



### **P5**

# Segmenting consumers according to both consumer perception and preferences using 2-step clustering approach

Q.C. Nguyen<sup>1,2\*</sup>, I. Berget<sup>3</sup>, G. Russolillo<sup>4</sup>, P. Varela<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>Ho Chi Minh City University of Technology (HCMUT), Vietnam

<sup>&</sup>lt;sup>2</sup>Vietnam National University Ho Chi Minh City, Vietnam

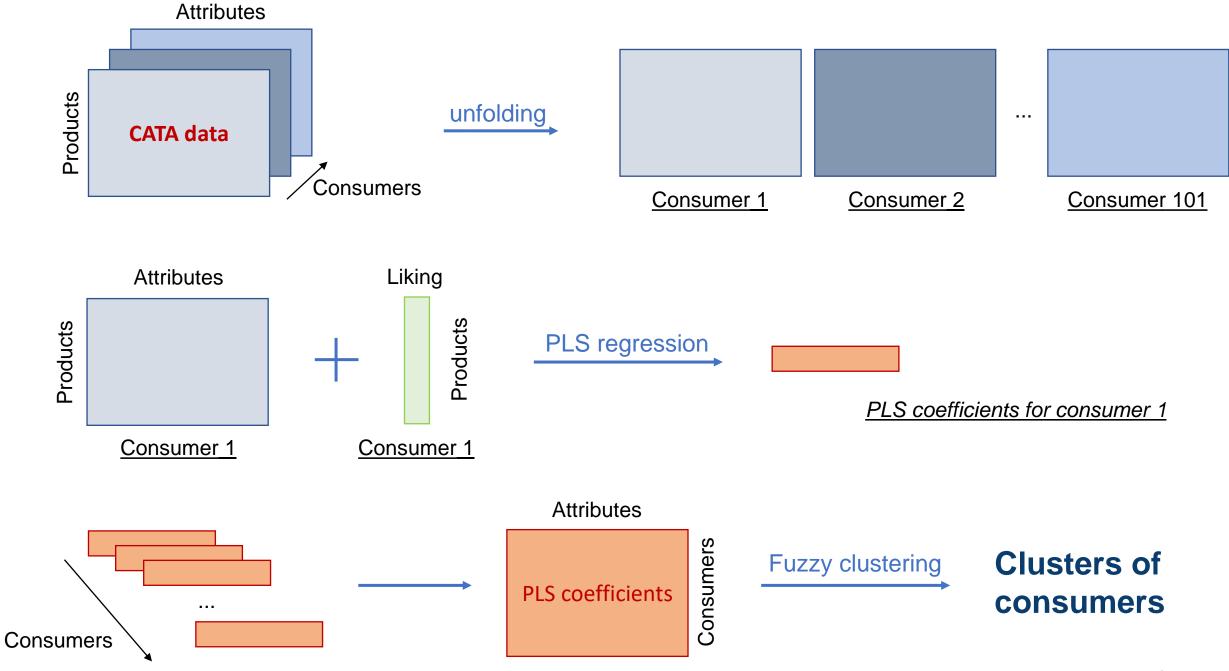
<sup>&</sup>lt;sup>3</sup>Nofima AS, Norway

