



# Effectiveness of store clustering by consumer life style

# Jointly Presented by





August 2008

### **Company Profile**

### **Project Partner**



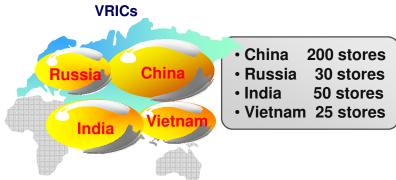
# LOTTE GROUP

- The Affiliate Companies : 44 Companies
- LOTTE Group's Total Sales in 2007 : USD 35 Billion

# LOTTE Shopping co., LTD

- 89th rank retailer in the world (2006) by NRF survey
- 1st rank retailer in Korea (2007) : USD 11 Billion

# LOTTE Mart Global Biz Plan by 2018





# 행복드림 LOTTE Mart

Major Types Sales (2007) **Miscellaneous** 

- **Hypermarket** USD 3.8 billion 3rd Largest in Korea
- 57Stores





**Department Store** USD 5.2 billion 1st Largest in Korea

21Stores



LOTTE Super

Supermarket USD 0.8 billion

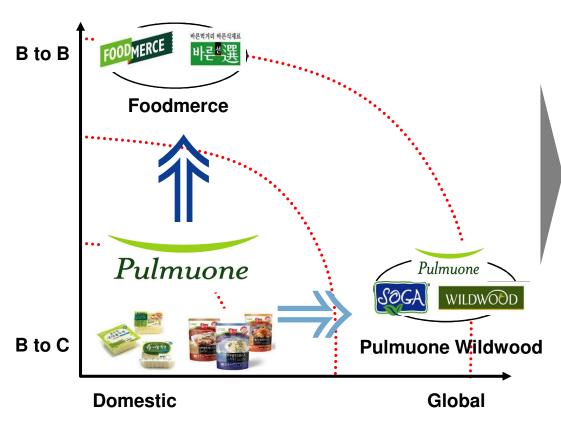
- 2nd Largest in Korea
- 79Stores



### **Project Partner**



# **Natural Fresh Foods Company**



# **Business Strategy**

# Core Business

- Market leader(M/S No.1) in Tofu, Sprout, Refrigerated Noodle in Korea
- Created synergy through core competence in sourcing, manufacturing & logistics
- Net revenue is USD 0.8 billion in 2007

# Lead Pulmuone's globalization

- Developed US market since 1991
- Acquired Wildwood which is American style Tofu manufacturing company in 2004
- Planning to enter into Chinese market

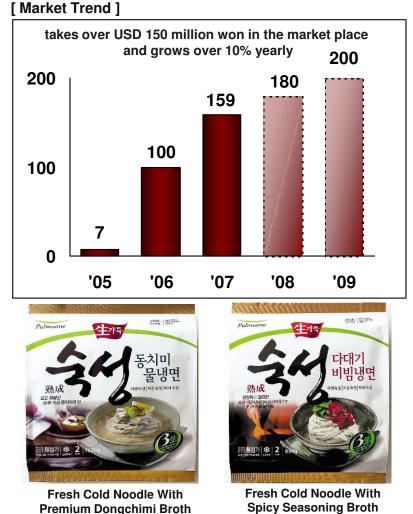


### **Category Definition**



The main ingredients, grain and starch, are shaped and processed, than combined with sauce (meat brew) and garnish, kept and shipped by the Cold Chain system and arranged in a refrigerator

stored in a cold storage below 10°C, period of circulation within 45 days





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# Stores don't satisfy each consumer's needs



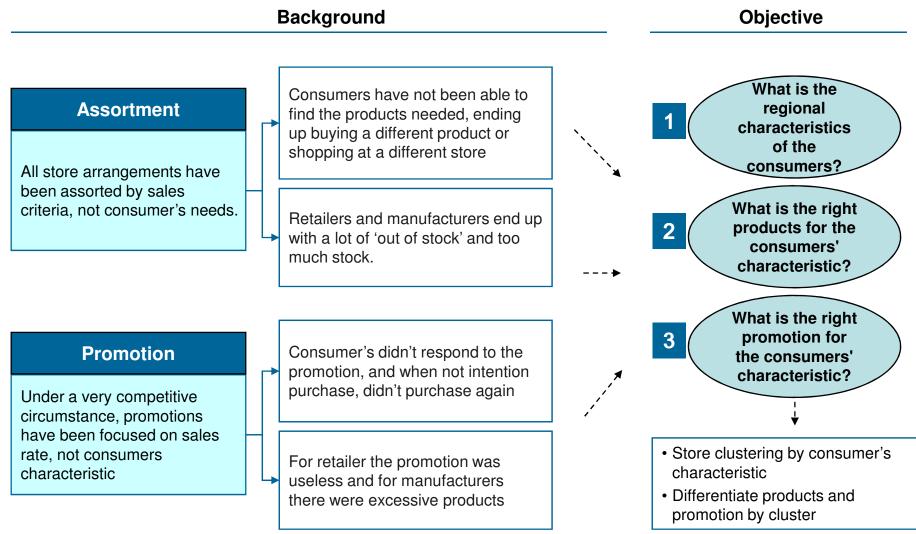
# Problem is...

