KANTAR WORLDPANEL

A CTR SERVICE IN CHINA

Project Phase II Market Research of New Product Launch for Lays Potato Chips

Prepared by Lin Fangzhou



Aug, 2023

Who we are & What we offer



Coverage & Sampling



- · Total China
- 700 sample cities in 20 provinces + 4 municipalities
- 1 to 6 tier cities/ 4 regions/ 8 subregions

Approach & Methodology

Approach

- Representative sample distribution
- Record real-time purchase behavior

Data Collection

 Panelists record data via smartphone APP- Panel Smart (with meter installed that also tracks media usage)



Omni-Channel

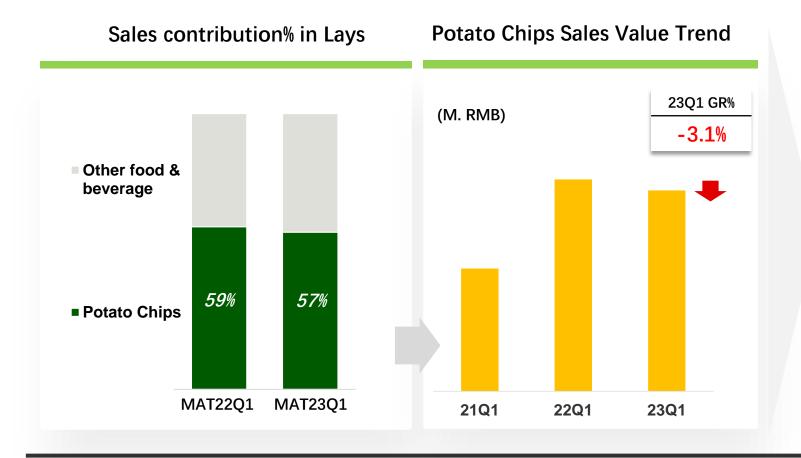


Project background



Potato Chips account for the major sales of LAYS, however, the market showed significant decline in Q1 after the promising growth.

Therefore, LAYS wanted to understand the reasons for the decline in the market, design and launch new products according to consumer needs

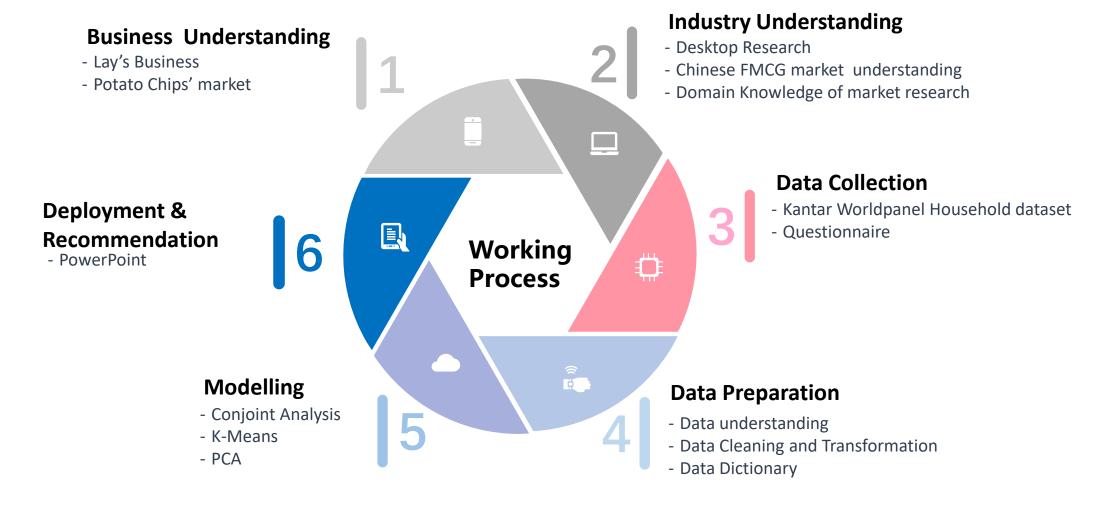


Key business question

- 1. Identify Potato Chips Market Landscape
 - Any potential trend?
 - Competition landscape
- 2. Identify key behaviors of Lays
 - Driving factors of sales drop
 - Any potential opportunities/risks?
- 3. New product launch suggestions
 - Which consumers should Lays focus on?
 - Customer Preference towards potato chips

Analytical Pathway





Data Set





Purchase data (Household panel)





Comment data (*E-Commerce platform*)









A B			U	E	F
、您的 * 2、您的年龄是?	▼ 3、您所居住的城市?	* 4、您所在	的家庭单位? 💌 5、您家	₹庭的月可 🕶 6、以下哪分	条语句符合最符(* 7、
2	3	1	4	5	3
1	3	2	1	5	3
1	4	2	3	6	3
1	4	1	3	5	3
1	1	2	3	4	3
2	2	1	1	2	3
2	2	2	2	3	3
2	3	2	2	4	3
1	1	2	2	2	3
2	3	1	4	5	3
1	3	2	1	5	3
1	4	1	3	6	3



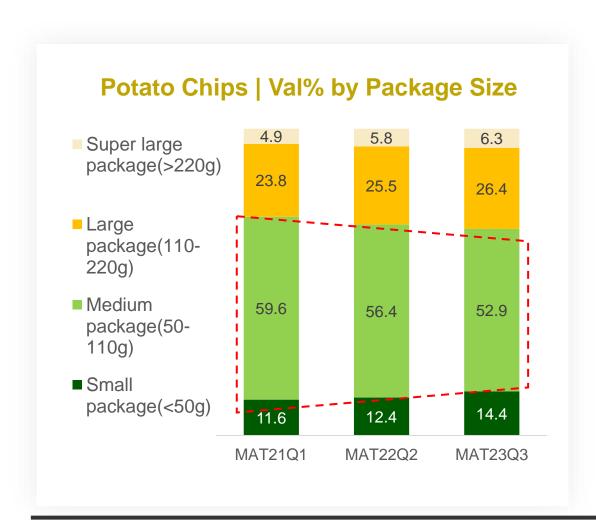
Objective 1. Identify Potato Chips Market Landscape

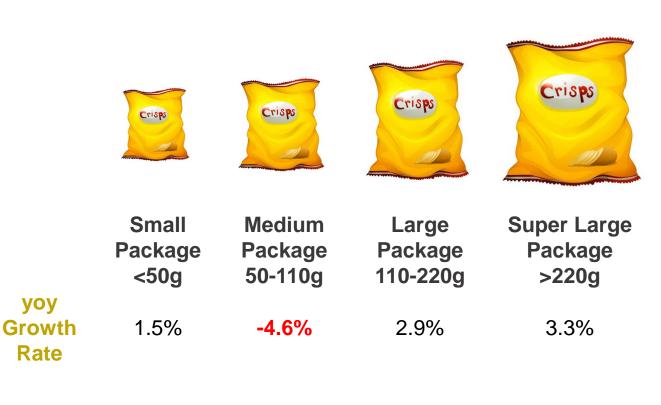
- What is the trend of Chinese Potato Chips Market?
- What is the Competitive Landscape?

