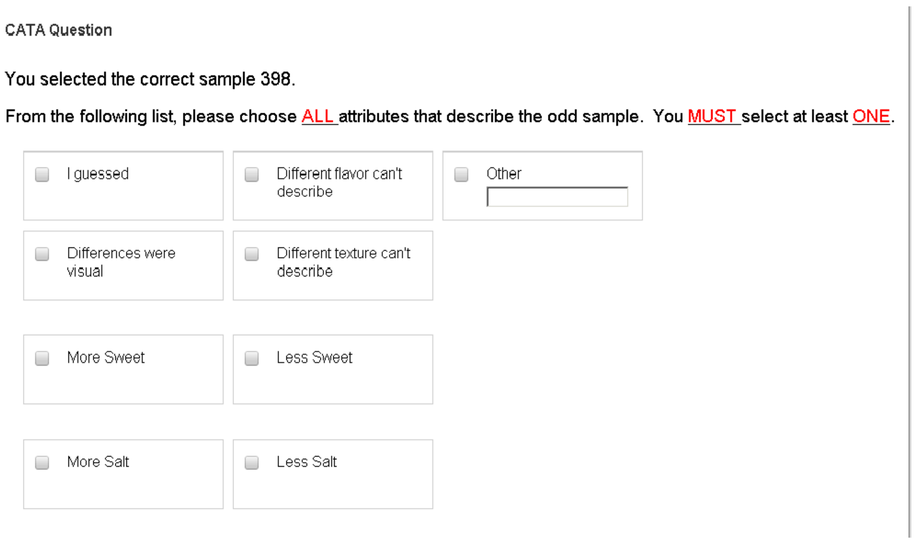
Choose-All-That-Apply: A valuable tool for assessing differences in Triangle testing

Overview

- **Triangle tests have been used to identify if products are different. However, they have been neither efficient nor effective in capturing what the differences are.**
- **CATA (Choose-All-That-Apply) questions can offer insight into product differences and should be explored further.**

Question Format and Considerations

- **When choosing attributes for a CATA question, focus on ones that are actionable and descriptive in nature.**
- **Experiment to ensure respondents understand what the attribute means.**
- **Avoid Hedonic scaling due to limitations in reformulation.**
- **Use More and Less qualifiers in CATA listings (unlike consumer testing).**



How to Manage Results

- **The grid below helps assess if further work is required. CATA can line up with DAP work.**

	No Trend	Weak Trend	Strong Trend
No Significant Difference	Risk is low	If trend is linked to change, more diagnostic work should be explored to confirm trend.	If trend is linked to change, more diagnostic work should be explored to confirm trend.
Borderline Significant Difference	Risk is low	If trend is linked to change, more diagnostic work should be explored to confirm trend.	If trend is linked to change, more diagnostic work should be explored to confirm trend.
Significant Difference	More diagnostic work required, CATA not helping	More diagnostic work required to confirm trend and aid reformulation	Reformulation based on CATA followed by another triangle or diagnostic work.

Sample Data

Data is tabulated; Team looks for qualitative trends

CATA Output from Triangle Test		
Comment	Control	Test
Differences were visual	1	7
More Attribute D	5	1
Less Attribute D	1	5
Less Texture A	0	3

CATA Comments can line up with DAP

Descriptive Data Trained Panel		
FLAVOR	Control	Test
A	4.6	4.2
B	0.7	0.8
C	1.6	1.5
D	2.6	2.0

Discussion

- **Choose-All-That-Apply (CATA) questions can offer insight into product differences and should be explored further.**
- **The CATA option for discrimination testing can yield considerable time savings in analysis versus interpreting open-ended comments.**
- **Caution should still be used in interpreting results based on the risk grid provided above.**

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