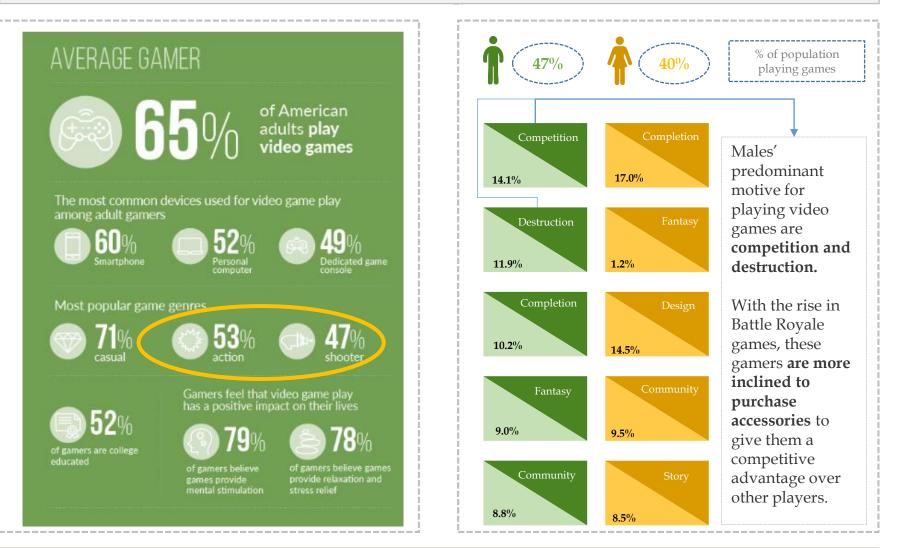
Mateo Panjol Tuflija, Chen Zhou, Jaro Van Diepen, Achyut Seth

> TURTLE BEACH

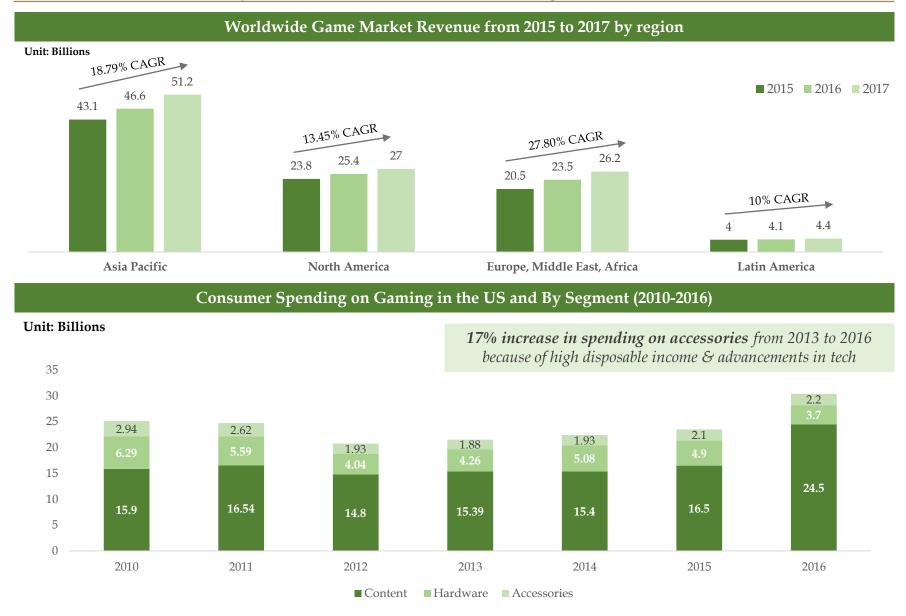
Video Game Industry Overview : Consumer Demographics

Action and shooter games are within the top three categories of popular games genres; these games require higher sound quality for gamers to maintain a competitive advantage. For example, in a shooting video game, a headset with high sound quality would allow a gamer to better locate other players and know what direction bullets are coming from.





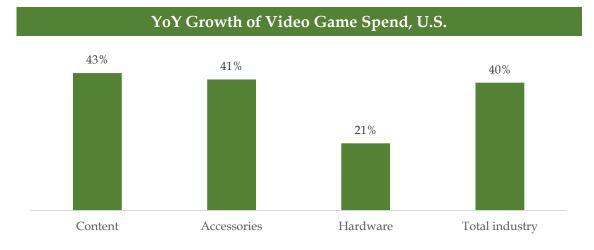
Video Game Industry Overview: Revenue and Segment Breakdown



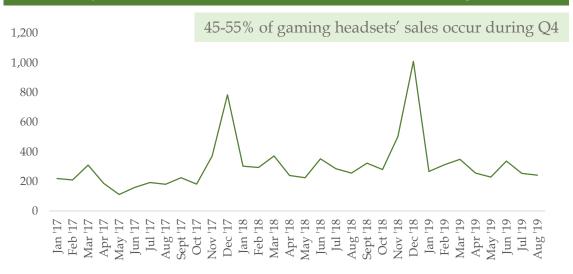


Video Game Headsets & Accessories Industry Overview: General Info and Trends

With gaming content in recent years becoming more focused on online multiplayer modes, communication and sound quality becomes more important in the gameplay experience. These factors drive the demand for video game headsets.



