



Internet and Tech in 2016: Put On Your Hard Hats



Richard Kramer, Analyst
Arete Research Services LLP
+44 (0)20 7959 1300

For Reg. AC certification and important disclosures, see the last page of this report.

Left top investment bank as #1 ranked analyst
Founded Arete in early 2000 on three principles:



Exclusivity Integrity

- ➔ 30+ staff help top 100 investors understand what they buy/sell.

- ➔ No conflicts of interest
- ➔ We take no money from companies!



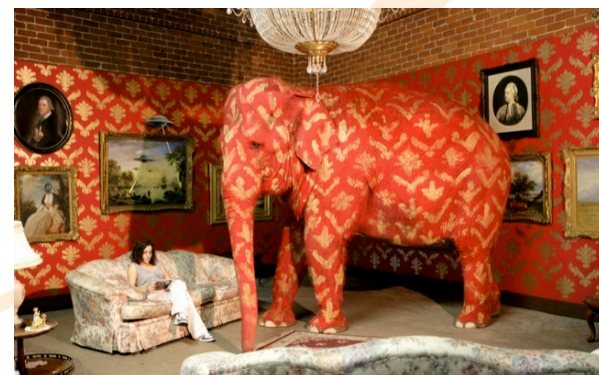
Excellence

- ➔ Analysts w/ industry + markets experience; we see 200+ cos/mo.

Global

- ➔ Look at ALL tech HW, SW, telco/cable, Internet, etc.

Unlike banks or industry analysts,
free to tell the truth

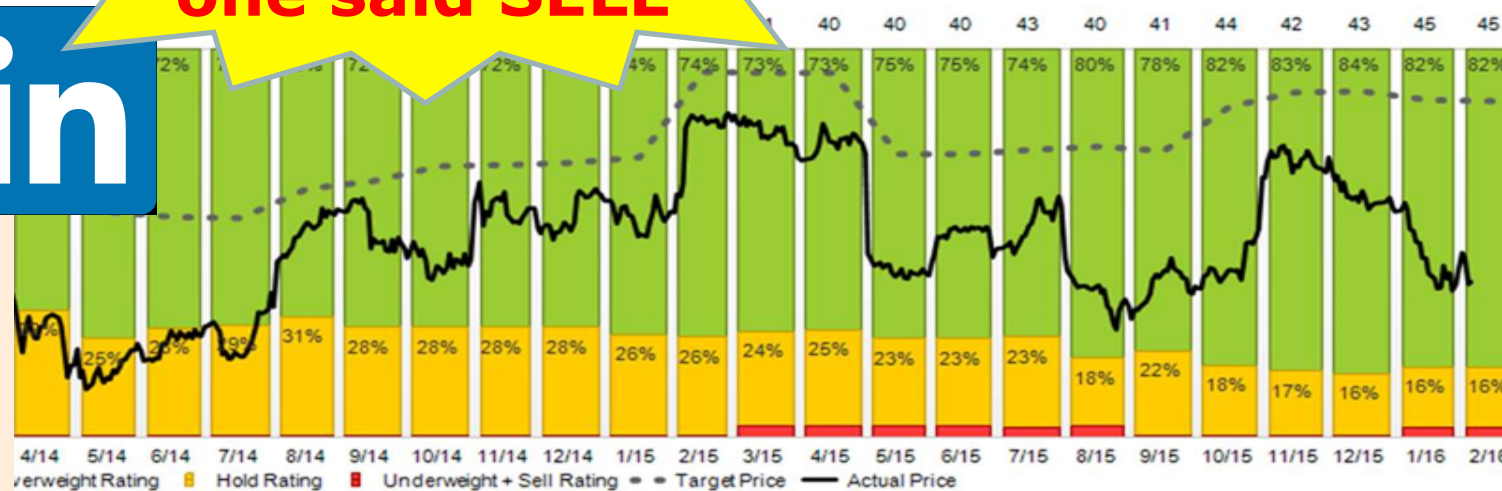


Let's Be Honest...



Out of 45 analysts, only one said SELL

Stock fell 62% in 12 months



Stock fell 40% in one day



Investors: Beware Banking Cheerleaders!