# Category management is based on only sales rate, not by consumer's changing life style





# Differentiated stores should be able to satisfy consumers

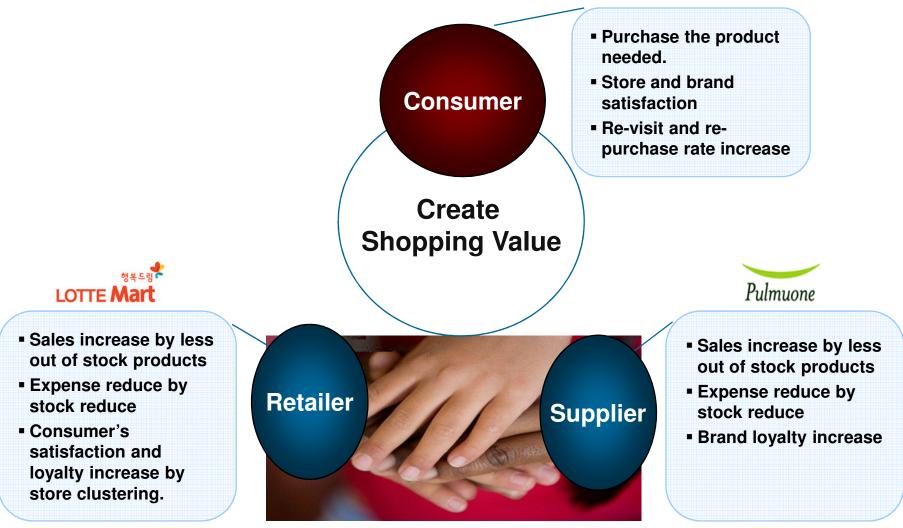




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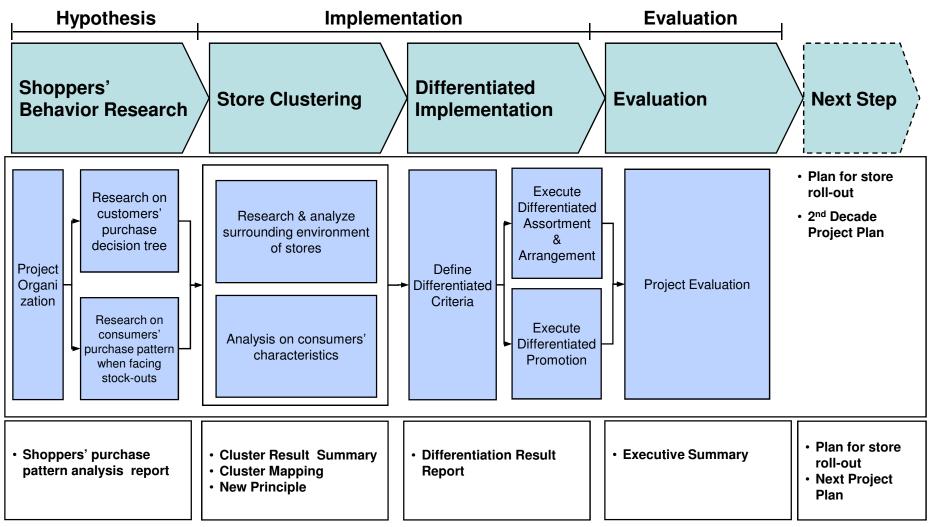
LOTTE Mart

# Eventually consumer's satisfaction leads to increasing efficiency





# What we have done....





# 10-month pilot test and 3-month roll-out to other stores

Tasks		Schedule												
		ťC	·07 ·08											
		11	12	1	2	3	4	5	6	7	8	9	10	11
Shoppers' Behavior Research	Research on consumers' purchase pattern when facing stock-outs		-											
	Research& Analyze purchase decision tree													
Store	Research & Analyze Store Environment				1									
Clustering	Store Consumer Analysis													
Implementation	Define differentiated Criteria on Assortment & Arrangement, Promotion							→						
	Apply and evaluate differentiation on Assortment& Arrangement, Promotion									•				
Evaluation	Evaluate cluster characteristic										>		Store	
	Measure Test effect											e	store kpansic plan	in
Next Step	Planning of expansion													→



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# Consumers' satisfaction recipe through collaboration





### **Shoppers' Decision Tree**

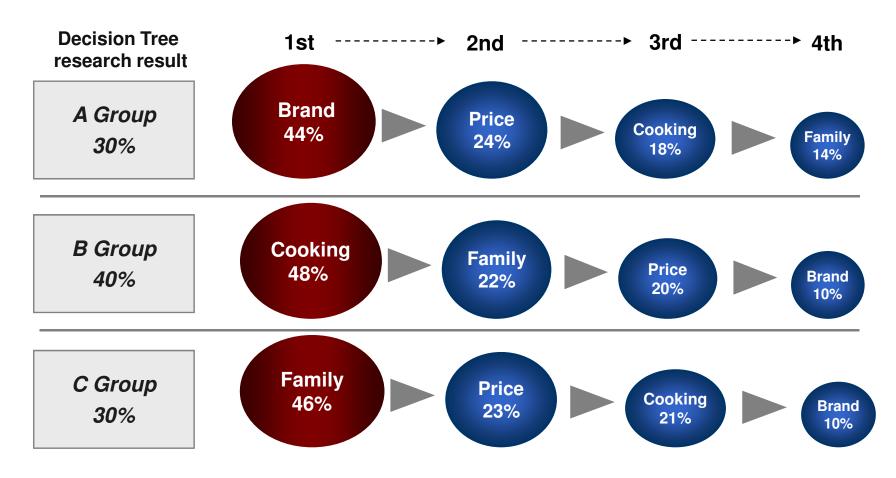
# Consumers belong to 3 different groups in terms of decision buying tree