Monthly revenue of Video Game Accessories (Jan 2017-August 2019)



Video Game Accessories: \$3.8 billion Global Business

Gaming headsets represent \$2.7 billion in the global market (>70% of total peripherals market)

 Sold at major retailers like Amazon, Best Buy, Gamestop, & Target (importance of kiosks)

North American region: projected grow at a high CAGR of 13.4% between 2017 and 2026

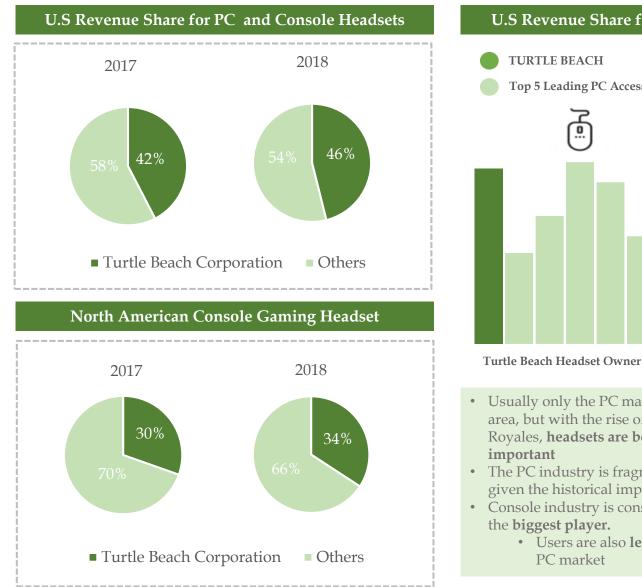
• Causes: high disposable income & advancements in tech and research

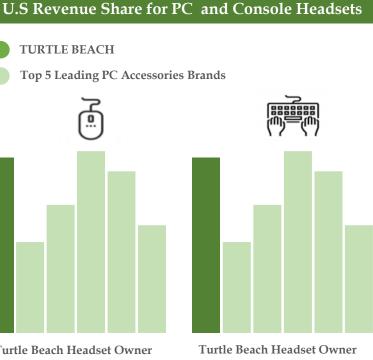
General Trends

- Increase in communication between players with many major flagship games (GTA V, Call of Duty, Battle Royale Games) having popular, online multiplayer modes
- Rise of free-to-play games (Fortnite, CS: GO, Apex Legends)
- Rise of Esports and professional gaming



Turtle Beach Corporation Market Share for Headsets





- Usually only the PC market had been competitive in this area, but with the rise of competitive gaming and Battle Royales, **headsets are becoming more and more important**
- The PC industry is fragmented and very competitive, given the historical importance
- Console industry is consolidated, with Turtle Beach being the **biggest player**.
 - Users are also **less sensitive and picky**, unlike the PC market



Driving Factor 1: Battle Royale Games

Understanding the drivers of demand for video game accessories



Battle Royale: Game genre where a max of 100 players join a match and fight to the death, collecting resources and weapons

41% of gamers actively play Battle Royale games *Examples:* H1Z1, PlayerUnknown's Battlegrounds, Fortnite, Apex Legends

General Business Model: free-to-play games that generate revenue predominantly through micro transactions (to customize in-game experience)

• About 80% Headset Usage Rate for Battle Royale Games



High Growth and Demand of Battle Royale *Fortnite:* 250+ million players, recently entered ESports with Fortnite World Cup, release of chapter 2

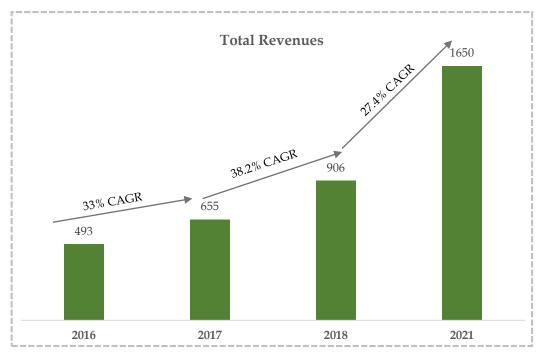
Cultural phenomenon of celebrities playing with professional gamers

New Twitch viewership record was set when Drake played Fortnite with Ninja (628,000 concurrent viewers watched the event)

Casual gamers love to watch competitive, professional players play these games because each game session is a different, unique experience

Driving Factor 2: Esports

Understanding the drivers of demand for video game accessories



"E-sports have turned online gaming into a spectator sport. It is like watching a professional event, with the difference being that instead of a physical sport, the viewers pay to watch gamers competing against each other. With the increasing popularity of e-sports, the **gaming headset manufacturers are increasingly customizing their products keeping e-sport gamers in mind.**"

- Senior Analyst at Technavio

Esports: Teams/leagues of professional gamers compete against each other in a video game (*COD*, *League of Legends*, *Fortnite*) for major cash prizes

