CONSUMERS IN CRISIS

Understanding the effect of the Coronavirus on China Consumers

Insights from Machine Learning

Feb 2020

We surveyed 900 consumers in Beijing, Shanghai & Guangzhou, showing 3 different coronavirus outcomes to equal numbers of people to measure changes in sentiment

Purpose to measure how each consumer category is affected by different coronavirus outcomes within next 3 months

Re-Hub utilized Zectr's proprietary Machine Learning solution to analyze answers from panel respondents and generate a comprehensive insights report and interactive dashboard. This whole process took less than 2 days.

We surveyed 300 people from each city, and asked them to respond based on one of the three scenarios: for each city we asked 100 consumers on Pessimistic, Base and Optimistic scenarios

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Key Findings and Suggested Actions

PESSIMISM AMONG CONSUMERS	**BRAND SUPPORT IS IMPORTANT**	**AGGREGATED CONSUMER DEMAND REMAINS STRONG…**	**…BUT BIG DIVERGENCES WITHIN CATEGORIES AND SEGMENTS**
Consumers perceive the situation to be severe and expect to last for **4-5 months**	Consumers are overwhelmingly more loyal to brands that show support	Consumers do not intend to spend less than before	Consumer priorities and preferences radically changed
Brands need to proactively listen to their consumers and continuously monitor the market to spot any changes in behavior	Brands should be vocal of their support for China on social media. Messages or efforts of support likely to yield results	Brands need to position themselves now to take advantage of demand recovery which could be rapid if situation improves	Each category will face unique challenges by segment and under different scenarios: brands need to prioritize their targets

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We divided respondents within each Tier 1 city into 3 groups, and showed each of them one of the following scenarios, comparing changes in sentiment for each case

Our target Tier 1 cities include Beijing, Shanghai, and Guangzhou with a sample of N900 general population
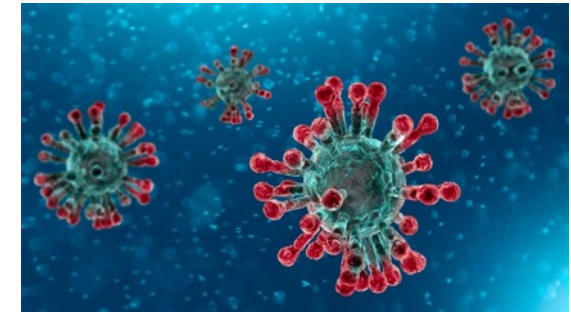
Optimistic Case

- Mortality rate from the coronavirus is likely to be much lower than 1%
- Dramatic reduction in infections may occur as soon as late February.

Base Case

- Over 40,000 cases of the coronavirus and over 1,000 deaths.
- China should recover completely by May or June.

Pessimistic Case

- Number of coronavirus infections and deaths continues to grow.
- Wuhan and Hubei Province continue to be quarantined, with strict restrictions in place in other Chinese cities.
- Outbreaks have now occurred as far away as Japan, Singapore, and London.
- Situation may continue to end of year.

Aggregate results for all Tier 1 Cities

Combined results by scenario & category

Consumers in China on average are extremely worried about the coronavirus situation and expect it to last another 4-5 months

Consumer behavior will likely reflect this expectation

Perceived severity of situation (1-5)	Months needed to return to normal
4.43/5	**4.75**
Consumers perceived the current situation as extremely serious (1=not so severe, 5=extreme crisis)	On average they expect the current situation to last until June/July

Q1: How would you rate the current situation with the coronavirus? (1=not so severe, 5=extreme crisis)
Q2: How many months will it take for things to return to normal?

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Across the board, regardless of location or segment, a brand's support for China during this time is very important to consumers' purchasing decisions

There is remarkably very little variance on this importance

8.4/10

For all segments in all 3 tier 1 cities we surveyed the importance was at least 7 or above

Q: How important is a brand's support for China during the coronavirus outbreak to you in choosing a consumer brand/product? (0=not important, 10=extremely important)

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Consumer's aggregate spend for the next 3 months vs same period last year remains consistent regardless of the expected outcome of the coronavirus outbreak

