

Global TMT Weekly

1ST JUNE 2018

GLOBAL TMT WEEKLY



SALES

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SUMMARY

This week has seen much focus on macro concerns and the ongoing uncertainties of the U.S. trade tensions. The micro has been significantly quieter, not helped by a shortened week in both the U.K. and U.S. Ahead of E3 conference for the video game industry next week many stocks in the industry acted well at the end of May and we reflect on the performance of our eGaming basket. We take a look, through the work and help of our strategy team, at the valuation of European equities relative to the U.S. and are reminder of the great earnings momentum for **Logitech** and the awful trends at **Swisscom**. We continue to count the ways that China is moving up the IP curve and highlight how the risk of **Apple** internalising components has come earlier than expected for **Dialog**. At the stock level we have updates on **Ubisoft**, **DISH**, **Facebook**, **Nintendo**, **Zynga**, and **salesforce.com**.

EGAMING: OUTPERFORMANCE AHEAD OF E3

With E3 just a week away we will be sending out an updated eGaming primer and E3 preview note in the next couple of days. The eGaming basket continues to generate alpha and had a good end to May. **Year to date the eGaming basket has returned +18% through the end of May. This compares to a return of the MSCI World Index of 1% and the Video Game Tech ETF return of 10%. If, hypothetically, the eGaming basket had been running for a last year the 12 month returns of the basket would have been 60%. This is double the return of the Video Game Tech ETF +30% and 6x the performance of the MSCI World Index.**



END OF MONTH. FIRST XI V WORST XI PERFORMANCE UPDATE

A quick look at performance for our global TMT top picks where we select our Alpha ideas on both the long and short side. We will be screening to see if any changes are necessary through June although the current state of play has played out well so far. The general style on the long side has reflected our top alpha ideas in eGaming, beneficiaries of GDPR implementation, value based MOAT and some specific stock picks. On the short sides stocks are mainly exposed to the OLED complex, old media, overpriced semiconductors and some specific stock picks. As a year to date proxy through 1st of June the 'long basket' is +27% and the 'short basket' is -9.3%.



AMAZON: DID YOU KNOW?

US internet consumers begin their search for products on Amazon more than on search engines. Incredible.



STAND OUTS FROM THE KLEINER PERKINS TREND REPORT

The annual release of Kleiner Perkins internet and digital trends report, all 294 slides of it, has some fascinating insights. A couple of things really stand out – such as how quickly China has risen to become a formidable global force, Amazon’s scale is frightening (for many others), and digital/mobile based transactions are accelerating. Examples include how 60% of payments are done digitally, six hours a day are spent on a mobile (but mobile device volume growth is now basically zero), eCommerce hit 20% of China retail (and fastest growing in the world), US it is at 13%. Amazon R&D & Capex +45% YoY (Apple just 5%) and more than any other company and eCommerce sales growth and share is accelerating.

A Few highlights:

- **Internet adoption:** As of 2018, half the world population, or about 3.6 billion people, will be on the internet. That’s thanks in large part to cheaper Android phones and Wi-Fi becoming more available, though individual services will have a tougher time adding new users as the web hits saturation.
- **Mobile usage:** While smartphone shipments are flat and internet user growth is slowing, U.S. adults are spending more time online thanks to mobile, clocking 5.9 hours per day in 2017 versus 5.6 hours in 2016.
- **Mobile ads:** People are shifting their time to mobile faster than ad dollars are following, creating a \$7 billion mobile ad opportunity, though platforms are increasingly responsible for providing safe content to host those ads.
- **Crypto:** Interest in cryptocurrency is exploding as Coinbase’s user count has nearly quadrupled since January 2017