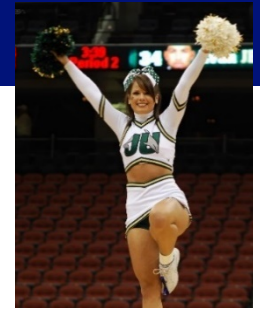
Unprofitable IPOs

The percentage of IPOs with negative

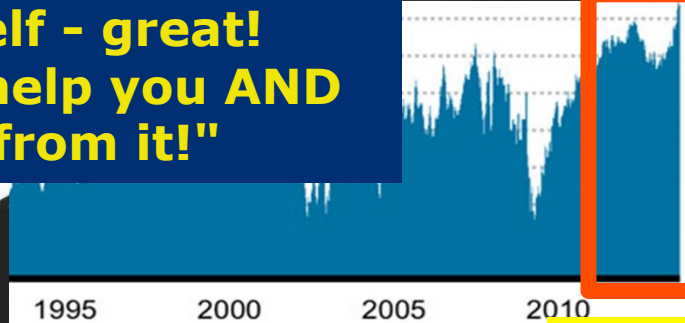
"If you want to kill yourself - great! We'll help you AND profit from it!"



150!



Levitas disagreed. Contacted by The Chronicle, she said her data, which tracked social media use on smartphones, could not be used to back up the 150 times-a-day statistic in any reasonable way. She also said her data had been public since March, so anyone could have used it in a presentation.



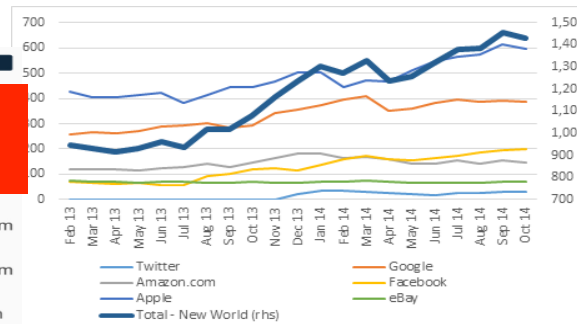
Source: SentimenTrade

Morgan Stanley sees 'iWatch' ringing up \$17.5B from iPhone users in first year

"New Tech" adds ~\$500bn in market cap in the last 18mos.

VCs fan the flames

Start-up Funding Points to New Tech Bubble



Still \$400bn of cash burning holes in pockets of tech balance sheets, very hard to put to use...

Make no mistake, Bubbles are Bursting!

Bubble? Just Out-Gunned...

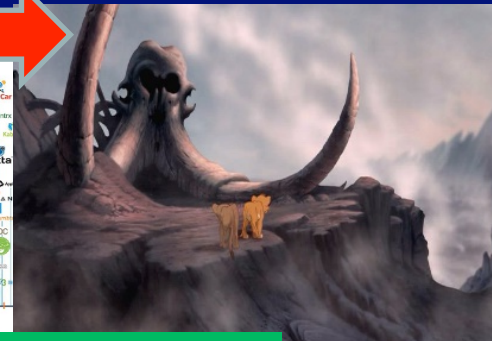
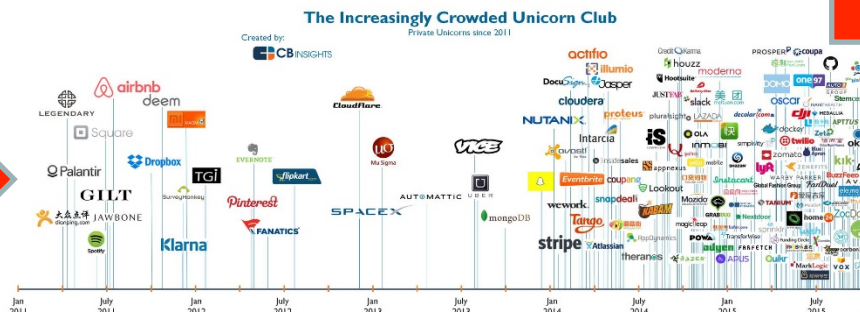


