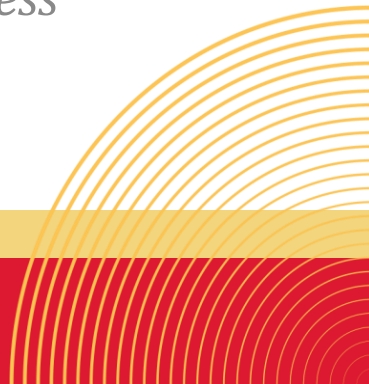


Storytelling with Data: How to make your insights resonate

Dr. Elizabeth Housholder

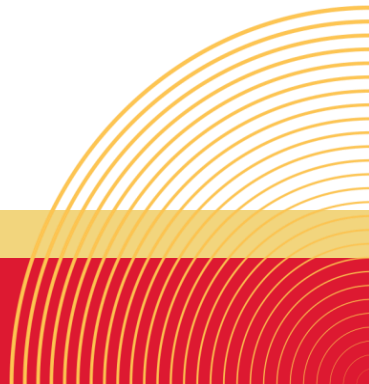
Associate Director

Office of Assessment, Research, and Divisional Effectiveness



Learning Outcomes

- Participants will be able to explain the impact of storytelling over reporting
- Participants will be able to apply storytelling principles to real-world datasets to drive data-informed decision-making
- Participants will be able to recall the key elements of a good data story



Let me tell you a story....

What happens when students select their own roommate?

17%

Higher satisfaction
with roommate

22%

Less likely to
consider switching
roommates

Students who are satisfied with their roommate are 23% more likely to return to living on campus again next year

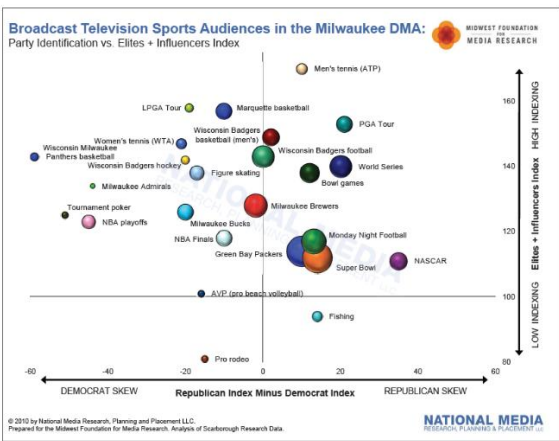
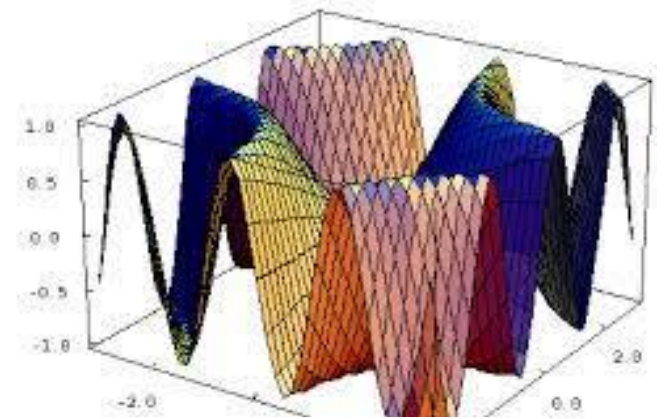
Why does storytelling matter for assessment?