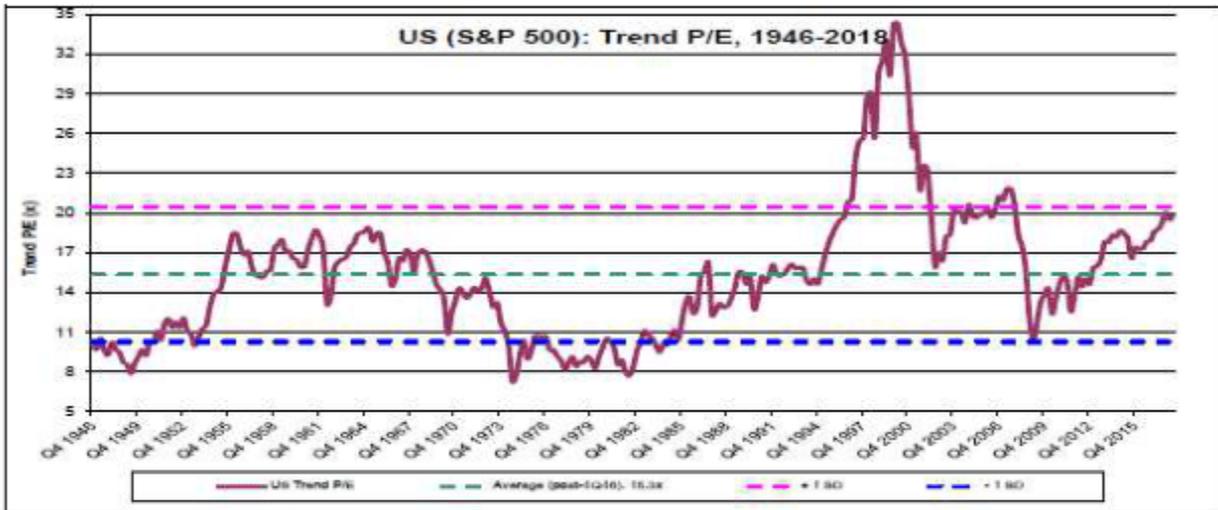
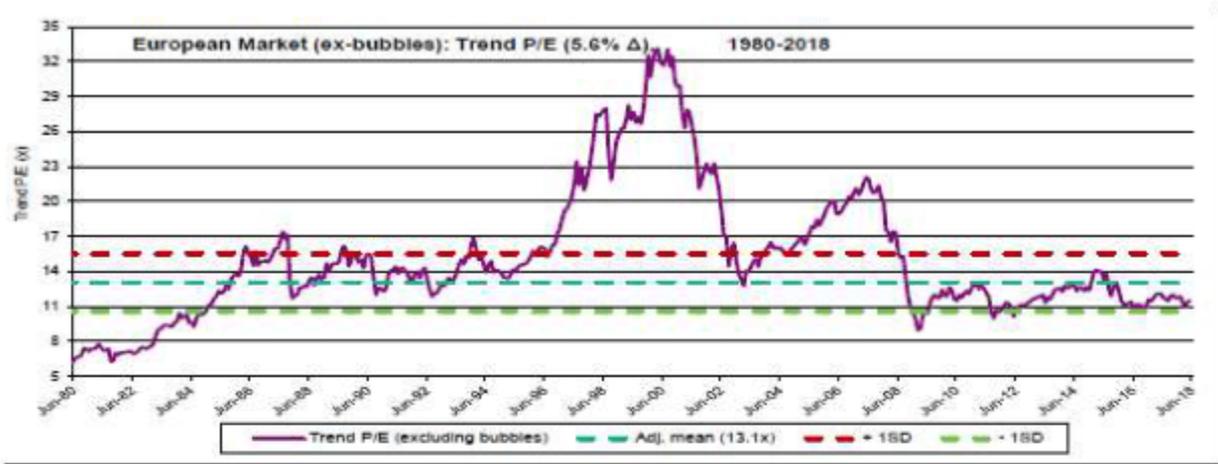
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- **Voice:** Voice technology is at an inflection point due to speech recognition hitting 95% accuracy and the sales explosion for Amazon Echo which went from over 10 million to over 30 million sold in total by the end of 2017.
- **Subscription services:** They're seeing massive adoption, with Netflix up 25%, The New York Times up 43%, and Spotify up 48% year-over-year in 2017. A free tier accelerates conversion rates.
- **Ecommerce vs Brick & Mortar:** Ecommerce growth quickens as now 13% of all retail purchases happen online and parcel shipments are rising swiftly, signalling big opportunities for new shopping apps.
- **Amazon:** More people start product searches on Amazon than search engines now, but Jeff Bezos still relies on other surfaces like Facebook and YouTube to inspire people to want things.
- **Education:** Employees seek retraining and education from YouTube and online courses to keep up with new job requirements and pay off skyrocketing student loan debt.
- **Freelancing:** Employees crave scheduling and work-from-home flexibility, and internet discovery of freelance work led it to grow 3X faster than total workforce growth. The on-demand workforce grew 23% in 2017 driven by Uber, Airbnb, Etsy, Upwork, and Doordash.
- **Transportation:** People are buying fewer cars, keeping them longer, and shifting transportation spend to rideshare, which saw rides double in 2017.
- **Enterprise:** Consumerization of the enterprise through better interfaces is spurring growth for companies like Dropbox and Slack.
- **China:** Alibaba is expanding beyond China with strong gross merchandise volume, though Amazon still rules in revenue.
- **Privacy:** China has a big opportunity as users there are much more willing to trade their personal data for product benefits than U.S. users, and China is claiming more spots on the top 20 internet company list while making big investments in AI.
- **Tech investment:** We're at an all-time high for public and private investment in technology, while the top six public R&D + capex spenders are all technology companies (Amazon #1).