 
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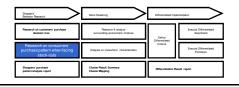
\* Research Period : '07 Nov ~ Dec

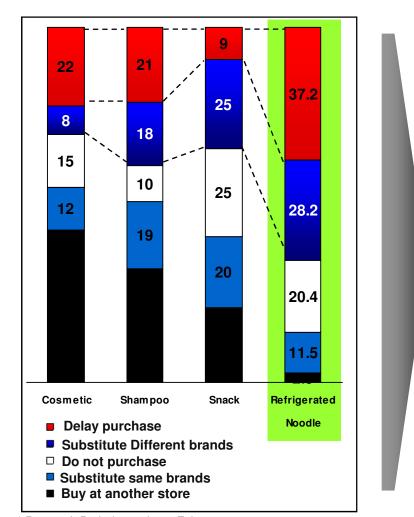
\* N=5,300, Lotte Mart 53 stores, for consumers having purchased refrigerated noodles



## Shoppers' Reaction to Stock-out (1/2)

# Stock-outs leads consumers' to choose different brands or not to purchase at all





\* Research Period : '08 Jan ~ Feb

**Achievements** 

\* N=1,000, consumers intending to purchase refrigerated noodles at Lotte Mart



In case of refrigerated noodles, when out of stock, the rate of not buying the product and changing brands are higher than other products.

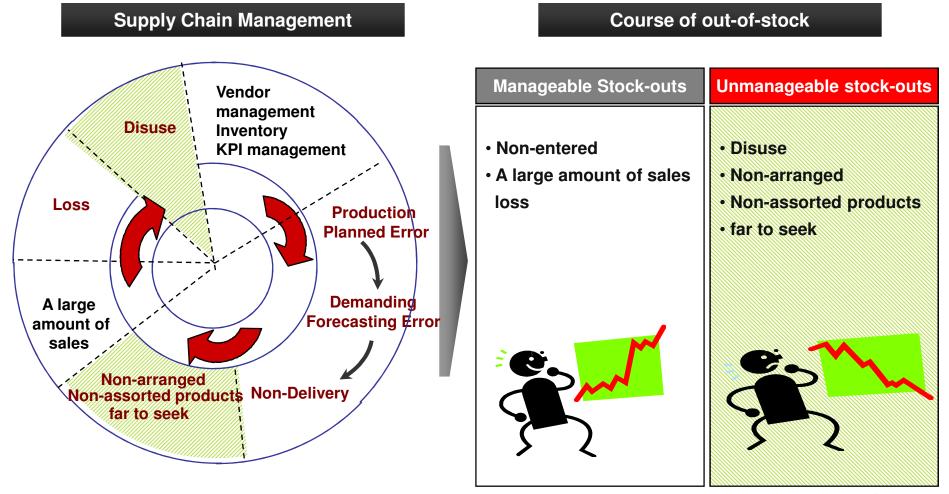
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# Shoppers' Reaction to Stock-out (2/2)

# Invisible out-of-stock should be managed





## Achievements

# Store differentiation strategy increases level of consumer satisfaction

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"Consumer's purchase pattern is effected by their life style"

"Product assortment according to consumer's life style can minimize the rate of out of stock."

"The consumer is satisfied when stores are clustered and managed by consumer's life style."





# Consumers purchase products based on their life styles

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Cluster Result Surr Cluster Mapping



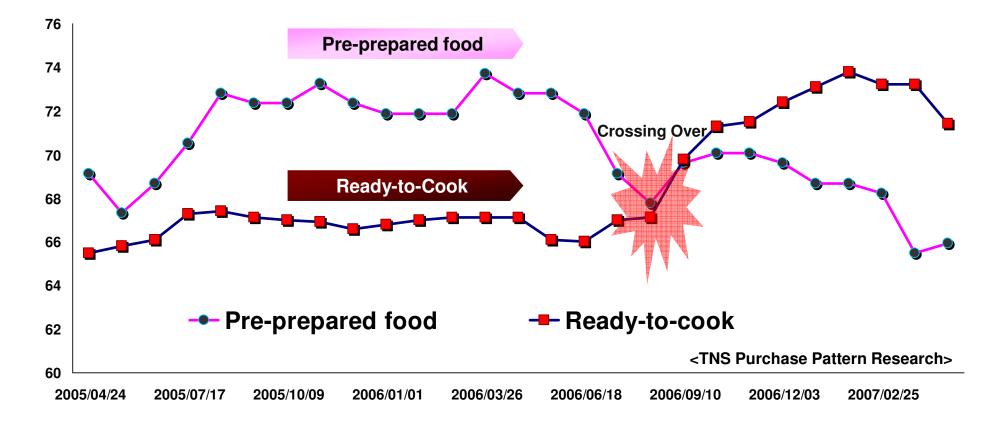


### **Voice of Consumer**

## **Refrigerated Noodle Market Trend**

# Ready-to-cook product sales have been increasing





• Pre-prepared food: Noodles and sauce are packed together. Easy to cook without additional ingredients.

