



# Nintendo Company

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# I. Investment Overview

## Buy NTDOY at Standard Allocation

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### Valuation

- Nintendo has seen recent recent drops in stock price, not because of poor performance, but rather due to an overall slowdown of the video game industry following a successful 2020.
- Nintendo shares currently have a PE of 13 which is less than 50% of 5-year average (27.49x)

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### Upcoming Releases and utilizations of Intellectual property

- Nintendo plans to release highly anticipated exclusive games (Zelda sequel, Mario, Pokemon, Bayonetta, Kirby) amongst other titles in 2022. A Switch pro model is also rumored (Although denied by nintendo - with good reason after the OLED model release)
- Super Nintendo themed areas are under construction at Universal Studios locations in Singapore (estimated completion: 2025), Orlando (estimated completion: 2025), and Hollywood estimated completion: unannounced) in addition to the fully completed area in Japan
- Upcoming Super Mario Movie is set for a Dec, 2022 release

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### Nintendo Online

- New expansion pack to online multiplayer and digital game access/distribution service from Nintendo (similar to Xbox Live and Playstation Plus)
- Incorporates access to classic titles and dlc for new games in addition to previously available features
- Opportunity for high growth rates to continue into the near future, boosting margins and helping NTDOY further transition into software

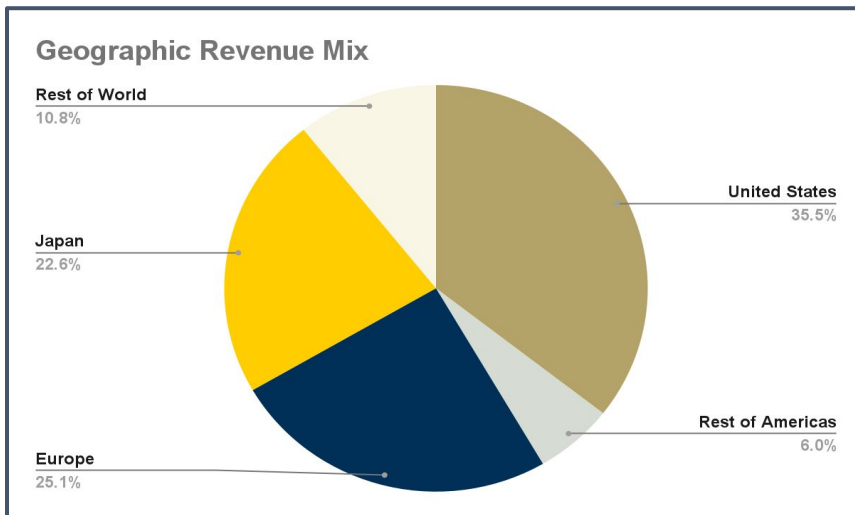
## Business Description

- Japanese company involved in the development, manufacturing, and sale of entertainment products which are categorized into the following:
- Dedicated video game (Consoles), software using Nintendo intellectual property (IP) for smart devices, including smartphones, playing cards, and other products
- Consoles are divided into hardware and software. On the software side, Nintendo produces original IP solely for its video game systems (first-party franchises) and licenses third-party developers
- Key first-party franchises include Mario, Legend of Zelda, Pokemon, Animal Crossing, and Super Smash Brothers