EUROPE V U.S. EQUITIES

At the index level there remains a value disconnect between the US and Europe. The charts below show that while Europe trades at one Standard Deviation below its trend P/E (on 11.5x) the US trades at nearly a one Standard Deviation premium (on 19.8x). This led our Strategy team, through their monthly "Compass Points Product" (let us know if you'd like a copy) to focus on the best and worst combinations of value creation, valuation premiums and relative earnings momentum in Europe. A full detailed analysis of the same is available from our team, just let us know if you want it. Within the TMT arena we would highlight two stocks, one good and one bad. **Logitech** (Buy, eGaming basket) has great relative earnings momentum which remains top quartile and the stock has nearly "all blue bar champion" status. Daniel also highlights that the Value Track screen still highlights 50% three year upside and the Value Layers displays continued widening of EVA margins. (For any discussions of these methodologies or screens do get in touch with Daniel White (Daniel.white@mirabaud.co.uk) for more on this. In contrast to Logitech comes Swisscom. **Swisscom** revisions remain worst in class, and the Trend PE valuation offers some 8% 3Y downside. Swisscom and other bond-like equities have of course been beneficiaries of ultra-low interest rates. Further local market due diligence highlights expensive price and less than stellar customer feedback.

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Logitech R – SF40.5, DY: 1.75%



Swisscom R – SF454.9, DY: 4.8%



APPLE SUPPLY CHAIN: BEWARE THE IDEAS OF DIALOG

The risk for some time to Dialog was that Apple would internally produce PMICs (Power Management Integrated Circuits). Dialog's statement that Apple would dual source for PMICs this year means that either this has come to fruition earlier than expected (2019/20 was common thinking) or that Apple is dual sourcing externally (Maxim or ON Semi perhaps?). But this shift is a shape of things to come. While the stated 5% hit to revenues in 2018 the bigger question is what happens in 2019 and beyond? Design shifts, technology changes and Apple's preference to reduce single vendor risk all point to lower opportunities for Dialog next year. If 2019 saw a shift to a three vendor strategy (one internal, two external) with one per iPhone design then Dialog's business could shrink substantially. **If Dialog managed to secure more sub-PMIC (explained below) but lost 2/3rds of PMIC main design this could see a \$350-\$500M hit revenue run-rate decline.**

Apple is 77% of revenues and all attempts to diversify both customers and products is slow and can't mask the fact that Dialog is heavily reliant on Apple business. Apple moving to dual source this year would probably imply that one of the iPhone configurations would be non-Dialog this year. Last month Dialog had completed designs for 2019 based products and was being taped out to the wafer fabs. These are due to be sampled and validated in the second half of 2018 for next year's products but it would be a natural progression for Apple to shift further away from Dialog. There is also a shift towards sub-PMIC 2019 on smartphones which has begun on the architecture of high end devices. Sub PMICs are required to effectively efficiently lay power blocks on a design closer to the functional blocks of a newer generation smartphone board (audio package, sensor hubs etc.) but their ASP can be as little as 1/10th the ASP of a core PMIC. Even if Dialog was able to get a larger piece of the sub PMIC stack, it wouldn't offset main PMIC share loss (main PMICs ASPs are \$3-\$4, sub-PMIC ASPs are \$0.20-\$0.50).

