Caring about Sharing: User Perceptions of Multiparty Data Sharing

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By Mark Bergen and Jennifer Surane
August 30, 2018, 3:43 PM EDT *Updated on August 31, 2018, 12:40 PM ED*

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James McLeod ✉ 🕐 June 15, 2020   In : Canada Privacy   💬 0   🔥 1,169   🔖 11 min read

Research Questions

- **RQ1**: How does the overall acceptability **vary** across **different types** of multiparty data sharing?

- **RQ2**: How does acceptability **vary** in multiparty data sharing f**or different user controls** (consent, purpose, retention)?
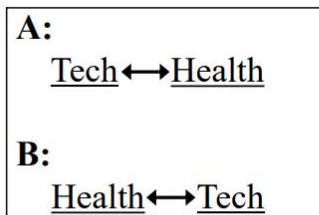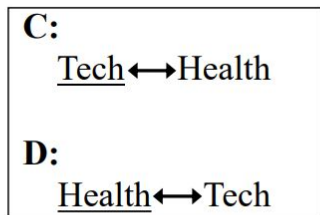
Survey Overview

- 1025 responses through SurveyMonkey in March 2021
- Final participant set is **N = 916**
- Each receives: **1 of 12** scenarios and a series of questions corresponding to user controls
- Use a **five-point semantic differential scale**:

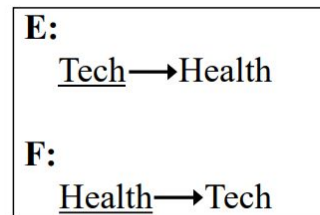"**Completely Unacceptable**", "Somewhat Unacceptable", "Neutral", "Somewhat Acceptable", "**Completely Acceptable**"
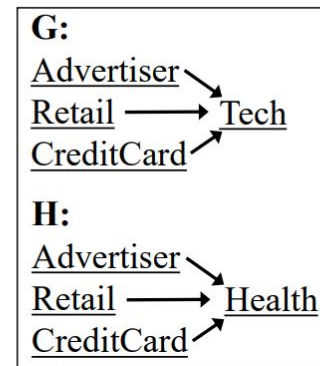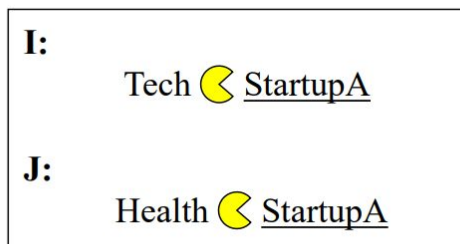
Types of Multiparty Data Sharing

A:
Tech ⟷ Health

B:
Health ⟷ Tech

V) Validation

C:
Tech ⟷ Health

D:
Health ⟷ Tech

1) Two-Way Two-Party Exchange

E:
Tech ⟶ Health

F:
Health ⟶ Tech

2) One-Way Two-Party Exchange

G:
Advertiser
Retail ⟶ Tech
CreditCard

H:
Advertiser
Retail ⟶ Health
CreditCard

3) Many-to-one Exchange

I:
Tech ⊂ StartupA

J:
Health ⊂ StartupA

4) Acquisition

K:
Tech ⊂ (StartupA+StartupB)

L:
Health ⊂ (StartupA+StartupB)
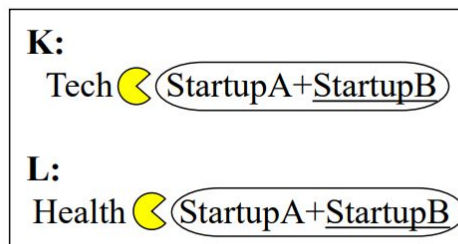
5) Merger then acquisition

