From: Amy Hood </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS

/CN=MICROSOFT.ONMICROSOFT.COM-55760-AMY HOOD>

To: Satya Nadella

Sent: 2/13/2019 12:43:57 AM

Subject: RE: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA

CSCO ATVI NTAP; GS Tech Conference

We knew the channel was a week or two heavy but took that into consideration so this is all true

end market issues. I have a meeting tomorrow on it.

From: Satya Nadella <satyan@microsoft.com> Sent: Tuesday, February 12, 2019 4:09 PM To: Amy Hood <amyhood@microsoft.com>

Subject: FW: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO

ATVI NTAP; GS Tech Conference

I hope we push to make up in the time left.

Thx

Sent from Mail for Windows 10

From: Phil Spencer

Sent: Monday, February 11, 2019 5:08:02 PM

To: Amy Hood; Satya Nadella

Subject: RE: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO

ATVI NTAP; GS Tech Conference

I agree. We are constantly reviewing and looking at plans.

On console, you'll see our ideas on Wednesday. Always have to run both ends of the business, the near term day to day (console sell-thru, game sales etc) and the longer term per user service goals.

Software and Service growth is a strategic key obviously.

Lot's of focus on Q3 and Q4 from us right now, all good pressures.

Phil

From: Amy Hood <amyhood@microsoft.com>
Sent: Monday, February 11, 2019 10:36 AM

To: Phil Spencer <philsp@microsoft.com>; Satya Nadella <satyan@microsoft.com>

Subject: Re: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO

ATVI NTAP; GS Tech Conference

Thanks Phil. Obviously given how gaming is trending this quarter we need all the help we can get. I will see Tim on Wednesday to get the latest. Maybe some of this transactional competition can help us catch up a bit. I know teams are looking for all ROI positive options that are on strategy.

Amy

From: Phil Spencer

Sent: Monday, February 11, 2019 9:53:51 AM

To: Satya Nadella Cc: Amy Hood

Subject: RE: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO

ATVI NTAP; GS Tech Conference

Some insight from the weekend.

Here is my mid-day Sunday report from the team.

Monetization: Free Game Purchases are basically F2P downloads. Another great indicator of acquisition.

Phil

From: Satya Nadella < satyan@microsoft.com>

Sent: Friday, February 8, 2019 4:32 PM
To: Phil Spencer philsp@microsoft.com
Co: Amy Hood <amyhood@microsoft.com</pre>

Subject: FW: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO

ATVI NTAP; GS Tech Conference

Sent from Mail for Windows 10

From: Wigg, Thomas (IED) < thomas.wigg@morganstanley.com>

Sent: Friday, February 8, 2019 1:23:04 PM

To: Satya Nadella

Subject: MS Tech Weekly: Video Games secular concerns vs F2P; Semis bottom to bonanza? SPOT podcast strategy | Earnings NVDA CSCO ATVI

NTAP; GS Tech Conference

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1. Weekly Recap

Stocks were **flattish** in **Week 6 of 2019** as the recent rally showed signs of fatigue following last week's bullish Fed reaction, and ahead of trade negotiations next week. The **SPX** is flat on the week, while the **NDX** outperformed +0.4% and the **SOX** rallied +1.2%.

As mega-cap tech earnings conclude, NFLX, FB & BABA emerge as the cleanest stories, GOOGL & MSFT remain intact despite expectations misses, AAPL was better than feared, and AMZN was messiest.

Video Game stocks saw further multiple compression + downward revisions after disappointing TTWO & EA guidance, while secular fears intensified around the risk of free-to-play (F2P) against traditional ~\$60 game price points, as Fortnite dominates and Apex Legends came out of nowhere.

Semiconductors continued to make 'bottoming' comments. MCHP was the first to guide down back in August and this week said that 2Q should improve sequentially and that any trade war settlement would drive a 'bonanza'.

SPOT strategically shifted from being a **music company to an 'audio company'**, with aggressive podcast acquisitions that could drive leverage over time.

TWTR & SNAP may experience a changing of the guards following surprise results on both sides.