- These teams will oftentimes partner with a company that sell video game accessories, promoting the brand on their websites, social media platforms (Youtube, Twitch, Twitter), and jerseys
- These teams have a huge following of gamers that idolize them and try to copy their gaming hardware and style

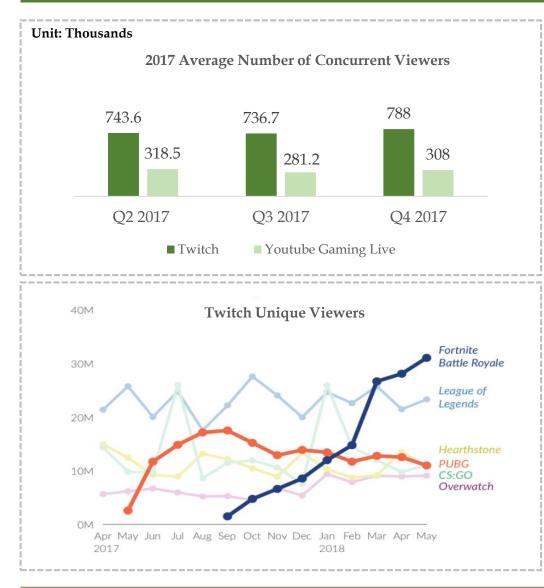
ESports revenue is **expected to surpass \$1 billion** in 2019 for the first time





Driving Factor 3: Video Game Streaming Content & Influencers

Understanding the drivers of demand for video game accessories



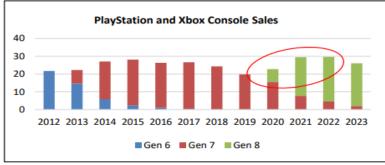
With the growing popularity of ESports and Battle Royale games, streaming content of video games is also growing

- Number of gaming video content viewers globally reached 666 million in 2017
- **Twitch** → dominant streaming platform for video game viewership
- Incentive for companies like Turtle Beach to **partner with streamers** as a way to effectively market their products to their target audience
 - Gaming is becoming more recognized as a competitive sport rather than a hobby, as figures like Ninja and other streamers become more popular (Ninja's following: had 14.6 million followers on Twitch)

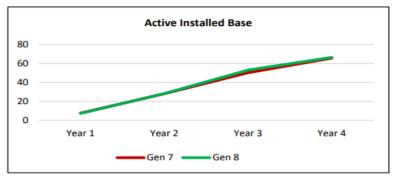




Understanding the drivers of demand for video game accessories



Source : DFC Intelligence July 2019 Worldwide Video Game Market Forecasts; Hardware unit sales (In Millions)



Source : DFC Intelligence July 2019 Worldwide Video Game Market Forecasts; Active Installed Base (In Millions). Yes

" It will be interesting to see how this affects Q4 with a potential positive of Microsoft and Sony more heavily discounting console prices to maintain sales and the potential negative of some customers delaying accessory purchase until new consoles are launched."

> -Jeurgen Stark, CEO of Turtle Beach Corp. in Q2 2019 Earnings Call

<u>Pro</u>

Playstation 5 is expected to heavily focus on 3D audio to provide a more immersive gaming experience \rightarrow increases importance of high-quality gaming headset

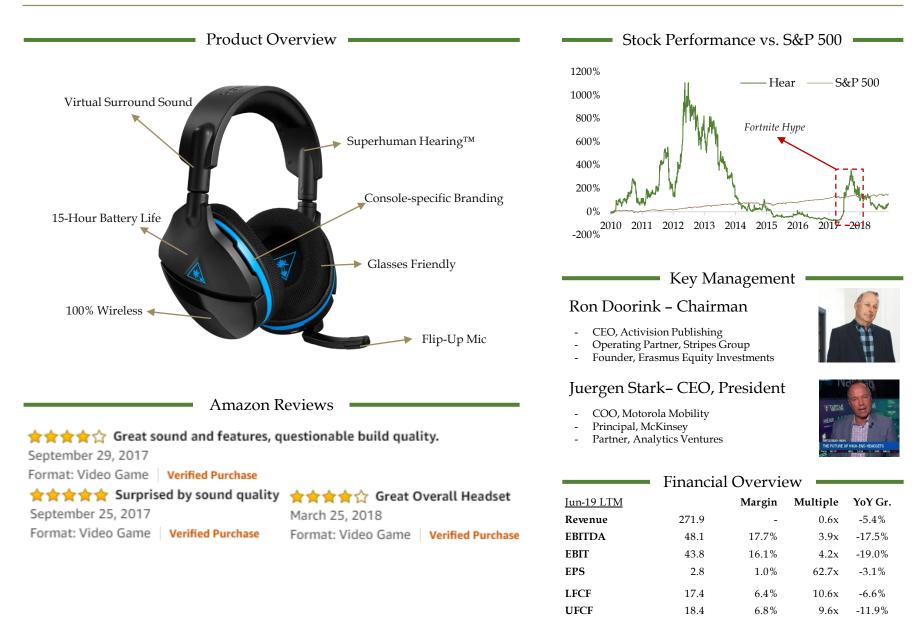
Historically, there was a lag in sales of video game accessories prior to release of new consoles, and then accelerated growth in sales after release