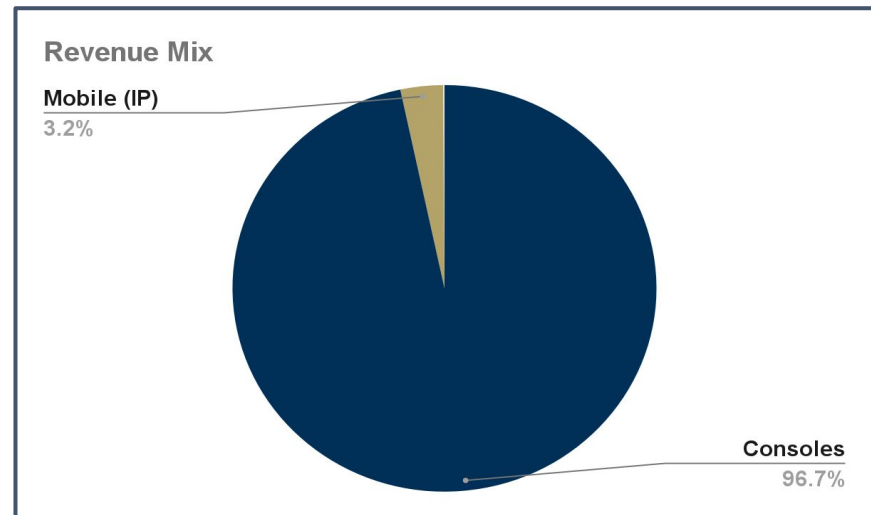
## Key Statistics

<b>GICS Sub-Industry</b>	Entertainment
<b>Market Cap</b>	\$51.43B
<b>Revenue</b>	\$15.49B
<b>Current Price</b>	\$54.80
<b>52-Week Range</b>	\$52.95 / \$82.55
<b>Beta</b>	0.71
<b>Dividend Yield</b>	2.91%
<b>Credit Rating</b>	---