Report

YOUR COMPANY

Export PDF

Category	Product	Month	7	8	9	10	11	12	Total	1	2	3	4	5	6
Dairy Products	Queso Cabrales		\$100		\$70	\$0	\$0	\$0	\$170	\$50	\$70	\$50	\$0	\$0	\$0
	Mozzarella di Giovanni		\$80	\$80	\$50	\$2,500	\$10	\$2,410	\$7,350	\$1,300	\$1,300	\$40	\$80	\$130	\$130
	Goloso		\$10	\$0		\$10		\$20	\$30	\$30	\$0	\$0	\$0	\$0	\$0
	Camembert Pierrot		\$1,000	\$2,000		\$3,000	\$3,000	\$10,000	\$19,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
	Gorgonzola Telino		\$200	\$200		\$500	\$1,200	\$1,900	\$4,400	\$140	\$140	\$30	\$300	\$200	\$1,000
	Raclette Courdavault		\$4,400	\$800	\$1,700	\$2,550	\$320	\$10,100	\$15,000	\$1,500	\$1,500	\$7,120	\$220	\$930	\$930
	Mascarpone Fabbri		\$150		\$1,020	\$150		\$320	\$1,640	\$320			\$1,000	\$100	\$100
	Queso Manchego La Pastora		\$300						\$300	\$450					\$1,700
	Foie gras		\$340	\$30	\$30	\$1,200	\$30	\$2,700	\$4,800	\$1,200	\$1,410	\$200	\$200	\$200	\$190
	Cheese and Sausage		\$800	\$4,010	\$4,200	\$8,710	\$7,720	\$12,100	\$40,010	\$9,070	\$9,070	\$9,000	\$9,000	\$9,000	\$9,000
Total		\$7,200	\$4,810	\$4,230	\$8,710	\$7,720	\$12,100	\$40,010	\$9,070	\$9,070	\$9,000	\$9,000	\$9,000	\$9,000	
Grains/Cereals	Singaporean Hokkaido Fried Rice		\$80		\$80	\$110	\$100	\$400	\$800	\$400		\$500	\$500	\$500	\$500
	Miso		\$100					\$100	\$100	\$200				\$300	\$300
	Gustaf's Knackebrod		\$1,010			\$250	\$700	\$2,070	\$3,070	\$310	\$230	\$1,000	\$1,000	\$1,000	\$1,000
	Ravioli Angelo		\$1,010	\$30		\$300	\$600	\$1,150	\$2,910	\$310	\$230	\$1,000	\$1,000	\$1,000	\$1,000
	Croccchi di nonna Alice		\$60		\$70	\$300	\$600	\$1,150	\$2,910	\$310	\$230	\$1,000	\$1,000	\$1,000	\$1,000
	Wimmers gute Semmelknödel			\$20		\$1,330	\$810	\$700	\$3,290	\$100	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
	Filo Mix					\$10	\$10	\$10	\$30	\$10	\$10	\$10	\$10	\$10	\$10
	Tunited					\$300	\$300	\$300	\$900	\$400	\$400	\$400	\$400	\$400	\$400
	Total		\$1,270	\$270	\$870	\$2,020	\$2,000	\$2,000	\$9,010	\$4,070	\$5,040	\$3,300	\$2,500	\$2,500	\$2,500
	Produce	Tofu		\$350			\$350	\$1,000	\$1,000	\$3,850	\$1,200	\$1,200	\$220	\$1,000	\$1,000
Manjimp Oned Apples			\$3,100	\$80		\$2,030	\$400	\$700	\$6,910	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Longlife Tota			\$450			\$300	\$1,000	\$2,000	\$3,750	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Uncle Bob's Organic Oned Pears			\$300			\$300	\$300	\$300	\$900	\$300	\$300	\$300	\$300	\$300	\$300
Röschen Sauerkraut				\$720	\$1,100	\$510	\$1,300	\$1,300	\$4,930	\$1,520	\$2,070	\$600	\$3,010	\$3,010	\$3,010
Total			\$4,200	\$880	\$1,170	\$2,680	\$3,600	\$4,000	\$16,030	\$5,020	\$5,020	\$2,820	\$5,010	\$5,010	\$5,010



What is Your Favorite Baseball Team?

	Toronto Blue Jays	Boston Red Sox	New York Yankees
Frequency Percent			
Boston, MA	11	33	7
Row Percent	21.57%	64.71%	13.73%
Montreal, Canada	23	14	9
Row Percent	50.00%	30.43%	19.57%
Montpellier, VT	22	13	14
Row Percent	44.90%	26.53%	28.57%
Column totals	56	60	30
Column Percent	38.36%	41.10%	20.55%