X⟶Y: X provides data to Y
X⟷Y: X and Y provide data to each other
X⊂Y: X acquires Y
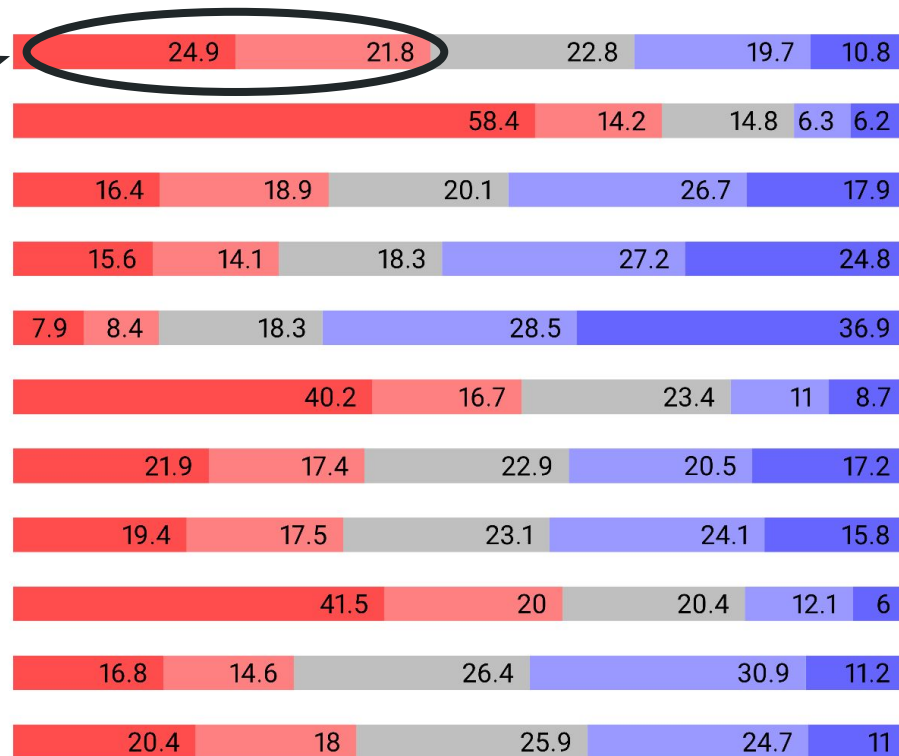(X+Y): X merges with Y
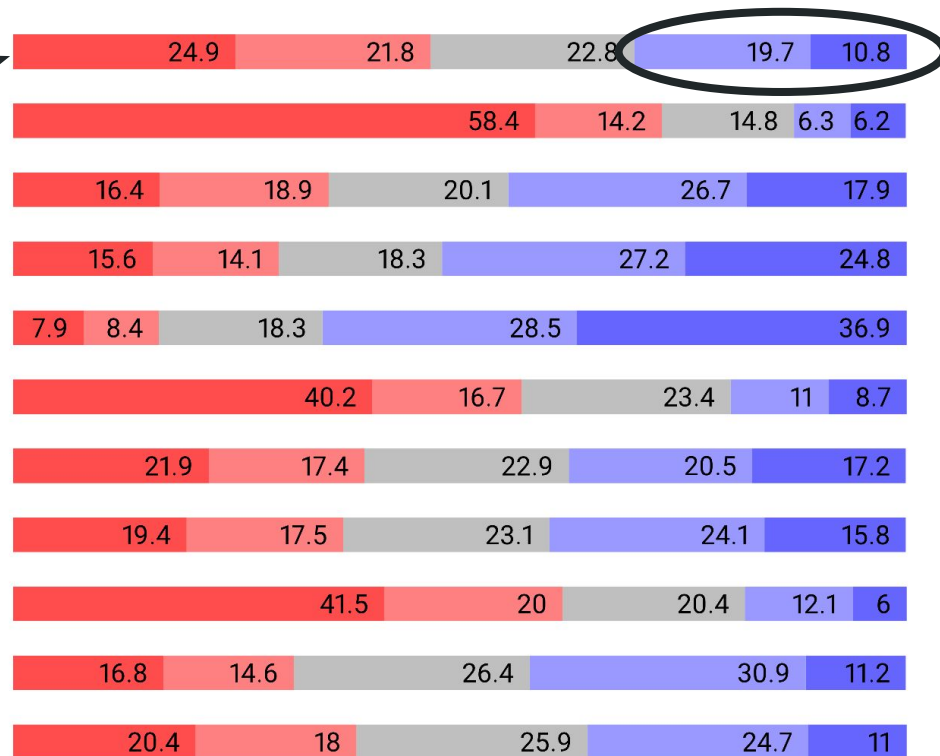X: scenario indicated you are a user of X

Results - Highlights

Overall Acceptability Across Scenarios

General Scenario Acceptability?

Overall Acceptability Across Scenarios

General Scenario Acceptability?

24.9	21.8	22.8	19.7	10.8
58.4	14.2	14.8	6.3	6.2
16.4	18.9	20.1	26.7	17.9
15.6	14.1	18.3	27.2	24.8
7.9	8.4	18.3	28.5	36.9
40.2	16.7	23.4	11	8.7
21.9	17.4	22.9	20.5	17.2
19.4	17.5	23.1	24.1	15.8
41.5	20	20.4	12.1	6
16.8	14.6	26.4	30.9	11.2
20.4	18	25.9	24.7	11