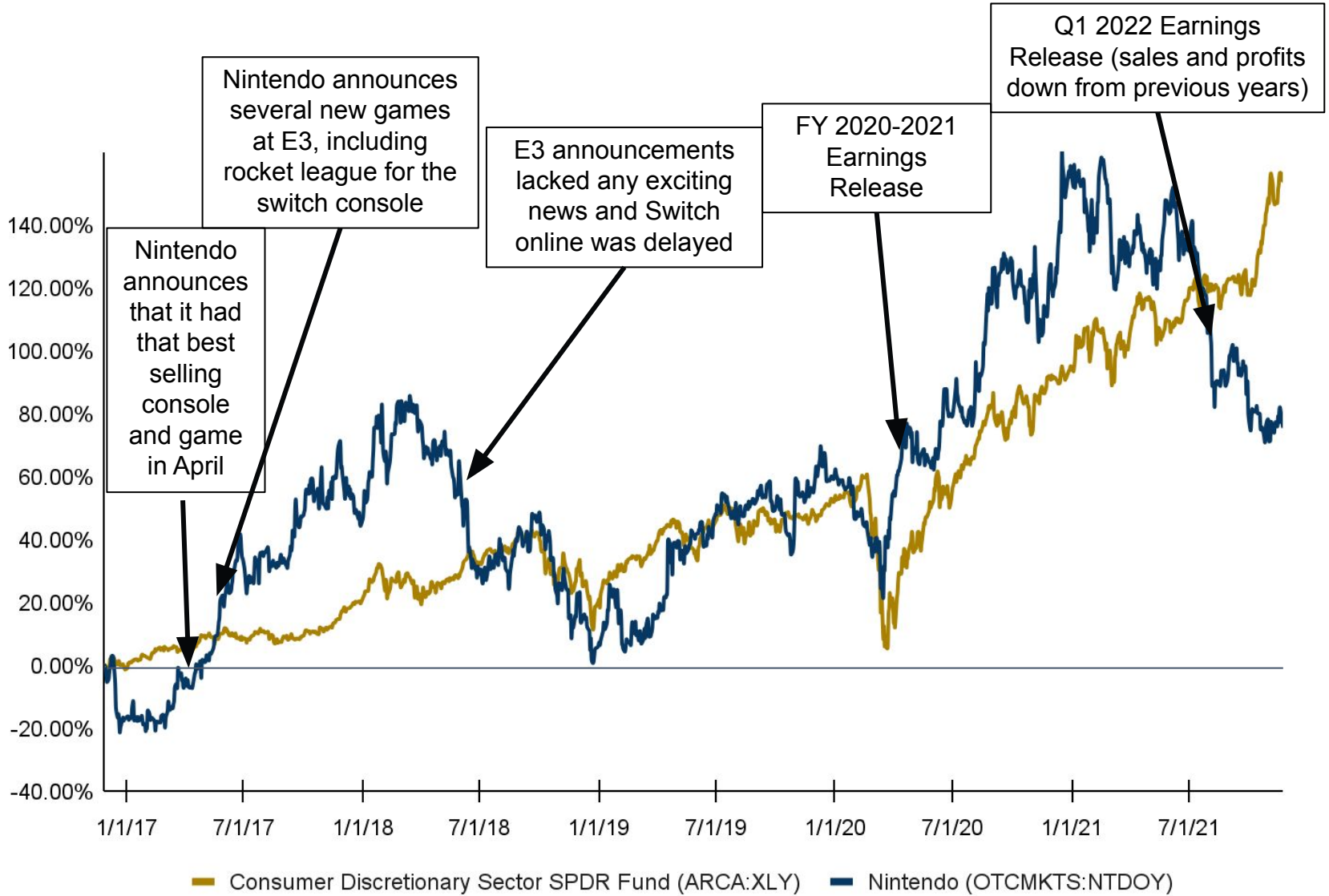
## Geographic Breakdown



## Segment Revenue Breakdown



# 5-Year Stock Performance



## Increased diversity in gaming

- More women and people of older ages are beginning to enjoy gaming
- Nintendo is already well positioned for older players considering that the majority of Switch user are in between the ages of 20 and 40
- Nintendo is also beginning to develop games with more appeal across genders. 7 months after its release, Animal Crossing: New Horizons was noted as having an almost even split of male and female players

## Cloud Gaming and Digital Distribution

- Advancements in internet speed have allowed for increased usage of cloud gaming. Digital distribution allows for more convenient purchasing of games while also preventing the transfer of games between users, benefitting the seller
- Nintendo has a steadily growing library of cloud games and its Switch Online service allows games to be accessed digitally and progress to be saved to the cloud
- Nintendo's digital sales have also increased 68.5% YoY

## Increased utilization of Intellectual Property

- Due to the high cost involved with creating a game series from scratch and desire for diversification out of titles and simple merchandise, video game companies are beginning to expand their use of intellectual property
- Nintendo currently generates less than 4% of its revenue off of intellectual property related endeavors, therefore giving it much room for growth in this area

## II. Business Segments

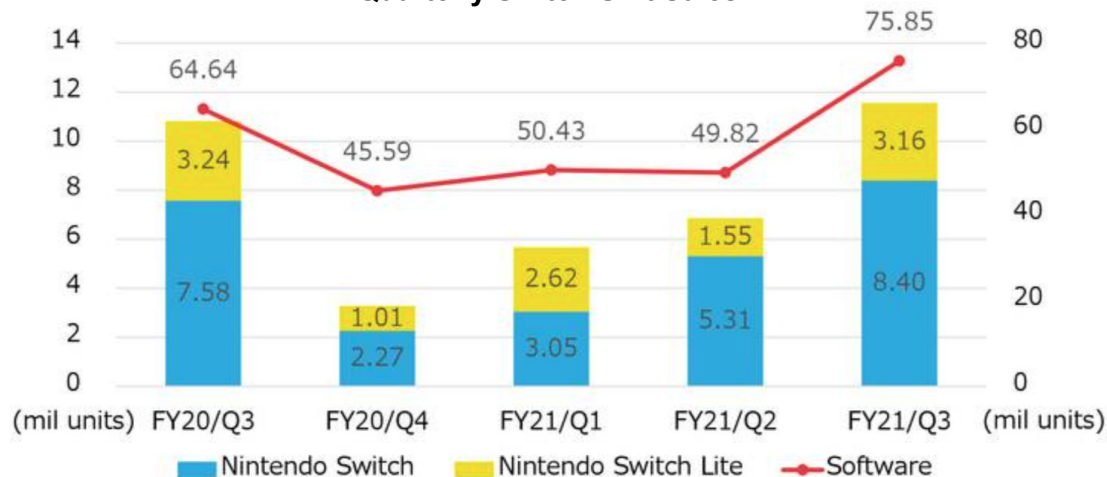
## Consoles

- Nintendo operates through a few segments, with consoles being the most notable
- 95% of sales are driven through software and hardware associated with consoles
- 54% of total sales come from hardware, while 41% come from digital sales, which include digital sales of packaged software and Nintendo Online
- Online sales increased 68.5% YoY in FY 2021
- This is naturally the higher margin portion of their business, with estimates of a mere \$20 average profit per unit on Switch hardware sales