Market Trend



Consumer demand for potato chip package sizes started to polarize





yoy

Rate

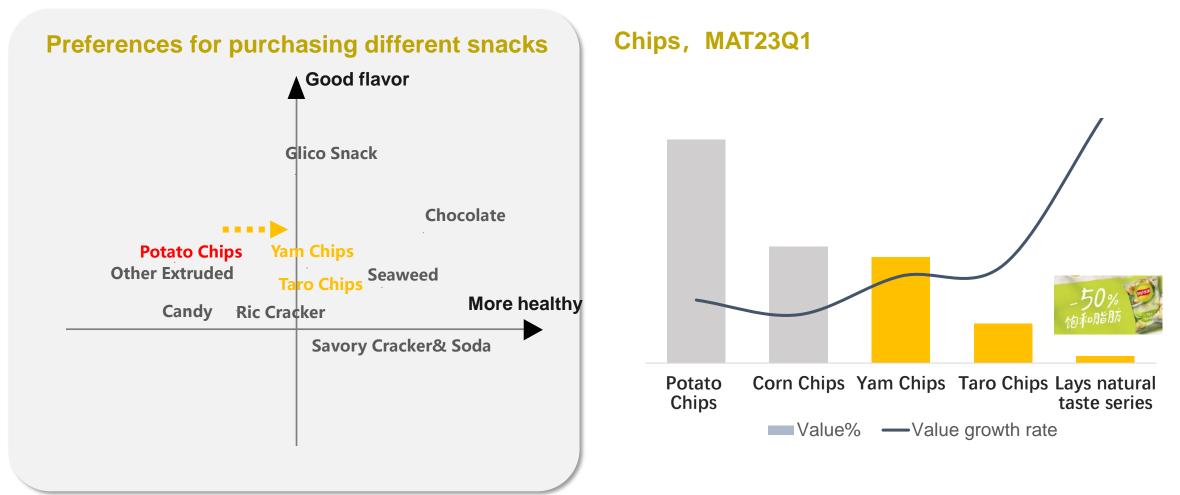
Market Trend

Competitior Landscape

Conclusion



Consumers perceive snack categories differently; Due to health concerns, Taro Chips and Yam Chips still have some room for growth



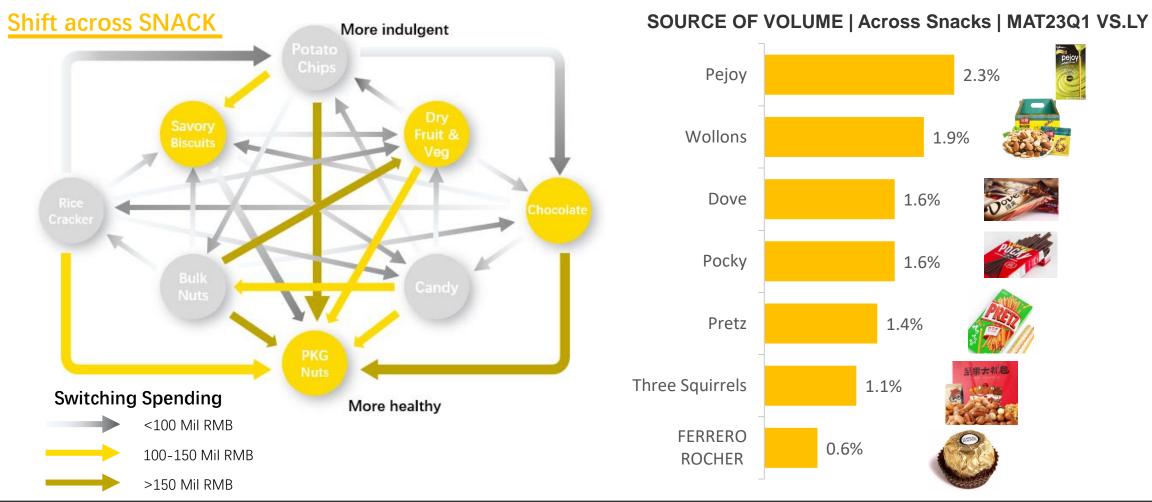
Market Trend

Competition Landscape

Conclusion



Through the consumers' wallet sifting dynamics across snack adjacent categories, we can identify that Savory biscuits, nuts and chocolate are the main competing categories





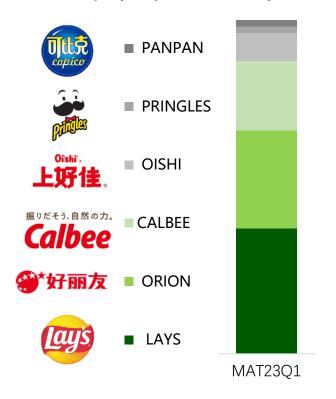
Competition Landscape

Conclusion

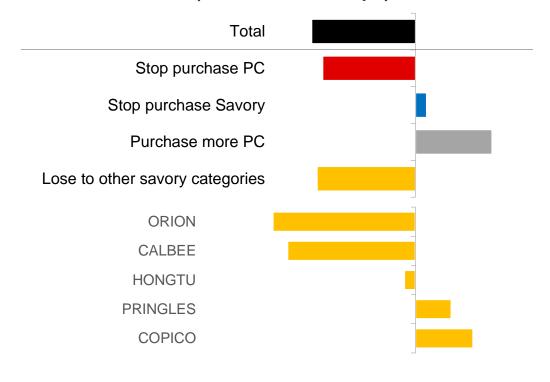


Lays, ORION, CALBEE and Oishi are top players in Chinese Potato Chips Market; In MAT2023Q1, Lays underperformed due to less category buyers and huge shift to ORION and CALBEE brands