Ready-to-Cook : Noodles and sauce are separated Mix-n- match by personal taste or purchase them individually

TNS Research : Consumer purchase pattern data, POS data analyze specialist company

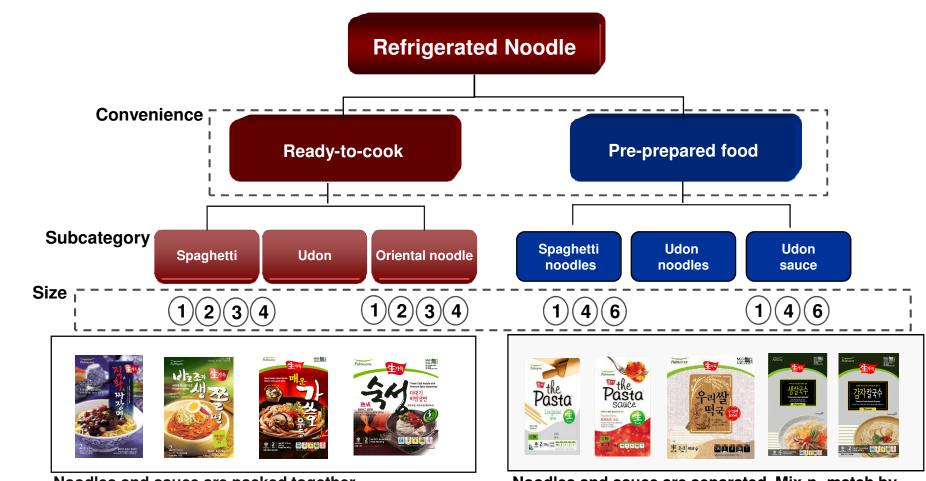


### **New Category Segmentation**

# Refrigerated noodles can be categorized by the type of convenience

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Noodles and sauce are packed together. Easy to cook without additional ingredients. Noodles and sauce are separated. Mix-n- match by personal taste or purchase them individually



\* Lotte-Mart Location Analysis (08' Jan ~ Mar)

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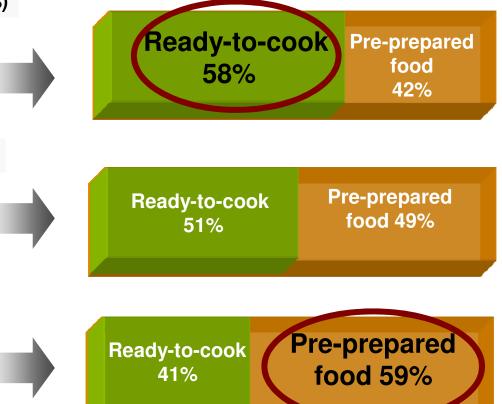
Apartment complex district (over 50%)

**Store location** 

Office, shopping district (over 50%)

Private home district (over 50%)





Sales rate by product convenience



**Achievements** 

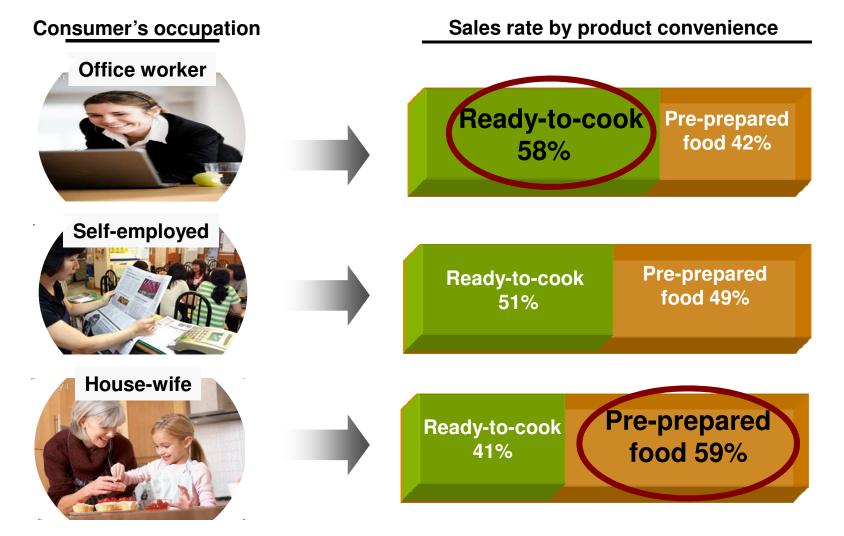
# Surrounding environment of stores have an influence on consumers' purchasing type



# Consumers' occupations have an influence on their purchasing type

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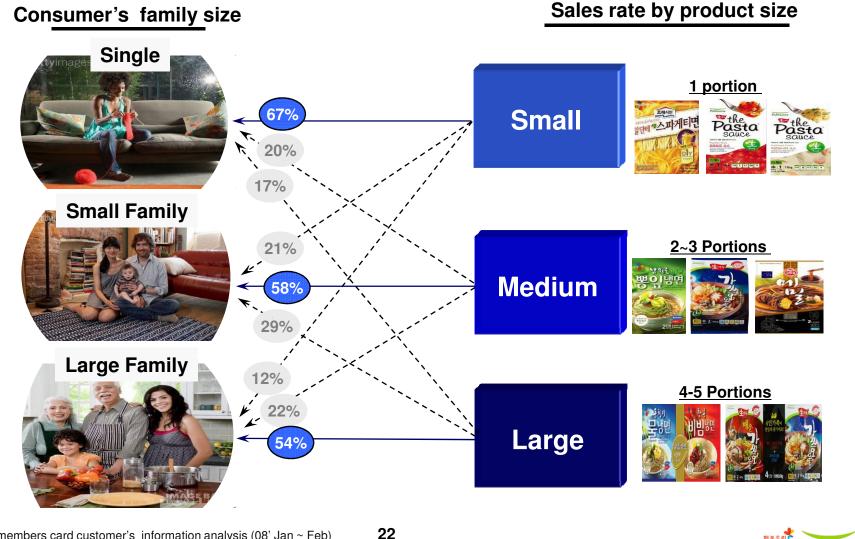
Store Clustering (2/3)