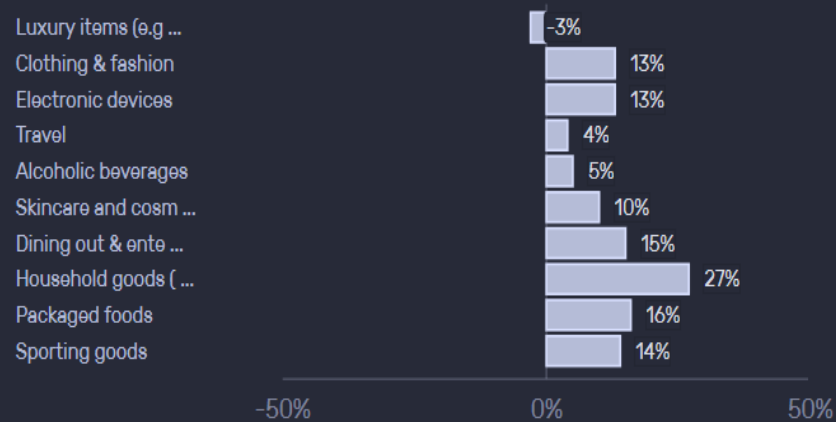There seems to be pent up demand built up from consumption fallout from Q1 last year

6/10

Consumers likely to spend the same or more in the
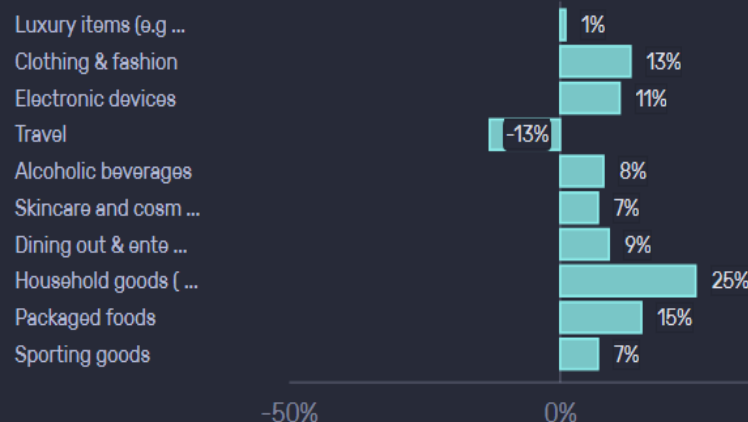next 3 months vs same period last year

But there are huge divergences on a category level with household goods, fashion, and electronics set for the best improvement in the next 3 months vs. last year

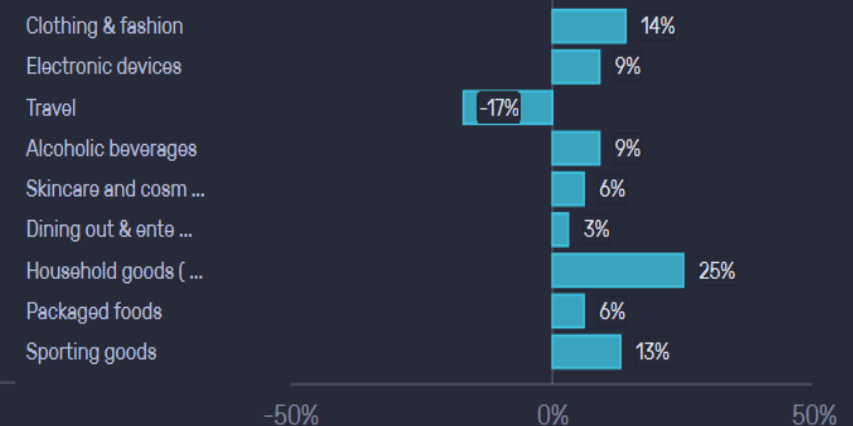## Changes in demand of each category strongly influenced by specific segments (target customers)

OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	Value
Luxury items (e.g ...	-3%
Clothing & fashion	13%
Electronic devices	13%
Travel	4%
Alcoholic beverages	5%
Skincare and cosm ...	10%
Dining out & ente ...	15%
Household goods (...	27%
Packaged foods	16%
Sporting goods	14%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	Value
Luxury items (e.g ...	1%
Clothing & fashion	13%
Electronic devices	11%
Travel	-13%
Alcoholic beverages	8%
Skincare and cosm ...	7%
Dining out & ente ...	9%
Household goods (...	25%
Packaged foods	15%
Sporting goods	7%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	Value
Clothing & fashion	14%
Electronic devices	9%
Travel	-17%
Alcoholic beverages	9%
Skincare and cosm ...	6%
Dining out & ente ...	3%
Household goods (...	25%
Packaged foods	6%
Sporting goods	13%