VAL % | Potato Chips | Key to D Cities | MAT2023Q1



SOURCE OF VOLUME | Within Potato Chips | MAT23Q1 VS.LY



Objective 1. Identify Potato Chips Market Landscape



Competitior Landscape

Conclusion



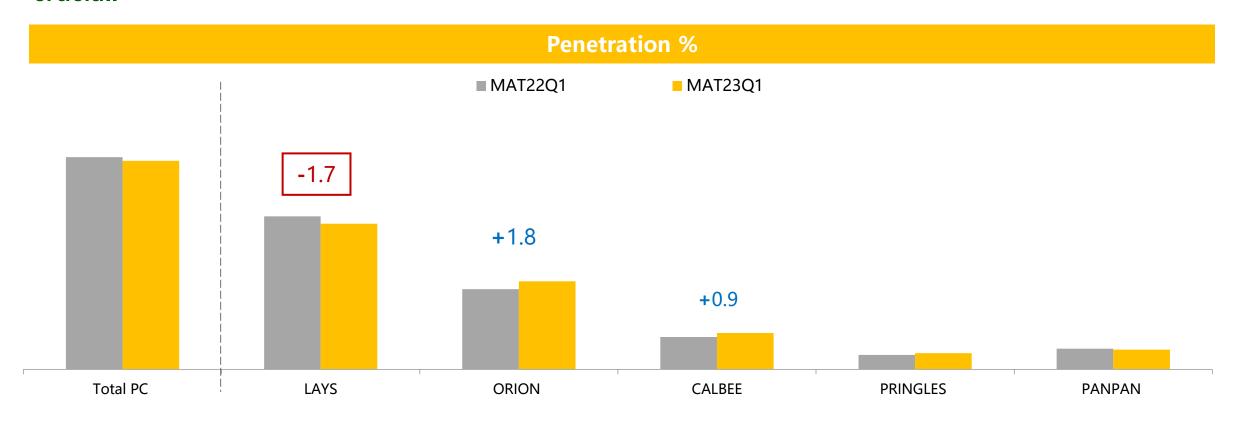
- Consumer demand for package sizes started to polarize to suit different scenarios
- 2 Healthy concept products like Taro Chips and Yam Chips still have some room for growth
- Across categories, Lays should notice chocolate, savory biscuits and nuts
 - Within Potato Chips category, ORION and CALBEE are the main competitors

Objective 2. Key behaviors of LAYs

- Driving factors of sales drop
- Any potential opportunities/risks?



Lays needs to speed up new buyer recruitment as currently it's behind competitors. Thus, acquiring non buyers, retaining Brand's current buyers and reclaiming Brands' losing buyers are crucial.







Conclusions



Consistent with the industry trend, healthy concept product lines (Nature taste, Taro Chips and Yam Chips) continue to grow



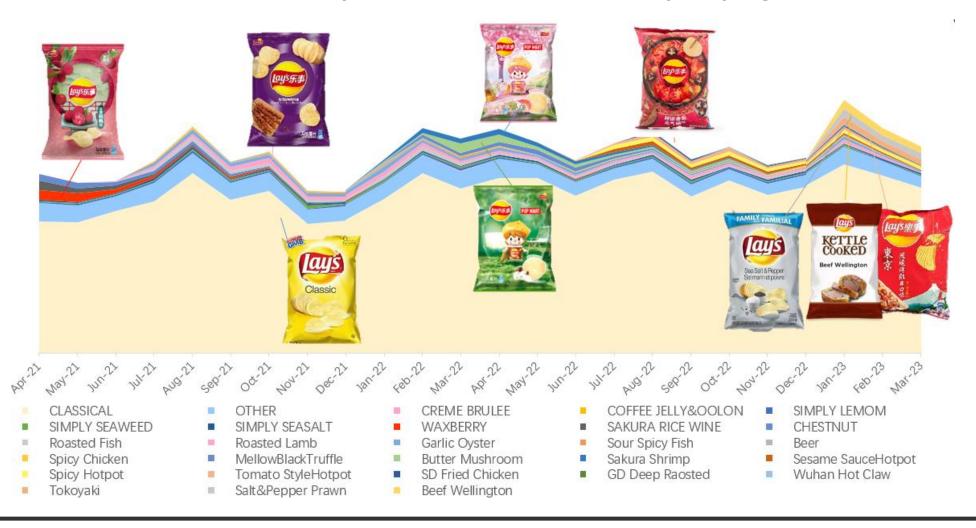
Driving Factors

Opportunities /Risks

Conclusions



Seasonal In & Outs SKUs are important to drive business by staying relevant to consumers





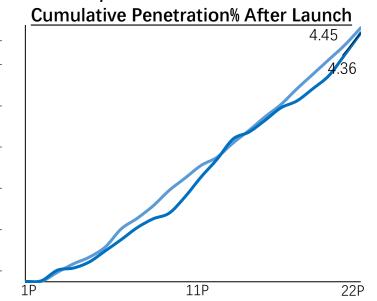




After launching for the same period, the penetration rates of Light & Baked flavor and Hotpot flavor are similar. However, Hotpot flavor accumulate higher penetration at the beginning.



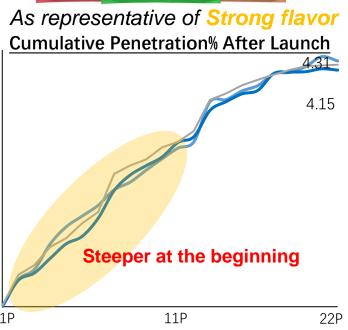
As representative of Mild flavor



Sparkling Water Flavor

As representative of Sweet flavor **Cumulative Penetration% After Launch** 4.04 11P 22P







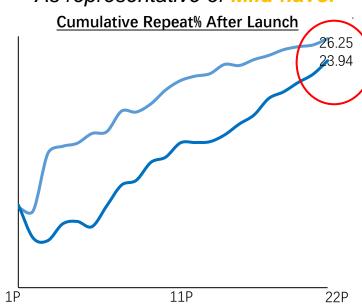




Light & Baked flavor has a higher repeat rate compared to Hotpot flavor.

