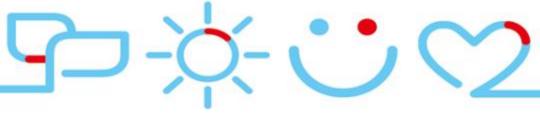


Sustainability and Diversity, Reshaping Detergent Industry

Kitty Zhang
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Content

Chinese
Detergent
Industry

The changing of China and Consumer insight

Sustainability and Diversity are reshaping detergent industry

Sustainable investment in R&D





The changing of China and Consumer insight



WeChat changes people's lifestyle.

People over 35 years finds his long lost friends/ classmates visa WeChat.

More and more people chat on WeChat in steady of talking on phone.

Generation gap is ignorance and everyone communicates with his friends visa WeChat friends.

Social media become the second largest news channel, market share is more than computer and TV combined. Largest channel for reading news is mobile News Apps.

The top reasons trigger sharing on WeChat are: value (usefulness), interest, and emotional value.

Among all company's WeChat account, traditional manufactory industry has the highest number of accounts.

WeChat official owner are investing a lot more time and monetary investment into account operation.



Fast Shopping





我要的现在就要

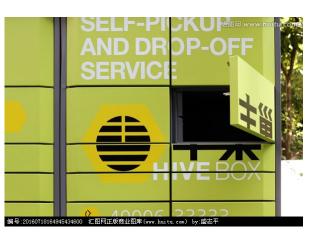
Consumer becomes more and more impatient and turns into the model of

"IWWIWWIWI"

Consumers are often impulse shopping, and the desire for fast shopping satisfaction. And they hope they can communicate with the real brand visa real time on line platform.

Convenience is the King.
Fast logistics distribution system wins consumer, JD





HIVE BOX system penetrates into the community and provides self-pickup and drop-off service.

Seven-day return policy.



liby☐ The awakening of self-consciousness





Ms Huang, 73, From shy little woman to Grandma Harley





Mr. Wang, 80, an actor and DJ, with perfect body and muscle.

The awakening of self-consciousness

Rapid expansion of Marathon in China

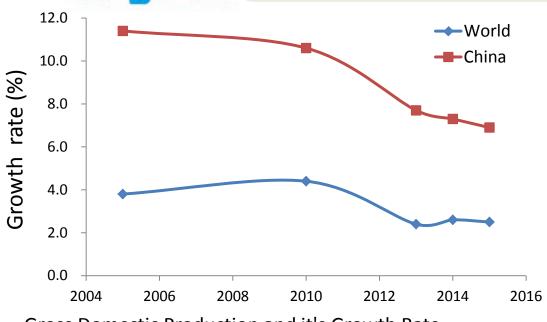
	Marathon games	The number of runners in the marathon
2014	51	0.9 million
2015	134	1.3 million
2016	328	2.8 million



People at middle age (34-53) are the main runners in the marathon games, accounting for 57% of the total number of participants. 21.1% of participant runs for keeping health, 13.3% of people runs for release pressure, 18.3% of people runs for social communication, 15.8% of people runs for self-expression. 67.4% of people runs for tasting/experience freedom.

Big data of China---- GDP

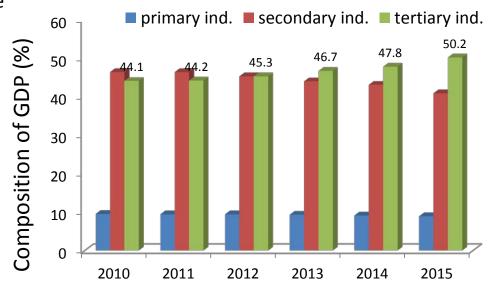




GDP of China was 10.87 trillion in 2015 and it took 14.8% of GDP of the world.

Gross Domestic Production and it's Growth Rate

In 2015, the contribution of the tertiary industries to GDP exceeded the sum of the primary industry and the secondary industry for the first time.



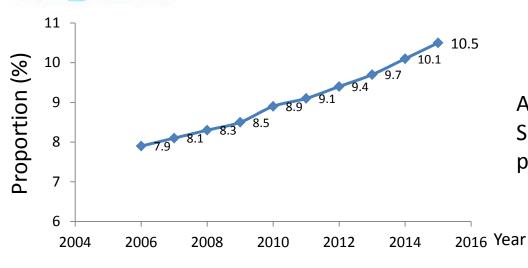
Composition of Gross Domestic Production

Source from China Statistical Yearbook 2016.