Luxury demand will remain muted even if situation improves

Travel and dining out poised for a quick recovery if things improve

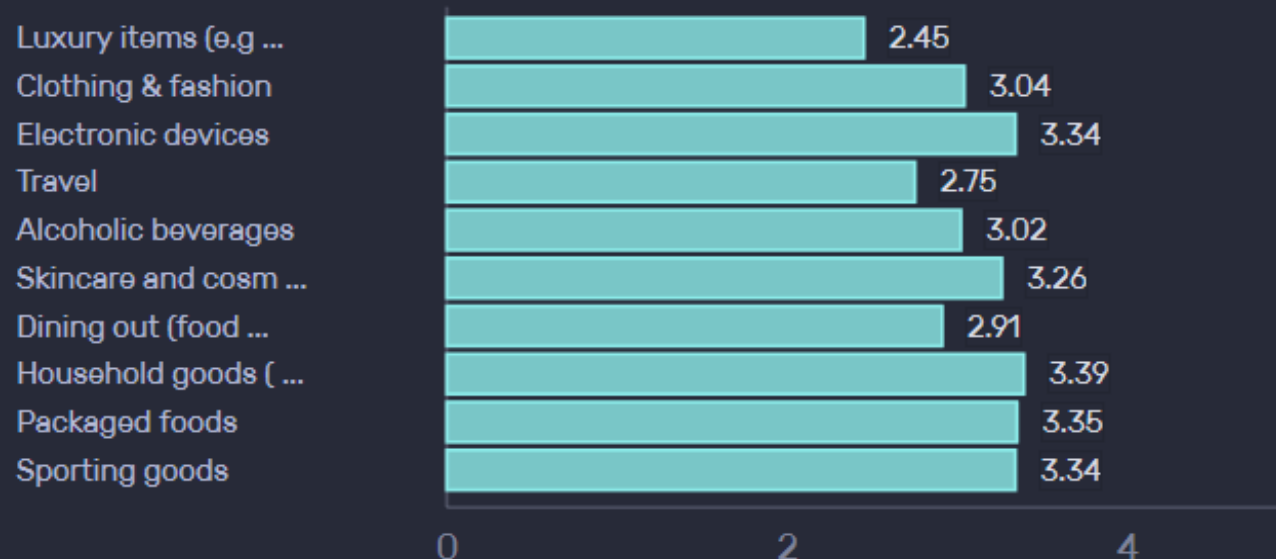Slight uptick in alcoholic consumption if situation deteriorates

Packaged food growth faces large impact if situation lasts past summer

The severity and duration of the coronavirus situation has only slight impact on consumer's intention to shop online vs. offline

Categories that do well regardless of scenario (e.g.: household goods) tend to have higher online purchases

BASE: HOW LIKELY TO USE ONLINE SHOPPING PORTALS

Category	Value
Luxury items (e.g ...	2.45
Clothing & fashion	3.04
Electronic devices	3.34
Travel	2.75
Alcoholic beverages	3.02
Skincare and cosm ...	3.26
Dining out (food ...	2.91
Household goods (...	3.39
Packaged foods	3.35
Sporting goods	3.34

- Likeliness to buy luxury online increased to 3 (60%) under pessimistic scenario

- Categories like Skincare&Cosmetics and Fashion have high online shopping likelihood regardless

- Categories that tend to have high repeat purchases (household good, packaged food, skincare) have high likelihood to partially absorb the impact via online

Q: How likely will you use online shopping portals (T-Mall, JD.com, Brand online store, etc.) for the following categories? (1=entirely offline purchases, 5=entirely online purchases)

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Individual market segments & their views

Tier 1 city consumer segmentation & sentiment analysis

Our AI has found 4 consumer segments within Tier 1 cities based on psychographic patterns including personal values, category preferences, and purchase drivers

Most consumers fall into Young Professionals, meaning Tier 1 city consumers have highly similar drivers & preferences

SILVER FOXES

Appreciate value for money, health and quality driven

SEGMENT 1 (9%)

👍 Electronic devices, value for money, and health & quality of life.

