

Expanding Record-Keeping Study Methodology to Assess Structure and Availability of Data in Business Records

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In-Scope Economic Surveys

Manufacturing

- Annual Survey of Manufactures (ASM)
- Manufacturers' Unfilled Orders Survey (M3UFO)
- Management and Organizational Practices Survey (MOPS)

Trade

- Annual Retail Trade Survey (ARTS)
- Annual Wholesale Trade Survey (AWTS)

Services

- Service Annual Survey (SAS)

Multisector

- Annual Capital Expenditures Survey (ACES)
- Information and Communication Technology Survey (ICTS)

Demographic

- Annual Survey of Entrepreneurs (ASE)
- Survey of Business Owners (SBO)

Business Register (Sampling Frame)

- Business and Professional Classification Survey (SQ-CLASS)
- Company Organizational Survey (COS)

Research Questions:

- 1. Definitions: how do businesses define themselves relative to the Census Bureau definitions?**
- 2. Accessibility: how accessible are key data points at varying business units?**
- 3. Burden: how resource intensive is gathering data at these varying business units?**

In-Scope Businesses and Respondents

Eligibility Criteria:

- **Sampled in at least two in-scope surveys**
- **In at least two industrial sectors**
- **More than one establishment**

	Phase 1	Phase 2
<i>Number of Industries*</i>		
Three or fewer	16	25
Four or more	5	5
<i>Number of establishments*</i>		
30 or fewer	9	19
31 or more	12	11
<i>*Numbers may not sum to total interviews because of missing data.</i>		

Phase 1 Interviewing

Phase 1 Findings



ens
at
ompany

- Application NAICS

Unit
Terminology

- Many different business units

Response
Process

- Dispersed internal process
- Decisions on data manipulation

Phase 2 Interviewing

Definitions and Equivalencies

Company

- Highest level
- Easily understood

Establishment

- Location
- Region
- Not applicable

Line of Business

- Revenue stream
- Kind of Activity
- Not applicable

General and Specific Industry

NAICS works well....

“These [NAICS codes] are a good fit. Most of what we do would fall under the first one.”

“[I] agree with the [given] NAICS.”

“Specific industry: that's a perfect fit.
General industry: that works as well, too.”

...until it doesn't.

“Yes, I am familiar, but I hate them. They have me in warehousing, and say ‘You operate the warehouse’ but we do not. Not what we do.”

“Somewhat familiar with. Do both at many locations. So one NAICS wouldn't apply to one location. We did not have specific NAICS looked up in advance. Mix within locations.”

“All other codes are coming from a long time ago, when was non-profit. All other entities dissolved. Focused entirely on [one industry] now. Dissolved these businesses

Card Sort



Sort into the four categories below how accessible or inaccessible the answer to this question is at each of these business units for your business. You will drag each of the six business units into one of the four categories.

- **GREEN:** Easily accessible
- **YELLOW:** Accessible with minor effort
- **ORANGE:** Accessible with major effort
- **RED:** Inaccessible

Question: What were the TOTAL sales, revenue, and other operating receipts for this [business unit] in 2019?

Business Unit	Green - Easily Accessible
Your company	
Establishment	
Line of business	
Specific industry	
General industry	
State	
	Yellow - Accessible with minor effort
	Orange - Accessible with major effort
	Red: Inaccessible

Defining Accessibility

Green:

“Green means go. Green means info is available.”

“Can run a report and get information.”

“Green is anything I pull directly off of a financial statement that I'm already producing.”

Yellow:

“I'd probably have to reach out for help.”

“I would run a new report for, but not have to do a lot of analysis and digging to find [the data], or I can modify an existing report.”

Orange:

“No one has any idea what we are looking for so they need to dig. If we don't know who to ask for it or know where to get it, but are pretty sure the data exist.”

“Orange would take more effort - involving other people or creating additional reporting that we don't normally run.”

Red:

“Red is inaccessible; there's no way for me to get that information, and it not tracked or maintained.”

“Red is we just can't pull it.”

	REVENUE						CAPITAL ASSETS						INVENTORIES						OPERATING EXPENSES						PAYROLL					
	Comp	Estab	LOB	State	Sp. Ind.	Gen. Ind.	Comp	Estab	LOB	State	Sp. Ind.	Gen. Ind.	Comp	Estab	LOB	State	Sp. Ind.	Gen. Ind.	Comp	Estab	LOB	State	Sp. Ind.	Gen. Ind.	Comp	Estab	LOB	State	Sp. Ind.	Gen. Ind.
1	Green	Red	Yellow	Yellow			Green	Orange	Red	Green	Red							Green	Red	Green	Red	Green		Green	Orange	Red	Yellow	Red		
2																														
3							Yellow					Yellow																		
4	Green	Orange		Orange	Red		Green	Yellow		Yellow	Red		Green	Yellow		Yellow	Red		Green	Red		Red		Green	Orange		Orange			
5	Green						Green						Green					Green						Green						
6																														
7																														
8	Yellow	Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow	Yellow	
9																														
10			Orange		Orange			Orange	Yellow	Orange	Orange			Orange	Orange	Orange	Orange			Orange	Orange	Orange	Orange		Orange	Orange	Orange	Orange	Orange	
11			Yellow	Yellow	Orange			Yellow	Yellow	Orange	Orange			Yellow	Yellow	Yellow	Yellow			Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow		
12	Yellow	Green		Yellow	Orange			Yellow	Green	Orange	Orange		Green	Green	Green	Red		Green	Red	Yellow	Red	Green		Green	Yellow	Green	Red	Red		
13																														
14	Green			Orange			Green		Orange	Orange	Orange		Green					Green		Orange	Orange	Orange		Green	Orange	Orange	Orange	Orange	Orange	
15	Green				Red		Green			Orange	Red		Green		Orange	Red		Green		Orange	Red	Red		Green	Orange	Orange	Red	Red	Red	
16																														
17		Yellow		Yellow	Orange			Yellow	Yellow	Orange	Orange			Yellow	Yellow	Yellow	Yellow			Yellow	Yellow	Yellow	Yellow		Yellow	Yellow	Yellow	Yellow	Yellow	
18																														
19																														
20	Yellow	Orange	Green	Orange	Yellow		Yellow	Red	Yellow	Red	Orange		Green	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Red	Red	Red	Green	Yellow	Red	Orange	Orange	Orange		
21							Yellow			Orange	Orange		Green	Yellow	Yellow	Yellow	Yellow		Green	Yellow	Yellow	Yellow	Yellow		Green	Yellow	Yellow	Yellow	Yellow	
22																														
23																														
24	Yellow			Orange				Orange	Orange	Orange	Orange																			
25	Orange			Orange	Orange			Orange	Orange	Orange	Orange																			
26																														
27	Orange	Yellow		Orange	Yellow			Orange	Orange	Orange	Orange		Orange	Orange	Orange	Orange	Orange		Orange	Orange	Orange	Orange	Orange		Orange	Orange	Orange	Orange	Orange	
28																														
29																														
30																														