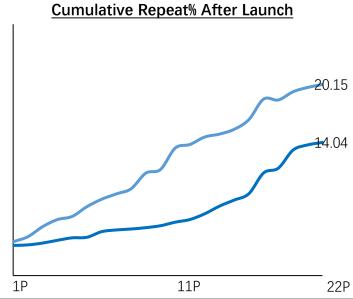


As representative of Mild flavor



Sparkling Water Flavor

As representative of Sweet flavor



Hotpot Flavor

Wishelf

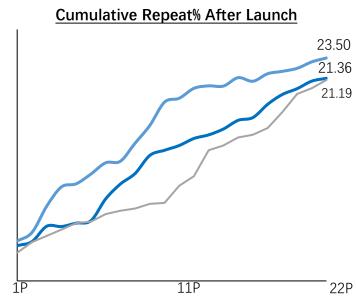
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T-1-Mishel

Mishel

Mishe

As representative of Strong flavor



Objective 2. Key behaviors of Lays

Driving Factors

Opportunities /Risks

Conclusions

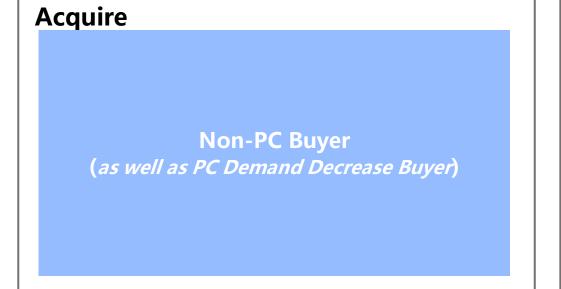


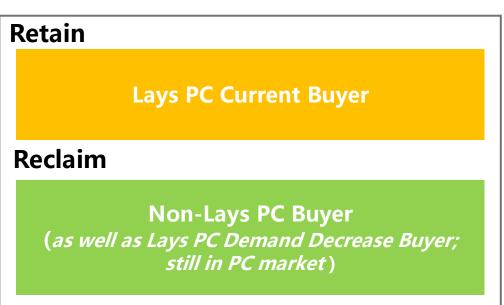
- Due to huge decline in penetration this year, Lays needs to speed up new buyer recruitment as currently it's behind competitors.
- New flavours can be developed based on the repeat rate and penetration of previous launches

- Which consumers should LAYs focus on?
- Customer Preference towards potato chips



Goal







Key questions

- What are the key barriers for non-buyers to try Potato Chips?
- Why did lost Potato Chips buyers leave us?
- What are the triggers for Lays Potato Chips existing buyers to buy our Brand? Compare to other Brands?

Non-PC Buyers

PC Buyers

Summary & Recommendation

Questionnaire contents..

Variables	Туре	Description
Gender	Categorical	1=Male, 0=Female
Age	Ordinal	1=15-24 y.o; 2=25-34 y.o; 3=35-44 y.o; 4=45-54 y.o; 5= more than 54 y.o;
City Tier	Categorical	1=Key&A Cities; 0=B-D Cities
Life Stage	Categorical	Young Singles&Couples, Mixed Families, Teenager Families, Adult Families, Empty Nest Families
Monthly Income	Ordinal	1= less than 5k RMB; = 5-7k RMB; 3= 7-9k RMB; 4= 9-12k RMB; 5=12-16k RMB; 6= more than 16k RMB
Frequency	Ordinal	1= once for a few months; 2= 1-2 times/months; 3= 3-6 times/months; 4= >6 times/months
Annual Spend	Ordinal	1= less than 50 RMB; 2= 50-100 RMB; 3= 100-150 RMB; 4= 150-200 RMB; 5= more than 200 RMB
Channel	Categorical	Hyper, Super, CVS, Accepting, EC, O2O
Occasion	Categorical	Festivals, Friends, Chatting, TV, Outdoor, Study&Work, Diet
Attitude towards PC	Nominal	
Attitude towards Brands	Nominal	
Preference for different portfolios	Ordinal	Rated from 0 to 10



Non-PC Buyers

PC Buyers

Summary & Recommendation

For Conjoint Analysis..



Attributes Levels

Package Size

Small Package (<=50g) Medium Package (50-120g)

Large Package (110-220g)

Super Large Package (>220g)

Price

5 RMB

10 RMB

15 RMB

Flavor

Mild

Strong

Sweet

Traditional Flavor

Texture

Thin

Thick

Oil

Baked crisps(no oil added)

Deep-fried chips



Non-PC Buyers

PC Buyers

Summary & Recommendation

Collected samples..

Group	Number	Ratio
Non-PC buyers	187	20.7%
Non-Lays buyers/Lays lost buyers (but still in PC market)	201	22.3%
Lays current buyers	515	57%



Non-PC Buyers

PC Buyers

Summary & Recommendation



What are the barriers to purchase Potato Chips for Non-PC Buyers?



Questionnaire Design Non-PC Buyers

PC Buyers

Summary & Recommendation



	Total	Y&M	Adult	E. Nest	Teen	Y S&C
Main consumer	-	<15 y.o.	18-24, 35-44 y.o.	45-64 y.o.	<18 y.o.	25-34 y.o.
Key barriers (by demo only highlight differentiating barrier)	Not healthyHigh CaloriesMuch additivesFried snack	 Less stock up needs after COVID (less family time at home after Covid) Can't find package size I want (prefer Independent small pack, won't overeat) 	(Same barriers as total)	High health concernFried	Negative info online	 Tired of eating (segment lack of excitement) Can't find package size I want (prefer Independent small pack, convenient)
Competing category (rank by importance)	Nuts, cheese, seafood snack	Seaweed, Glico biscuits Snacking Cheese,	Nuts, bean snack, savory biscuit	Nuts, Chinese pastry, Dry Vegetable & Fruits	Nuts, cheese, Rice Cracker	Nuts, Glico biscuits, seafood snack
Key Insight	Need to bridge our brand with healthy image to reduce barriers	 Parents are critical gate keeper to avoid overweight Need to communicate consumption occasion to encourage stock up 	Low calories & natural ingredient products are good to engage them	Difficult for PC to fulfill their functional healthy needs	Easily influenced by online negative information	 Like to seek taste enjoyment and excitement Convenient package solution is value added
Action for Lays	 More resources on existing healthy concept product: Simply/TARO/Yam Innovation on low calories snacks 	 Communicate different consumption occasion Provide Convenient package 	 Expand penetration among Simply/TARO 	 Some occasion penetration like CNY to promote the family reunion 	 Positive Word-of- Mouth Digital engagement to remove the concern 	 Keep bring PC new news to them Provide Convenient package

Questionnaire Design

Non-PC Buyers PC Buyers

Summary & Recommendation



What are the Barriers of Lays Lost Buyers?