Table 1: R&D (ex-stock comp)

	2014	2015	Abs.	%	Sales Incr.
Google	7,632	9,271	1,639	21%	13%
Amazon	8,470	11,018	2,548	30%	20%
Facebook	1,338	2,539	1,201	90%	41%
Apple*	5,305	6,888	1,583	30%	18%

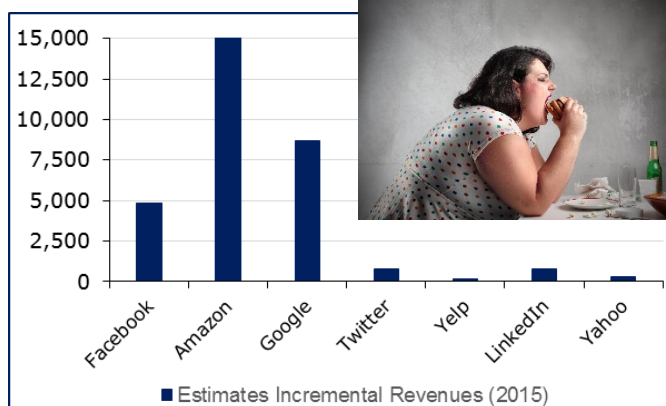
This reflects market "power"



R&D Spend of Ad Tech/Internet Firms

Company	R&D Spend	as a % of ex-Sales Comp FY14 sales
Brightcove	27	21%
ComScore	56	17%
Criteo	56	6%
LinkedIn	381	17%
Marin Software	25	25%
Rocket Fuel	35	9%
Rubicon Project	20	16%
Sizmek	12	7%
Tremor Video	16	10%
Trip Advisor	144	12%
TubeMogul	21	18%
Yelp	50	13%
YuMe	5	3%

Four giants invested \$7.0bn incremental R&D in 2015
... 18 listed ad-tech firms have a combined market cap of \$5.4bn (CRTO is 36% of that, SCOR is 31%)



The bubble was in Funding, not audience/time spent



David vs. Goliath: Digital Empires

"Open" is a Four-Letter Word...

This is about fishing rights

Fishing (or "phishing") innovations led by hyper-scale Internet players - Devices just enable it...

The Microsoft logo, consisting of the word 'Microsoft' in its signature font.The Amazon logo, featuring the word 'amazon' in a sans-serif font with a curved arrow underneath.

Web brands are giant drag-nets aim to collect oceans of meta-data

The Facebook logo, featuring the word 'facebook' in white lowercase letters on a dark blue rectangular background.

Vampire Squids of the Web

The Google logo, featuring the word 'Google' in its multi-colored, sans-serif font.

Wearables just another type of fishing rod!

No companies want *their* fishing waters "open"! They want to construct digital empires!

Web players see world of 80%+ smartphone use w/ horizontal services, ecosystems, OS, etc.

Benevolent Dictators?What Empires Do



Dealing with Digital Empires

Empires control distribution, "ecosystems," economics...

Make the law...

1

Have cash

\$50bn+
profit
pools

2

Set/collect tolls

3

"Data Donation Agreement"

Most apps aim to drain users of PII/location data.

4

Control what is seen

Mode of interaction, apps, content all shift to **video**, cuts across cultures

Video = #1 growth segment of digital ads

Google

amazon



LEGO

Microsoft

facebook

THE GREAT GAME

You Tube
Broadcast Yourself

NETFLIX



Vine





Digital Empires? or... ...the New Walled Gardens



Google

**\$68bn
Cash**



**\$20bn
Cash**



**\$160bn
Cash**

Baidu 百度

Alibaba.com

Tencent

**\$30bn
Cash**

**\$80bn sales
15%+
growth**

**\$20bn sales
40%+
growth**

**\$234bn sales
+27% growth
in FY15!**

**\$40bn sales
+20-40%
growth**

Content distribution channels, ecosystems, messaging...