If this had occurred three years ago it would be likely that the current largest shareholder could be seen as a potential white knight or interested acquirer. After all, it happens to be Tsinghua Unigroup, the China state backed Goliath which is leading the charge to create a semiconductor powerhouse in China. But that is unrealistic today and would never get past CFIUS. **There is valuation support given Dialog has \$480M net cash and a lowly valuation.** But if there is a path to Dialog losing say half of the current revenue base over the next two years then it is difficult to ascertain the floor with so much uncertainty. Taking a midpoint of this wide range would imply a risk of 30% to current consensus revenue estimates for 2019. **Standing still on current (already very low) valuation metrics would imply fair value/floor at around €13/share.**

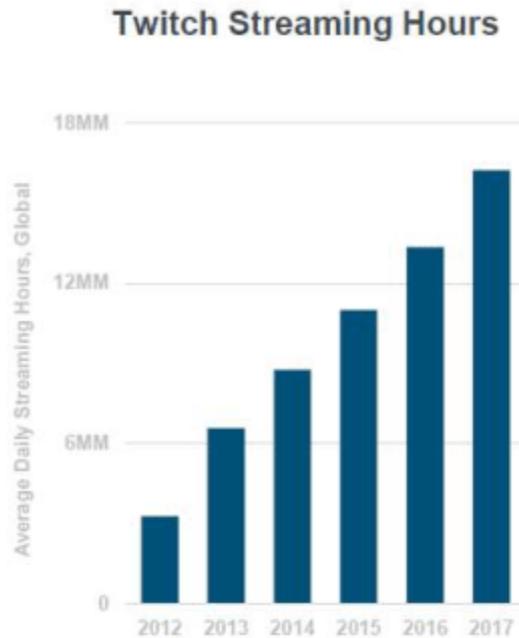
The bigger question here is that Apple needs to control more of the key technology building blocks for sophisticated designs and seeks to find ways to prevent the BOM (Bill of Materials) of the iPhone from spiking higher. Companies such as **Dialog (7x P/E)** and **Cirrus Logic (12x P/E)** have valuations that reflect such a risk with heavy reliance on Apple as a customer. Newer technologies (3D sensing, ToF) may not have the same short term risk, but ultimately the valuations will likely fade as the technologies become more mainstream, competitive advantages of leaders get lessened and Apple exerts pricing power. **AMS trades on 30x 2018 P/E** (with downside risk to the "E") and the huge ramp of volumes, design wins and market share dominance which many expect through the next two to three years may not transpire.

ESPORTS: LIVESTREAMING EXPLODES

Live streamers in the U.S. on sites like Twitch (Amazon owned) are almost as influential as journalists when it comes to influencing purchasing intent (15% vs 16%). PayPal survey shows that **34% of livestream viewers in the U.S. have spent more than \$50 on livestream content in the last three months** (which amounts to more than a Netflix subscription and is similar to what is spent on a full game (\$53.56)). This is before we even get the new **Fortnite**

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eSports competition which will see \$100M in prize money, 4x the size of any eSport before. By comparison the current French Open Tennis Grand Slam has a total prize pool of E39M.



TRADE WARS AND CHINA IP CURVE

Reuters report that the U.S. plan to push ahead with plans to apply a 25% tariff on \$50B of Chinese goods by 15th June, as well as an announcement of investment restrictions and enhanced export controls for Chinese persons and entities that “related to the acquisition of industrially significant technology” by the end of June. It echoes the emergency CFIUS policies considered earlier this year and goes back to the core of the battle over IP. China State press this morning warn that a full-scale trade war would be inevitable if the tariffs proceed. The move would also mean that any previous agreements reached by both sides would be rendered invalid and China would then respond with similar punitive measures. China doesn’t want a trade war, but it seems that it is willing to go into battle and fight if required. Perhaps all this uncertainty explains why Apple has been stockpiling component inventory? After all the same measure grew 170% YoY last quarter and Apple, as the most global of corporations, would be at risk of supply chain shocks.