Big data of China ---- Population

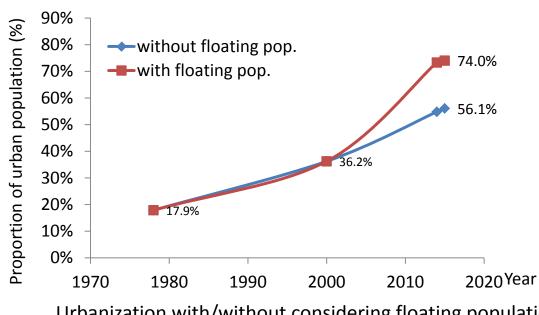




Aging is a big trend in China. Second baby policy is a way to prevent from working

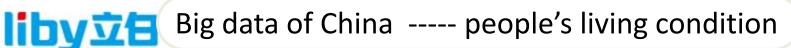
proportion of aged 65 and over

The population in urban area accounts 56.1% of the total population without considering floating population. Actually, 74% of population lived in urban area.



Urbanization with/without considering floating population







General information

Average family size: 3.1 persons/household

Annual per capita disposal income

Nationwide: 21,916 yuan;

in urban: 31,800 yuan;

In rural: 11,420 yuan;

Washing machine: 86.4% total,

92.3% in urban,

78.8% in rural.

Average per capita expenditure: 15,712yuan

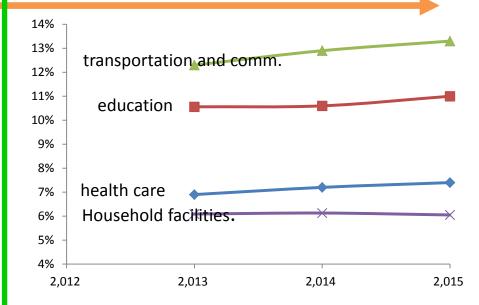
In urban: 21,392 yuan;

In rural: 9,222 yuan; Automobile: Ntionwide: 22.7%,

> urban 30.0% in, 13.3%. rural

Consumption expenditure in 2015 nationwide

Food, tobacco and liquor	30.6%
Clothing	7.4%
Residence	21.8%
Household facilities, articles and services	6.1%
Transport and communication	13.3%
Education, culture and recreation	11.0%
Health care and medical services	7.4%
Miscellaneous goods and services	2.5%



Expense on Health care, education, transportation, and household facilities

Source from China Statistical Yearbook 2016.





Market size

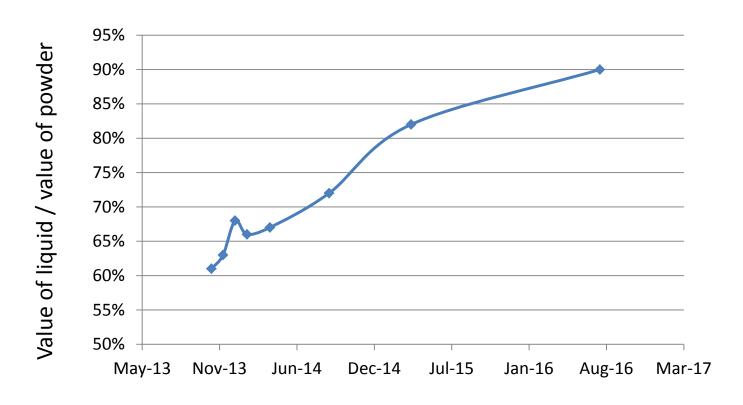
Category	Volume (million tons)	Growth rate 2016 vs 2015 (%)
Synthetic detergent	10.99	1.94
Soap	0.8	- 2.4
Synthetic powder detergent	4.46	- 5.7
Liquid detergent (including dishwashing and liquid laundry detergent etc.)	6.53	7.16
liquid laundry detergent	2.64	8.6
dishwashing	2.32	4.1
Hard surface cleaner	0.5	12

The total main business income of the industry was $\mbox{ }\mbox{ }\$

Source from CCIA, the statistic data of 2017.3.

Portfolio of laundry detergent: powder and liquid

Liquid made a continuous growth in last 4 years. In urban area, the ratio in value of liquid to powder is over 90%, which means it becomes the alternative of powder and consumers accepted it as commonly used laundry product.



The ratio of retail price of liquid to powder was 1.38 by the end of last November. It decreased to 1.25 in first half in 2016 due to the big promotion of Nice, Liby, Blue Moon, Unilever and P&G.