Potential Risk

Backwards compatibility of the next generations of consoles means gamers **might buy accessories quicker with no lag or not buy accessories at all** before release of the new consoles



Company Overview





A business is only as good as its management

Juergen Stark - CEO, President

Mr. Juergen Stark serves as Venture Partner at Analytics Ventures. He has been the CEO of Turtle Beach Corporation since January 2014 and serves as its President. Mr. Stark served as Corporate Vice President of Productivity Mobile Devices at Motorola and as its served as Corporate Vice President of Enterprise - Government and Enterprise mobility services. He served as COO of Mobile Devices from January 2011 to June 2012 and previously served as Senior Vice President and Chief Operating Officer, Mobile Devices, for Motorola from August 2010 to January 2011. Mr. Stark was a Partner with McKinsey & Co and served as a Principal for 9 years on the leadership team of the North American Telecom practice with a focus on technology M&A. He holds a Bachelor degree in Aerospace Engineering from the University of Michigan and a MBA degree from Harvard .

Joe Stachula - CTO, VP of Development

Mr. Joe Stachula is Chief Technology Officer and VP of Development at Turtle Beach Corp. since January 2018. He leverages Turtle Beach's extensive history of audio expertise and product innovation to advance existing technologies and develop new, cutting-edge products designed to deliver the best gaming audio experience. Having spent over 20 years in the consumer electronics and audio industries, he has led global development teams and successfully brought numerous products to market in his prior roles with Plantronics and GoPro. He holds a degree in Mechanical Engineering from University of Illinois at Urbana-Champaign, as well as a degree in Physics from North Central College.-

René Korte - General Manager, PC Products

René Korte joins as General Manager of Turtle Beach, PC products after being CEO of ROCCAT. Combining his past experiences as VP for Razer Europe and being a pioneer in eSports- both as professional gamer and founder of the MTW clan (one of the first and most respected eSports teams around the world), René 's goal has always been to bring into the hands of gamers pushing the boundaries of their performances, authentic and innovative tools. René has always motivated his teams to deliver the best of design, marketing and engineering. This has resulted in both ROCCAT and René receiving many awards in the industry. His expertise in the field of PC peripherals is the product of his versatile accomplishments, his passion for gaming, and his skills proficiency in business. An expertise that René is proud to share with his new position at TB Germany GmbH.

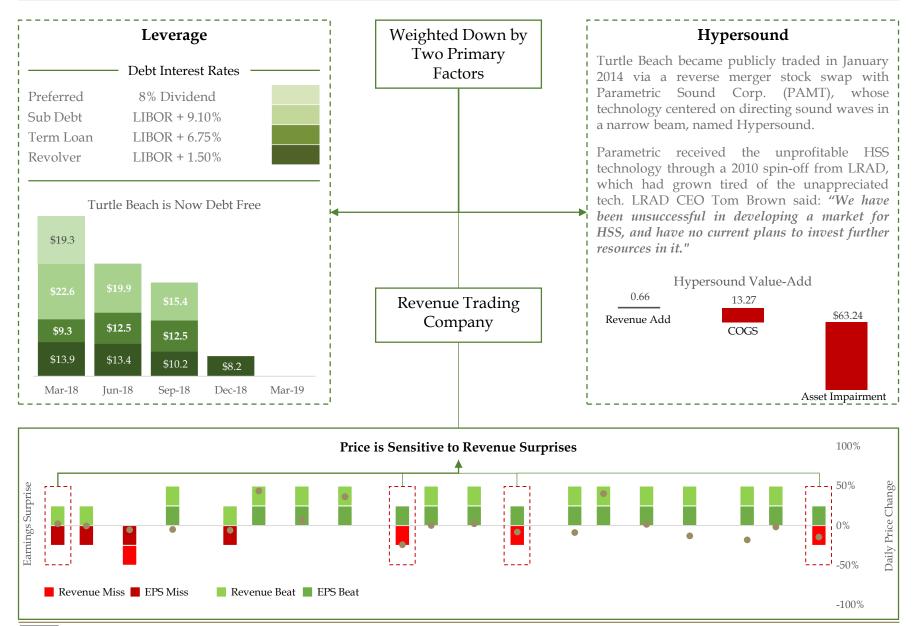
Where can management go wrong? What are the risks associated with management?









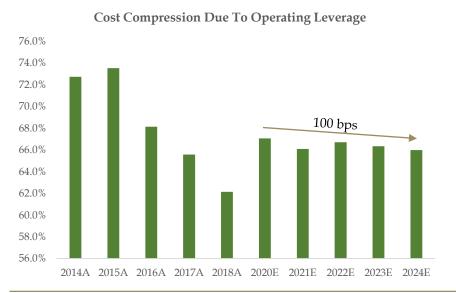




A Revitalized Business

Levered Free Cash Flow 2017		Adjusted Levered Free Cash Flow	2017
EBIT	5.33	EBIT	5.33
*(1-0.21)	0.79	*(1-0.21)	0.79
EBIAT	4.21	EBIAT	4.21
(-) Interest Expense	7.92	(-) Interest Expense	0.00
*(1-0.21)	0.79	*(1-0.21)	0.79
(+)D&A	4.42	(+)D&A	4.42
(+) Amortization of Deferred Charges	1.59	(+) Amortization of Deferred Charges	1.59
(-)CAPEX	4.41	(-)CAPEX	4.41
(+) Stock Based Compensation	1.43	(+) Stock Based Compensation	1.43
(-) Change in NWC	4.5	(-) Change in NWC	4.5
Levered Free Cash Flow	(3.52)	Levered Free Cash Flow	2.74
	78	%	

\$6.3 Million Value Add





Avg. Days Sales Out.