Increasing reach into e-commerce, "curated content"



Plenty of "hooks": deep links, E2E encryption "going dark," joint "initiatives" (MVNO)

Dividing up world in overlapping split of users, ecosystem reach

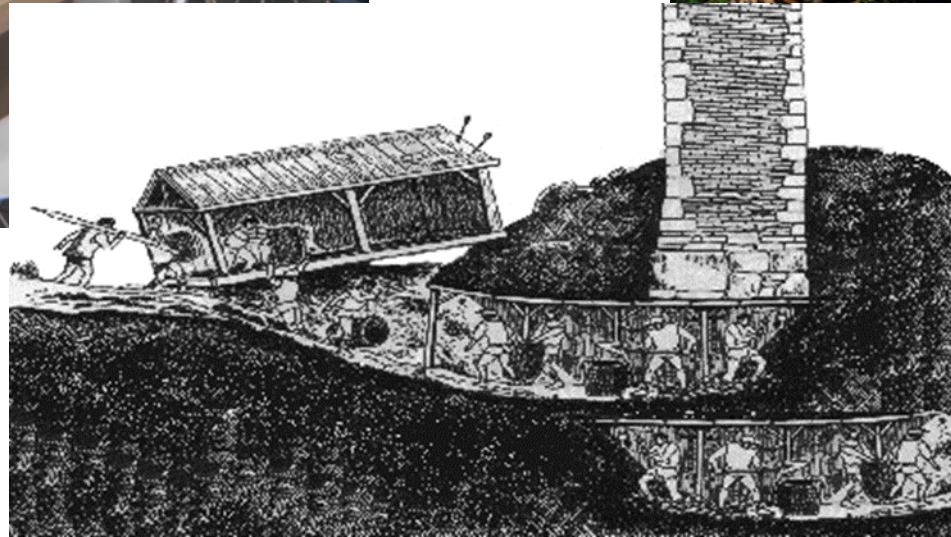


(in thousands)

	2014	2013
Payments to social & mobile platform providers	\$ 684,804	\$ 563,853
Marketing and advertising	422,140	362,478
Employee benefits expense (note 8)	298,521	152,457
Office, data center and related services	32,158	16,168
Operating lease payments	11,238	4,420
Depreciation of property, plant and equipment (note 15)	9,580	4,189
Amortization of intangibles (note 14)	5,265	2,174
Commissions paid to advertising partners & agencies	-	3,255
Payments to online partners & service providers	2,798	2,236
Other expenses	67,817	56,195
Total costs and expenses	\$ 1,534,321	\$ 1,167,425

**Platform Power =
King Digital spent
\$685m on Apps
Installs/Rev Share
w/ FB, GOOG,
AAPL in '14**



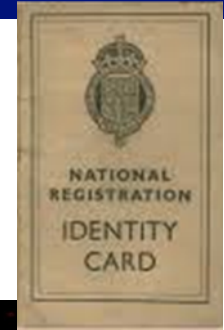


Every Empire Has its Failings

Uneasy Industry Issues



**Authentication/
identity across
platforms....**



**More awareness of digital
surveillance invites regulatory
scrutiny (FTC, EU)**

**Faustian
bargains on
personal data**



**Blocking is Hard... ..
but it's Happening**



Customers/audience are telling you something!



**Mobile = \$30bn ad
market in US in '15!**



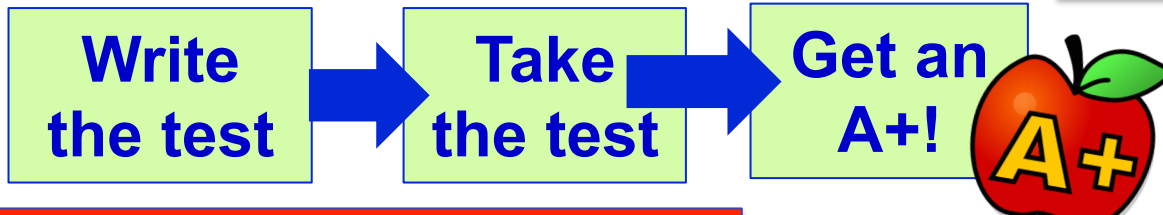
**Anti-Google
Alliance – In U.S.,
trying to create
alternative in
search/display ads.**

**Everyone sees three risks of duopoly
even if AMP/Instant Articles is seductive**

More Uneasy Industry Issues

- Ad agencies amusingly huffing over “viewability, “bots” traffic quality
- Most are living off arbitrage or mark-ups on ad spend

Attribution...or Cheating?