Construction of ecological civilization



Regulation of water pollution control

在线访谈

则, 贯彻"安全、清洁、健康"方针, 强化源头控制, 水陆统筹、河海兼顾, 对江河湖海实

施分流域、分区域、分阶级科学治理、系统排讲水污染防治、水牛态保护和水溶温量小化、坚

Regulation of air pollution control

负责,多排放、多负担,节能减排得收益、获补偿"的原则,实施分区域、分阶段治





A Battle of Environment Protection and Economy development

The target of air pollution control: The concentration of inhalable particles in cities at and above prefecture level is expected to less than 10% compare with that in 2012.

➤ The target of water pollution control: by the end of 2017, the black and odorous water bodies should be eliminated in all provincial capital city.

Cost rising of chemicals and packaging











Carton:

Price: 40%

more

Plastic

Price: 10%

more

Surfactant

Price: 20%

more

Builder

Price: 20%

more

Filler

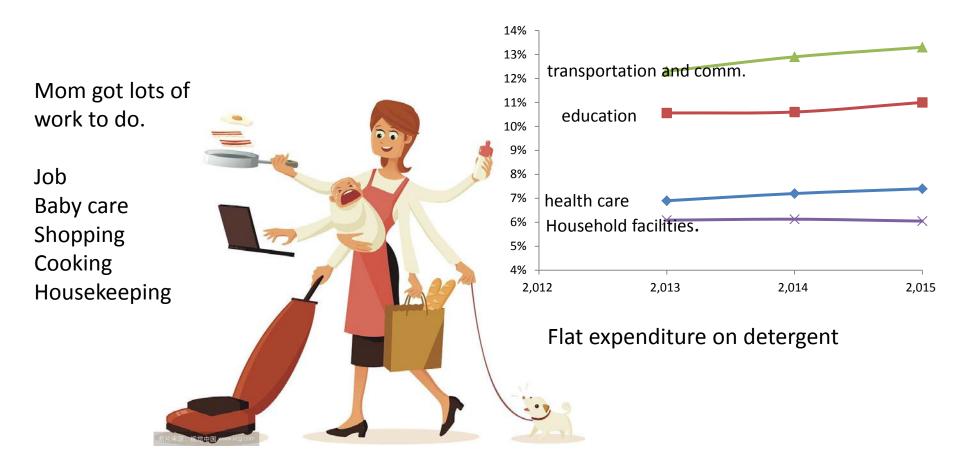
Price: 30%

more





How can we get new growth in tough economic situation?



Detergent get less attention. Housewife need products with high performance and good to health.





Emotional and experience



Green and healthy
With notable benefit



Smart

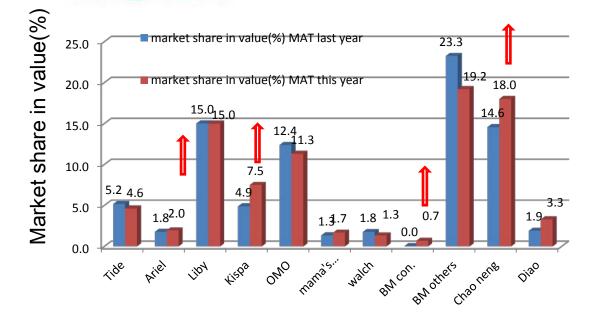


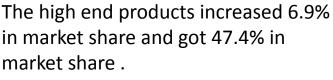
Love and Smart

Average price (yuan/kg)

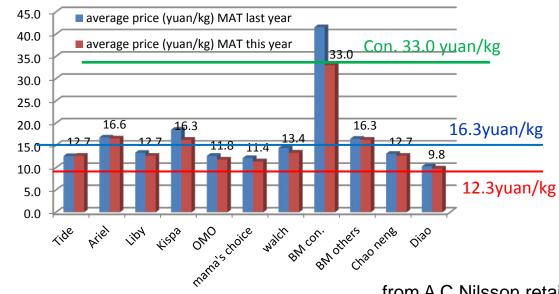
Liquid laundry detergent 💬







There was a fierce price cut competition in last two years.



from A C Nilsson retail audit, from May 2015 to Apr 2017.