# Family size of consumers have an influence on their purchasing type

Cluster Result Sum Cluster Mapping



\* Lotte-Mart members card customer's information analysis (08' Jan ~ Feb)



Store Clustering (3/3)

### \* Lotte-Mart members card customer's information analysis (08' Jan ~ Feb)

### Achievements

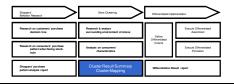
# **3 Clusters of consumers' life style**

	Definition of Consumer's life style	Characteristic of Major Consumer	Characteristic of Purchase pattern High rate of purchasing convenient noodles and 1 portion meals				
Cluster A	<ul> <li>Progressive person who refuses traditional values</li> <li>Westernized and trendy</li> <li>Not interested in realistic problems</li> <li>Interested in leisure and dilettante life</li> </ul>	<ul> <li>Single men, women and newly-weds in their 20's</li> <li>Mostly apartment residents</li> </ul>					
Cluster B	<ul> <li>Very Traditional</li> <li>A family oriented person Interested in health, children, relationship</li> <li>Waits for sale seasons</li> </ul>	<ul> <li>Consumers in their 30's~40's</li> <li>Big families</li> <li>Mostly house residents</li> </ul>	High rate of purchasing 4 portion meals and discounted products				
Cluster C	<ul> <li>Technology oriented but not leading, rather following and family oriented</li> <li>Interested in shopping</li> <li>Interested in income and savings</li> </ul>	<ul> <li>Married women in their 20's~30's</li> <li>Apartment, house residents</li> </ul>	High rate of purchasing inconvenient noodle and big portion meals				

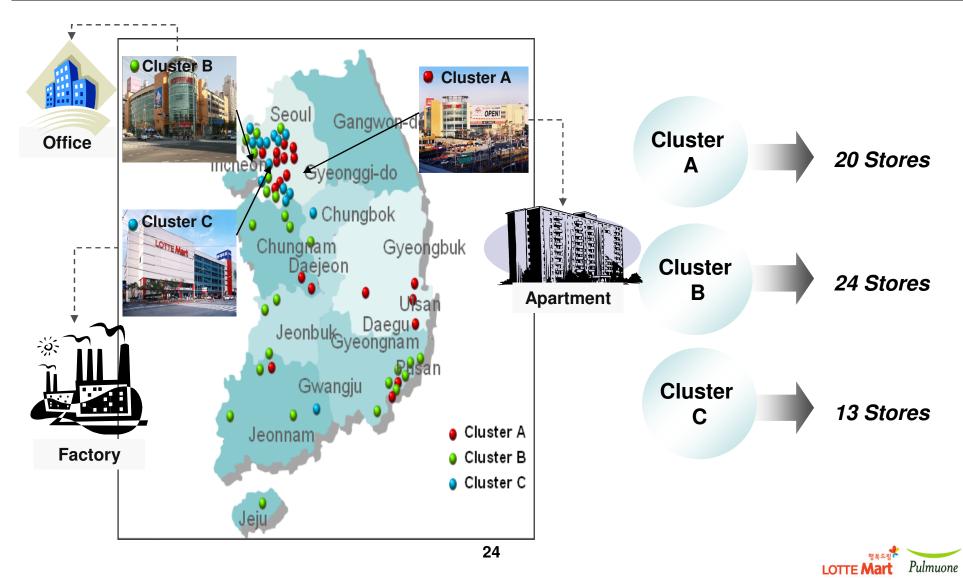


**Store Clustering Summary** 

### **Store Mapping**



# **3 Types of clustered stores**

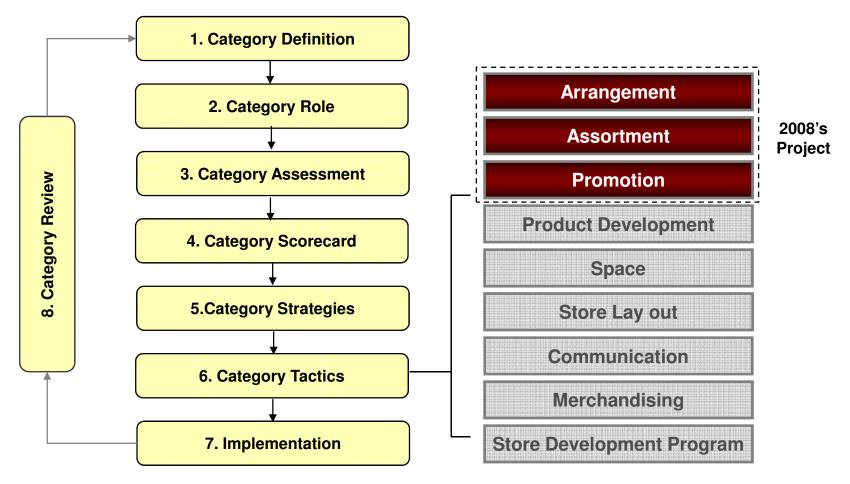


### **Quick-win Implementation**

Shopper/ Behavior Research	Store Clustering	Differentiated Implementation					
Research on customers' purchase decision tree	Research & analyze surrounding environment of stores	Define Differentiated	Execute Differentiated Assortment				
Research on consumers' purchase patternwhen facing stock- outs	Analysis on consumers' characteristics	Differentiated Criteria	Execute Differentiated Promotion				
Shoppers' purchase patiers analysis report	Cluster Result Summary Cluster Mapping	Differentiation Result report					