2. Earnings Scorecard

- GOOGL had a fairly standard quarter with solid core business trends offset by disappointing margins + elevated capex driven by 'Other Bets' losses, though the CFO guided for slower capex + headcount growth in 2019. (Brian Nowak)
- SPOT posted better subscribers + guided for accelerating net adds, while disappointing margin guidance was explained by podcast / content spending that should drive margin expansion longer term. SPOT confirmed the acquisitions of Gimlet and Anchor in the podcast content + creation space, and earmarked more money for similar deals. (Ben Swinburne)
- SNAP surprised positively against low expectations post CFO departure, with daily active user stabilization after two Qs of declines before the Android app update rolls out. (Brian Nowak)
- TWTR disappointed with higher opex guidance into 2019 to ensure platform safety, and mixed reactions to 'monetizable daily active user' metrics that are lower than (but not comparable to) peers, though advertising revenue momentum continued. (Brian Nowak)
- TTWO has been the best executor among video gamers, but still disappointed with Red Dead Redemption 2 units and FY19 guide below expectations. (Brian Nowak)
- EA management cut FY19 (Mar) guidance materially and posted flat Live Services vs hopes for a FIFA-driven rebound, though Apex Legends is driving new optimism into FY20. (Brian Nowak)
- MCHP expects the March quarter to mark the bottom of this Semiconductor cycle and said that any trade war settlement would drive a 'bonanza' in terms of demand. The CEO has a mixed reputation but was the first to call the current downturn back in 1H'August. (Craig Hettenbach)
- EXPE guided EBITDA growth ahead of expectations, which overshadowed lackluster Room Night and HomeAway growth (Brian Nowak)
- GRUB rebounded after guidance for EBITDA per order to rebound with profit growth into 2020, though investors are skeptical given intensifying competition that's unlikely to abate in a year. (Brian Nowak)

• CTSH announced roughly inline results and a surprise CEO change to bring in an outsider, while the former heir apparent with tight connections to the sales force is stepping down. (Brian Essex)
• DXC reassured with an EPS beat + raise and better sequential revenue growth after a large magnitude miss last Q. (Brian Essex)
3. Newsflow
• EA surprise released free-to-play game Apex Legends to compete with Fortnite in the battle royale genre, and quickly attracted 10M players + 1M concurrent users in the first three days. (Polygon)
• AAPL experienced a China iPhone sales rebound following local price cuts as Suning and Tmall sales rose ~80% in 2H'Jan, consistent with Tim Cook's commentary re better January trends. (Apple Insider)
• President Trump is pushing for a blanket ban on Huawei & ZTE network equipment, with an executive order to cover the US and possible countermeasures against EU countries, with a US envoy encouraging EU countries to use 'Scandinavian' equipment instead. (Bloomberg)
• AMZN changed business structures in India to address local regulation, as Cloudtail has returned with >300,000 products listed on the site. (Reuters)
• ULTI announced plans to go private in a \$11B deal with Hellman & Friedman; they compete with WDAY & ADP in the mid-market space. (Bloomberg)
4. MS Research Highlights
• INTU Upgrade on multiple catalysts such as TurboTax Live product cycle (video conference with tax pro / drives units + ASPs), tax code changes, and a more benign competitive environment. (Keith Weiss)

• 5G preferred names are COMM, GLW & VIAV over CIEN & JNPR: Carrier capex budgets are tracking flat so not everybody wins. (James Faucette & Meta Marshall)

• PYPL should grind higher as any competitive concerns are overblown based on MS' quarterly tracker and a hypothetical V & MA joint button would draw regulatory issues.

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(James Faucette)

• EBAY/ WMT is unlikely to be interested in EBAY's Marketplace business despite activist push. (Simeon Gutman & Brian Nowak)
• INTC new CEO has potential to review the entire portfolio + increase capital returns; they could exit Wireless + NAND and stop making large acquisitions. (<u>Joe Moore</u>)
• OKTA initiate EW on expensive valuation ~16x, though fundamentals remain best-in-class with large TAM opportunity. (Melissa Franchi)
• ADYEN has a roadmap to E1.5B revenue and raise EPS by 8-16% for 2019-21 post recent deals (H&M, Dollar Shave, Valve, Dunkin, Theory, etc) but stay EW at ~80x '20 EPS. (Adam Wood)
5. Winners & Losers
• Winners: SNAP +32%, ULTI +20%, FSCT +17%, APPN +16%, IRBT +15%, SMAR, UBNT & MSI +14%, CDK, VSH & DBD +13%, BOX, YEXT & QTNA +11%, SWKS, ZEN, DOMO & SVMK +10%, GRUB, ZNGA, CDW & RPD +9%, EXPE & MCHP +7%, EA, TEAM, DXC, MDB, RNG & VIAV +6%, VMW, PVTL, GPRO, DBX & NUAN +5%.
• Outperformers: ADBE, MTCH, CTSH, Z & TRIP +4%, AAPL, NOW, EBAY, TXN, DELL, HPQ, ADSK & SPLK +3%, MSFT, NFLX, NVDA & PYPL +2%.
• Losers: ARLO -50%, CALX -30%, PRLB -17%, LITE -15%, INFN -13%, SONO -12%, TWTR -10%, FEYE -9%, TTWO -8%, DATA & NINTENDO -7%, ATVI & AMD -6%, MELI & TENB -5%.
• Underperformers: NTES, GRPN, NPTN & NCR -4%, AMZN, MU, SAMSUNG, SK HYNIX & ACIA -3%, SPOT, TSLA, JD, YNDX & NEWR -2%.