👍 Travel, dining out & entertainment, convenient, saves me time, reputable brand, and saving & investing for the future.

👎 Luxury items (e.g. watches, handbags), clothing & fashion, skincare and cosmetics, reflects my unique identity, fits in with popular trends, from prestigious foreign countries, social standing, relationships with friends, and fitting in with friends.

Show Scores

FASHION-FORWARD MOMS

SEGMENT 2 (8%)

👍 Clothing & fashion, skincare and cosmetics, and fits in with popular trends.

👍 Saving for an uncertain future and raising my child well.

👎 Electronic devices, sporting goods, from prestigious foreign countries, and relationships with friends.

Show Scores

Very interested in fashion and cosmetics

f0, (f4)

(f3), (f11), (f26), f1, f22, f25

(f2), (f5), (f14), (f25), f12, f16, f19
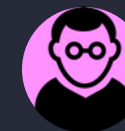
TASTEFUL COSMO-POLITANS

SEGMENT 4 (5%)

👍 Luxury items (e.g. watches, handbags), from prestigious foreign countries, premium brand, saving & investing for the future, health & quality of life, and raising my child well.

👎 Household goods (e.g. soap, detergent), convenient, saves me time, supporting domestic brands, relationships with friends, expressing my individuality, and fitting in with friends.

Show Scores

Interest in luxury, saving and investing for future

f2, f5, f14, f25, (f12), (f16), (f19)

(f0), f4
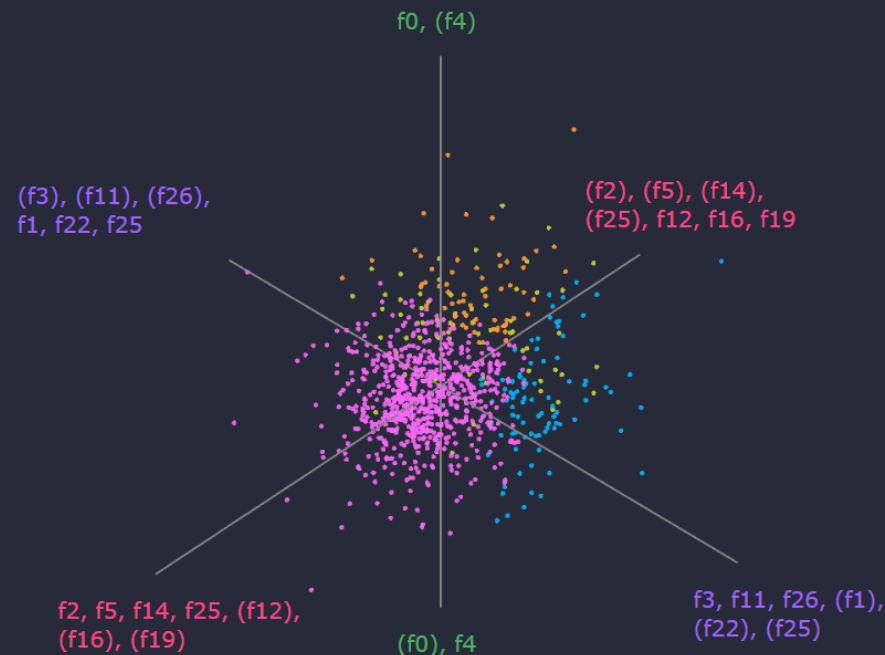
f3, f11, f26, (f1), (f22), (f25)

YOUNG PROFESSIONALS

SEGMENT 3 (79%)

👍 Electronic devices, Relationships with family, and Health & quality of life.