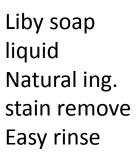




High end products achieved new growth

Sustainability and convince







Kispa Mild to skin Stain remove



Chaoneng
Natural ingredients
Easy rinse



Blue Moon
Easy handle,
3 X concentrated



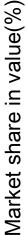
Ariel
Easy rinse,
quick washing

|| Powder laundry detergent ->>

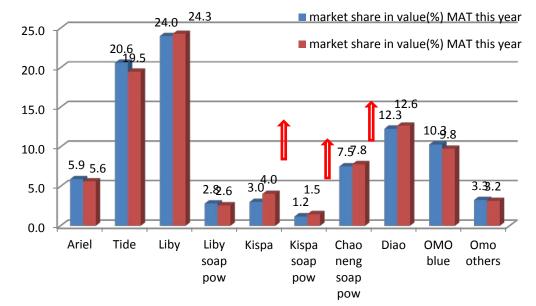


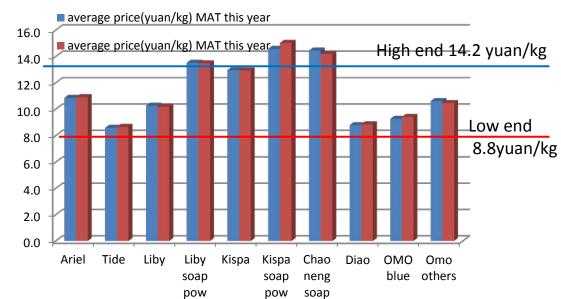






Average price (yuan/kg)





pow



The market share of high end products was over 24.3%. Average price of soap powder was14.2 yuan/kg, 61% higher than that of standard powder (8.8 yuan/kg).





High end products achieved new

Sustainability and healthy



Soda ash free,
Natural ingredient
No heat emission when
dissolve in water.
Less CaCO3 scale on fabric



Microscope image of fabric after washing for 20 cycles.

0.0

Libv with

HDPE bottle

Liby with

PET bottle

Diao with

HDPE bottle

Chaoneng

with PET

bottle

White cat

with HDPE

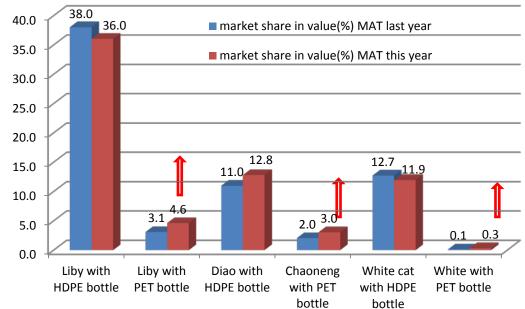
bottle

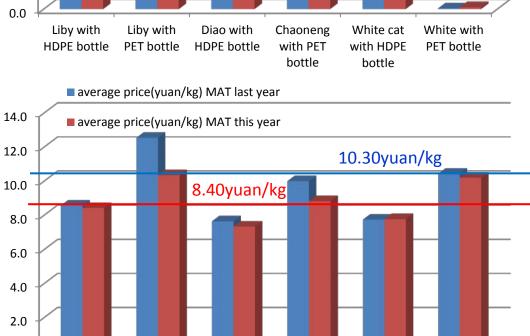
White with

PET bottle

liby 🔀 Development of dishwashing detergent 💟













High end products with PET bottle are on the rising tide. Liby increased 1.5%, Chaoneng increased 1.0%, White cat increased 0.2%

The average price of the category decreased from 8.40 yuan/kg to 8.30yuan /kg within 2 years.

High end products gained more share.

> from A C Nilsson retail audit, from May 2015 to Apr 2017.



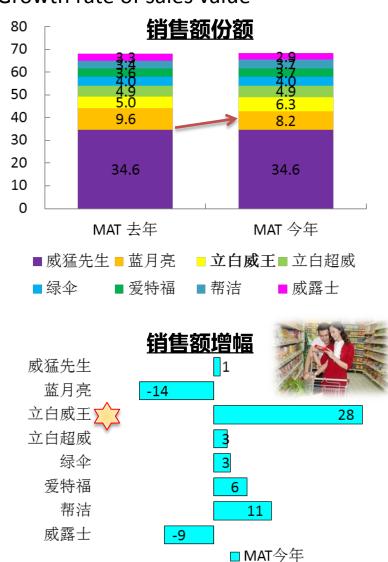


Review of hard surface cleaner





Growth rate of sales value











Natural ingredient Convenient and powerful

Malodor control



Sustainable investment in R&D



General information in 2015

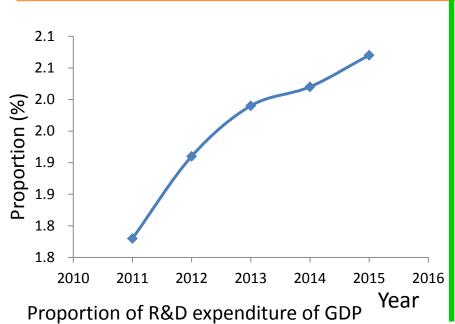
Promotion rate from senior secondary school to higher education: 92.5% Proportion of R&D expenditure of GDP: 2.05%