importance to the multiple

NVDA was a secular growth darling for most of the last three-plus years, but the stock has been cut in half as a Gaming chip inventory build-up and cryptocurrency hangover put an end to the beat + raise quarterly track record, and the most recent negative pre suggested that the Datacenter segment would disappoint despite well-established leadership in Al + Machine Learning applications. For context, MS' JanQ revenue estimate has come down by ~\$1B since they reported the last Q. SoftBank also sold out of its entire \$3.6B stake last month.

<u>Joe Moore</u> downgraded the stock after the negative pre as he thinks **Gaming** will take multiple Qs to improve and is less willing to apply a premium multiple to roughly ~\$6.00 EPS in CY20.

- Gaming: MS now models this segment down -47%q/q & -46%y/y from \$1.76B in OctQ to just \$935M in JanQ on a combination of negative influences from crypto crash, China macro + game approval freeze, Nintendo Switch build cuts, DRAM price pass-through reversal, and Fortnite fever (less GPU intensive). This is especially troubling because NVDA should be benefiting from new Turing product cycle, but it's too expensive, they're still clearing inventory on older generation Pascal chips, and current games lack support for Turing's new features such as Ray Tracing and DLSS. Into AprQ, MS models a slight sequential improvement to \$1.05B with full Q benefit from mid-range GeForce 2060 launch.
- HPC Cloud / Data Center: This segment grew ~\$100M per Q from ~\$300M in July-17 to \$700M in Apr-18, but growth slowed to +\$60M in Jul-18 and +\$30M in Oct-18.

 NVDA's press release suggested deal pushouts on large purchases amid macro uncertainty, and investors assume some impact from broader cloud capex digestion and government shutdown. MS models the first sequential decline of -10%q/q to ~\$720M, though that's still up +20%y/y. MS models AprQ rising back to ~\$780M, though that's a y/y decel to +10%y/y. If the y/y growth rate goes negative, expect more significant multiple compression.

7. CSCO expectations are for an inline F2Q(Jan) print + F3Q(Apr) guide, though with some concern around impact from tariff-related pull-forward and government shutdown given relatively high exposure (~10%); the CEO has done multiple interviews intra-quarter and sounds good / fine

CSCO has been executing better than most expected, driven by macro tailwinds, legacy infrastructure spending, and a Catalyst 9000 product cycle that has had long legs.

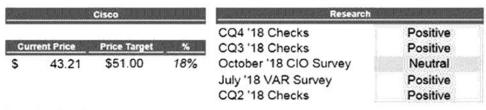
Investors have been waiting for some sort of downtick, but management went out of their way to sound good on macro last Q. CEO Chuck Robbins has been on CNBC once a week in 2019, but mainly lobbying for a trade deal and warning that an increase to 25% tariffs would mean a reduction in R&D. He has said the macro environment remains solid, though noted risk of 'talking ourselves into a slowdown'.

<u>James Faucette</u>'s mid-January previewed a <u>slightly better JanQ print + AprQ outlook</u> relative to Consensus, as channel partners were tracking strong in December and saw activity spill over into January, though some customers did pull forward spend early in the Q ahead of tariff hikes.

• Revenue + EPS: CSCO guided revenue up +5-7%y/y and EPS \$0.71-73, with the Street at \$12.4B (+5% total, +7% ex SPVSS sale) and \$0.72. Into F3Q(Apr), the Street models revenue up +2% total (+4% ex SPVSS) to ~\$12.8B and EPS at \$0.76, with +2%q/q growth consistent with historical seasonality. Given the tariff risk / pull-forward, government shutdown, and cyclical / transactional exposure, investors see risk of *some* shortfall on the guide, so inline numbers could provide relief.

- Gross margins: Product GMs rebounded from 61.5% in Jul-18 back to ~63% in Oct-18. Given lower DRAM prices, higher software mix and price increases (to offset tariffs), expect stability to continue.
- Infrastructure Platforms + Catalyst 9000: CSCO's newer disclosure groups switching with routing and service provider, where MS models +7%y/y growth, a decel from +10% last Q and +7% the quarter prior. Catalyst 9000 has been a substantial driver of core switching growth, though investors are wary of any plateauing.
- Security: MS models +12%y/y growth, generally consistent with +11-12% growth the last three Qs and above high single digit growth rates before that. FTNT, CHKP and even JNPR's security business represent positive read-throughs, though checks around CSCO security have been just okay.