Dec-31-2014 Dec-31-2015 Dec-31-2016 Dec-31-2017 Dec-31-2018 Jun-30-2019



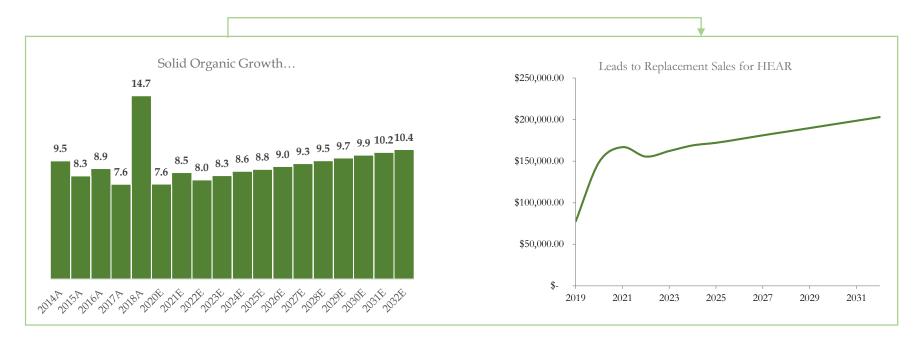
Headset Unit Sales (in millions)



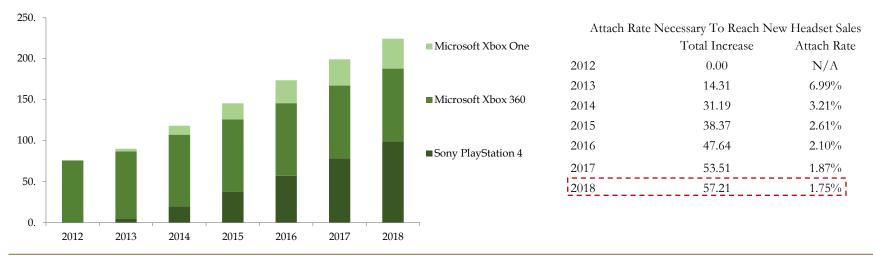
1 Year(s) Old	14,700.00	2,969.31	1,002.22	1,923.38	2,156.62	2,009.47	2,096.31	2,183.28	2,223.76	2,280.27	2,340.22	2,395.95	2,452.43	2,509.47	2,566.18
2 Year(s) Old	-	-	5,865.34	1,483.55	2,847.09	3,192.35	2,974.54	3,103.08	3,231.81	3,291.74	3,375.38	3,464.12	3,546.61	3,630.23	3,714.66
3 Year(s) Old	-	-	-	4,384.39	1,108.96	2,128.22	2,386.30	2,223.49	2,319.57	2,415.80	2,460.60	2,523.12	2,589.46	2,651.12	2,713.62
4 Year(s) Old	-	-	-	-	1,345.88	340.42	653.30	732.52	682.54	712.04	741.58	755.33	774.52	794.89	813.81
5 Year(s) Old	-	-	-	-	-	132.01	33.39	64.08	71.85	66.95	69.84	72.74	74.08	75.97	77.96
6 Year(s) Old	-	-	-	-	-	-	3.06	0.77	1.49	1.67	1.55	1.62	1.69	1.72	1.76



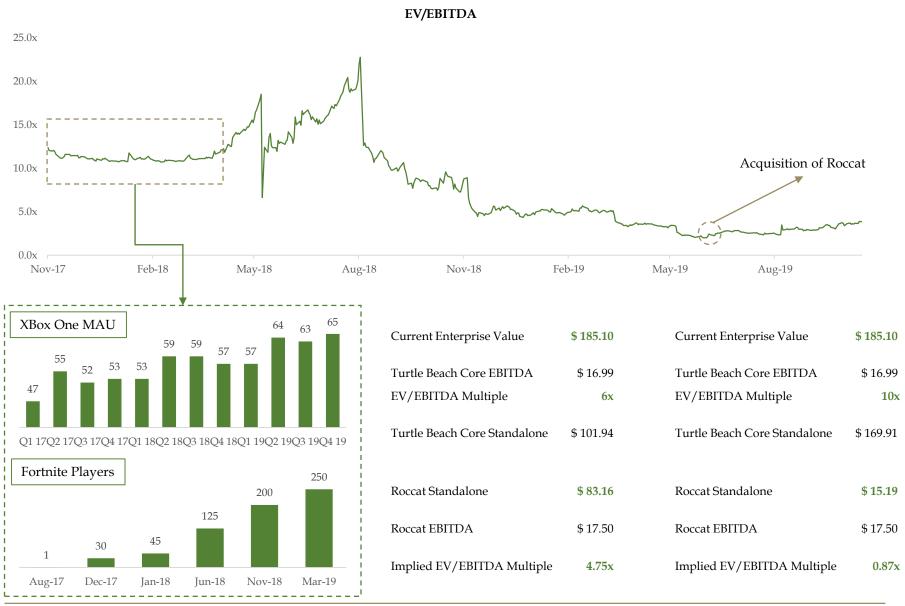
What Does This Mean for The Industry and Turtle Beach?



