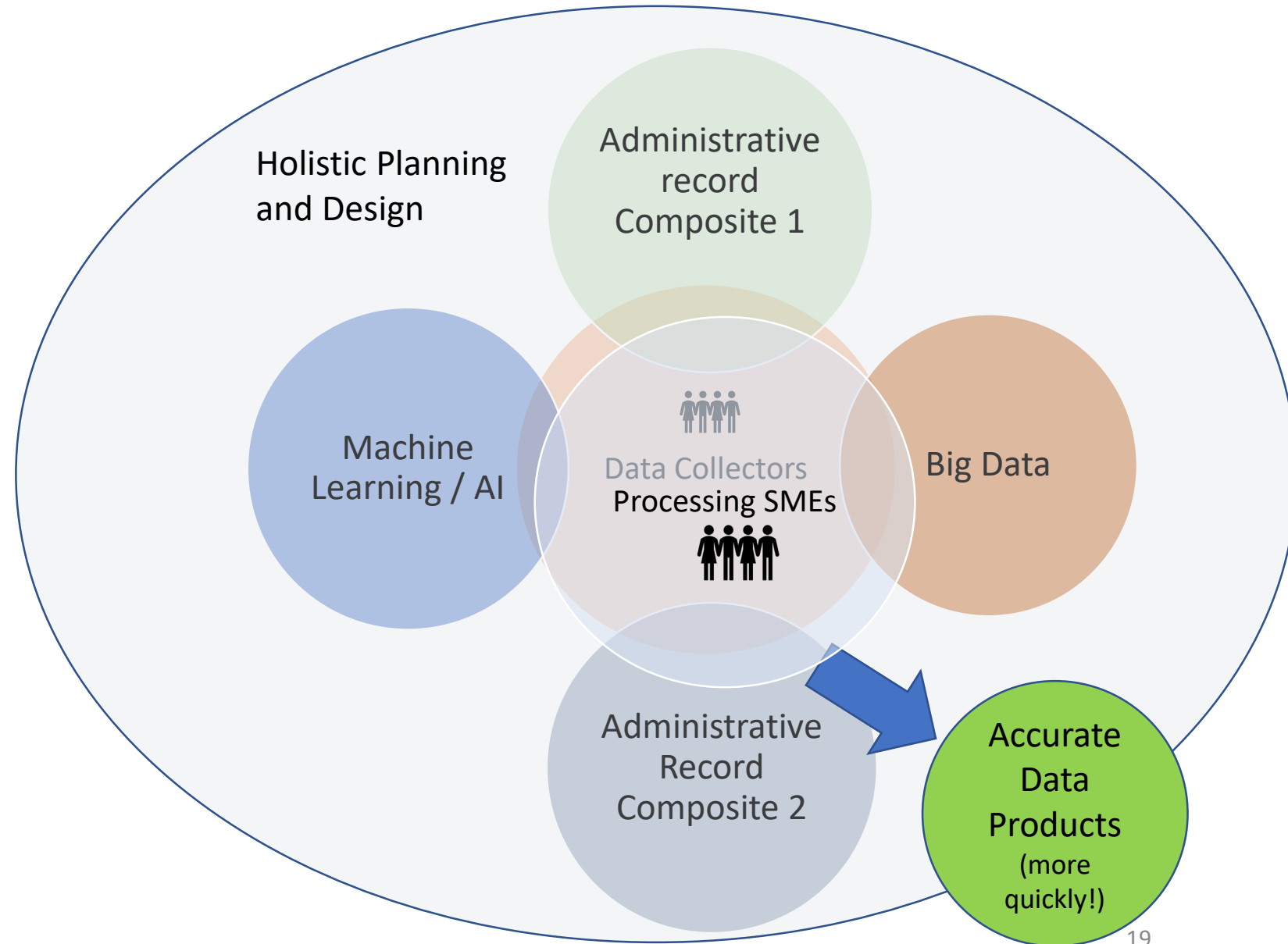
Time is the Issue

- Holistic View

- Accurate information on cost and progress, but also on data quality, respondent characteristics, and possible data anomalies

- Goals:

  - Achieve near-Real Time Processing -- Perform as much processing near-real time as possible

  - Build in Data and Quality Review -- Build an accompanying quality and data review arm of post-processing that is active throughout operations

  - Wrap-up Processing quickly-- Perform final processing minimally, only to the extent that issues are found or requirements cannot be accommodated by near-real time processing

Putting it all together

Automation

The People Interaction

Time

Holistic Planning and Design

Administrative record Composite 1

Machine Learning / AI

Data Collectors
Processing SMEs

Big Data

Administrative Record Composite 2

Accurate Data Products (more quickly!)

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Automation

The People
Interaction

Time

Questions

Thank You!