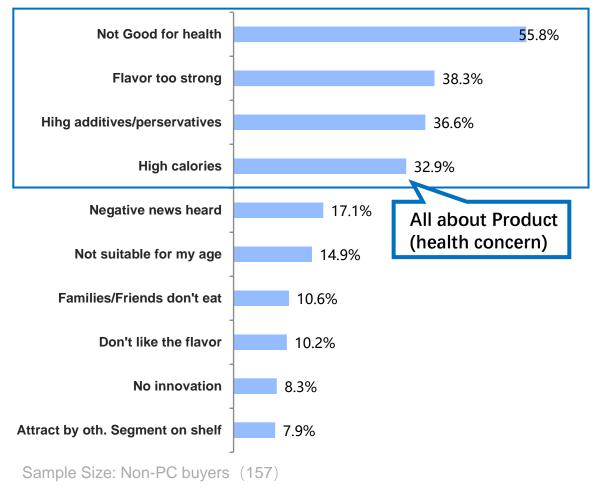
Questionnaire Design

Non-PC Buyers

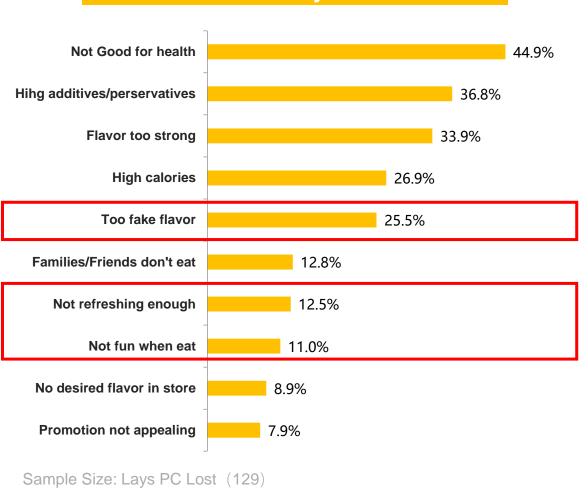
PC Buyers

Summary & Recommendation

Top 10 Potato Chips Category Claimed Barriers among Non-PC Buyers



Top 10 Claimed Barriers among Brand Lost Buyers



Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation



What are the triggers to buy Lays Potato Chips?

Questionnaire Design Non-PC Buyers

PC Buyers

Summary & Recommendation



- A number of Potato Chips brands (observations)
- ➤ Rated brands on attributes/comments such as "refresh myself", "not expensive", "attracting advertisement", etc.

(dimensions)

A	В	C	U	E	F	G	H	1	J	V	L	M	N
brand	share_with_	good_for_s	thealthier_th	refresh_myse	new_flavour	crispy	low_calo	lighter_	not_exper	attracti	many_cam	co-brande	unique_pac
Lays	4. 2	4.	1 2.2	3.7	4.7	4. 1	2	2.8	3. 1	3.8	4. 1	4.2	3.6
ORION	4	4.	1 3.8	3.6	1.4	3. 3	3. 9	3. 7	3.3	3. 1	2. 1	1.8	1.9
COPICO	3. 9	3.	9 2.5	3. 1	1.3	3. 5	1.6	2. 9	3.6	2.3	1.9	1.1	1.8
HONGTU	4	4.	2 4.7	3.6	2	3.9	4.2	3. 9	3. 2	2.1	1.7	1.1	2. 1
CALBEE	3.5	4.	2 2.9	3.7	4.5	3.9	1.8	2.4	2.6	4	3. 1	4	3.9
OISHI	3. 5	3.	8 2.2	3. 1	1	3. 5	1.7	2.8	3.3	1.3	1.1	0.2	1.8
PRINGLES	3.9	3.	9 2	3. 1	1.3	3.5	1.6	2. 9	3. 7	1	1.1	0.3	1.2

Two components explain **84.5 percent** of the variance in the ratings

		eigenvalue	percentage of variance	cumulative	percentage	of variance
comp	1	7.38550517	56.8115782			56.81158
comp	2	3.60341956	27.7186120			84.53019
comp	3	1.27908463	9.8391125			94.36930
comp	4	0.54334920	4.1796093			98.54891
comp	5	0.10693829	0.8226023			99.37151
comp	6	0.08170314	0.6284857			100.00000

Data: Questionnaire Data

Questionnaire Design Non-PC Buyers

PC Buyers

Summary & Recommendation



Dim.1	Dim.2	variable	communality	uniqueness
<db1></db1>	<db 7=""></db>	<chr></chr>	<db 7=""></db>	<db7></db7>
0.152	0.483	share_with_friends_and_families	0.257	0.743
0.813	0.511	good_for_stocking_up_at_home	0.923	0.077 <u>2</u>
0.196	0.917	healthier_than_other_brands	0.880	0.120
0.904	0.391	refresh_myself	0.971	0.028 <u>9</u>
0.948	-0.266	<pre>new_flavours_are_introduced_frequently</pre>	0.970	0.030 <u>0</u>
0.784	-0.097 <u>5</u>	crispy	0.625	0.375
0.128	0.979	low_calories	0.975	0.024 <u>7</u>
-0.194	0.972	lighter_in_flavour	0.983	0.017 <u>1</u>
-0.851	0.0748	not_expensive	0.731	0.269
0.926	-0.001 <u>12</u>	attracting_advertisment	0.858	0.142
0.920	-0.161	many_campaigns_on_social_platforms	0.872	0.128
0.965	-0.178	co-branded_packaging	0.962	0.037 <u>8</u>
0.957	-0.258	unique_packaging_designs	0.983	0.016 <u>8</u>

Dimension 1

✓ Leisure, entertainment and advertisement

Dimension 2

✓ Health

Data: Questionnaire Data

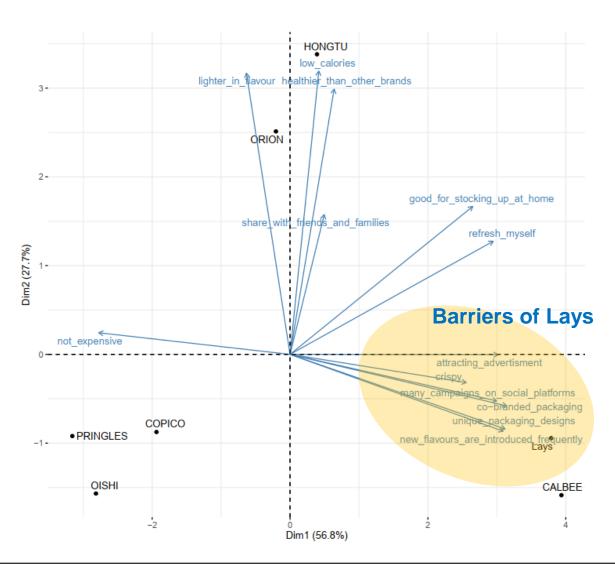
Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Lays scores highly on the first factor

Questionnaire Design

Non-PC Buyers PC Buyers

Summary & Recommendation



Who are the main customers of Potato Chips?