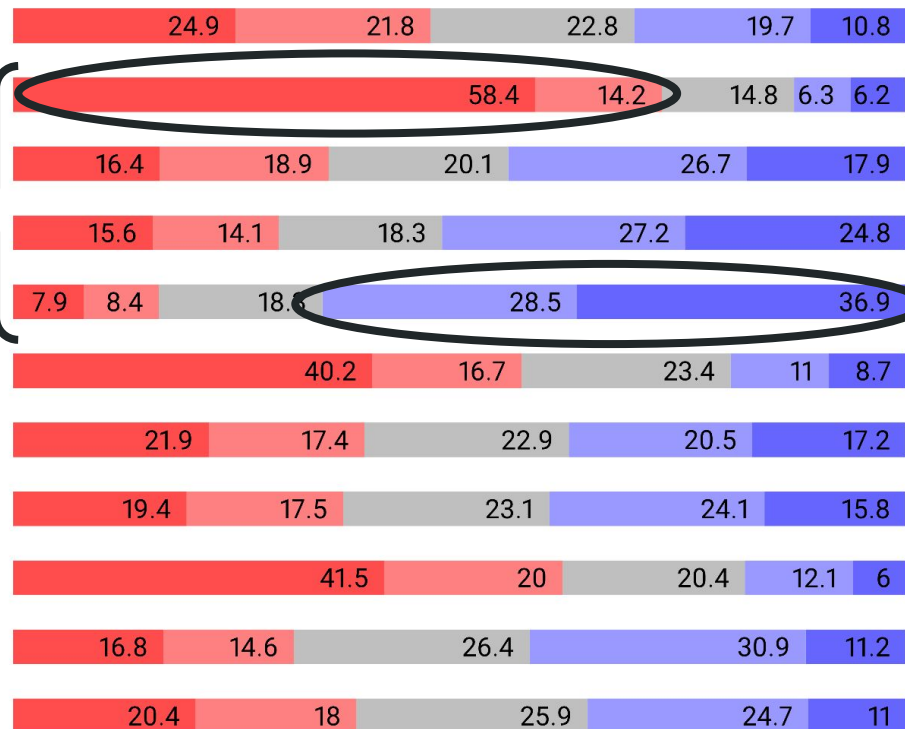# Consent: Acceptability Across All Scenarios

Informed Consent?

- **Concealed**
- **Assumed**
- **Opt-out**
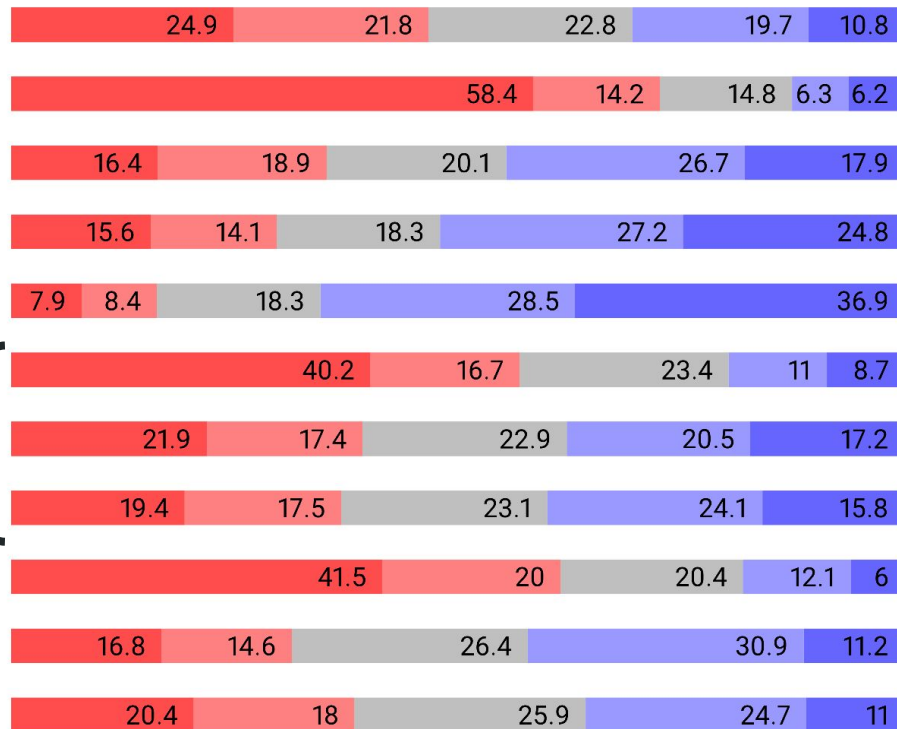- **Opt-in**

Data Retention: Acceptability Across All Scenarios

Data Retention?

- **Indefinitely**
- **While in use**
- **For set time**

24.9	21.8	22.8	19.7	10.8
58.4	14.2	14.8	6.3	6.2
16.4	18.9	20.1	26.7	17.9
15.6	14.1	18.3	27.2	24.8
7.9	8.4	18.3	28.5	36.9
40.2	16.7	23.4	11	8.7
21.9	17.4	22.9	20.5	17.2
19.4	17.5	23.1	24.1	15.8
41.5	20	20.4	12.1	6
16.8	14.6	26.4	30.9	11.2
20.4	18	25.9	24.7	11

Sharing Type Impact on Overall Acceptability

E:
Tech ⟶ Health

F:
Health ⟶ Tech

2) One-Way Two-Party Exchange

G:
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Retail ⟶ Tech
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L:
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5) Merger then acquisition

General acceptability is statistically different between types.

Takeaways

- The granularity of information in current systems contains insufficient information to support differences for consent depending on sharing type

- Disambiguate Third Parties

- Explicit over Implicit Consent.

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Thank you