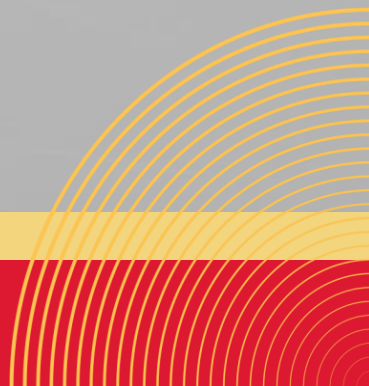




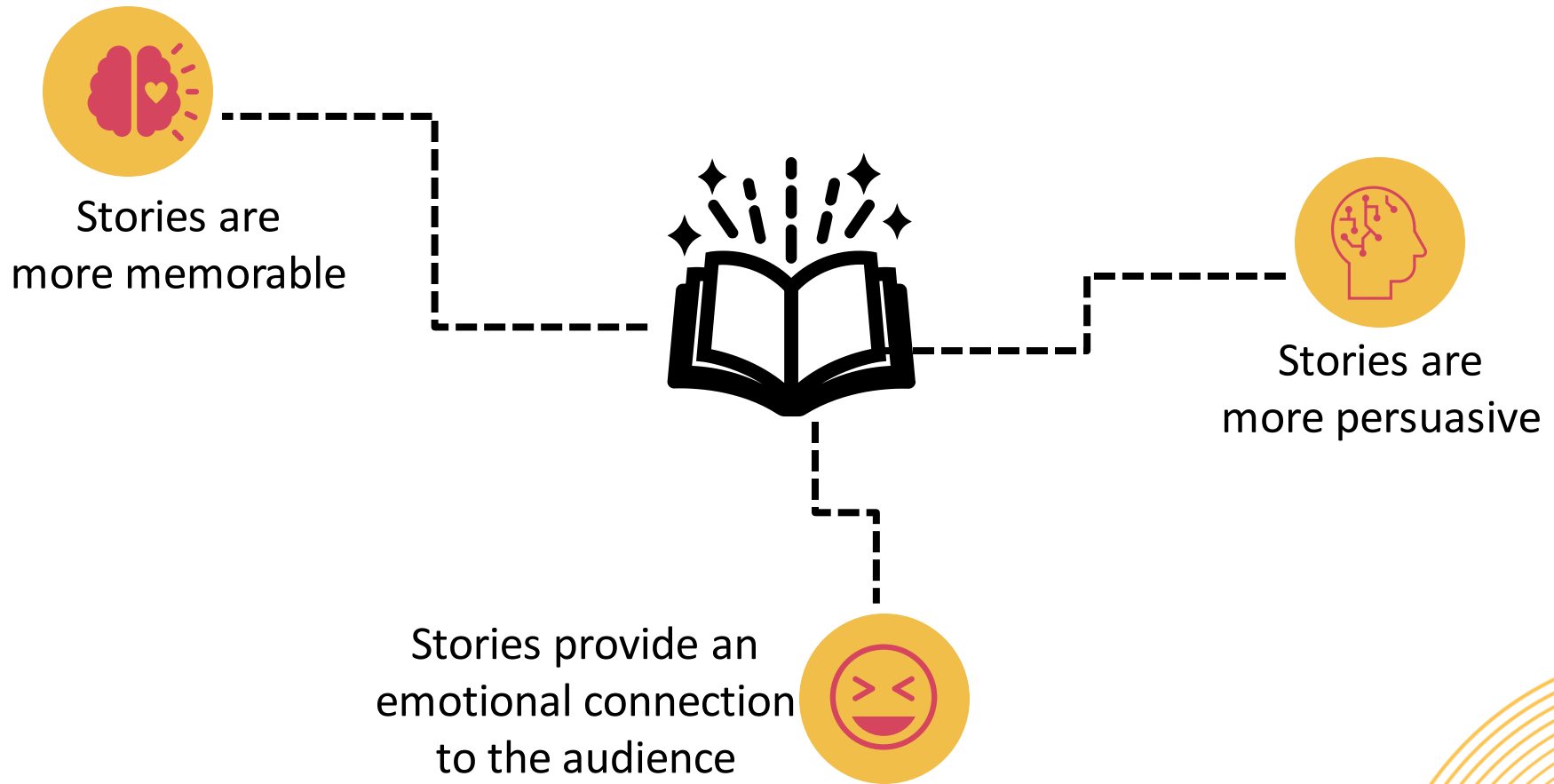
GOOD DATA ARE PERSUASIVE COMMUNICATION

DISABILITY AWARENESS SUMMIT

Iowa State University 2024



Why does storytelling matter for assessment?



Stories

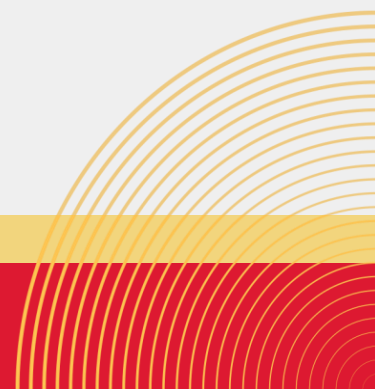


Data





What data do you currently collect?