Meanwhile this week it was reported this week that after three years the province in Hefei has successfully built out one of the fastest growing IC clusters in China; a total of 129 IC companies across foundries, fabless firms and back end companies have set up and created a complete local supply chain. The output value of the Hefei IC industry grew 31% in 2017, and remember this is before the significant tax breaks for the semiconductor industry in China were announced earlier this year.

UBISOFT (BUY): TWO POSITIVES AT THE BEGINNING OF JUNE

This weekend sees Ubisoft’s latest title, *The Crew 2*, move into open beta. Our early tracking of social media suggests it is being well received. The original title, released in 2014, was described as an average, hollow racing game that didn’t trouble rivals Forza or Need for Speed. We were impressed with the gameplay shown last year at E3 and felt the variety of experiences, challenges and types of vehicles (changing from a stunt plane to a speed boat on the fly for example) was a massive improvement. The beta shows a ‘loot system’ where items are awarded after finishing certain races and with them allowing customization of parts and performance (handling, power, speeds) could be

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attractive for gamers who increasingly like 'skins' in their gaming experience. The game is set in an open world environment which is a scaled down version of the United States. It is only in beta today – but the signs are good.

Ubisoft has also confirmed, after a leak, that there is a new Assassin's Creed planned and will be showcased at E3. Assassin's Creed Odyssey is the latest title and the teased clip suggests it will be set in Ancient Greece with the Spartans in a vein similar to the movie 300. Our best guess right now is that the timing of the product could be for the first or second quarter of 2019 (annualised from the Far Cry 5 successful launch this year) which would leave the fall 2018 release window open for Splinter Cell perhaps (more on this in the E3 review we will send out next week)? More will be revealed on Monday 11th June at Ubisoft's press presentation and investor day on June 12th. We will report back from both.

DISH (SELL): NO RESPITE IN SIGHT

Whether it is uncertainty over spectrum/wireless build out, OTT differentiation or structural cable cord cutting Dish remains exposed. Dish's Sling TV has taken three years to amass 2.3M subscribers. This week rival Hulu announced the company had signed up 800k subs within a year of launch which is impressive given the plan costs 2x as much as Sling. The basic plan costs \$40 for 50 live channels versus \$20 for 30 or \$25 for 40 channels at Sling.

Last week co-founder Charlie Ergen outlined plans to spend \$500M-\$1B on a phase one build out of wireless assets which focus on narrowband tech. A second phase would cost \$10B but will wait for standards for 5G. So the hope that Dish would sell the spectrum assets for significant financial gains got another setback and the path if the company is now going to develop their own network, but it is both years behind rivals and probably subscale given the investments suggested.

Dish's partners, Northstar Wireless and SNR Wireless, are waiting on the U.S. Supreme Court to decide if it will take on a case about FCC denials of small-business discounts. The decision is likely in June and Dish funded SNR and Northstar want the Supreme Court to hear the case which challenges the FCC decision that forced the companies to return a \$3.3B small business discount and imposed a \$516M penalty on the basis that Dish controls the companies and therefore the discounts shouldn't apply.

NINTENDO (BUY): POKÉMON, AND MAYBE FORTNITE, CAN ADD TO SWITCH MOMENTUM

We expect more details of games from Nintendo at E3 but this week Nintendo has showcased significant software plans for the key franchise IP of Pokémon on Switch. Pokémon has the potential to be a big driver of Switch take up for two reasons: (1) these are the first RPG (role playing games) for the franchise (2) there is a massive installed base of Pokémon fans which could be drawn in. **Some 227M unit sales on Nintendo's own platforms historically (see chart below) and 300M in total have been sold. And this isn't including the +800M downloads of Pokémon Go game in the first year of launch.**

Sold 'Em All
Global sales of flagship Pokémon videogames on hand-held system



The announcement of Pokémon Quest wasn't expected and is coming on both Switch and smartphones. It will be a new free, non-core NPG, released today on Switch with a mobile version available from June. The RPG format of Pokémon: Let's Go Games will come out in November. "Let's Go, Pikachu!" and "Let's Go, Eevee!" will cost \$60 and users will be able to transfer some of the characters they collect from playing Pokémon Go which still has 65M active MAUs. This will be co-op play emphasis and is aimed at a broader audience. There is also a brand new competitive play RPG Pokémon in development for release in H2 19.