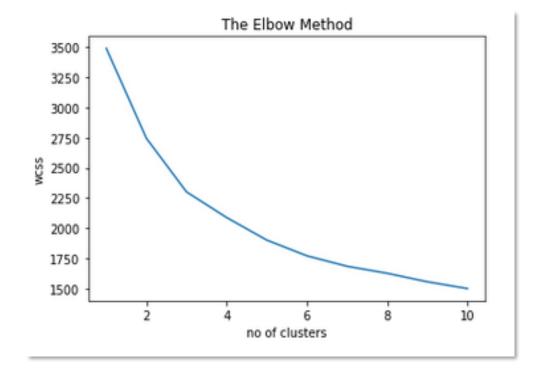
Questionnaire Design Non-PC Buyers

PC Buyers

Summary & Recommendation



For the K-means clustering, only Demographic & Purchase data were used. By using the elbow method, a cluster of number of 6 was chosen.



Data: Questionnaire Data

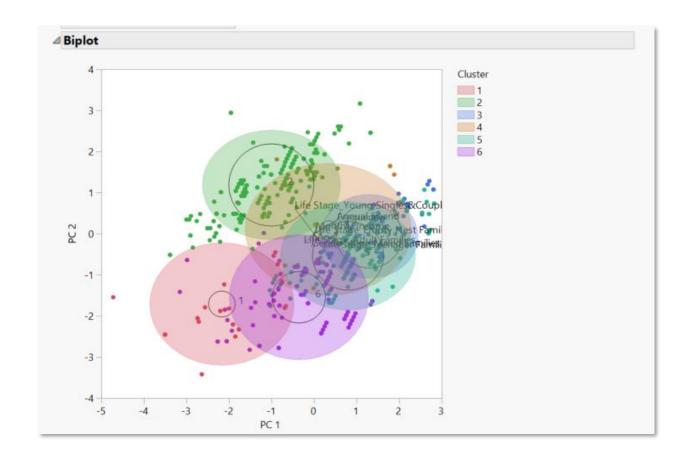
Questionnaire Design

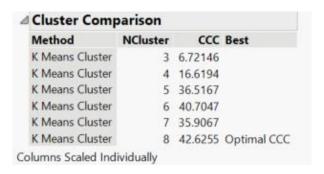
Non-PC Buyers

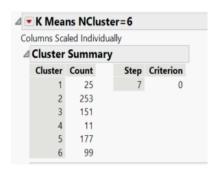
PC Buyers

Summary & Recommendation

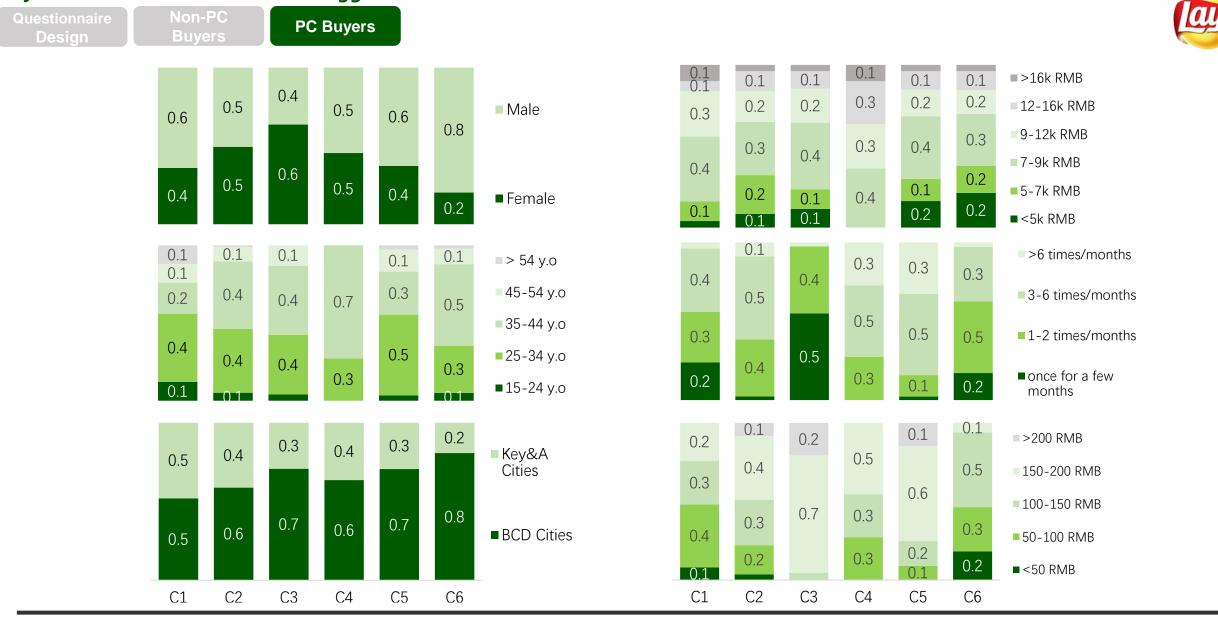








Data: Questionnaire Data



Data: Questionnaire Data

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Questionnair Design Non-PC Buyers

PC Buyers

Summary & Recommendation



Profile 1 (N=253)



Occasions

- Festivals
- Stocking up at home

Demographic

- Predominantly 34-44 y.o
- High Income
- Teenager & Adult Families

Purchase Behavior

 Heavy buyers, mostly purchase PC 3-6 times/month

Channel Preference

- Hypermarket
- Supermarket
- E-commerce

Profile 2 (N= 151)



Occasions

- Stocking up at home
- Chatting
- Outdoor
- Share with friends

Demographic

- Predominantly females, 25-44 y.o
- Single & Mixed Families

Purchase Behavior

- Low Frequency
- High value per purchase occasion

Channel Preference

- CVS
- 020
- Hypermarket

Profile 3 (N=177)