Types of Data



Contact time with students

- Total number of students served
- Average number of visits per student
- Average time spent with students
- Percent of university population served



Faculty Experience

- Ease of working with office
- Understanding of process
- Referring students to office
- Training on accessibility



Exam center statistics

- Total number of students served
- Number of participating departments
- Number of participating faculty
- Percent of university population served



Student Experience

- Student satisfaction
- Understanding of process
- Classroom experiences
- Support provided by staff

Types of Data



Contact time with students

- Total number of students served
- Average number of visits per student
- Average time spent with students
- Percent of university population served



Faculty Experience

- Ease of working with office
- Understanding of process
- Referring students to office
- Training on accessibility



Exam center statistics

- Total number of students served
- Number of participating departments
- Number of participating faculty
- Percent of university population served



Student Experience

- Student satisfaction
- Understanding of process
- Classroom experiences
- Support provided by staff

Stories



Data



A good data story should:



IDENTIFY

What problem are you trying to solve?



EXPLAIN

How are your data relevant to the problem?



SOLVE

What are possible data-informed solutions to the problem?

Identifying important problems

Thinking about your audience, your program, and your customers will help you identify important problems



AUDIENCE



PROGRAM



CUSTOMER

Audience considerations



ROLE

- Who is receiving this information?
- What is their role at the university?
- How much technical knowledge do they possess?

RELEVANCE

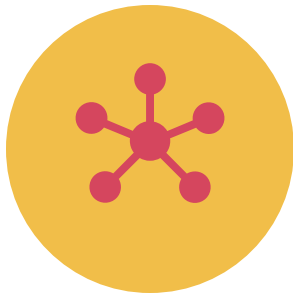
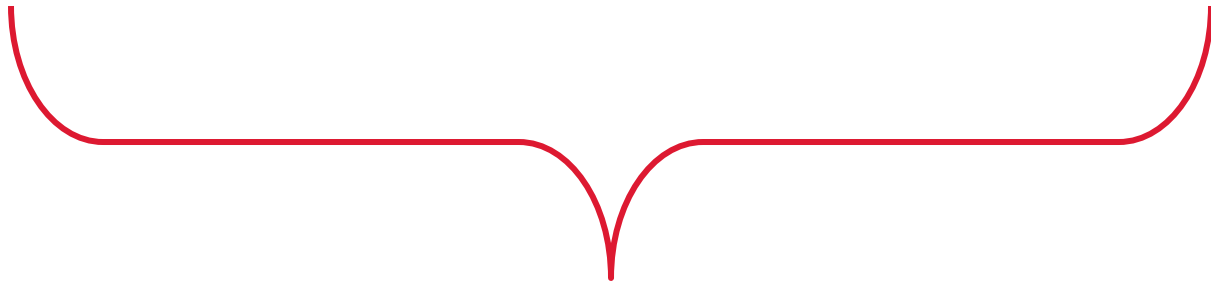
- What type of information is most relevant to each role?
- What problems are each role trying to solve?
- How do people in each role interact with your office?

REACTION

- What do you want your key audiences to do with the information you share?

Program considerations

Why are you assessing your program?