What Justifies the Organic Growth?







Acquisition of ROCCAT as a Cheap Call Option: Transaction Overview

Turtle Beach acquired ROCCAT in May 2019, further tapping into the PC peripherals market.

ROCCAT Profile

Founded in 2006 and based in Hamburg and Taipei, ROCCAT is a well-recognized German producer of **gaming mice**, **keyboard**, **and other PC accessories**, boasting

- Product & engineering personnel with deep experience & innovations in PC mice & key boards
- Experienced PC peripheral sales & marketing personnel with strong retailer connection and coverage in major Asian countries
- Pro Forma 2018 Financials
 - Net Revenues: ~**\$25mm**
 - Gross Margin: ${\sim}35\%$, with similar EBITDA margin

Transaction Details

Rationale

- Establish immediate product line and capability in PC peripherals to **complement the PC headset push** (ref. the right)
- Leverage mutual strengths in geographies & products across both companies to drive incremental sales
- Leverage ROCCAT skills to enter new **non-headset** categories over time

Transaction Metrics

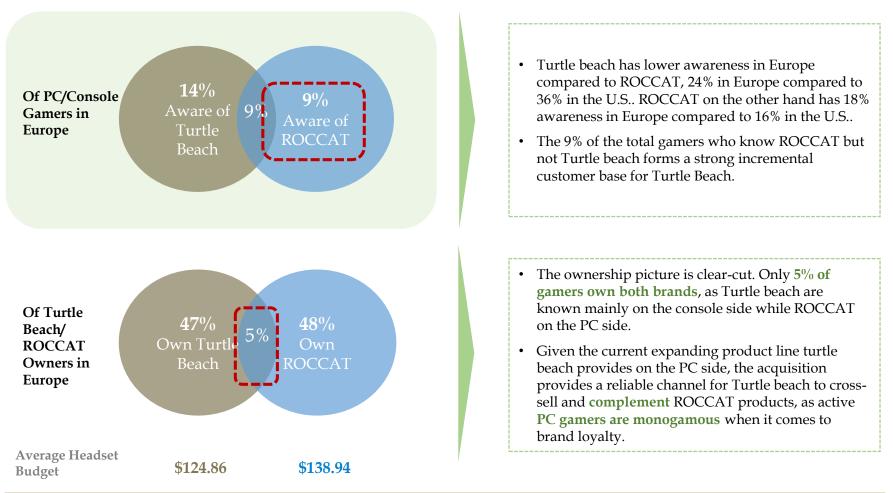
- EV: \$15.6mm, with earn-out payments of \$3.3mm
- EV/Revenue: 0.6x
- Targeted ROCCAT-related revenues of \$30M+ per management

Post-Acquisition Market Position Global Gaming URTLE BEACH Accessory Market \$3.934mm 9 Mice **Including 7 RGB** Mice Models \$597M \$29-\$139 MSRP 8 Key Boards **Including 4 RGB** Keyboard Models \$684M \$79-\$159 MSRP **5** Headsets **5** Headsets Including 1 USD Including 1 PC Headsets Wired Model & 3 new USD/RGB Wired \$1.575M Atlas Models Model & 1 Earbud \$39-\$99 MSRP Model \$29-\$119 MSRP 21 Headsets **Including 4 Wireless** Console Models, 2 Pro esports Headsets models & 2 Earbud \$1,802M Models \$19-\$249 MSRP

26 \Rightarrow **48** Active Core Models in Portfolio

Acquisition of ROCCAT as a Cheap Call Option: European Reach

- While Turtle Beach has strong standing in the U.S. and U.K. among console gamers, it does not have strong brand awareness in mainland Europe, where PC gaming dominates. The acquisition strengthens Turtle beach's reach to European gamers and positions it as the third best-known peripherals brand in Europe (behind Logitech and Razer).
- The acquisition helps Turtle Beach establish a strong foothold in PC peripherals, as Battle Royale games drive PC gamers to seek peripherals. The management aims to build a \$100mm PC gaming business by 2020.



Acquisition of ROCCAT as a Cheap Call Option: PC Peripherals

ROCCAT acquisition helps Turtle Beach establish a strong foothold in PC peripherals, in the form of substantial ownership conversion increase.

Purchase Funnel

• The acquisition can result in large improvements to each step of the purchase funnel (awareness, consideration, preference, ownership, and loyalty), according to Newzoo peripheral brand tracker. Ownership conversion grows from 12% for the Turtle Beach funnel, to 22% when looking at the combined funnel.