Nintendo's first party switch software continues to impress. Nintendo has four first party Switch games with a Metascore above 90 (out of 100). Super Mario Odyssey and The Legend of Zelda: Breath of the Wild both have a Metascore of 97, with Mario Kart 8 Deluxe and Bayonetta 2 both scoring 92. **As we have often said, through our thematic work on the industry, it is compelling content and engagement which drives the eGaming cycle and in the performance of these titles Nintendo has delivered.**

On Friday, media outlets reported that the extremely popular Fortnite Game was likely coming to Switch. It was spotted that the game was on a ratings application from publisher Epic Games for the Nintendo Switch platform at the Korean Game Rating and Administration Committee, one of the final steps before launch. The very design of the game is for it to be device agnostic and we know that an Android version is in the works to complement the PC, iOS, Xbox and PlayStation formats. With the unique controller gaming experience of the Switch and the portability option this could end up being a goldmine and accelerate adoption, if it were to happen.

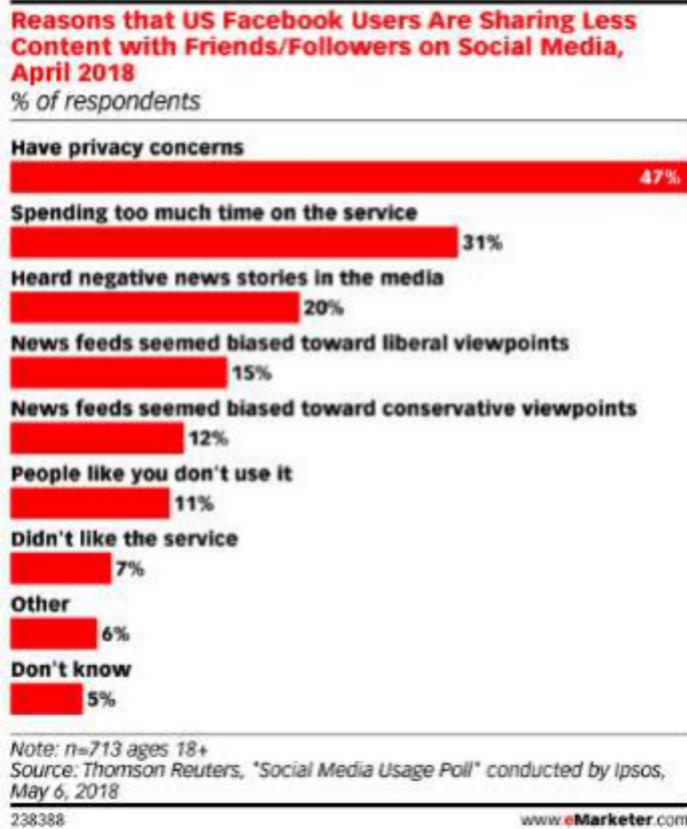
Nintendo's earnings profile remains resilient. The stock continues to enjoy high earnings revisions rankings relative to global equities (Stoxx Global 1800 used in the illustration).



Buy.

FACEBOOK (SELL): HABITS ARE CHANGING. THERE MAY BE TROUBLE AHEAD

A new survey released by eMarketer on Friday shows that for US users who are sharing less with friends and family on the platform it is often because of trust. 47% of such respondents said that the reason was due to privacy concerns. It comes after a Gallup poll last month showed that 43% of Facebook users were very worried about the invasion of privacy. Now this may not manifest into platform behaviour changes **yet** but the first effect could be to see slowing DAU/MAU metrics and lower engagement. In turn, this could lead to marketers questioning the digital ROI of the platform. As we mentioned last week, we see evidence of Twitter attempting to capitalise by introducing a new timeline ad campaign for publishers as the company shifts deeper into programmatic ads.