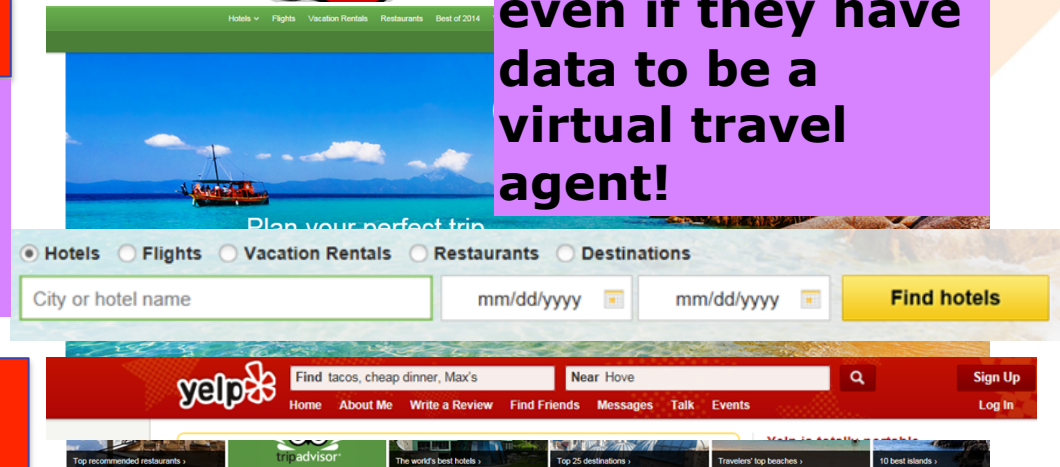
Making Money vs. Helping Users

TRIP financially addicted to referral fees, even if they have data to be a virtual travel agent!

Freshness Counts



How many apps need a refresh?
Usage killed by poor UX.



Last boat to Alcatraz?

- “Closing the loop” in commerce, paid listings is hard!



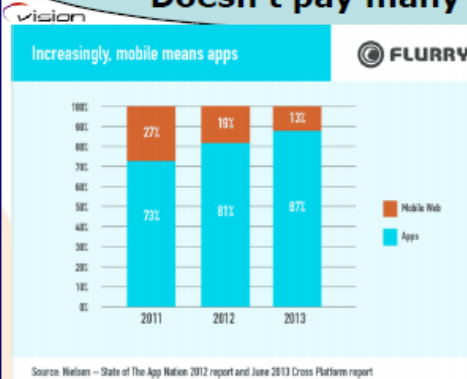
Where Are The Developers Yachts?



Most of the UX in apps is AWFUL. Much of it designed to fool the user into revealing PII/location data.

~\$5K/month = \$60K p.a.
Doesn't pay many bills!

If apps were a scale business, you'd see more IPOs than gaming cos. + and the rare platform (Twitter).



Apps = Content
A few "aggregators" + local/specialist ones

Apps = Utilities
Move "self-service" costs from co. to consumer.



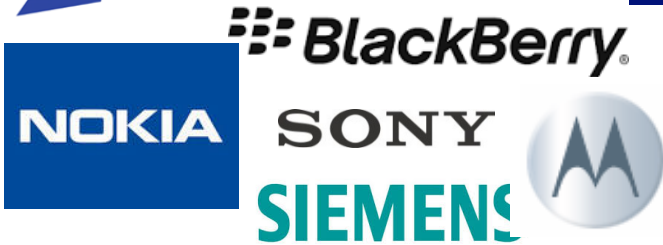
➤ **AppStores = Multi-channel distribution**

Except for pricey trade sales!