# We have focused on ...

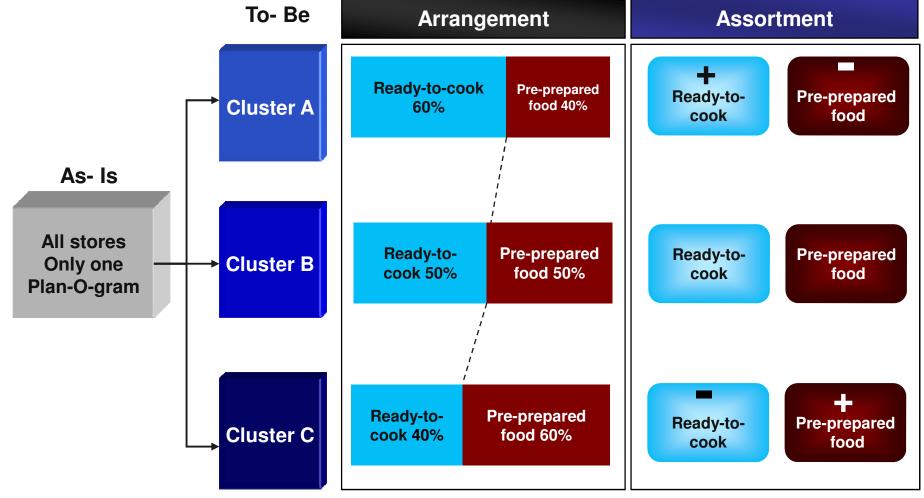
- Category Management Process -





# To- Be

# Differentiation by convenience level of cooking





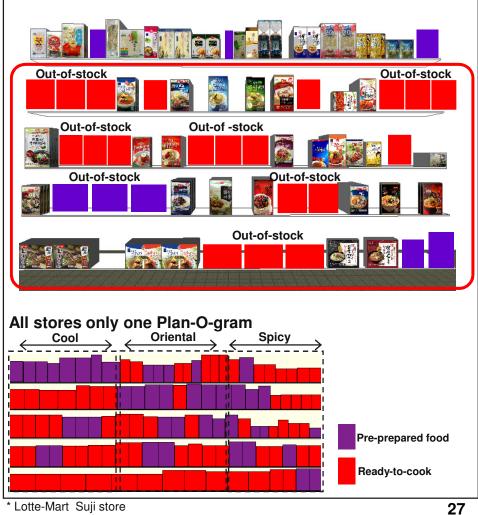
### **Differentiated Criteria**



## Assortment Implementation (1/4)

# **Cluster A Group**

### **Before**

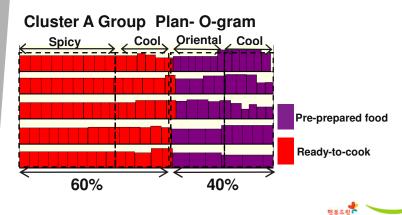


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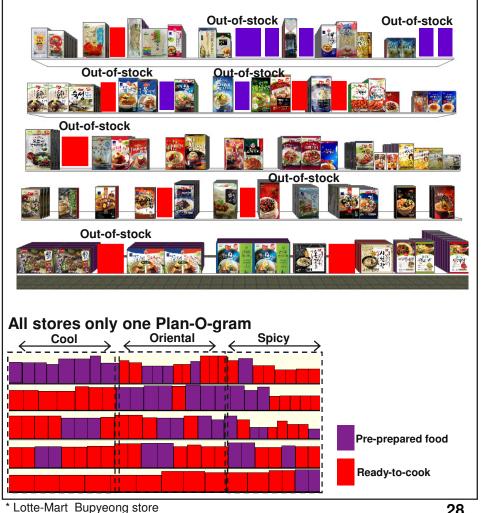




## Assortment Implementation (2/4)

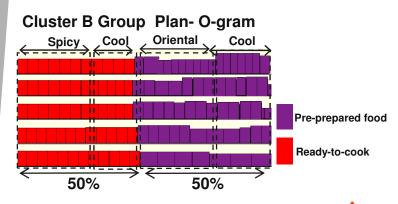
# **Cluster B Group**

### **Before**



Cluster Result Summary Cluster Mapping





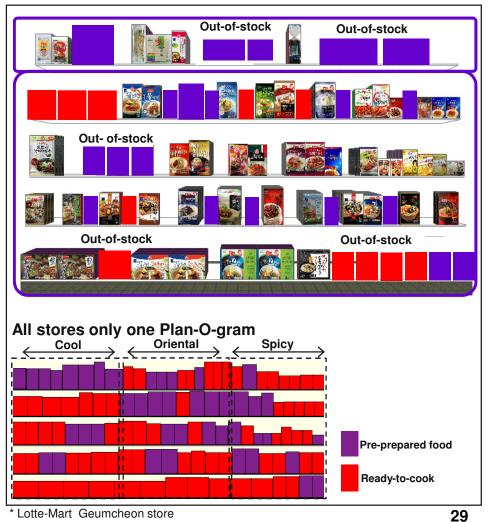
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## Assortment Implementation (3/4)