SCOPE



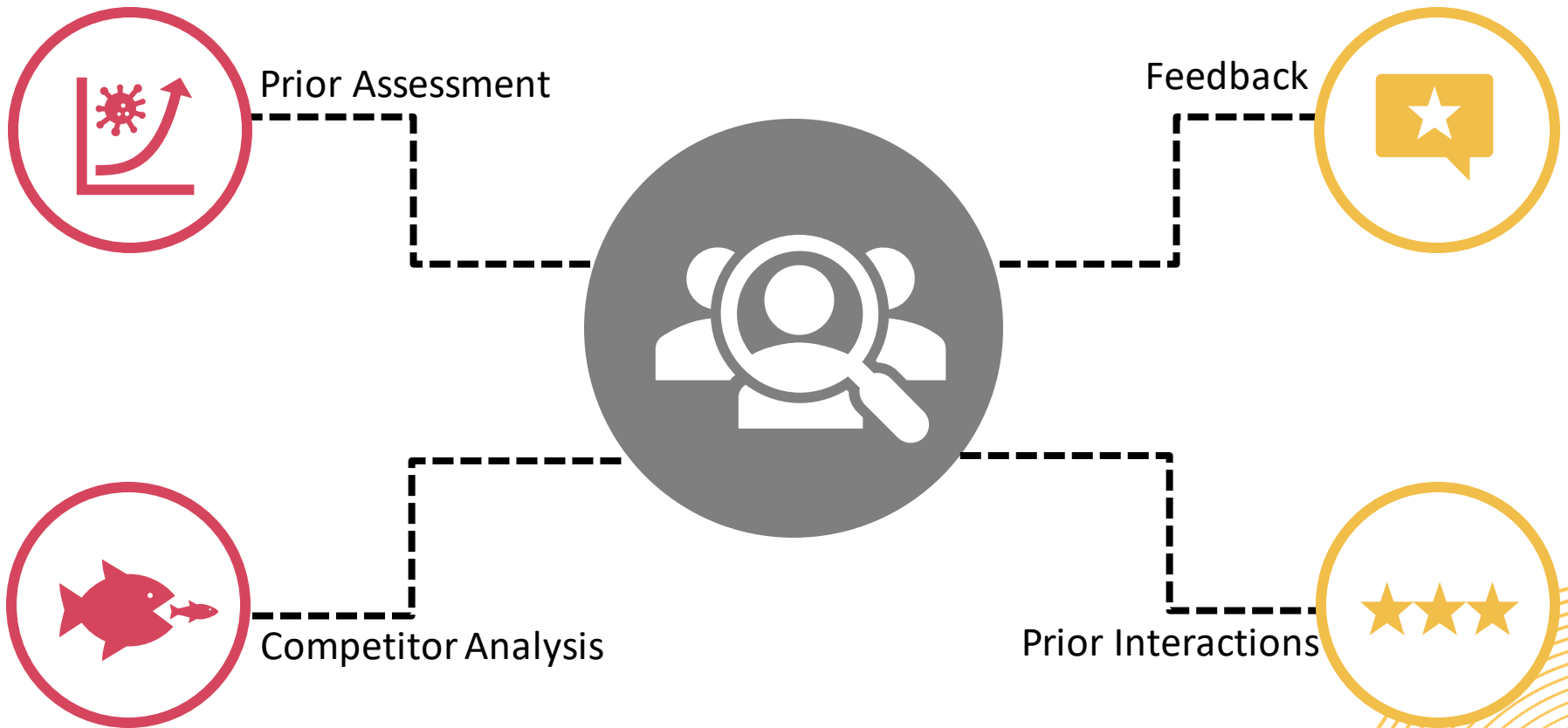
STAFFING



BUDGET

Customer considerations

How do you know what your customers want?



A good data story should:



IDENTIFY

What problem are you trying to solve?



EXPLAIN

How are your data relevant to the problem?



SOLVE

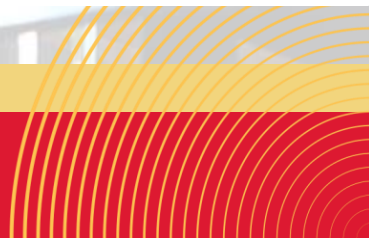
What are possible data-informed solutions to the problem?