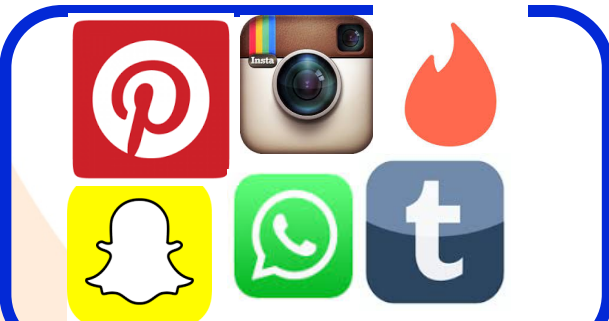
Forget Apple's \$16bn paid out to developers in the "app economy"

Logos Needs To Learn



Leading mobile phone vendors had collective \$500bn market value

Internet world lacks "management universities"



Competing for time spent....



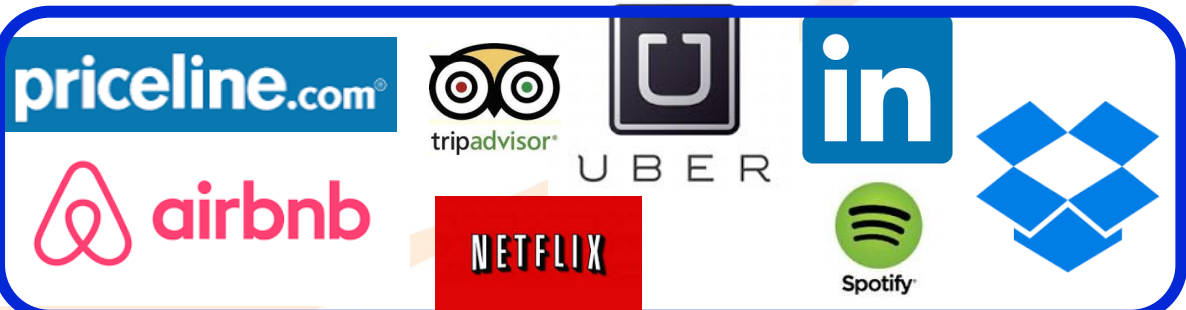
Management matters... often taken for granted



Empires are deeply dysfunctional

Spending money doesn't help (e.g. MSFT \$9bn R&D budget)

Very different issues for "vertical" apps and utilities... classifieds is one case!

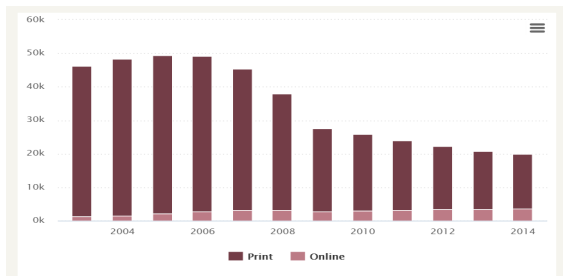




Digital Marketing Snake Oil or Science?

Let's Be Honest (2)

**I don't know much about classifieds....
~\$3-4bn in US, ~\$15-17bn worldwide**



We see newspaper revenue plunge

There is a lazy or easy conclusion...



Smart global brands out-gun local ones

We see local Internet services flounder



**We see crazy land-grab multiples getting paid...
\$850m for 30% Avito**



We're sceptical of the Luxor "winner takes all" investment thesis...



**...and of consolidated multi-company JVs/
cross-holdings**



...Let's Be Honest (3)

Schibsted

- \$700m, +19%
- 20-35% Margins



So, this sector could be displaced, or evolve into a set of apps



eBay

- \$700m+, +17%
- 30-40% Margins



Naspers

- \$200m+, +40%
- ?? Margins



58.com

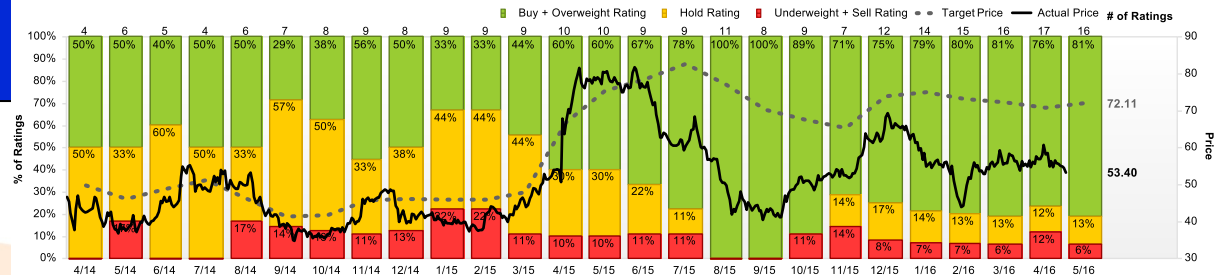
- \$700m+, +100%
- -35% Margins



Or maybe conventional wisdom is wrong ...