Card Sort: Revenue

Question:

What were the **TOTAL** sales, revenue, and other operating receipts for this [business unit] in 2019?

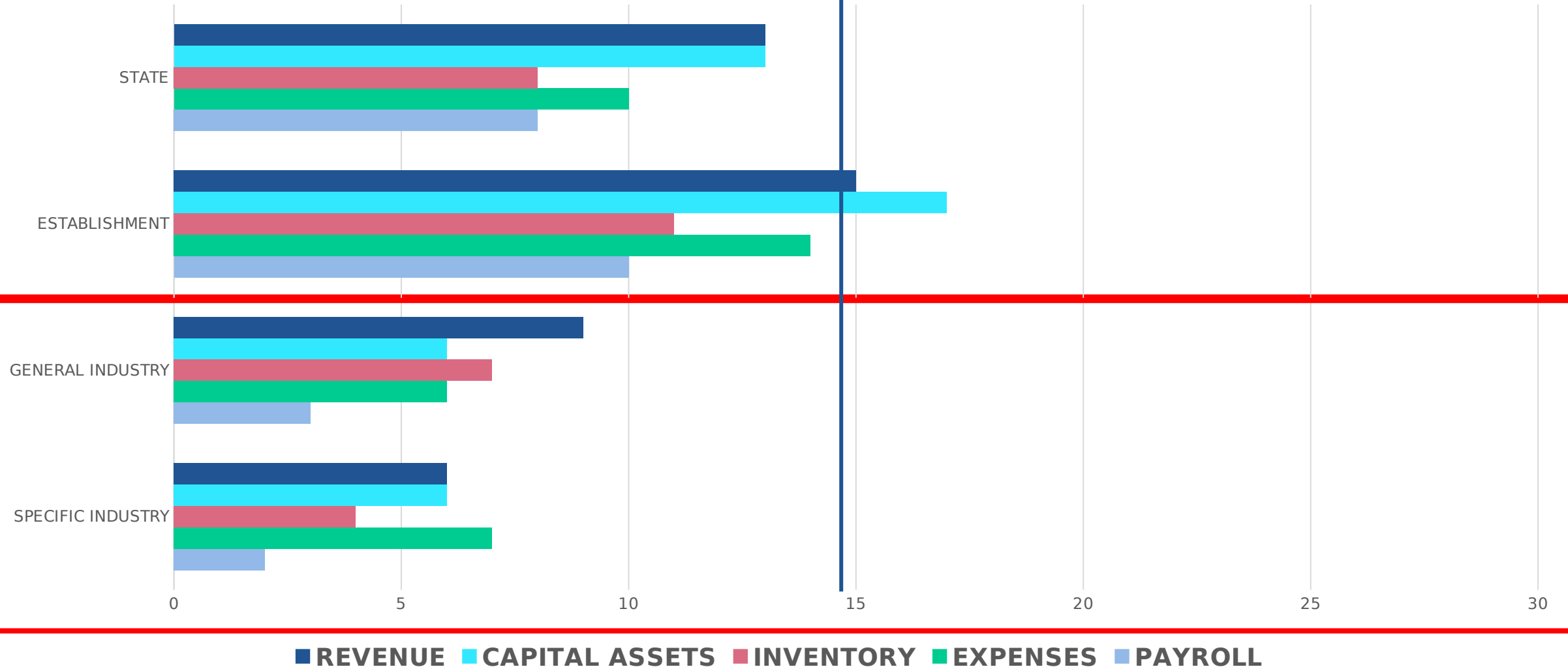
REVENUE	ORANG				X	
	GREEN	YELLOW	E	RED		
COMPANY	29	0	0	0	0	1
ESTABLISHMENT	15	9	3	1	1	2
LINE OF BUSINESS	13	10	2	0	0	5
STATE SPECIFIC INDUSTRY	13	8	7	0	0	2
GENERAL INDUSTRY	6	7	9	2	2	6
INDUSTRY	9	9	4	1	1	7

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"EASILY ACCESSIBLE" (GREEN) DATA BY UNIT BY TOPIC



■ REVENUE ■ CAPITAL ASSETS ■ INVENTORY ■ EXPENSES ■ PAYROLL

Key Takeaways:

- **Using a generic Chart of Accounts during interviewing helps to center respondents to the task at hand.**
- **Use cognitive methodology to give context to the resultant data.**
- **Card sorts can be a useful tool in establishment surveys.**
- **Visualization of qualitative data can have a powerful impact with stakeholders.**

Thank you!

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