Occasions

- Study & Work
- Stocking up at home
- · Share with friends

Demographic

Young male, mostly 23-34 y.o

Purchase Behavior

 High frequency consumption, >3 times/month

Channel Preference

- CVS
- Supermarket
- Small Super

Profile 4 (N=99)



Occasions

- Festivals
- Watch TV

Demographic

- Adult Families
- Predominantly >35 y.o

Purchase Behavior

Purchase PC 3-6 times/ month, annual spend 150-200RMB

Channel Preference

- Small Super
- Supermarket
- CVS

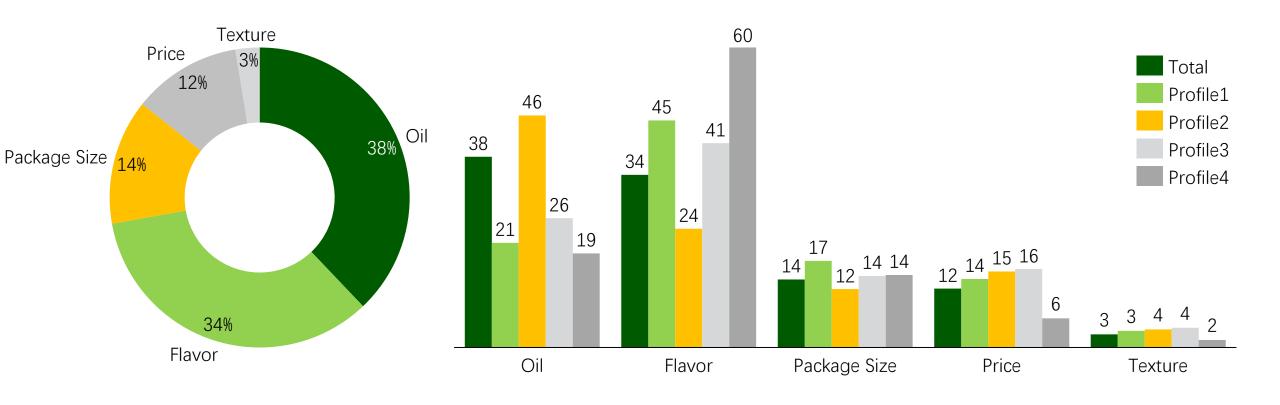
Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Teenager & Adult Families: focus on middle-income families in A cities, high purchase frequency, prefer online channels; the main consumption scenes are festivals and family reunions.

Demographic



Index:

Teenager Family 113
Adult Family 117



Monthly Income 9-12K

Index: **104**



A Cities

Index: **106**

Purchase Behavior

3 times/month Index: 126

Annual Spend > 150 RMB

Index: 128

Channel Preference



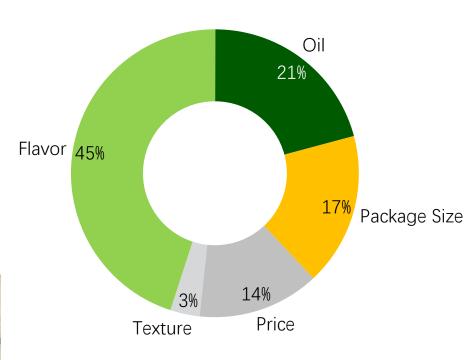


Occasions





Relative Importance of Attributes



*Index = Percentage of Consumer segmentation vs. Percentage of Overall PC Consumers *100

Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation



Attribute	Level	Profile 1 Importance(%)	Utility	
Oil	Baked crisps(no oil added)	20.8	-1.261	
	Deep-fried crisps		1.261	
Texture	thick	3.3	-0.201	
	Thin		0.201	
Flavor	Mild Flavor	45.1	-3.637	
	Strong Flavor		1.843	
	Sweet Flavor		1.272	
	Traditional Flavor		0.522	
Price	5 rmb		0.22	
	10 rmb	13.7	0.719	
	15 rmb		-0.94	
	50g/pack, small		-0.75	
Package Size	100g/pack, medium		-0.978	
i ackage oize	150g/pack, large	17.2	0.621	
	200g/pack, super large		1.107	
Constant 4.9		_		
	Pearson's R Value	0.778 .000 0.619		
	Pearson's R Sig Kendall's tau			
	Kendall's tau Sig		.000	

- ☐ Flavor & Oil are identified as the most important factors
- Within flavor, the most utility was obtained from **strong** flavor
- ☐ Super Large package size is preferred

Recommendations

- Incorporating regional flavors as well as festive features into new product
- ➤ Innovation on sweet flavor (e.g. Honey butter chips of CALBEE can be benchmarked)

Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Young women: mainly from Single & Mixed family in B-D cities, prefer O2O and CVS channels; Socializing(sharing with friends and outdoor) is the main purpose of consumption

Demographic



Index:

Single & Mixed Family 115
Female 139

25-44 years old Frequency: 80%



Monthly Income 7-9K

Frequency: 40%



BCD Cities

Frequency: 70%

Purchase Behavior

<2 times/month Index: 132

Annual Spend > 150 RMB

Index: 128

Channel Preference



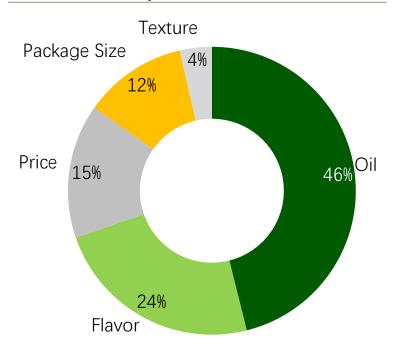


Occasions





Relative Importance of Attributes



*Index = Percentage of Consumer segmentation vs. Percentage of Overall PC Consumers *100

Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Attributa	Level	Profile 2	
Attribute		Importance(%)	Utility
Oil	Baked crisps(no oil added)	46.1	2.644
	Deep-fried crisps		-2.644
Texture	thick	3.6	0.208
	Thin	3.0	-0.208
	Mild Flavor		1.611
Flavor	Strong Flavor		-1.092
FlavOl	Sweet Flavor	23.6	0.106
	Traditional Flavor		-0.625
	5 rmb		0.593
Price	10 rmb	15.1	0.54
	15 rmb		-1.133
	50g/pack, small		0.229
Package Size	100g/pack, medium	11.6	-0.815
Package Size	150g/pack, large		0.518
	200g/pack, super large		0.068
Constant Pearson's R Value Pearson's R Sig Kendall's tau Kendall's tau Sig		8.311 0.765 .000 0.655 .000	