- Local brands, peculiarities matter more...
- Margins are sustainable
- Its been more innovation than just financial engineering....

We've taken a view that China is different... but not like some think!



What Did He Say?

Don't trust any financial market commentary.
Conflicts abound.

Deal with the reality of digital empires. **No Digital Empire wants open anything.**
Empires are dysfunctional, vulnerable.

Mobile device = personal video viewer;
low-cost s'phones = global reach for content, services.

A very difficult year in markets...death of many unicorns. **Tech hardware remains in Crisis!**

Super dynamic period in tech. – Land-grab
behaviour still backed by seemingly limitless
capital.

richard.Kramer@arete.net



Regulation AC - The research analyst(s) whose name(s) appear(s) on the front cover of this presentation certify that: all of the views expressed in this report accurately reflect their personal views about the subject company or companies and its or their securities, and that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report

Primary Analyst(s) Coverage Group:

Potential Conflicts:

Rating System: Long (L), Positive (+ve), Neutral (N), Negative (-ve), and Short (S) - Analysts recommend stocks as Long or Short for inclusion in Arete Best Ideas, a monthly publication consisting of the firm's highest conviction recommendations. Being assigned a Long or Short rating is determined by a stock's absolute return potential, related investment risks and other factors which may include share liquidity, debt refinancing, estimate risk, economic outlook of principal countries of operation, or other company or industry considerations. Any stock not assigned a Long or Short rating for inclusion in Arete Best Ideas may be rated Positive or Negative indicating a directional preference relative to the absolute return potential of the analyst's coverage group. Any stock not assigned a Long, Short, Positive or Negative rating is deemed to be Neutral. A stock's absolute return potential represents the difference between the current stock price and the target price over a period as defined by the analyst.

Distribution of Ratings - As of 31 March 2016, 17.6% of stocks covered were rated Long, 33.3% Positive, 8.3% Short, 29.7% Negative and 11.1% deemed Neutral. .

Global Research Disclosures - This globally branded report has been prepared by analysts associated with Arete Research Services LLP ("Arete LLP"), Arete Research, LLC ("Arete LLC"), and Arete Research Asia Ltd. ("Arete Asia"), as indicated on the cover page hereof. This report has been approved for publication and is distributed in the United Kingdom and Europe by Arete LLP (Registered Number: OC303210, Registered Office: 26 Red Lion Square, London WC1R 4AG), which is authorized and regulated by the UK Financial Conduct Authority ("FCA"); in North America by Arete LLC (15 Broad St, Boston, MA 02109), a wholly owned subsidiary of Arete LLP, registered as a broker-dealer with the Financial Industry Regulatory Authority ("FINRA"); and in Asia by Arete Asia (CE No. ATS894, Registered Office: Suite 5A, Abdoolally House, 20 Stanley Street, Central, Hong Kong), which is authorized and regulated by the Securities and Futures Commission in Hong Kong. Additional information is available upon request. Reports are prepared using sources believed to be wholly reliable and accurate but which cannot be warranted as to accuracy or completeness. Opinions held are subject to change without prior notice. No Arete director, employee or representative accepts liability for any loss arising from the use of any advice provided. Please see www.arete.net for details of any interests held by Arete representatives in securities discussed and for our conflicts of interest policy.

