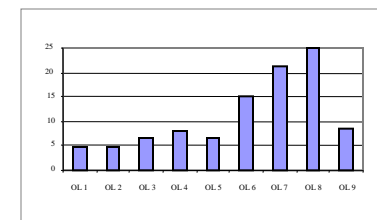
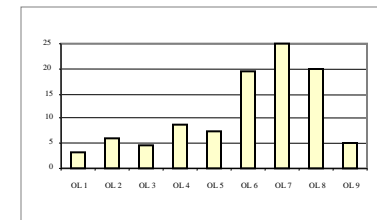
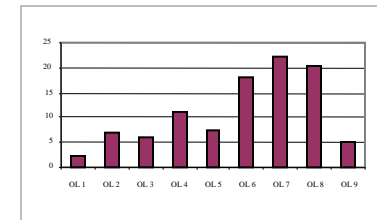
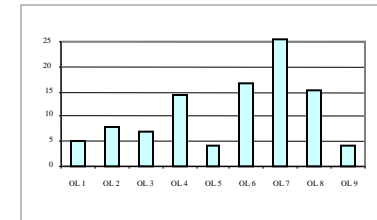
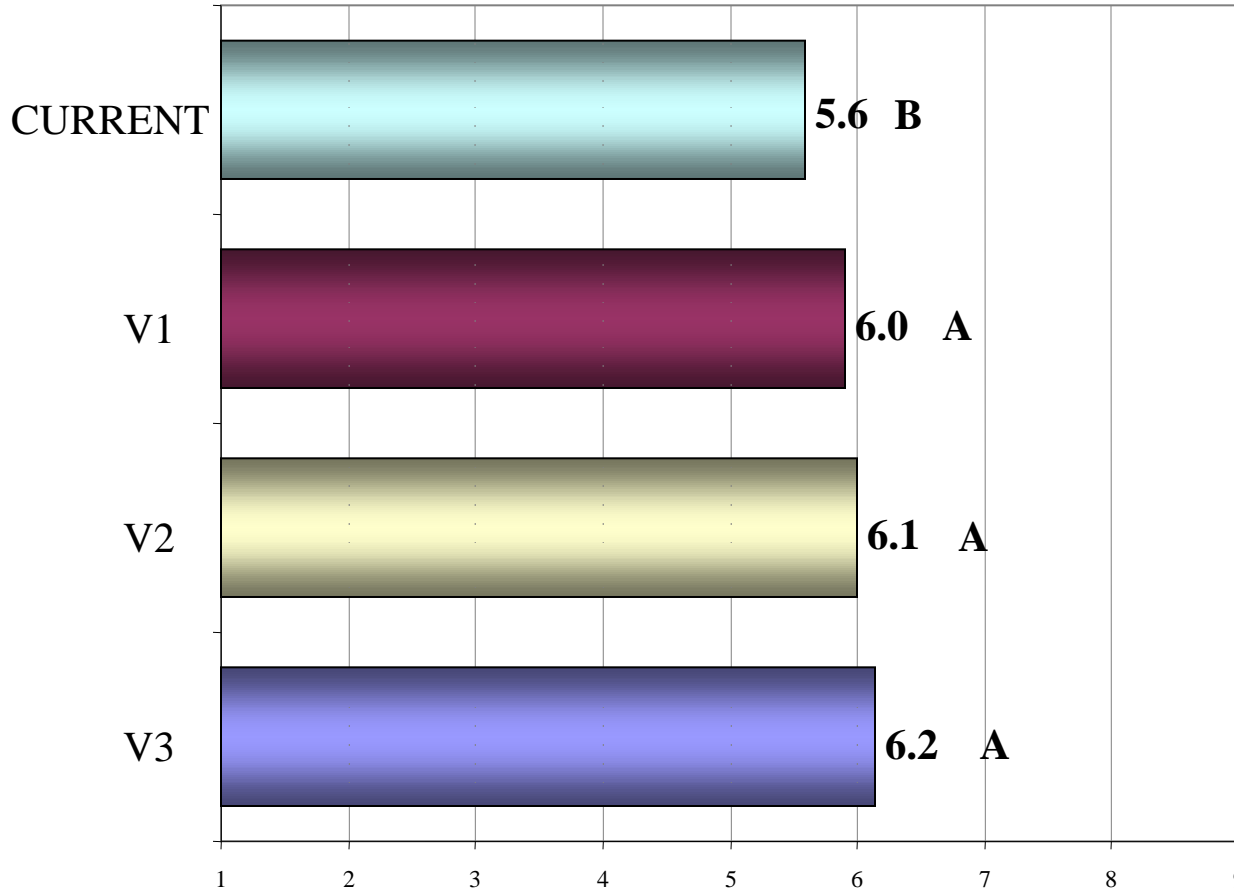


product improvement

- The team has identified some opportunities to improve the quality and taste perceptions of their product in order to increase their market share in the category
- The goal of this project is to significantly improve the current product
 - A preliminary round of research revealed that from a product-standpoint, overall acceptance would be enhanced by increasing the amount of cheese and cheese flavor decreasing the hardness of their crust.

- Locations: New York, Chicago and Los Angeles
- Consumers: N=100 per each city (N=300 total)
- Samples: current and 3 new prototypes V1, V2 and V3
- Presentation design: 4 out of 4 complete block
- Central Location Test execution:
 - Unbranded
 - Consumers attended one session
 - Sequential monadic presentation (1 sample at the time)
 - Serving orders balanced to control for position biases
 - Samples (1 slice) were served hot (w/i 5 minutes from baking) on paper plates
 - Samples identified with 3-digit blinding codes
 - 45-minute sessions (with 15 minutes change-over between sessions).



ANOVA Table

LIKING (9-pt, 9=like extremely)	V3	V2	V1	CRRNT	P-Value	Sig
Overall	6.2 A	6.1 A	6.0 A	5.6 B	0.0155	**
Aroma	6.4	6.1	6.1	5.8	0.1392	ns
Cheese Flavor	6.1	5.9	6.1	5.6	0.2136	ns
Tomato Flavor	6.3 A	6.0 A	6.1 A	5.4 B	0.0037	**
Crust	5.9 A	5.4 AB	5.6 A	4.9 B	0.0106	**
INTENSITY (7-pt, 7=extremely strong)	V3	V2	V1	CRRNT	P-Value	Sig
Aroma	4.3	4.4	4.4	4.6	0.3940	ns
Sweetness	4.6	4.7	4.9	5.0	0.1201	ns
Tomato Flavor	4.1	4.2	4.4	4.5	0.1218	ns
Cheese Flavor	2.7 A	2.5 AB	2.6 A	2.2 B	0.0251	**
Sourness	2.9 B	3.6 A	3.4 A	3.7 A	0.0049	**
Hardness of the Crust	2.2 b	2.4 ab	2.3 b	2.7 a	0.0678	*

- Overall the three new prototypes outperformed the current product on a unbranded basis
- Since the changes introduced with the three new prototypes were positive, there is an opportunity to increase consumers' acceptability even further. Therefore, additional optimization work is recommended:
 - Consider starting with V3 (the overall top performer - although closely followed by V2 and V1) and further increase cheese flavor and decrease crust hardness. In addition, decreasing sourness may also be beneficial.
 - Ideally the next round of CLT would include V3 as an internal benchmark. Subsequently, a competitive assessment is recommended
- If, however, further optimization is not possible, the introduction of any of the three new prototypes do not present major risks. Out of the three new prototypes, V3 possesses the greater sensory advantages.