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Combining text mining of social media data and conjoint approach to investigate consumer choices on organic food

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- Study investigated the use of social media to interpret consumer perspectives on organic food product
- Organic production, sustainability, origin, shelf-life, price were five important information influencing choices for organic food
- Organic milk was used as a validation of the findings from social media data analysis
- Conjoint analysis was applied to estimate relative importance of information on choices for organic milk
- For each consumer cluster, different product information was important for consumer choices of organic milk

1 Introduction

- Interest in **organic food** continues to increase throughout the world in response to concerns about intensive agricultural practices and their potential effects on human health and the environment
- **Motivation for purchasing organic food** can be divided into two main categories, altruistic and egoistic
- **Social media**, especially X, can serve as a valuable resource for researchers studying food-related topics, especially organic food consumption
- **Conjoint analysis** is used to measure product attributes' impact on consumer preferences

2 Objective

To investigate the main factors influencing consumer choices on organic food by text mining of social media data

3 Methodology

Keywords for seaching

#organic
#food

Experiment 1: Social media data

Retrieval Twitter (X) data
Data cleaning and analysis
Topic modelling

Experiment 2: Conjoint analysis

Vietnamese young consumers *(n=144)*
Selection attributes and levels *(from experiment 1)*
Generation of product profiles and choice sets
Ranked-conjoint task

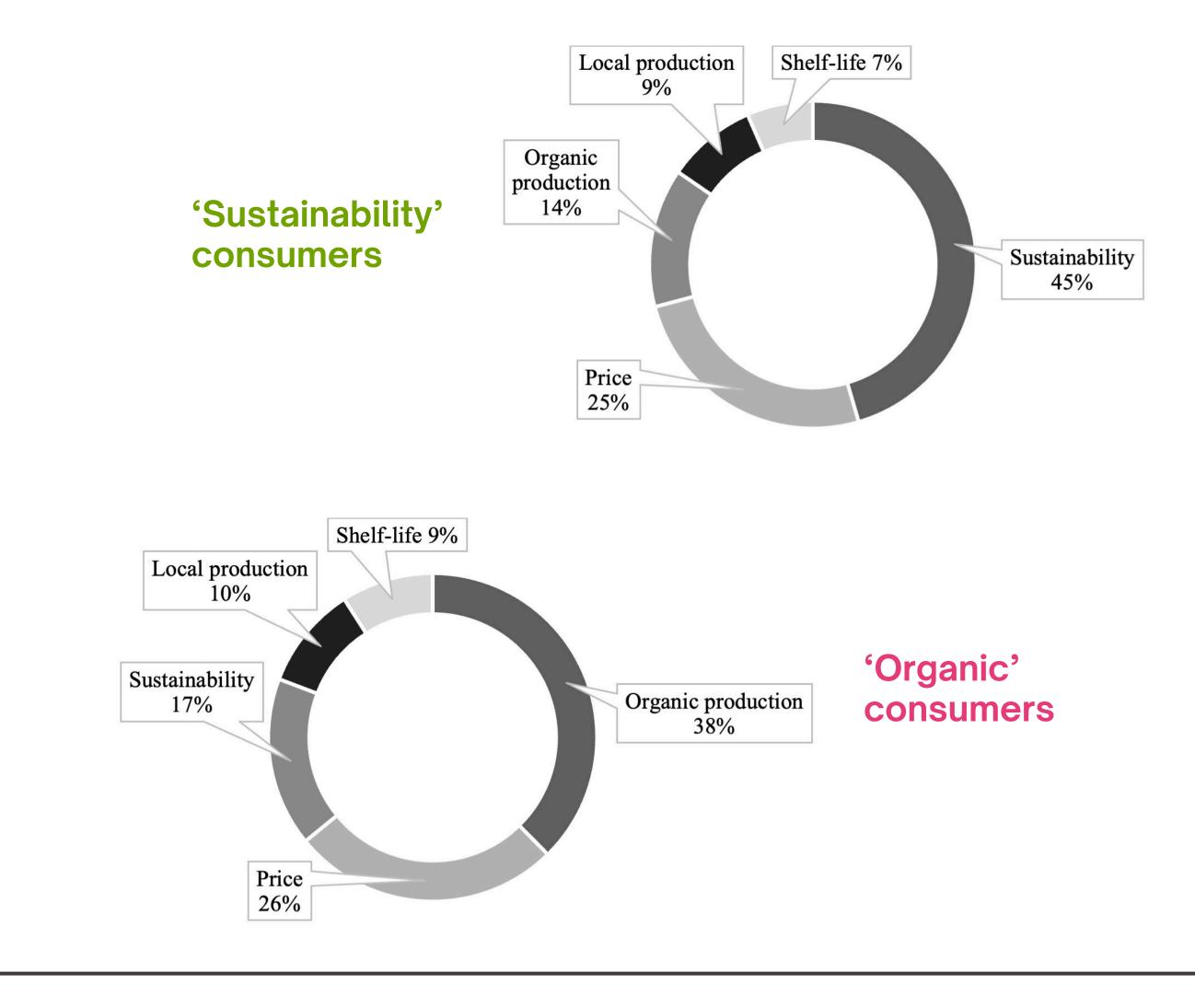## 4 Results

9 topics are extracted from Social media data

Health consciousness; Local production; Shelf-life; Price-quality ratio; Natural sources; Target consumer; Organic production; Non-GMO label; Food waste

Two clusters based on food choices on organic milk

'Sustainability' consumers — Local production 9%, Shelf-life 7%, Organic production 14%, Sustainability 45%, Price 25%

'Organic' consumers — Shelf-life 9%, Local production 10%, Sustainability 17%, Organic production 38%, Price 26%

6 Conclusion

Social media data is as a valuable source for understanding consumer behaviour and preferences in the context of organic food consumption

Key factors influencing consumer choices on organic milk include organic production, sustainability, country of origin, shelf-life, and price

Consumer heterogeneity in the organic food market: 'sustainability' and 'organic' consumers

- '**sustainability**' consumers relates sustainability, price attitude, and locality
- '**organic**' consumers prioritizes natural content and healthiness

Related literature

Vidal, L., Ares, G., Machín, L., & Jaeger, S. R. (2015). Using Twitter data for food-related consumer research: A case study on "what people say when tweeting about different eating situations". Food Quality and Preference, 45, 58-69.