Show Scores

Value relationships with family and friends

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Demographically speaking, Tier 1 city consumers can be split into Young Professionals, Fashion-forward Moms, Tasteful Cosmopolitans and Silver Foxes
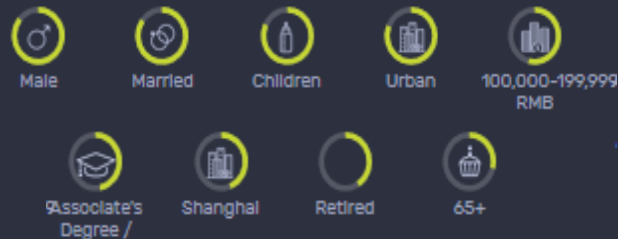
Each segment's demographic profile align with their psychographic preferences

SILVER FOXES

Usually retired males, well-educated but with low incomes

SEGMENT 1 →

Male · Married · Children · Urban · 100,000-199,999 RMB

Associate's Degree / · Shanghai · Retired · 65+

FASHION-FORWARD MOMS

Fit in with popular trends while raising their child well

SEGMENT 2 →

Married · Urban · Female · Bachelor's Degree / · Children

25-34 · Clerical · Guangzhou · 100,000--399,999 RMB

TASTEFUL COSMO-POLITANS

Skew older but have highest income vs other segments

SEGMENT 4 →

Married · Children · Urban · Professional / Managerial · Bachelor's Degree /

Female · 200,000-399,999 RMB · Beijing · 45-54
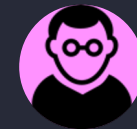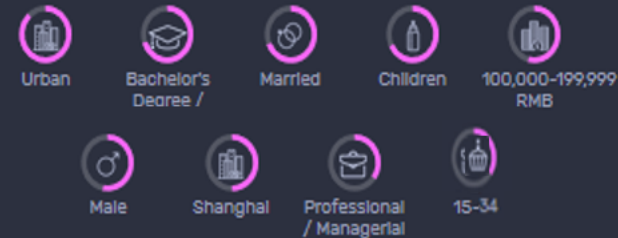
YOUNG PROFESSIONALS

Well educated, upwardly mobile young white collars

SEGMENT 3 →

Urban · Bachelor's Degree / · Married · Children · 100,000-199,999 RMB

Male · Shanghai · Professional / Managerial · 15-34

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YOUNG PROFESSIONALS' demand seem to be resilient for most categories except travel and dining out/entertainment

As this segment represents the vast majority of consumers, behaviours are highly similar to national averages

OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

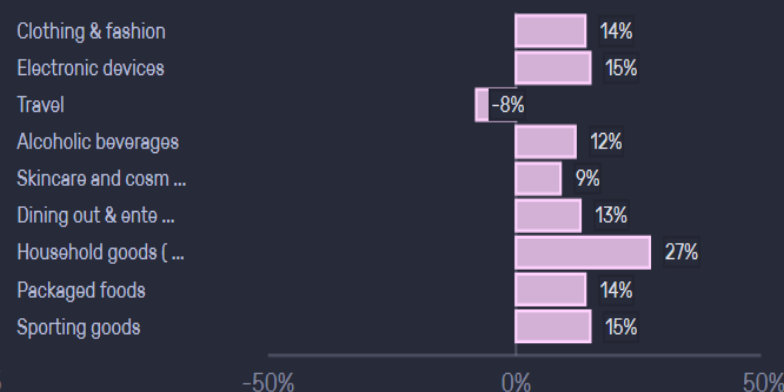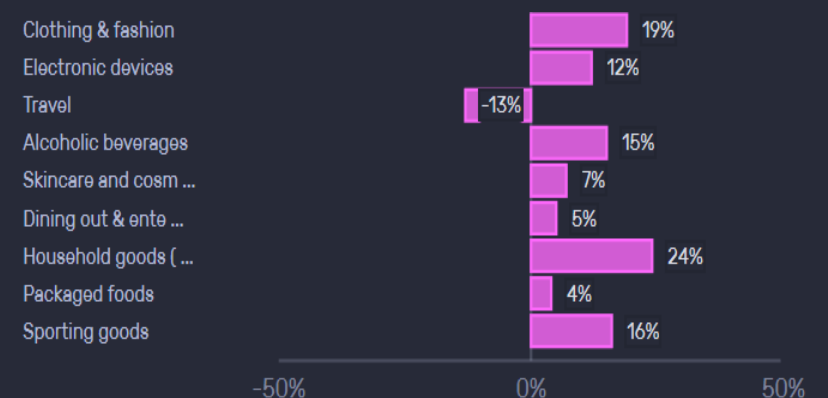| Category	Change
Clothing & fashion	16%
Electronic devices	14%
Travel	7%
Alcoholic beverages	6%
Skincare and cosm ...	14%
Dining out & ente ...	18%
Household goods (...	29%
Packaged foods	17%
Sporting goods	15%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	Change
Clothing & fashion	14%
Electronic devices	15%
Travel	-8%
Alcoholic beverages	12%
Skincare and cosm ...	9%
Dining out & ente ...	13%
Household goods (...	27%
Packaged foods	14%
Sporting goods	15%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	Change
Clothing & fashion	19%
Electronic devices	12%
Travel	-13%
Alcoholic beverages	15%
Skincare and cosm ...	7%
Dining out & ente ...	5%
Household goods (...	24%
Packaged foods	4%
Sporting goods	16%

