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# Social Media Update

The 4<sup>th</sup> Asia Pacific Pharmaceutical compliance conference

Advisory

Strictly Private and Confidential

2014

# PwC China Discussion



# Emerging trends are changing the nature of "information driven" business opportunities

#### **Emerging Trends**

# Picking Up the Signals

 Advances in sensing & monitoring people, entities, events and objects

## Information Synthesis

• Emerging methods to collect, organize, structure and search massive amounts of data

# Analytics & Decision Making

 Alternative modeling techniques to gain new insights

### Presentation & Visualization

 Improving usability through advances in visualization and simplification techniques

#### **Business Opportunities**

Change Growth Trajectory

Increase Margin Potential

Differentiate Customer Experience

Manage Risk / Return

Build a Learning Organization

# China is one of the most mobile centric and digitally engaged populations in the world...



#### Mobile is the primary source for internet access...

**73**%

China has over 600m+ mobile internet users and 73% of all internet users describe it as their primary source for accessing the web

..and Digital — especially social — has a bigger impact on Chinese consumers than any other nation in world

95%

of Chinese consumers trust brands who have a microblog

87%

of Chinese social media users have friended or followed brands

**68**%

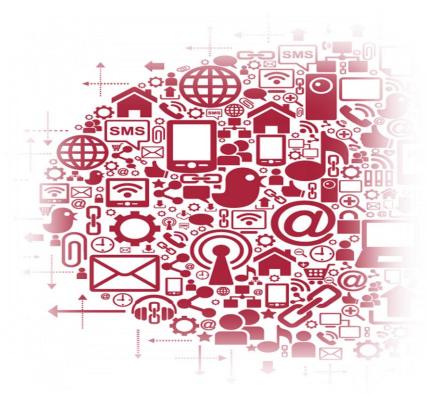
of Chinese consumers write reviews about the product they buy online

# Digital channels are growing rapidly in China and creating new opportunities for businesses to engage with consumers and apply analytics to optimize its commercial activities

**¥167bn** 2013 worth of products and services sold on mobile in 2013. By 2020 China's digital universe will **¥1.3tn** in mPayments in 2013, growing at 60% CAGR... be **9,000 Exabytes**, but <30% will fiercely competitive market be useful for business decision disrupting the antiquated mainland banking model making Bia data **mPayments ¥9.9tn** *GMV*) in 2013 with 477m M2M modules 2017, Internet of making smart devices out China set to overtake the US *eCommerce* things of currently "dumb" objects as the largest eCommerce Digital mega market with 12 months trends in China **81%** of internet access **¥26bn** mobile advertising over mobile, making it the market forecast in 2017, the primary channel to fastest growing segment in connect with the internet all advertising Smartphone Privacu usaae 416m smartphone users in **58%** of Chinese consumers 2013, more than the entire willing to share their personal **600m**+ social media population of the US data in return for benefit users – proactively

*engaging with brands* 

With 9,000+ exabytes of useful data available in China by 2020 it is tempting to believe that insight will scale at the same rate ...



#### ...but they wont

there is a finite amount of insight and by definition this can't scale at the same rate as data growth

The key to uncovering genuine insight is therefore to separate the "signal" — causation, from the "noise" — correlation

Smart Data not "Big Data" will underpin profitable growth in the digital age in China Big Decisions NOT just Big Data

# The next evolution of analytics will leverage complexity science and behavioral economics

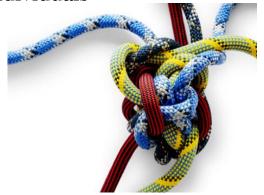
#### Traditional Analytics

A top down approach that leverages past data to predict the future



#### **Complexity Science**

A bottoms up approach that models the behaviors of a population of individuals



**IMPLICATION** 

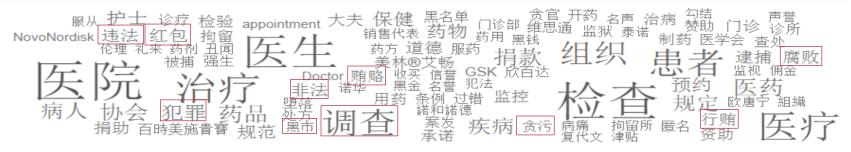
Modeling individual behavior against macro-economic drivers will lead to better decisions, products and profitability – From Descriptive to Predictive Analytics

