

# The preliminary analysis of factors influencing cross-boundary data collaboratives: A quantitative study from the perspective of the public sector

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## BACKGROUND

### • Cross-boundary Data Collaboratives

- A process in which government agencies collaborate with external organizations to leverage external resources to implement public policies, address public problems, and generate values and innovations for the public interest through the use of open data [1].
- Government agencies are encouraged to form partnerships since the collaboratives benefits the public sector and promotes the use of open data [2] [3] [4].



- **Research Question:** How do government agencies' intention to form cross-boundary data collaboratives and its influencing factors vary across different levels of the government?

## RESEARCH FRAMEWORK

### Influencing Factors [5]

Shared Beliefs  
Communication

Perceived Benefits

Perceived Effort

Perceived Risk

Organizational Capability

Leadership Support

Legislation & Regulation

External Influence

Intention for participation in  
data-driven collaboratives

Government Levels

Central Government

Special Municipality

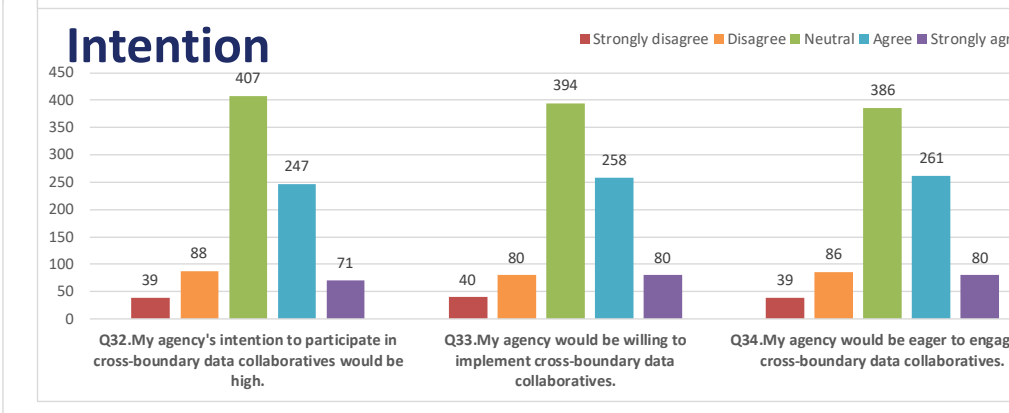
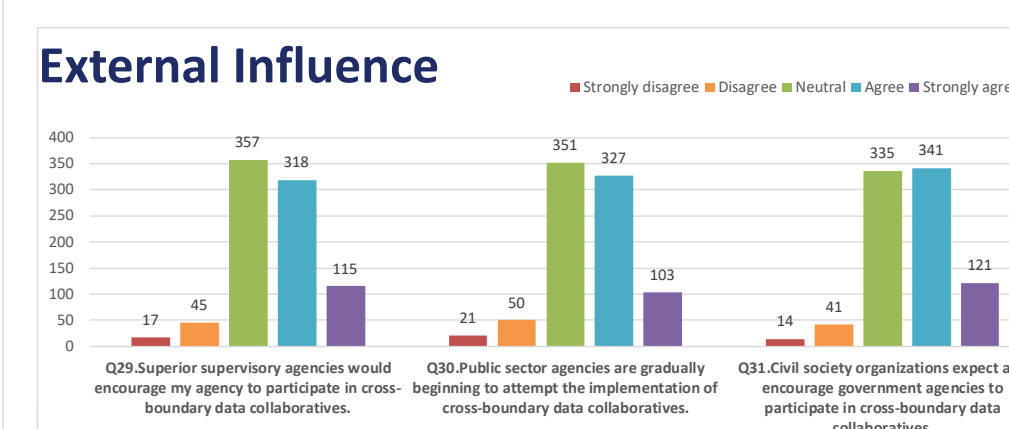
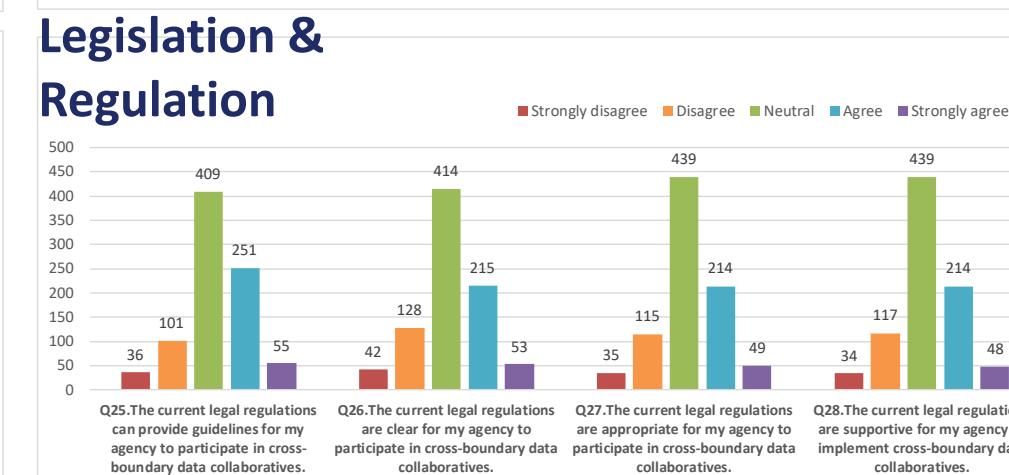
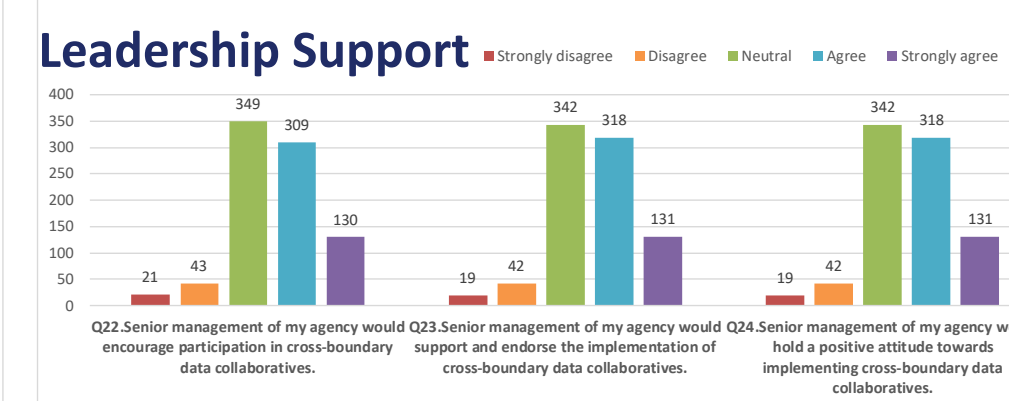
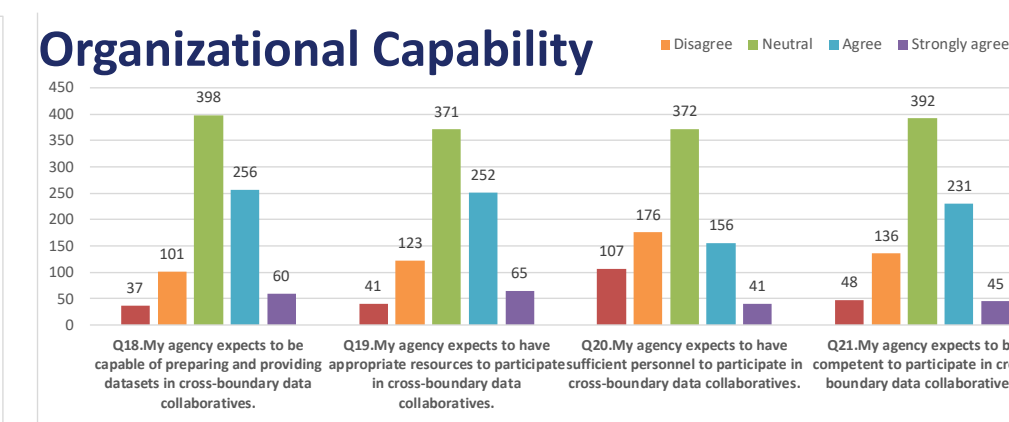
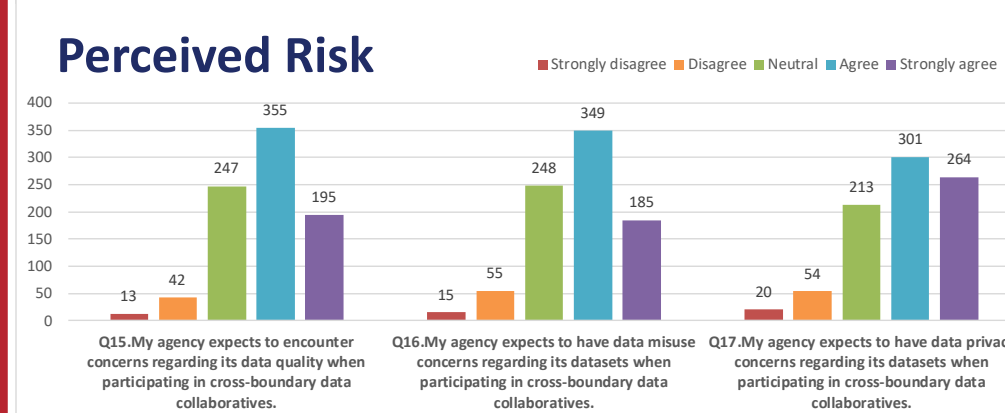
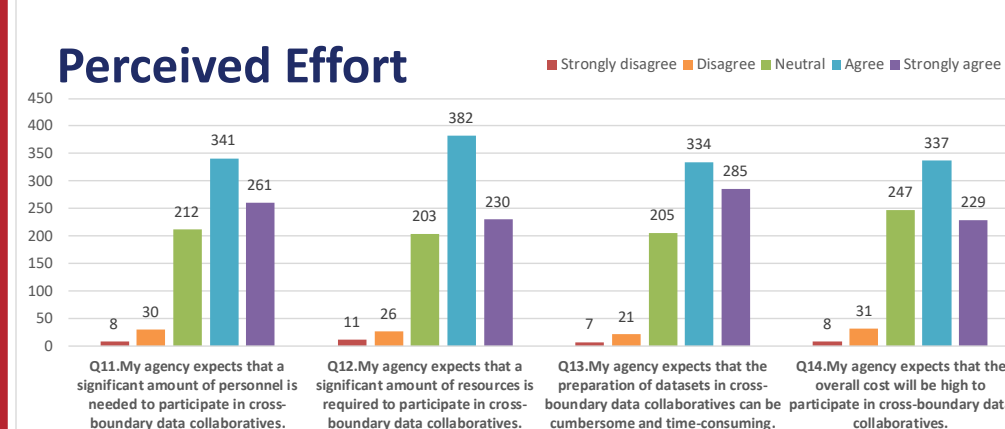
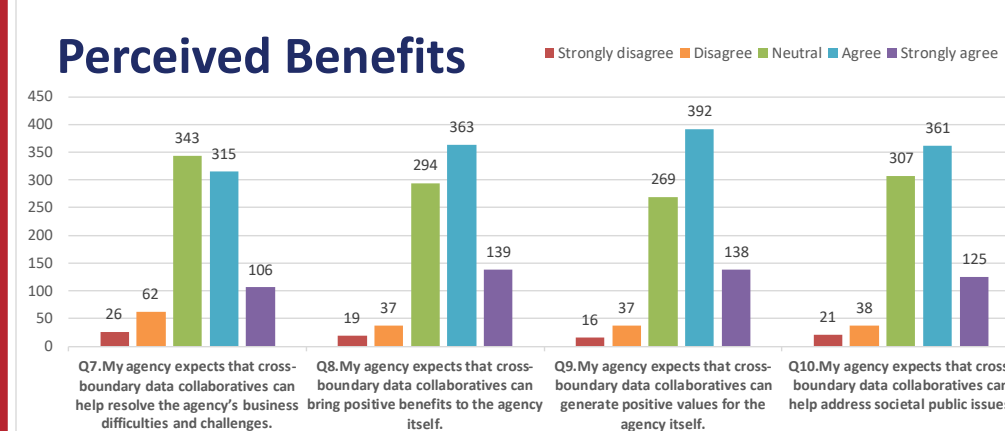
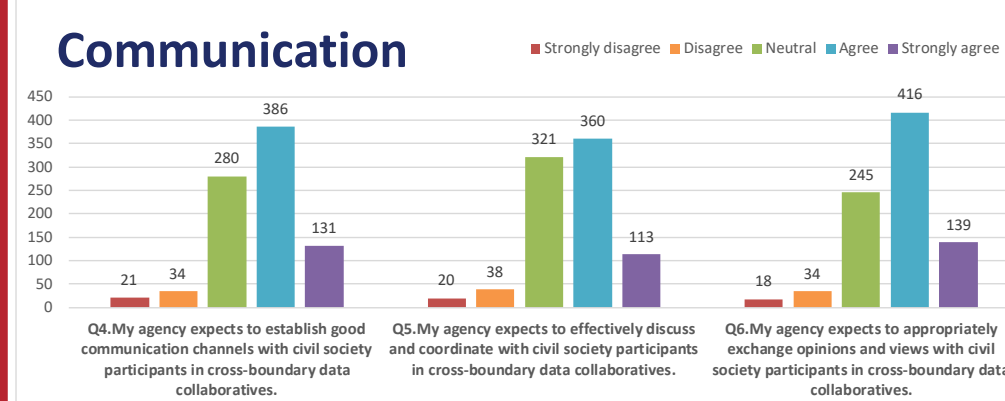
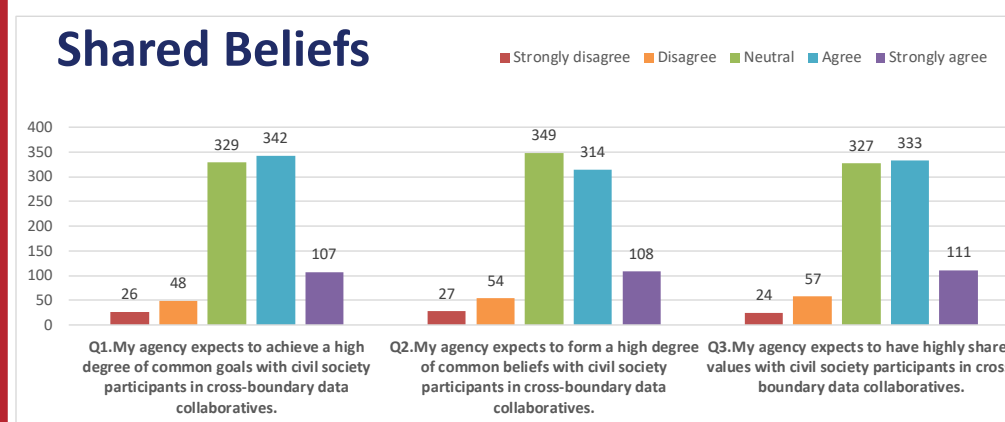
Local Government