<sup>&</sup>lt;sup>4</sup>Conservatoire National des Arts et Métiers, France

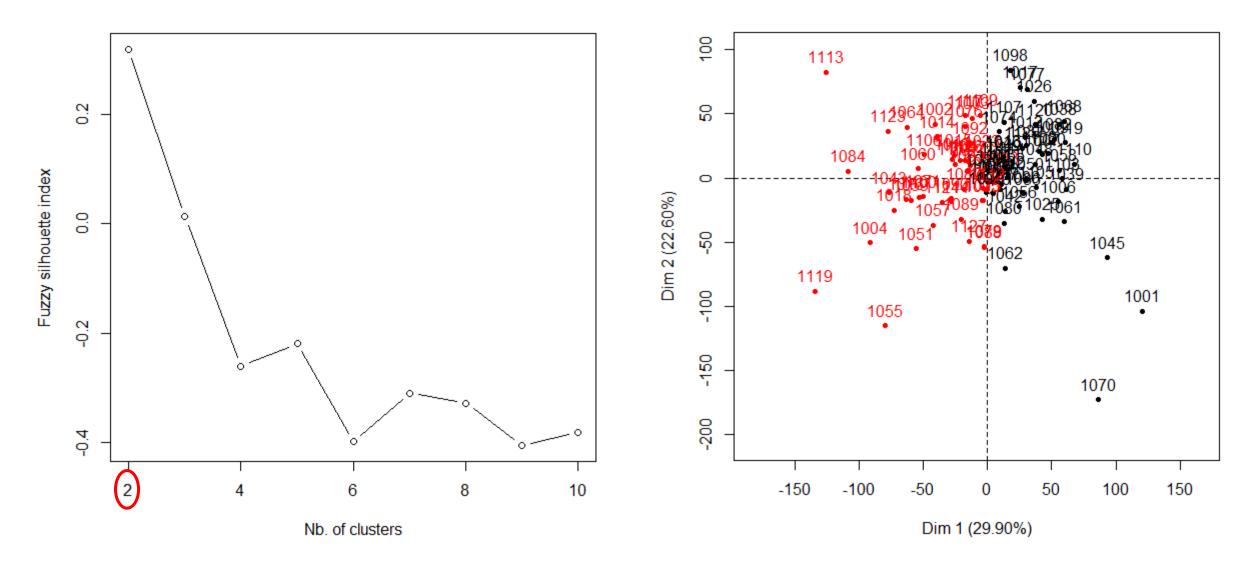
<sup>\*</sup>Corresponding author: Q. C. Nguyen (<u>nqcuong@hcmut.edu.vn</u>)

## Approach

- Consumer segmentation based on consumer perception vs consumer preference
- Clustering consumer perception (i.e. CATA data): CLUSCATA
- Clustering consumer preference (i.e. liking data): fuzzy clustering
- → 2-step clustering approach: conjoint clustering for CATA liking data

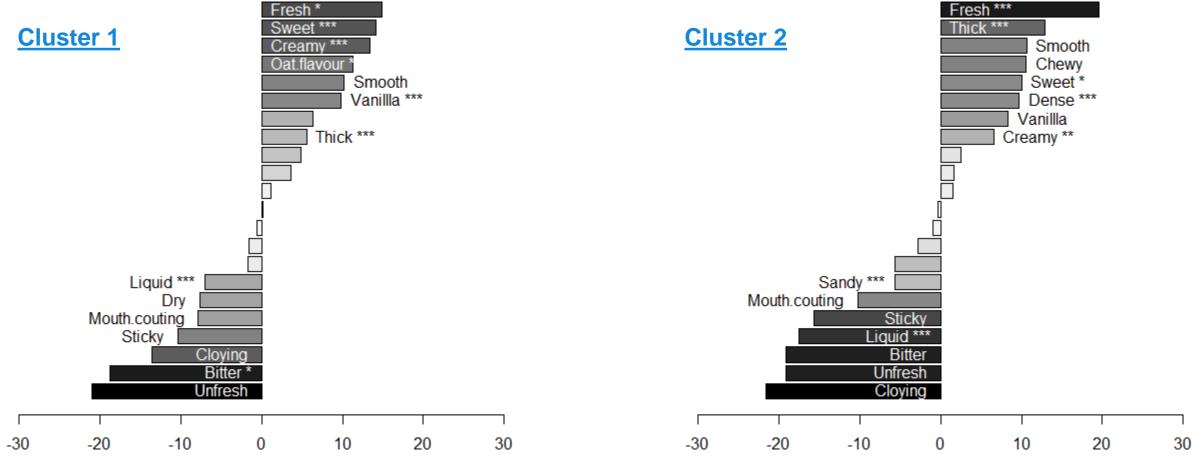


### PLSR + Fuzzy clustering on regression coefficients



Based on fuzzy silhouette index  $\rightarrow$  Cluster 1 (n = 54); Cluster 2 (n = 47)

### Cluster inspection using penalty-lift analysis



- Cluster 1: Flavour (Sweet, Oat flavour, Vanilla) as positive driver > the influence of texture
- Cluster 2: Texture (*Thick, Smooth, Dense*) as positive driver > flavour (*Sweet, Vanilla*)

Conclusion: 2-step clustering approach is useful way to cluster consumers based on both *liking and CATA data*