# Social insights into pharmaceutical industry

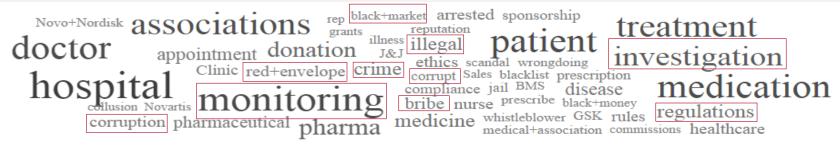
#### Frequently used words and phrases

Content on social media is dominated by comments about key players in the industry while wrongdoing-related terms are also brought to light

#### Original Chinese character word cloud



#### **English translation**

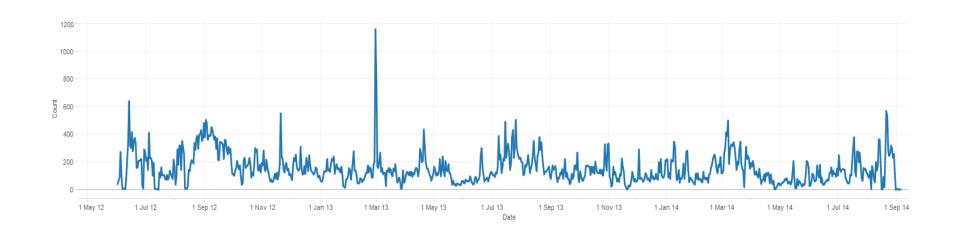


#### Wrongdoing-related volume of posts

The peaks and fluctuations in the volume mirror the Chinese netizens' concern and engagement of breaking news about pharmaceutical industry.....

Volume trends of wrongdoing-related content on social media sites by China/HK residents

*Time period: 1 June 2012 – 5 September 2014* 

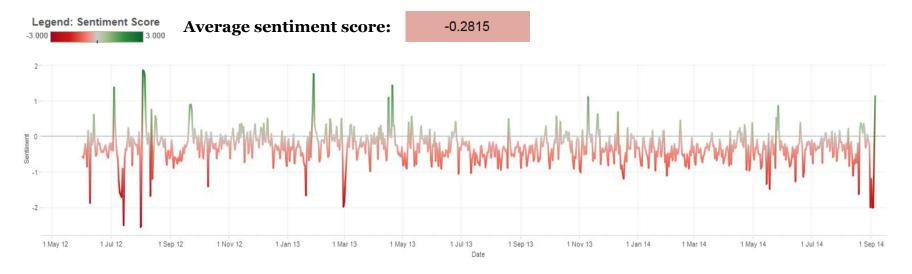


#### Sentiment analysis for pharmaceutical industry

Meanwhile, the sentiment score reflects their attitudes towards and stances on these news

#### Social media comments on pharmaceutical are generally negative

Sentiment key: 3 Strongly positive, 1.5 Positive, 0 Neutral, -1.5 Negative, -3 Strongly negative



<sup>\*</sup>Colour Spectrum measures collective sentiments; Red represents 'Negative', Green represents 'Positive' and Grey represents 'Neutral' ;the darker the colour, the stronger the sentiments concerned.

#### What do netizens talk about in the social media space?

#### Key comments: Original Chinese posts

"转发微博@健康界网站:【外媒:别让医生为制药公司工作】[公司A]\*决定 停止付费让医生向其他医生推荐其药品,并不再将销售代表的奖金与医生开药 数量挂钩。此举是业内首次打击丑闻,并为其他药企整改销售手段树立了榜 样。"

"[公司B]在药品进口前通过转移定价,增高药品报关价,在中国以高于国外 几倍的价格销售,获巨额利润支撑贿赂资金,然后以贿赂开道,提高药品销 量。"

"[药品 A]不是第一次因为这个出事了,其实完全都是经过检验的处方药,配 比实在有些太随意了。。。"

> "但我想说的是:不管娃娃有无基础疾病,这些症状都可高度怀疑与[药品B] 有关,同时这个事情触犯法律,即便0损害 也必须追责到底。"

#### Key comments: English translations

"Reposted by @HEALTHCARE:[FINANCIALNEWS:] [Company A] \*will stop paying doctors for promoting its drugs and scrap prescription targets for its marketing staff - a first for an industry battling scandals over its sales practices, and a challenge for its peers to follow suit."