Travel set for quick recovery if situation improves

Most core categories steady across scenarios

Strong demand for household goods like detergent or soup

Demand for luxury not set to change a lot regardless of scenario

Packaged food demand steady unless pessimistic scenario materializes

Q: What is the change in your budget for spending on these consumer product categories for the next 3 months compared to same period last year?

FASHION-FORWARD MOMS' demand for fashion and cosmetics is generally resilient but if situation substantially worsens then demand takes a dive

They also have relatively low interest for luxury, sporting goods, and electronic devices

OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Clothing & fashion — 21%
Skincare and cosm ... — 21%
Household goods (... — 39%
Packaged foods — 14%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Clothing & fashion — 27%
Skincare and cosm ... — 16%
Household goods (... — 20%
Packaged foods — 18%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Clothing & fashion — 3%
Skincare and cosm ... — 11%
Household goods (... — 29%
Packaged foods — 6%

Fashion and cosmetics demand resilient unless the situation substantially worsens (Pessimistic Scenario)

Household goods do very well in Optimistic or Pessimistic Scenarios, hinting at 2 different underlying drivers

Q: What is the change in your budget for spending on these consumer product categories for the next 3 months compared to same period last year?

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TASTEFUL COSMOPOLITANS are most interested in luxury and their demand will take a huge hit should the coronavirus situation continue or worsen

This segment also contain older consumers, and some of their behaviours mirror those of Silver Foxes
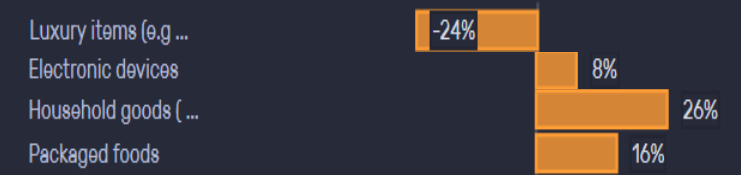
OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Luxury items (e.g ...	-4%
Electronic devices	4%
Household goods (...	23%
Packaged foods	4%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Luxury items (e.g ...	-17%
Electronic devices	-14%
Household goods (...	20%
Packaged foods	17%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Luxury items (e.g ...	-24%
Electronic devices	8%
Household goods (...	26%
Packaged foods	16%

Demand for luxury decreases as the situation worsens

Demand of Electronic devices to raise under Pessimistic Scenario

Strong consumption of Household goods across scenarios, while Packaged Foods demand grows as situation worsens
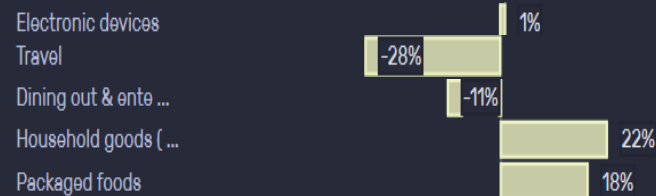
Q: What is the change in your budget for spending on these consumer product categories for the next 3 months compared to same period last year?