Exhibit 5: Our checks continue to be positive on Cisco



Source: Morgan Standay Research

Exhibit 6: Our Q2 FY 19 estimates are in line with consensus

	MS Extimates								Variance (Positive = MS Higher)			
	201902 \$12,454 \$0.72	201903	FY 2019	FY 2020	2015Q2	201903	FY 2013	FY 2020	201902	201503	FY 2019	FY 2020
Revenue	\$12,454	\$12,764	351,317	\$53.057	\$12,404	\$12.032	\$61,560	553,221	016	(196)	(3%)	(0%)
EPS	\$0.72	50 74	\$2.96	\$2.21	\$0.72	\$0.76	33 04	\$3.31	(29%)	(3%)	(3%)	13%1

Source Thomson Reutins, Morgan Stanliny Research estimates

8. ATVI guide down seems like a foregone conclusion given negative read from TTWO & EA, abrupt Bungie divorce, competition from Fortnite, disappointing Call of Duty launch, and high-profile mgmt departures; 2019 EPS guide expectations have come down (flat to down y/y), though headcount cuts could help soften the blow

ATVI entered 2018 with bullish expectations around a Call of Duty cycle and an emerging eSports story, but that was derailed by lackluster results on a combination of legacy portfolio declines (Overwatch, Hearthstone) and Call of Duty: Black Ops 4 missing expectations amid competition from Fortnite and Red Dead

Redemption 2.

Executive departures have piled up including the CFO (went to NFLX), CEO of Activision Publishing, CEO & co-founder of Blizzard, and Head of Consumer Products. The Bungie divorce was another negative surprise that should hurt EPS and future game pipeline.

Brian Nowak stays bullish despite misexecution given compelling valuation and potential catalysts around Diablo Immortal and Diablo 4.

- 2019 EPS guide: The Street models ~\$2.50 in CY19, though Bungie is a ~\$0.10 negative impact and expectations were for guidance of ~\$2.20 before the TTWO & EA reports, and now sit somewhere between ~\$2.00-2.20. Investors could historically gross up initial guide by ~20% given typical conservatism, though they'll only beat this year by ~\$0.10 so you may need to see some execution before giving them credit. Reports suggest that ATVI will announce 'hundreds' of job cuts to 'boost profits', which could help protect EPS amid weaker top line.
- Call of Duty: Black Ops 4: ATVI does not disclose units, but investor expectations for ~21-22M units may be too high based on the higher selling Red Dead Redemption 2 at 22M units vs expectations for 25M+. Investors will press management on in-game monetization strategy around Blackout battle royale mode, with pressure to go free-to-play to compete with Fortnite and now EA's Apex Legends.
- Diablo? ATVI announced Diablo Immortal mobile game at BlizzCon and faced a ton of backlash from investors who wanted a full PC version / Diablo 4. Timing on the Diablo Immortal launch could help if anything near term, while Diablo 4 is a hope for Blizzcon'19 in November.
- 9. NTAP expectations are for an inline F2Q(Jan) with potential risk to F3Q(Apr) guide given concerns similar to CSCO around pull-forward pre tariffs and government shutdown (~12% exposure); DELL EMC competition should intensify this year checks say not an issue yet

NTAP has become a **poster child** for **concern that legacy infrastructure spend will slow in 2019** as benefits from **corporate tax cuts** + depreciation accounting changes fade and companies face increasingly tough comps in a more uncertain macro environment. NTAP has **additional risk** from **DELL EMC** getting its act together, **AMZN** getting into hardware this year, and ~10-15% **government** exposure.

<u>Katy Huberty</u> recently downgraded the stock based on the above factors and MS' CIO survey that suggested slower Hardware spend into 2019, though she thinks JanQ should be good / fine based on healthy year-end budget flush and rising tide lifting all boats in storage.

- Revenue + EPS: NTAP guided revenue and EPS to \$1.6B and \$1.15 at the midpoint, consistent with normal seasonality, with benefits from lower NAND costs likely to offset incremental FX headwind (2pts vs 1pt guide). ELAs helped boost results in F1Q & F2Q by ~\$30-60M, but that's unlikely to repeat. Product revenue growth has slowed from ~20%y/y to +11% in OctQ and MS models just +2%y/y in JanQ, but going negative would be bad for the stock. Into AprQ, MS is slightly below the Street on revenue (+4%q/q vs +6%q/q) and EPS (flat q/q vs +9%q/q) given concerns on macro, pull-forward and competition.
- Cloud Data Services run rate was \$20M in JulQ and \$27M in OctQ and should keep going up to reach the longer term goal of \$400-600M by FY21. Last Q was tracking below the targeted ~\$60M run rate implied by guidance for cloud data services to reach ~1% of revenue growth in FY19.