"To increase the customs value of the drugs, [Company B] changed the original drug prices before imported them into China. Consequently, the price of these drugs sold to China is several times higher than that in other countries. Through this sales practices, the company gained enormous profits that were used for bribery to further increase the sales volume."

"This is hardly the first time that [Medicine A] was exposed to having safety problems. Actually they should have avoided it with all that tested prescription drugs, but they still screwed it up by wrong proportions in drug formula."

"But what I want to say is that [Medicine B] is a highly suspect cause of these infants' syndromes no matter whether they have underlying diseases or not, and that this breaks the law so the company has to be responsible for it."

<sup>\*</sup> Company name and medicine name are not disclose due to privacy purpose

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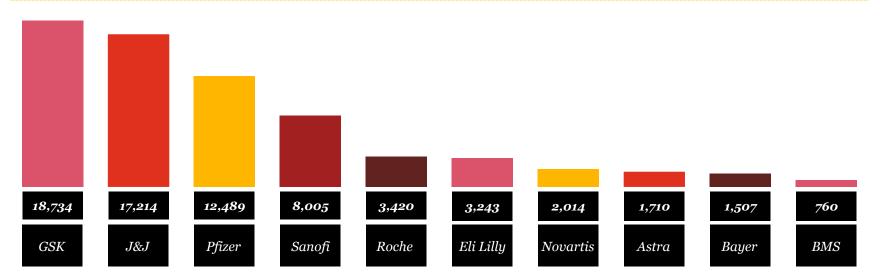
# Detailed findings from social listening

#### Comparative listening cross brands

Our social listening analysis identified emerging risks, understand customer experience, and gain competitive intelligence

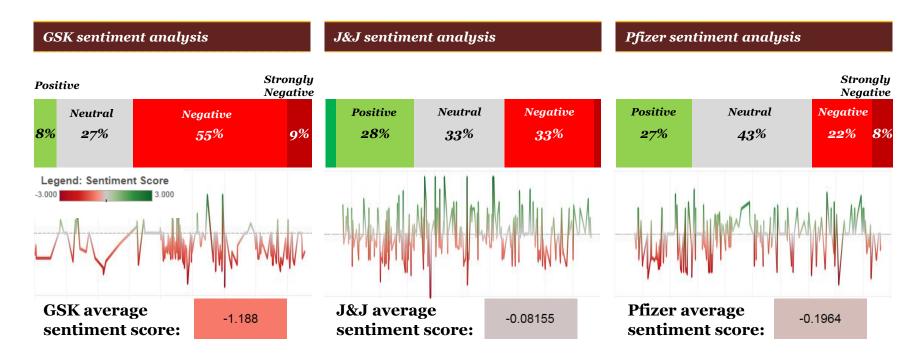
#### GSK, J&J and Pfizer draw most attention in Chinese social media

# Number of compliance-related mentions over the last 24 months



#### Top brand temperature check

Our analysis revealed that GSK received most comments while J&J and Pfizer enjoy a comparatively positive reputation



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# How this works

Our approach to social insight combines proprietary models and analytics with sector specific context, taxonomies and metrics

- Full range of social insight: from broad scope to specific detail
- Comprehensive geographical coverage: area specific targeting
- Flexible time frame selection
- Multiple language support
- Wide range of social media platforms: Weibo, Twitter, Facebook and select forums



**Select "Not Words"**Identify words that can generate irrelevant

generate n

#### Define Structure



Understand the business requirement and define the categories to be studied

Select "Keywords"
For each topic, choose the keywords that can capture the desired posts

# We use complexity science to generate insights from social listening to make business impact across the entire organisation



### Customer service Social outreach



#### Sales

*Identify influences* 



#### Marketing

Improve sentiment



#### M&A

Reach and understand



#### R&D

*Improve products* 



#### Public relations

Mitigate risks

- Better customer support and response rate
- Track sentiment and issues
- Work directly with them
- Understand hot topics
- Understand needs of existing customers
- Improve awareness
- Improve brand health
- Refine public perception of a brand or product
- Discover social landscape
- · Identify common terminology
- Incorporate feedback into products
- Improve product development lifecycle
- Address issues to minimise negative affects
- Understand sentiment of announcements



#### Thank you.

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