Cluster Result Summar Cluster Mapping

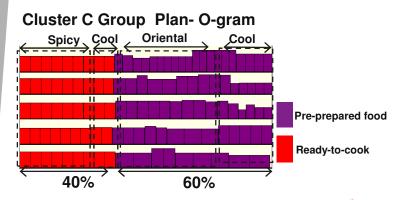
# **Cluster C Group**

### **Before**



# After



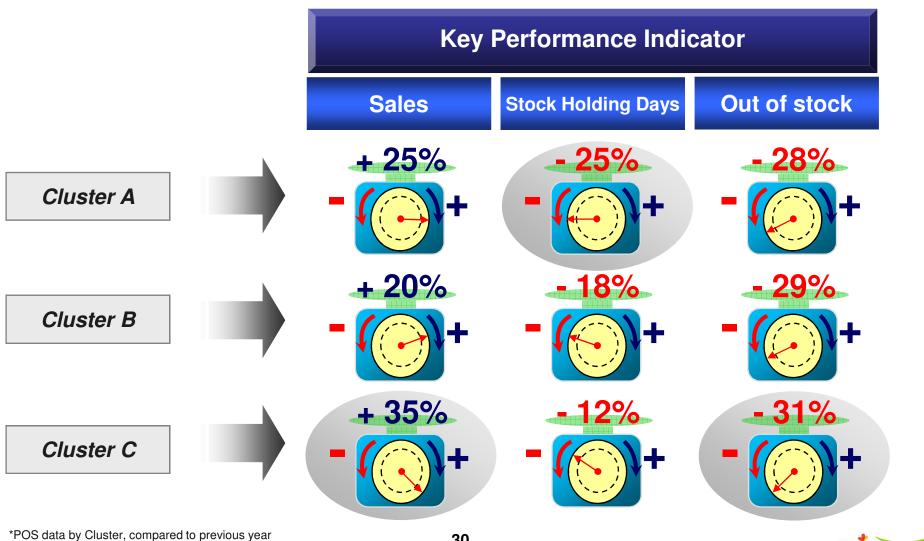




## Assortment Implementation (4/4)

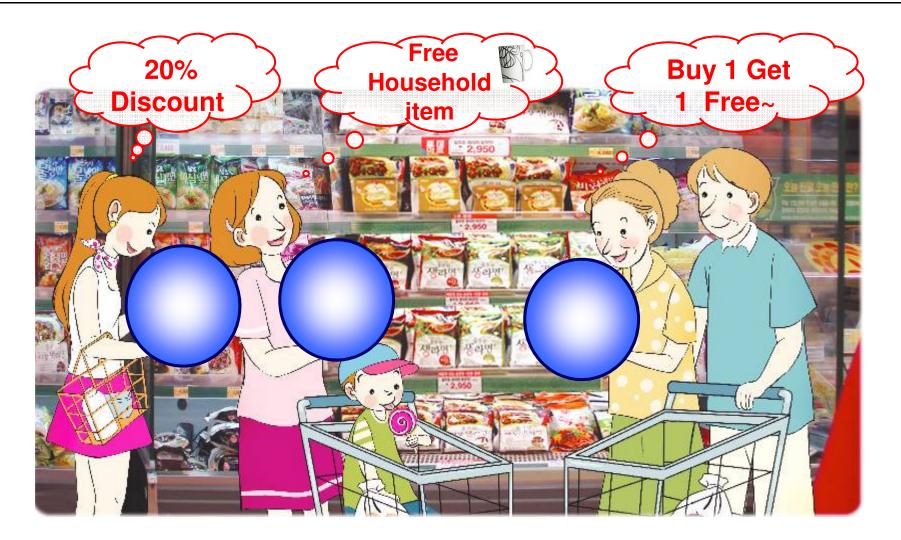
Cluster Result Summ Cluster Mapping

# Differentiated assortment has a positive effect





# Preferred types of promotion differ by consumers' life style

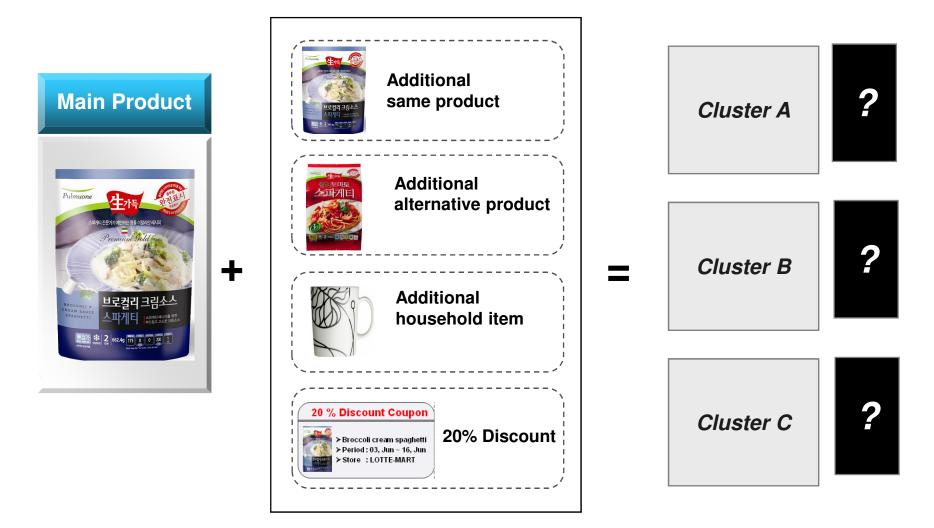




### **Differentiated Criteria**



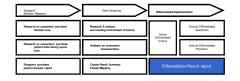


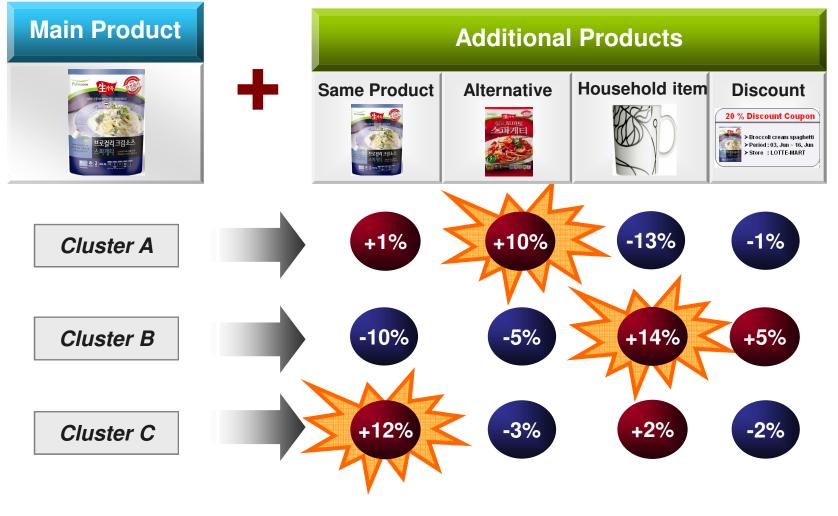




### **Promotion Execution**

# Each cluster has a different result







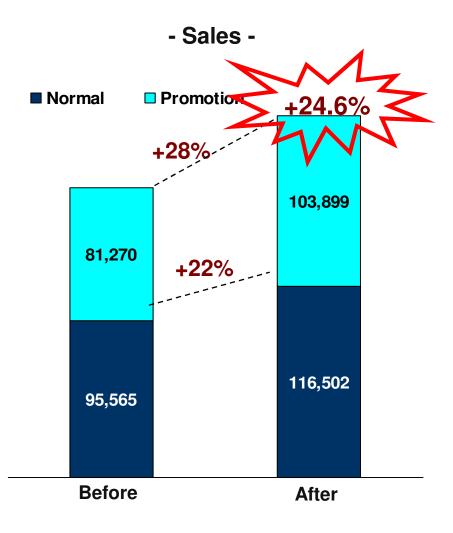
# Contents

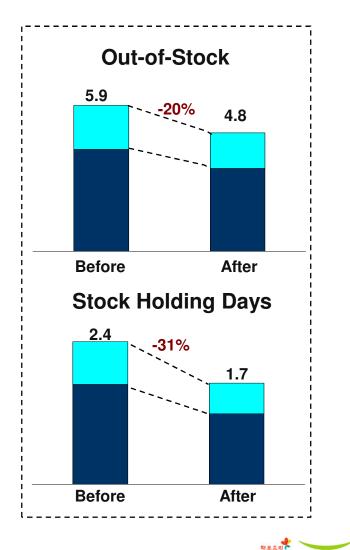