10. Other Catalysts + Full Calendar

- GS Tech Conference in SF features keynotes from the new GOOGL Cloud Head (watch for M&A comments), ORCL Co-CEO Mark Hurd, CRM CEO, CSCO CEO, TWTR
 CEO, LRCX CEO, V President, SoftBank Vision Fund CEO, and Snowflake CEO. Notable presenters include AMD CEO, MU CEO, SYMC CEO, EA COO, NOW CFO, TXN
 CFO, GLW CFO, DOCU CEO, FTNT CEO, KLAC CFO, LITE CEO, DoorDash CEO, and OpenDoor CFO.
- IBM hosts an investor briefing on Tuesday into Wednesday.
- HIMSS Health Information & Tech Conference happens in Orlando.
- · Earnings Next Week
 - Mon 2.11: pre-mkt AVYA, post-mkt AMKR, CHGG, MIME, MGI, RNG, VRNS, VECO
 - Tue 2.12: pre-mkt FIS, IPGP, MDSO, ONDK, SABR, SHOP, Scout24: post-mkt AKAM, ATVI, AQ, CSOD, EXEL, GRPN, HUBS, JCOM, LSCC, MPWR, QLYS, QUOT, SHOP, TRIP, TWLO
 - Wed 2.13: pre-mkt CEVA, CRTO, ECOM, DBD, GPN, IPG, LXFT, TKWY, post-mkt BAND, BCOV, CTL, CSCO, DIOD, EQIX, NTAP, PRSP, PS, SWIR, SPWR, SVMK, YELP
 - Thu 2.14: pre-mkt CYBR, EPAM, NICE, UBI, ZBRA, WIN Semi, post-mkt AMAT, ANET, BL, CBS, CGNX, ELLI, GLOB, LOGM, MRIN, NVDA, PDFS, PS, RDFN, SMIC, SSNC, SMCI, TLND, TNET, TRUE
 - o Fri 2.15: pre-mkt ASOS, YNDX

11. Google Trends

- 10M+ Lunar New Year | Adam Levine | Super Bowl 2019
- 2M+ State of the Union | Kristoff St John | 21 Savage | Patriots | Groundlog Day 2019
- 1M+ Wells Fargo | Patriots vs Rams | Gisele Bundchen | Gladys Knight | Super Bowl commercials 2019

• 500K+ Jeff Bezos Tobias Harris Barcelona vs Real Madrid NBA trades Cook Maroney Apex Legends Liam Neeson Captain Marvel What channel is the Super Bowl on Pete Davidson
• 200K+ Ariana Grande Albert Finney Markelle Fultz Hailey Baldwin Mike Muscala What Men Want Cold Pursuit John Dingell Lonzo Ball NBA All-Star draft BB&T Emiliano Sala The Prodigy Vanessa Tyson Thon Maker Ricki Lake Harrison Barnes Justin Jackson Otto Porter Alexandria Ocasio-Cortez Cory Booker Lakers vs Pacers Reggie Bullock Billie Elish Mercedes-Benz Stadium Andy Warhol Kia Telluride Toyota Supra Tony Romo Buffalo Wild Wings Cardi B Scary Stories to Tell in the Dark Demi Lovato Hanna Colin Kaepernick Patrick Mahomes Chris Long Robert Kraft Bow Wow Premier League Rickie Fowler UFC
• 100K+ Marc Gasol Green New Deal Joy Behar Bob Massi Legarda Invan Shumpert Donny Osmond Bob Marley Tiffany Trump Entertainment John Wall Buzz Aldrin Elizabeth Warren Andy Cohen Trayvon Martin James Brown Alice Johnson Travis Barker Dave Mirra Liverpool Alec Baldwin Charlotte Russe Patriots parade Brooklyn Decker Justin Fairfax
• 50K+ Rocky Lockridge Kaley Cuoco Bebe Rexha Russell Westbrook Michelle Carter Susan Lucci Bernie Sanders National Signing Day 2019 Maya Moore James Harden Designated Survivor Rick Perry Camille Kostek Sam Gordon Rosa Parks Zac Taylor Origin
Thomas Wigg Morgan Stanley Institutional Equity Division 1585 Broadway, 5th Floor New York, NY 10036 Phone: +1 212 761-8759 Mobile: +1 201 787-5612 Thomas.Wigg@morganstanley.com
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