Composition of Expenditure of R&D:

basic research: 5.05%;

applied research:10.79%

experimental development: 84.16%

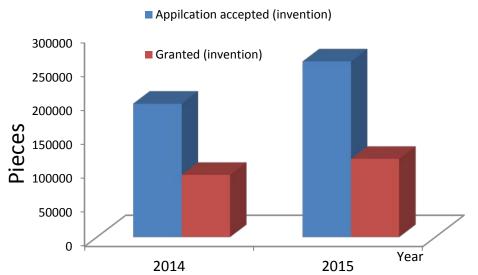


Source from China Statistical Yearbook 2016.

High education in 2015: 44.2% of postgraduates work in the science and engineering.

item	Graduates	Entrants	Enrolment
Postgraduates	551522	645055	1911406
Doctor's degree	53778	74416	326687
Master's degree	497744	570639	1584719
Undergraduates	6808866	7378495	26252968

patent granted (invention):359316 pieces, annual growth rate: 54%. Domestic: 73.3%, foreign: 26.7%.



Granted Patent in section C and section D

liby立日 Speed up innovation



A large number of graduates with PhD.

Rising investment in R&D

More than 25% annual growth in granted invention patents.

Rapid development of computer science, information technology and analytical science.

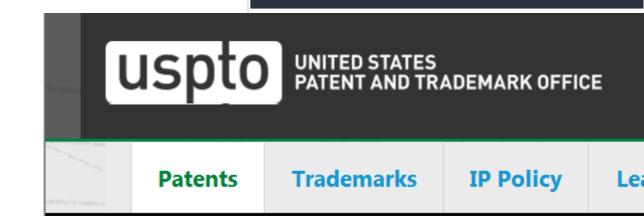




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Patent Translate
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Changing the mind set





New generation of product Not the single new product





iPhone 6 iPhone 7 New generation



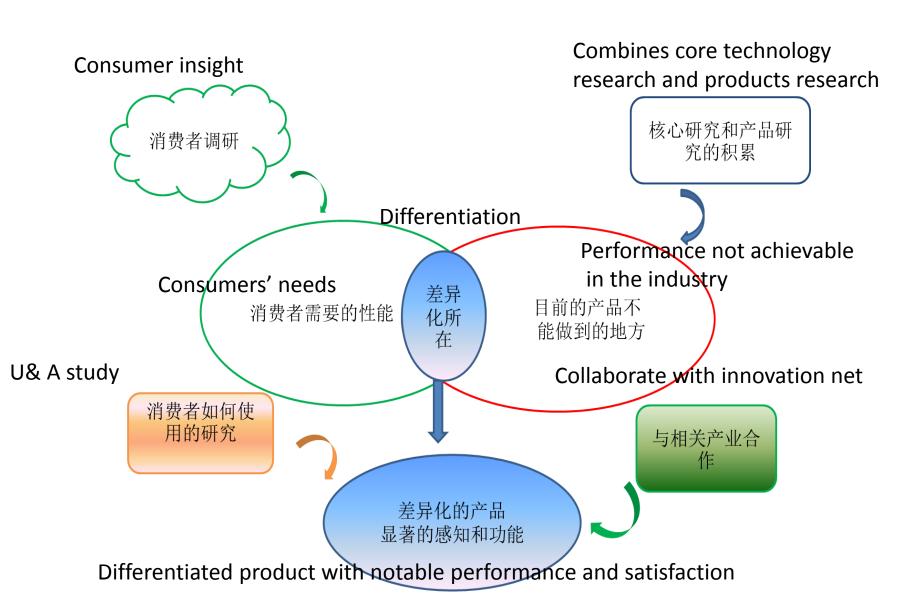


New generation of product





Consumer experience is the core of the new product design



Summary

- 1. Great changes in China: awakening of self-consciousness and rising of middle class.
- 2. High end of detergent is getting more market sharing. Products with green and sustainability claim are popular.
- 3. More R&D investment speeds up innovation in detergent industry.

THANK YOUL

liby立包