- To be in shape and healthy, women are especially conscious of Flavor & Oil
- ☐ Within flavor, the most utility was obtained from **mild flavor**
- Large and small packages are suitable for different scenarios

Recommendations

Apply portable small packages and super large packages to current mild flavor products(e.g. nature taste and Taro Chips)

Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Young men: mainly from Single & Mixed family in B-D cities; heavy buyers of Potato chips; prefer Offline channels (Supermarket & CVS); the main consumption scenes are study & work as well as sharing with friends

Demographic



Index:

Single & Mixed Family 111
Male 119
25-34 years old 108



Monthly Income 7-9K 106



BCD Cities

Frequency: 70%

Purchase Behavior

>3 times/month Index: 110

Annual Spend > 150 RMB

Index: 134

Channel Preference



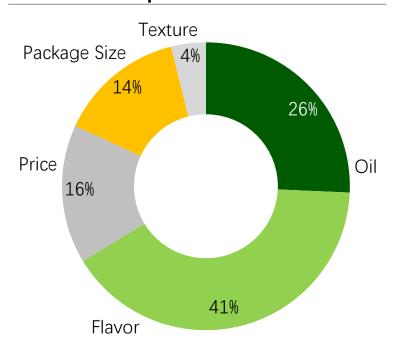


Occasions





Relative Importance of Attributes



^{*}Tendency Index = Percentage of Consumer segmentation vs. Percentage of Overall PC Consumers *100

Questionnaire Design

Non-PC Buyers

PC Buyers

Summary & Recommendation





Attributo	Level	Profile 3	
Attribute		Importance(%)	Utility
Oil	Baked crisps(no oil added)	25.7	-1.571
	Deep-fried crisps		1.571
Texture	thick	3.9	-0.213
	Thin	3.9	0.213
	Mild Flavor		1.911
Flavor	Strong Flavor		5.932
Flavoi	Sweet Flavor	40.6	-3.906
	Traditional Flavor		-3.937
	5 rmb		0.61
Price	10 rmb	15.6	0.413
	15 rmb		-1.023
	50g/pack, small		-1.322
Package Size	100g/pack, medium	14.2	0.129
Package Size	150g/pack, large		0.162
	200g/pack, super large		1.031
Constant Pearson's R Value Pearson's R Sig Kendall's tau Kendall's tau Sig		5.786 0.687 .000 0.583 .000	•

- Less concern about the functionality and health of the product
- ☐ deep-fried crisp with strong
 Flavor and thin texture is prefered
- ☐ Super large package size is prefered

Recommendations

- ➤ Introduce super large package size to current top-selling strong flavor products (e.g. Hotpot Series)
- Communicate sharing and relaxing image, combined with at-home scenarios

Questionnaire Design

Non-PC Buvers

PC Buyers

Summary & Recommendation





Adult & Empty Nest Families: mainly high-income families in B-D cities, prefer Ecommerce and CVS channels; the main consumption scenes are festivals.

Demographic



Adult Family Index: 117
Male 111



Monthly Income >12K Index: 123



BCD Cities
Frequency: 80%

Purchase Behavior

<3 times/month Index: 113

Annual Spend < 150 RMB

Index: 139

Channel Preference

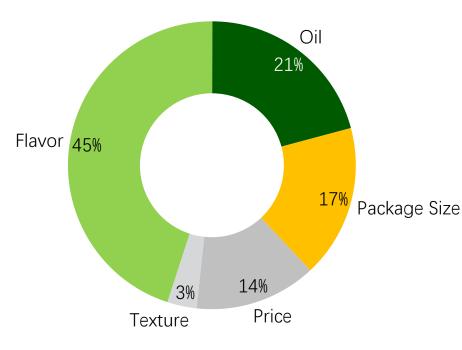




Occasions



Relative Importance of Attributes



^{*}Tendency Index = Percentage of Consumer segmentation vs. Percentage of Overall PC Consumers *100

Questionnaire Design

Non-PC Buyers PC Buyers

Summary & Recommendation





Attributo	Level	Profile 4	
Attribute		Importance(%)	Utility
Oil	Baked crisps(no oil added)	18.7	2.166
	Deep-fried crisps		-2.166
Texture	thick	1.5	0.172
TCALUIC	Thin		-0.172
	Mild Flavor		9.029
Flavor	Strong Flavor		-2.988
	Sweet Flavor	59.6	-4.773
	Traditional Flavor		-1.267
	5 rmb		0.459
Price	10 rmb	5.8	-0.884
	15 rmb		0.424
	50g/pack, small		0.052
Package Size	100g/pack, medium	14.4	-1.599
	150g/pack, large		-0.186
	200g/pack, super large		1.733
	Constant		7.799
Constant Pearson's R Value			0.799
Pearson's R Sig			.000
	Kendall's tau		0.555
	Kendall's tau Sig		.000

- ☐ Flavor is identified as the most important factor
- Within flavor, the most utility was obtained from **mild flavor**

Recommendations

Similar with Group 2

Questionnaire Design

findings

Key

Recommendations

Non-PC Buyers PC Buyers

Summary & Recommendation



For PC non/Lost buyers...

Barriers

Health

- High Calories
- ☐ Fried

Taste

☐ Lack of excitement

Much additives

For Lays non/Lost buyers...

Barriers

- Too fake flavor
- Not refreshing enough
- Not fun when eat

For Lays buyers...

Triggers

Innovation

☐ New flavors introduced frequently

Communication

- **□** Attracting advertisement
- **□** Co-branded packaging

- More resources on existing healthy concept product: Simply/TARO/Yam
- Innovation on low calories snacks
- Communicate health image of specific product lines

- Continue the multi-flavor strategy to expand penetration
- Further research among PC buyers for taste improvement

(See the results of conjoint analysis)

- Keep introducing new products every season
- Continue communicating sharing and happiness image

Data: Questionnaire Data

Non-PC Buyers

PC Buyers

Summary & Recommendation



For Total PC buyers...

Product Lines

- > Develop "Healthy + Portable" Concept Products---- apply portable small packages to current mild flavor products(e.g., nature taste and Taro Chips)
- > Develop Family Sharing Packs---- Incorporate regional flavors as well as festive features into new products, with super larger package
- > Innovation on sweet flavor (e.g., Honey butter chips)
- ➤ Apply super large package size to current top-selling strong flavor products and mild flavor products(e.g., Hotpot Series and Nature Series)