76% Awareness +53% Increase in consideration for the combined purchase funnel of Turtle Beach Consideration and Roccat +76% #3 Preferred Rank in awareness of the Turtle Beach and **Roccat brand** combined among active PC/console gamers. (Turtle Beach alone stands at #4) % Increase Compared to the current funnel

How does this tie into the big picture?

- The dramatic surge in cash flow due to the Fortnite "Fad" has allowed Turtle Beach to have a debt-free balance sheet and to pursue the ROCCAT acquisition.
- The acquisition is a strategic move that more than doubles Turtle Beach's TAM and represents management's effective conversion of the Fortnite windfall into a long-term advantage.
- With coverage in both PC and console sides, Turtle beach becomes a stronger business and moves closer to a well-rounded player such as Logitec, which currently trades at 20x NTM P/E and 15x EV/EBITDA compared to Turtle Beach's 12x and 7x, respectively.

Sales = Replacement Sales + New Sales

Units in thousands	 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
							Populat	on Distribution							
1 Year(s) Old	14,700.00	3,969.31	7,617.57	8,541.31	7,958.55	8,302.47	8,646.90	8,807.23	9,031.03	9,268.46	9,489.17	9,712.88	9,938.80	10,163.40	10,388.01
2 Year(s) Old		11,730.69	2,967.09	5,694.19	6,384.69	5,949.07	6,206.16	6,463.62	6,583.47	6,750.76	6,928.25	7,093.23	7,260.45	7,429.33	7,597.22
3 Year(s) Old			5,865.34	1,483.55	2,847.09	3,192.35	2,974.54	3,103.08	3,231.81	3,291.74	3,375.38	3,464.12	3,546.61	3,630.23	3,714.66
4 Year(s) Old	-	-		1,480.96	374.58	718.87	806.04	751.05	783.50	816.01	831.14	852.26	874.67	895.49	916.60
5 Year(s) Old					135.08	34.17	65.57	73.52	68.50	71.46	74.43	75.81	77.74	79.78	81.68
6 Year(s) Old	-	-			-	3.07	0.78	1.49	1.67	1.56	1.63	1.69	1.72	1.77	1.81
7 Year(s) Old					-		0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
8 Year(s) Old					-			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Year(s) Old	-	-			-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 Year(s) Old					-					0.00	0.00	0.00	0.00	0.00	0.00
11 Year(s) Old	-	-			-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
12 Year(s) Old					-							0.00	0.00	0.00	0.00
13 Year(s) Old					-								0.00	0.00	0.00
14 Year(s) Old						-								0.00	0.00
15 Year(s) Old	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Sales	1,000.00	1,000.00	750.00	750.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00
							n.	placements							
1 Year(s) Old	14,700.00	2,969.31	1,002.22	1,923.38	2,156.62	2,009.47	2,096.31	2,183.28	2,223.76	2,280.27	2,340.22	2,395.95	2,452.43	2,509.47	2,566.18
2 Year(s) Old			5,865.34	1,483.55	2,847.09	3,192.35	2,974.54	3,103.08	3,231.81	3,291.74	3,375.38	3,464.12	3,546.61	3,630.23	3,714.66
3 Year(s) Old			-	4,384.39	1,108.96	2,128.22	2,386.30	2,223.49	2,319.57	2,415.80	2.460.60	2,523.12	2,589.46	2,651.12	2,713.62
4 Year(s) Old				4,004.00	1,345.88	340.42	653.30	732.52	682.54	712.04	741.58	755.33	774.52	794.89	813.81
5 Year(s) Old				-	1,545.00	132.01	33.39	64.08	71.85	66.95	69.84	72.74	74.08	75.97	77.96
6 Year(s) Old						102.01	3.06	0.77	1.49	1.67	1.55	1.62	1.69	1.72	1.76
7 Year(s) Old							-	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01
8 Year(s) Old								-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 Year(s) Old					-		-		-	0.00	0.00	0.00	0.00	0.00	0.00
10 Year(s) Old										-	0.00	0.00	0.00	0.00	0.00
11 Year(s) Old					-		-			-	-	0.00	0.00	0.00	0.00
12 Year(s) Old					-		-			-			0.00	0.00	0.00
13 Year(s) Old					-		-			-			-	0.00	0.00
14 Year(s) Old															0.00
15 Year(s) Old		-	-		-	-	-	-	-			-	-	-	-
Units in thousands	 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Units Sold	14700.0	3969.3	7617.6	8541.3	7958.5	8302.5	8646.9	8807.2	9031.0	9268.5	9489.2	9712.9	9938.8	10163.4	10388.0
Market Share	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Units Attributable to HEAR	6615	1786.2	3427.9	3843.6	3581.3	3736.1	3891.1	3963.3	4064.0	4170.8	4270.1	4370.8	4472.5	4573.5	4674.6
Average Selling Price	\$ 43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44 \$	43.44
Sales	\$ 287,378.00 \$	77,598.16 \$	148,919.78 \$	166,978.58 \$	155,585.82 \$	162,309.32 \$	169,042.84 \$	172,177.21 \$	176,552.31 \$	181,194.07 \$	185,508.81 \$	189,882.22 \$	194,298.86 \$	198,689.58 \$	203,080.74
Units in thousands	 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Sales	\$	77,598.16 \$	148,919.78 \$	166,978.58 \$	155,585.82 \$	162,309.32 \$	169,042.84 \$	172,177.21 \$	176,552.31 \$	181,194.07 \$	185,508.81 \$	189,882.22 \$	194,298.86 \$	198,689.58 \$	203,080.74
Costs of Revenue		65.6%	65.3%	65.1%	64.8%	64.6%	64.3%	64.1%	63.8%	63.6%	63.3%	63.1%	62.8%	62.6%	62.3%
Operating Costs	\$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00 \$	50,000.00
Interest Expense		1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%	1.42%
Tax Expense		21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Net Income	\$	(19,275.20) \$	(392.17) \$	4,680.03 \$	1,972.96 \$	4,085.74 \$	6,227.78 \$	7,415.71 \$	8,956.55 \$	10,588.39 \$	12,147.51 \$	13,740.13 \$	15,362.23 \$	16,994.41 \$	18,644.05
Diluted Shares Outstanding		16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00	16,260.00
Diluted EPS	ş	(1.185) \$	(0.024) \$	0.288 \$	0.121 \$	0.251 \$	0.383 \$	0.456 \$	0.551 \$	0.651 \$	0.747 \$	0.845 \$	0.945 \$	1.045 \$	1.147