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SILVER FOXES generally have lower demand but if situation gets worse their demand for household goods and packaged food will increase substantially

Consumption intentions imply they will likely stay a lot more at home if situation gets worse
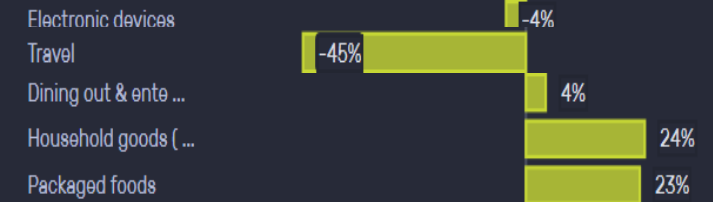
OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	
Electronic devices	8%
Travel	
Dining out & ente ...	3%
Household goods (...	9%
Packaged foods	10%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	
Electronic devices	1%
Travel	-28%
Dining out & ente ...	-11%
Household goods (...	22%
Packaged foods	18%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	
Electronic devices	-4%
Travel	-45%
Dining out & ente ...	4%
Household goods (...	24%
Packaged foods	23%

They will reduce spending on travel and dining out & entertainment substantially should situation last until summer

Growth in consumption in household good and packaged food more than doubles vs optimistic scenario

Q: What is the change in your budget for spending on these consumer product categories for the next 3 months compared to same period last year?

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How we can help

Dive deeper into the insights included in this report via Zectr online interactive dashboard

Consultation on how to these insights are applicable to your industry or line of business

Understand how to leverage Machine Learning to generate tailored reports to monitor your target customers sentiment evolution

Subscribe to additional industry reports analyzing the impact of Coronavirus across industries and consumer segments

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Appendices

Re-Hub helps Brands in Asia to address business challenges by leveraging the most relevant AI-powered solutions for any business scenario

Re-Hub brings agility and efficiency to problem-solving for brands to drive sustainable growth and improve efficiency

We serve global brands in CPG, fashion and luxury from our offices in Shanghai and Singapore

GROWTH

- Customer acquisition
- Customer engagement
- Market intelligence
- Forecasting & prediction

CUSTOMER EXPERIENCE

- CS optimization
- Voice search
- Visual search
- AR/VR

EFFICIENCY

- Marketing automation
- Omnichannel analytics
- Data science
- Location analytics

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Zectr was envisioned by a strategy consultant, modeled by a Stanford professor, and built by a Silicon Valley technologist

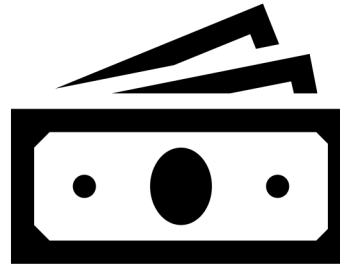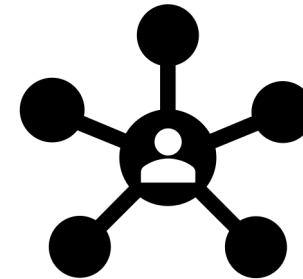## Zectr can make your project teams faster & more efficient – or run many standardized projects simultaneously

Faster	**More efficient**	**Massively Parallel**
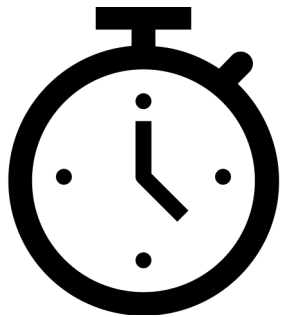
⊘ Fast turnaround, results delivered within a week

⊘ Enable data backed conclusions quickly

⊘ Reduce the number of analysts required

⊘ Increased efficiency makes projects more profitable

⊘ Run tests for many products across many markets at once

⊘ Consistent & rigorous methodology

We conducted a N900 survey evenly divided amongst 3 Tier 1 cities in China, targeting the general population

General public

Identify & recruit survey respondents

• Population of Beijing, Shanghai, and Guangzhou residents (i.e. Tier 1 cities)
• Sampled from Toluna panel of survey takers

1 day

Conduct surveys and collect data

• Panelists receive a web link to the Zectr survey app
• Each city divided into 3 groups, each exposed to either optimistic, baseline, or pessimistic scenario

2 days

Analyze survey data

• Weight respondents by age and gender according to local population characteristics
• Conduct segmentation & other insight-oriented analyses using machine learning