U.S. Disclosures - Arete provides investment research and related services to institutional clients around the world. Arete receives no compensation from, and purchases no equity securities in, the companies its analysts cover, conducts no investment banking, market-making or proprietary trading, derives no compensation from these activities and will not engage in these activities or receive compensation for these activities in the future. Arete restricts the distribution of its investment research and related services to approved institutions only. Analysts associated with Arete LLP and Arete Asia are not registered as research analysts with FINRA. Additionally, these analysts may not be associated persons of Arete LLC and therefore may not be subject to Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Singapore Disclosures - This document is distributed in Singapore only to institutional investors (as defined under Singapore's Financial Advisers Regulations ("FAR")) in reliance on Regulation 27(1)(e) of the FAR read in conjunction with Section 23(1)(f) of the Financial Advisers Act, Chapter 110 of Singapore. This document does not provide individually tailored investment advice. Subject to the foregoing, the contents in this document have been prepared and are intended for general circulation. The contents in this document do not take into account the specific investment objectives, financial situation or particular needs of any particular person. The securities and/or instruments discussed in this document may not be suitable for all investors. You should independently evaluate particular investments and strategies and seek advice from a financial adviser regarding the suitability of such securities and/or instruments, taking into account your specific investment objectives, financial situation and particular needs, before making a commitment to purchase any securities and/or instruments. This is because the appropriateness of a particular security, instrument, investment or strategy will depend on your individual circumstances and investment objectives, financial situation and particular needs. The securities, investments, instruments or strategies discussed in this document may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. This document is not an offer to buy or sell or the solicitation of an offer to buy or sell any security and/or instrument or to participate in any particular trading strategy. This document may not be reproduced or provided to any person in Singapore without the prior written permission. The use or reliance on any information in this document is at your own risk and any losses which may be suffered as a result of you entering into any investment are for your account and Arete Research Services LLP and its affiliates shall not be liable for any losses arising from or incurred by you in connection therewith. You will conduct your own evaluation and consult with your own legal, business and tax advisors to determine the appropriateness and consequences of any investment and you will make any investment pursuant to an independent evaluation and analysis of the consequences of the same in reliance only upon your own judgment and not in reliance upon this document and/or any views, representations (whether written or oral), advice, recommendation, opinion, report, analysis, materials, information or other statement by Arete Research Services LLP or any of its affiliates, agents, nominees, directors, officers or employees. Arete Research Services LLP and its affiliates do not hold out any of its affiliates, agents, nominees, directors, officers or employees as having any authority to advise you, and Arete Research Services LLP and its affiliates do not purport to advise you on any investment. You will evaluate and accept all of the risks associated with an investment in any investment. Accordingly, Arete Research Services LLP and its affiliates are entitled to rely on your own independent evaluation and analysis. Any investment will be made at your sole risk and Arete Research Services LLP and its affiliates are not and shall not, in any manner, be liable or responsible for the consequences of any investment.

Section 28(e) Safe Harbor - Arete LLC has entered into commission sharing agreements with a number of broker-dealers pursuant to which Arete LLC is involved in "effecting" trades on behalf of its clients by agreeing with the other broker-dealer that Arete LLC will monitor and respond to customer comments concerning the trading process, which is one of the four minimum functions listed by the Securities and Exchange Commission in its latest guidance on client commission practices under Section 28(e). Arete LLC encourages its clients to contact Anthony W. Graziano, III (+1 617 357 4800 or anthony.graziano@arete.net) with any comments or concerns they may have concerning the trading process.

Asian Disclosures - The contents of this document have not been reviewed by any regulatory authority in Asia. You are advised to exercise caution and if you are in doubt about any of the contents of this document, you should obtain independent professional advice. Whilst considerable care has been taken to ensure the information contained within this document is accurate and up-to-date, no warranty is given as to the accuracy or completeness of any information and no liability is accepted for any errors or omissions in such information or any action taken on the basis of this information. The information may not be current and Arete Asia has no obligation to provide any updates or changes.

General Disclosures - This research is not an offer to sell or the solicitation of an offer to buy any security or in any particular trading strategy in any jurisdiction. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or need of the individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice. The price and value of the investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain instruments. As with all investments, there are inherent risks that each individual should address.

© 2016. All rights reserved. No part of this report may be reproduced or distributed in any manner without Arete's written permission. Arete specifically prohibits the re-distribution of this report and accepts no liability for the actions of third parties in this respect. This report is not for public distribution.