Valuation

How we re +64% upside

(mm)	 2019E	2020E	2021E	2022E	2023E	2024E
NWC	\$ (1,822.66)	\$ 25,632.70	\$ 33,642.36	\$ 31,354.61	\$ 33,705.70	\$ 36,053.55
(thousands)	 2019E	2020E	2021E	2022E	2023E	2024E
EBIT	\$ 15,312.54	\$ 26,817.34	\$ 32,357.19	\$ 32,898.97	\$ 34,037.90	\$ 35,226.80
EBIAT	13,781.29	21,185.70	25,562.18	25,990.19	26,889.94	27,829.17
D&A	4,250.00	4,250.00	4,250.00	4,250.00	4,250.00	4,250.00
Stock Based Compensation	1,004.85	1,723.09	1,918.15	1,856.86	1,915.41	1,973.33
Change in NWC	(30,078.92)	27,455.37	8,009.66	(2,287.75)	2,351.09	2,347.85
CAPEX	5,100.00	5,100.00	5,100.00	5,100.00	5,100.00	5,100.00
FCF	44,015.06	(5,396.58)	18,620.67	29,284.80	25,604.26	26,604.65
Present Value	44,015.06	(4,872.59)	15,180.25	21,555.98	17,016.87	15,964.92

WACC Calculation									
Market Cap	\$	152.60							
Total Debt	\$	-							
Interest on Debt	\$	-							
Tax Rate		21%							
Cost of Debt		0.00%							
Cost of Equity									
Risk Free Rate		2.440%							
Beta		1.51							
Market									
Premium		5.50%							
Cost of Equity		10.8%							
WACC		10.8%							

Implied Enterprise Value	 293,063.96
Net Debt	7,400.00
Equity Value	285,663.96
Fully Diluted Shares Oustanding	14,500.00
Implied Share Price	\$ 19.70
Implied Upside	64%

New Headset Sales 1000 2000 3000 40005000 6000 0 37.5% \$ 14.34 \$ 17.36 \$ 20.38 \$ 23.40 \$ 26.42 \$ 29.45 \$ 32.47 Market Share 14.87 \$ 18.10 \$ 40.0% \$ 21.32 \$ 24.54 \$ 27.76 \$ 30.99 \$ 34.21 \$ 42.5% \$ 15.41 \$ 18.83 22.26 \$ 25.68 \$ 29.10 \$ 32.53 \$ 35.95 \$ \$ \$ 45.0% \$ 15.94 19.57 23.19 \$ 26.82 \$ 30.44 \$ 34.07 37.69 47.5% \$ 16.47 \$ 20.30 \$ 24.13 27.96 31.78 35.61 39.44 \$ \$ \$ \$ 50.0% \$ 17.01 \$ 21.04 \$ \$ \$ 41.18 \$ 25.06 \$ 29.09 33.12 37.15 52.5% \$ 17.54 \$ \$ \$ 21.77 \$ 26.00 \$ 30.23 34.46 38.69 \$ 42.92

		New Headset Sales										
		0	1000	2000	3000	4000	5000	6000				
e	0.75	14.03	17.43	20.83	24.22	27.62	31.01	34.41				
Cycle	1.00	14.86	18.34	21.83	25.31	28.79	32.28	35.76				
ut C	1.25	15.47	19.04	22.60	26.16	29.72	33.28	36.84				
me	1.50	15.94	19.57	23.19	26.82	30.44	34.07	37.69				
lace	1.75	16.31	19.98	23.66	27.34	31.01	34.69	38.37				
Replacement	2.00	16.60	20.32	24.04	27.76	31.47	35.19	38.91				
_	2.25	16.84	20.59	24.34	28.10	31.85	35.60	39.36				