HOW TO EXPLAIN SO PEOPLE WILL REMEMBER

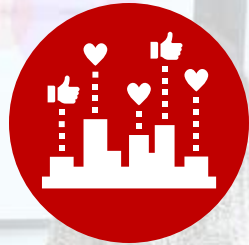
DISABILITY AWARENESS SUMMIT

Iowa State University 2024





Connect emotionally with your audience

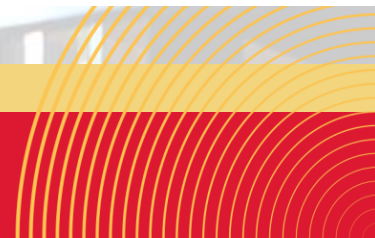


Select data that tell your story

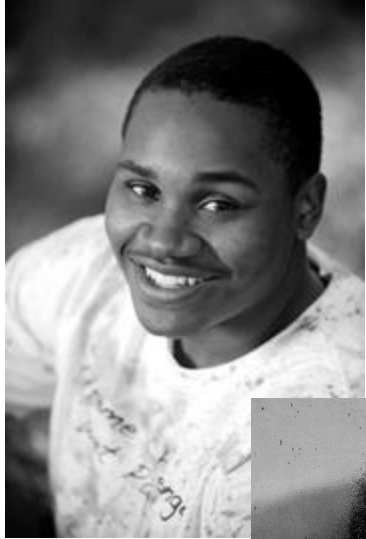


Simplify visual data

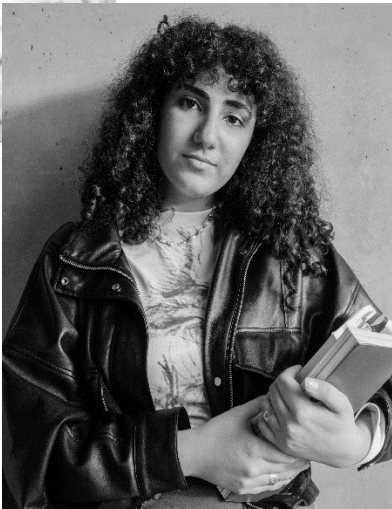
HOW TO EXPLAIN SO PEOPLE WILL REMEMBER



Connect emotionally with your audience



ANDY

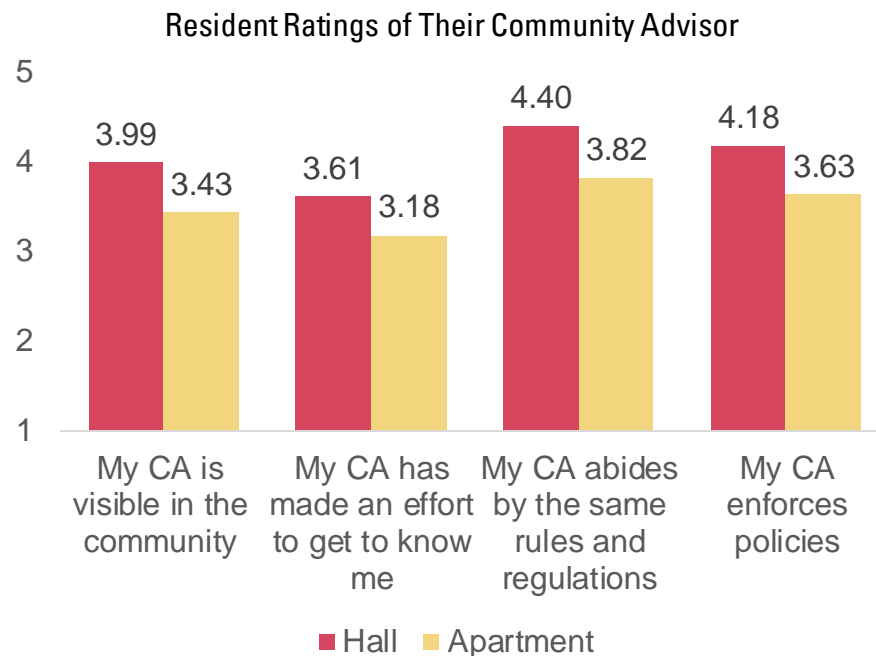


CHRISTINA

Use personal stories
and customer
testimonials to
humanize data

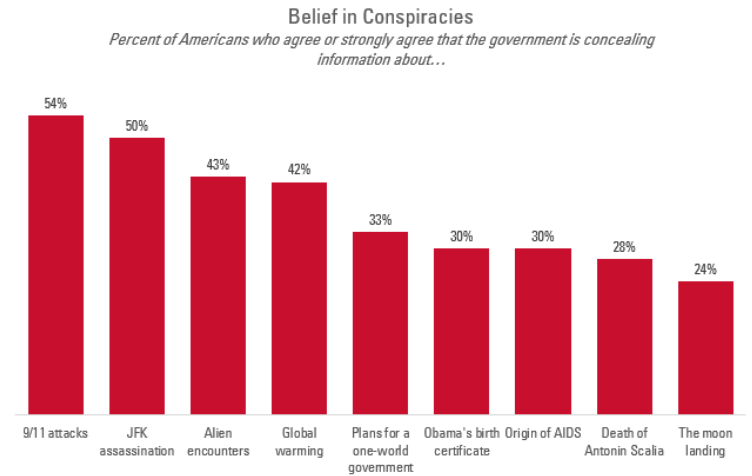
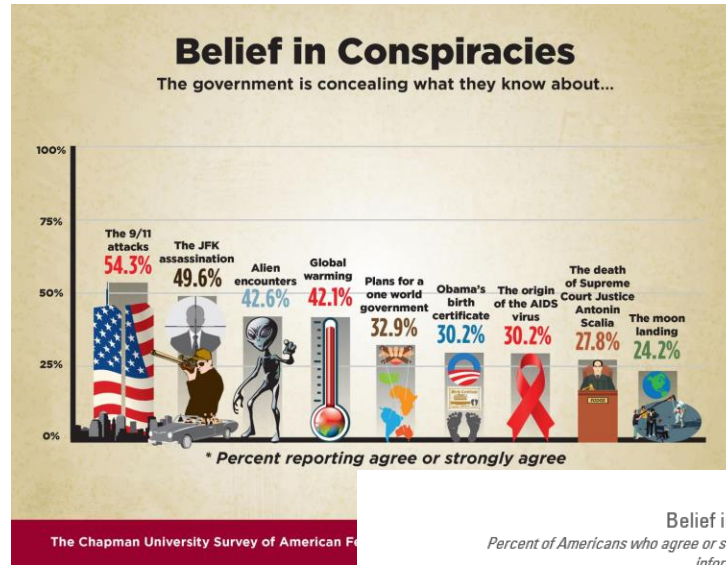
Simplify visual data