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### **Key Benefits**

# After differentiating clustering, sales increased, out-of-stock and stock holding days decreased





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LOTTE Mart

• Period : Before (07' May ~ Jul), After (08' May ~ Jul)

# The brilliant recipe is to satisfy the consumer's appetite

- 1. Consumer's loyalty toward brands, on both manufacturers' and retailers' side, increased
- 2. Consumer satisfaction rose
- 3. Preferable visit to stores increased





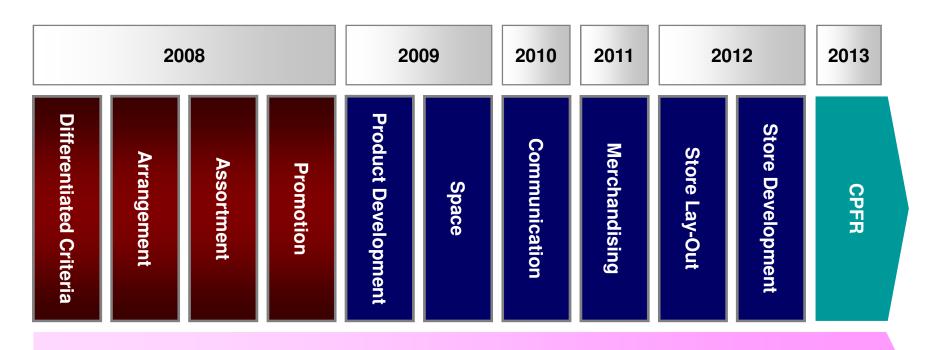
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# Efficient consumer response project should be continued



# Store clustering based on consumer of life style



