

# User Identity Linkage for Different Behavioral Patterns across Domains

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## Problem

- limited understanding customers from a **single** dataset
- users are **unlinked** across domains
- datasets (domains) are **heterogeneous**

## Approach

- linking users based on their **behavioral histories** by
  - regarding a user behavior as a **sentence**
  - adopting **NLP, supervised ML, and Graph**

## Result

- enables to bridge the gap between two different behavioral patterns of **the same user across domains**

### Your own data

uID	Purchase history
s001	chocolate, juice, ...
s002	beef, beer, knife, ...
s003	pasta, cheese,...

conventional

Why s002 bought knife after beer?  
It makes no sense...

### User Identity Linkage

### 3<sup>rd</sup> party data

uID	Browsing history
t01	camp, BBQ, ...
t02	car, bike, oil, ...
t03	baby, toys,...



Analyst

I got it! Then, we can recommend outdoor items for s002.

our application