	RH	APT
My RA is visible in the community	3.99	3.43
My RA has made an effort to get to know me	3.61	3.18
My RA abides by the same rules and regulations	4.40	3.82
My RA enforces policies	4.18	3.63



Simplify visual data

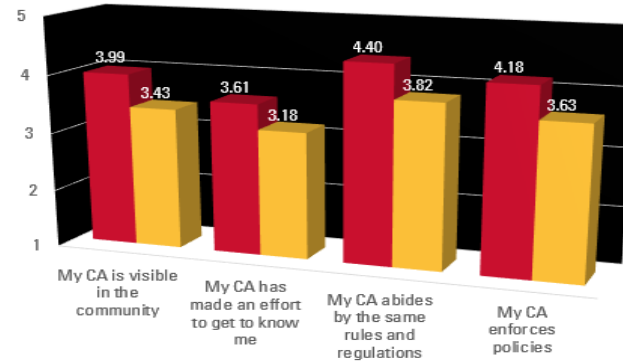
**AVOID
CHART
JUNK**



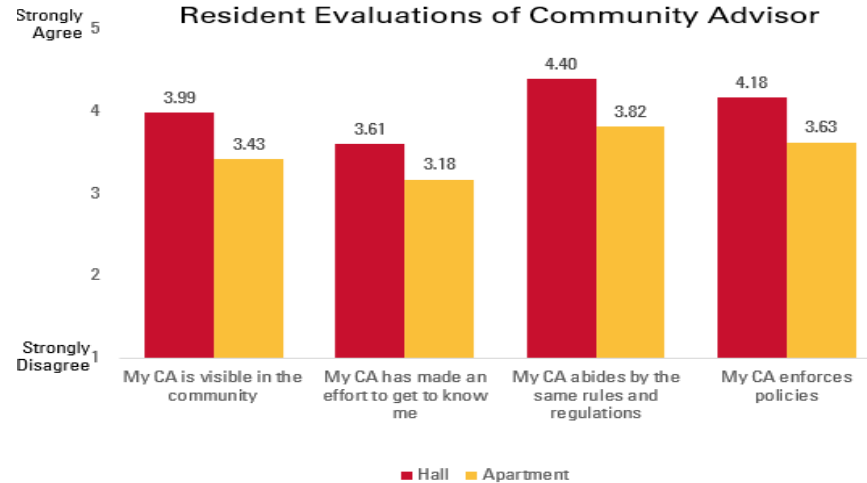
Simplify visual data

**MAINTAIN
HIGH
DATA-INK
RATIO**

Resident Evaluations of Community Advisor

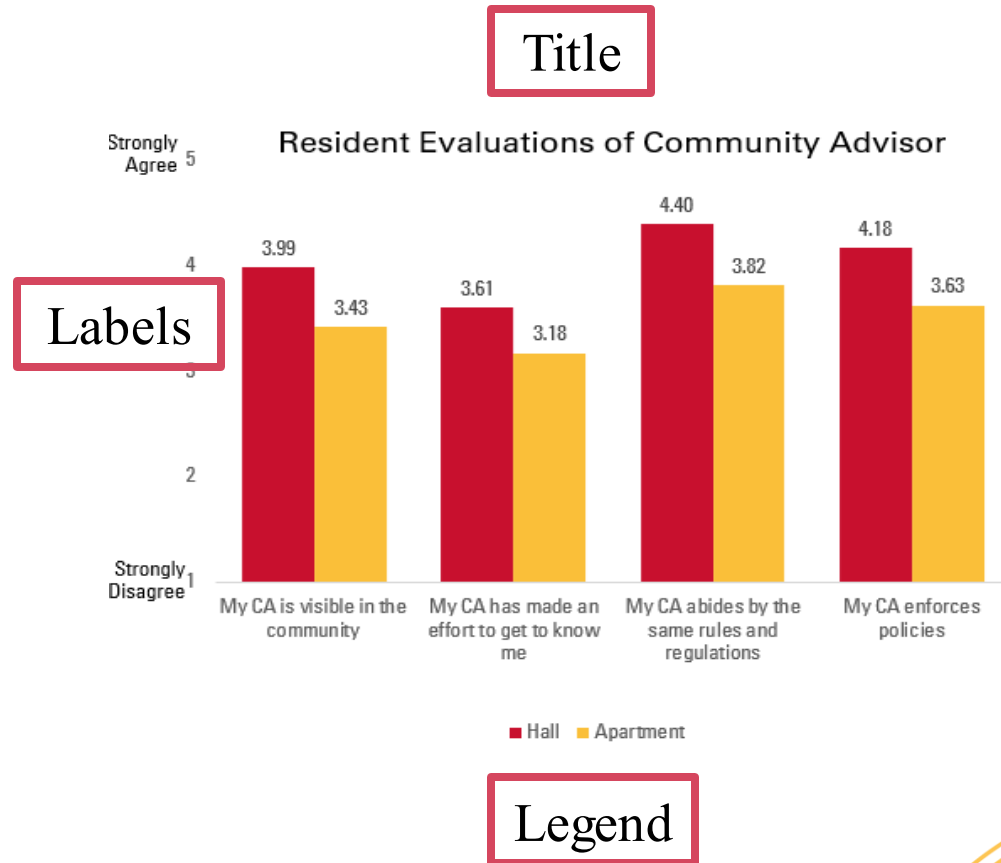


Resident Evaluations of Community Advisor



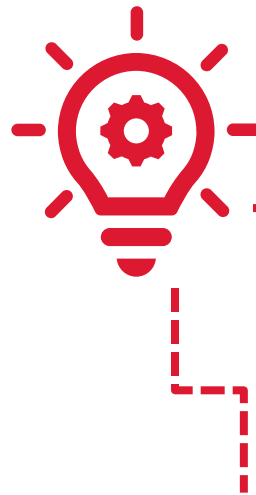
Simplify visual data

**AVOID
AMBIGUITY**



Share relevant data

Is this data important
to solving the
problem? How?



Does this add to
my story?

Who am I presenting to and
what can they accomplish?

A good data story should:



IDENTIFY

What problem are you trying to solve?



EXPLAIN