1 day
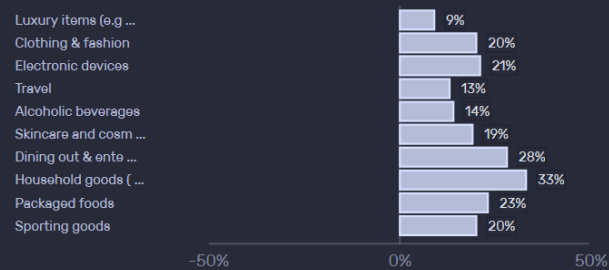
Identify & report key insights

• Identify key insights using machine learning
• Visualize and report insights via a dynamic presentation deck running on modern web browsers
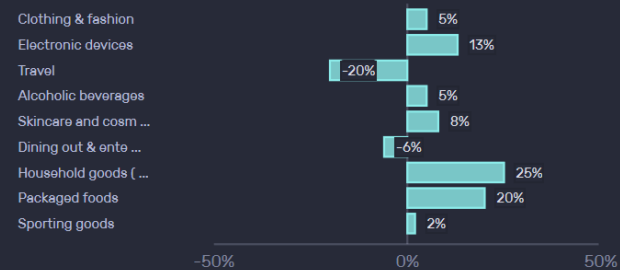
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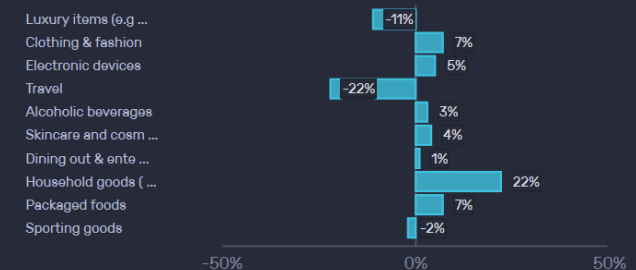# Shanghai data is most aligned with expectations on the category level

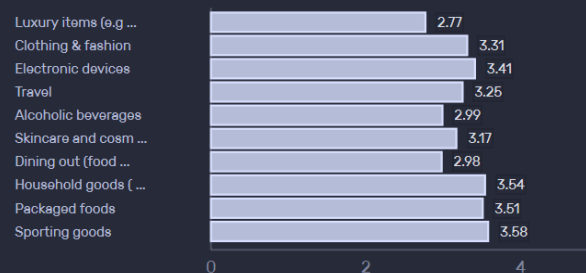**OPTIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR**

Category	%
Luxury items (e.g ...	9%
Clothing & fashion	20%
Electronic devices	21%
Travel	13%
Alcoholic beverages	14%
Skincare and cosm ...	19%
Dining out & ente ...	28%
Household goods (...	33%
Packaged foods	23%
Sporting goods	20%

BASE: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	%
Clothing & fashion	5%
Electronic devices	13%
Travel	-20%
Alcoholic beverages	5%
Skincare and cosm ...	8%
Dining out & ente ...	-6%
Household goods (...	25%
Packaged foods	20%
Sporting goods	2%

PESSIMISTIC: CHANGE IN 3 MONTH BUDGET VS LAST YEAR

Category	%
Luxury items (e.g ...	-11%
Clothing & fashion	7%
Electronic devices	5%
Travel	-22%
Alcoholic beverages	3%
Skincare and cosm ...	4%
Dining out & ente ...	1%
Household goods (...	22%
Packaged foods	7%
Sporting goods	-2%

OPTIMISTIC: HOW LIKELY TO USE ONLINE SHOPPING PORTALS

Category	Value
Luxury items (e.g ...	2.77
Clothing & fashion	3.31
Electronic devices	3.41
Travel	3.25
Alcoholic beverages	2.99
Skincare and cosm ...	3.17
Dining out (food ...	2.98
Household goods (...	3.54
Packaged foods	3.51
Sporting goods	3.58

BASE: HOW LIKELY TO USE ONLINE SHOPPING PORTALS

Category	Value
Luxury items (e.g ...	2
Clothing & fashion	2.4
Electronic devices	3.49
Travel	2.45
Alcoholic beverages	3.05
Skincare and cosm ...	3.13
Dining out (food ...	2.48
Household goods (...	3.52
Packaged foods	3.48
Sporting goods	3.07

PESSIMISTIC: HOW LIKELY TO USE ONLINE SHOPPING PORTALS

Category	Value
Luxury items (e.g ...	3
Clothing & fashion	2.73
Electronic devices	3.11
Travel	2.73
Alcoholic beverages	2.86
Skincare and cosm ...	3.07
Dining out (food ...	2.72
Household goods (...	3.25
Packaged foods	2.98
Sporting goods	3.25

Thanks

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