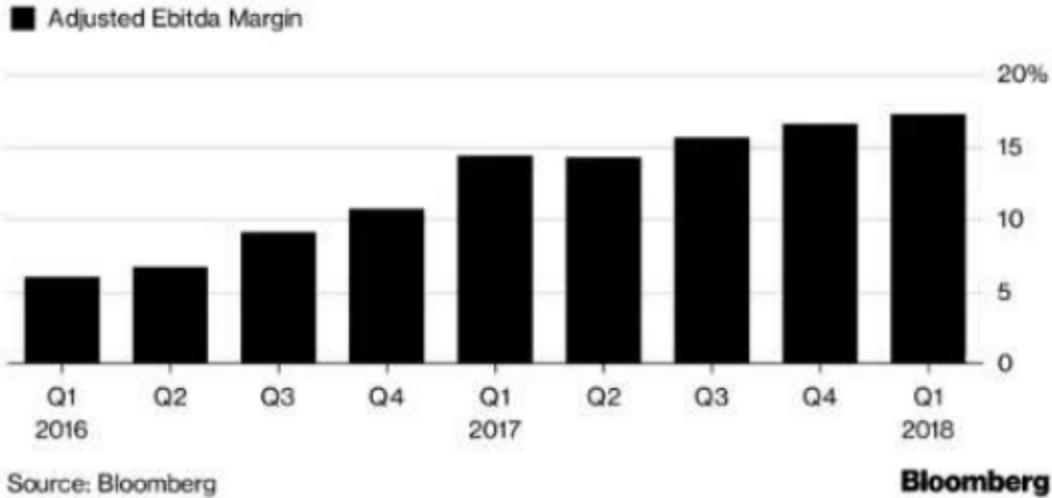
ZYNGA (BUY): COMPLEMENTARY DEAL AND MARGIN UPLIFT AHEAD

The key push v pull argument on Zynga has been on how the company will get to a stated aim of a 20% adjusted EBITDA margin. The company is executing on the progress of the same and this week’s acquisition of Gram Games should help achieve that target with projected EBITDA contribution of \$12M in 2018 and \$20M in 2019. The price of the deal at \$250M seems reasonable and will bring in a 75 person studio in London and Istanbul that fits into the Zynga strategy of connecting interactive entertainment with players. Gram has success in building hyper-casual games and Merge games. The Merge series uses the mechanic of merging two puzzle pieces together to solve a puzzle and is a mechanic that makes free-to-play games easy and addictive.

The strategic shift towards live services is paying off, with frequent content updates driving higher average revenue per user and engagement. Audience numbers are on the rise with DAU’s up +19% YoY and MAU’s +30% YoY. Zynga guided Q2 adjusted EBITDA to \$37M above consensus (Factset) \$35.7M, and the Q2 guidance implies the company is on track with adjusted EBITDA margin of 18% expected for Q2. Zynga has now delivered EBITDA upside for eight straight quarters.

Nearing the Next Level

Zynga's adjusted Ebitda margin approaches management's 20 percent target



SALESFORCE.COM (BUY): NO SLOWING IN SIGHT

Salesforce.com, despite high expectations, still managed to beat and raise. 1Q revenue of \$3.01B was ahead of consensus (Factset) \$2.94B driven by subscription beat (\$.281B above \$2.73B expected), Non GAAP OM of 17.1% 190bps above street. Raise FY guidance for revenues of \$13.075-\$13.125B and EPS of \$2.29-\$2.31 above consensus \$12.73B and \$2.12. Company revenue run rate of \$12B/year, growing 25% YoY. A quite remarkable feat – we remember when it reached \$1B in 2009 and \$5B in 2014. Artificial Intelligence, through its Einstein assistant, is delivering nearly 2 billion predictions every day and its ease of use is seen as key driver of adoption. This is almost double the number in February and the ability to include custom sales and service forecasting in the predictive analytics can only help further embed salesforce CRM in customers’ spending priorities.

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