How are your data relevant to the problem?



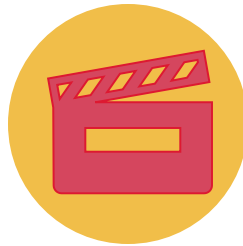
SOLVE

What are possible data-informed solutions to the problem?

Turning insight into action



**Restate key
conclusions**



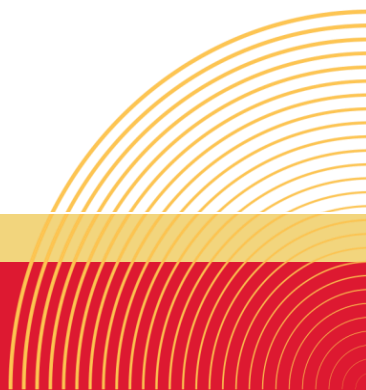
**Suggest data-
informed actions**



**Plan for follow-
up assessment**

Key Takeaways

- 1. Stories about data are more memorable, relatable, and persuasive than statistical reports**
- 2. A good data story will do the following:**
 - Identify a problem
 - Explain what you know about a problem
 - Offer solutions to the problem
- 3. Storytelling should be considered an essential part of any assessment project, not just an afterthought**



**THANK
YOU!**

Dr. Elizabeth Housholder

Associate Director

Office of Assessment, Research, and
Divisional Effectiveness

ehoushol@iastate.edu