## METHOD

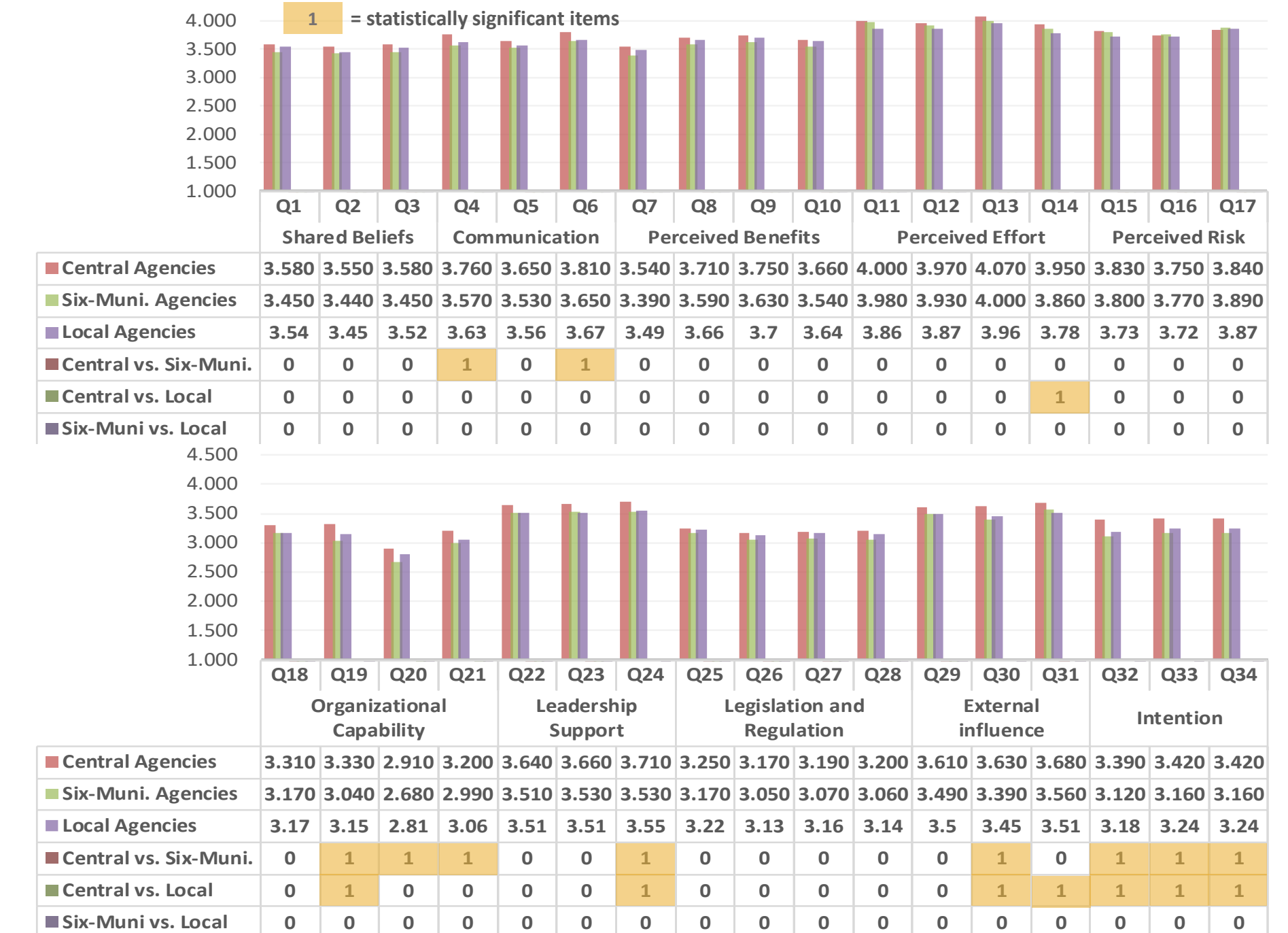
- **Method:** Survey using 5-point Likert scale questionnaire measuring the factors and intention of government agencies.
- **Sampling:** Purposive sampling by distributing the questionnaires to agencies of the central, special municipality, and local governments of Taiwan via the Government's Electronic Official Document System (from mid-March to mid-April 2024) to recruit respondents potentially overseeing tasks relevant to data collaboratives.
- **Sample Size:** 852 government officials – Central (46%) | Special Municipality (27%) | Local (27%)
- **Data Analysis:** Descriptive Statistics & ANOVA

## PRELIMINARY FINDINGS

- The intention to form the collaboratives and factors including communication, perceived effort, organizational capability, leadership, and external influence significantly vary across different government levels. However, the differences among the means are small.
- The interrelationship among the investigated factors will be examined in the later stage.



### Comparison between government agencies at different levels



## REFERENCES

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- [5] Yang, T.-M., Wu, Y.-J.: A proposal to inquire the potential determinants influencing government agencies' propensity to engage in data-driven collaborative partnerships utilizing open government data. In: Liao, H.-C., Cid, D., Macadar, M., Bernardini, F. (eds.) The 25th Annual International Conference on Digital Government Research (dg.o). Taipei, Taiwan (2024)