## Other Segments

- Software using Nintendo intellectual property (IP) for smart devices, including smartphones, playing cards, and other products drive the remaining 5% of sales
- New IP utilization such as aforementioned parks and films demonstrate Nintendo's efforts toward capturing future growth within the segment

Quarterly Switch Unit Sales





## New Developments and Releases

- The Nintendo Switch has sold considerably well (Best selling console in the U.S. for 33 straight months)
- The Switch has entered the mature phase of its cycle, so sales are expected to wane
- Highly anticipated titles such as The Legend of Zelda: Breath of the Wild, Pokemon Legends: Arceus, and [Mario + Rabbids Sparks of Hope](#) (among other releases) are expected to boost game revenue while also driving Switch sales
- The Switch OLED model released in October providing a boost in console sales (allowed Switch to reclaim top spot in terms of revenue and units purchased). Additionally, a Switch pro model is on the horizon
- Increased popularity of retro games favors Nintendo's wealth of classic titles
- Nintendo Online expected to continue high growth in the near future



## Partnership with Niantic

- In March, Nintendo announced a partnership with Niantic (creator of Pokemon Go) to develop AR mobile games
- The first deliverable of this partnership (Pikmin Bloom) debuted in late October
- Nintendo hasn't yet broken into the lucrative space of mobile gaming, so outsourcing development is estimated to help progress



NIANTIC

## III. Valuation

Company	Market Cap	5Y Rev CAGR	Forward EV/EBITDA	Forward PEG	Operating Margin	FCF Margin	Dividend Yield
Nintendo	\$56.93B	32.15%	8.4x	---	33%	34%	2.89%
Microsoft	\$2540B	15.63%	24.15x	2.83x	45%	33%	0.80%
Sony	\$155.90B	7.00%	11.02x	-6.29x	13%	9%	3.12%
Activision Blizzard	\$47.44B	15.25%	10.68x	1.70x	40%	27%	0.80%
Electronic Arts	\$35.82B	5.71%	18.91x	7.46x	19%	32%	0.53%
<b>Median</b>	<b>\$137.7B</b>	<b>11.74%</b>	<b>11.9x</b>	<b>2.26x</b>	<b>33%</b>	<b>32%</b>	<b>1.98%</b>

## Positives

- Impressive revenue growth
- Dividend yield is among the best when compared to peers
- Free cash flow margin beats out all peers

## Negatives

- Operating Margin isn't exceptional, signaling decent efficiency in terms of generating income

## Sensitivity Analysis (19.5% Implied Upside)

		Exit Multiple				
		9.0x	9.5x	10.0x	10.5x	11.0x
<b>WACC</b>	4.74%	\$ 63.44	\$ 65.95	\$ 68.46	\$ 70.97	\$ 73.48
	5.24%	\$ 62.12	\$ 64.57	\$ 67.03	\$ 69.48	\$ 71.93
	5.74%	\$ 60.84	\$ 63.24	\$ <b>65.63</b>	\$ 68.03	\$ 70.42
	6.24%	\$ 59.60	\$ 61.94	\$ 64.28	\$ 66.61	\$ 68.95
	6.74%	\$ 58.39	\$ 60.67	\$ 62.96	\$ 65.24	\$ 67.52

### Model Assumptions

- Software driven sales through FY2022 and 2023
- Improved and expanded Nintendo Switch Online Experience will drive higher margins compared to historical figures
- Relatively sticky increase in digital sales of packaged software

### WACC Assumptions

Assumptions	
Tax Rate	29%
Exit Multiple (EBITDA)	10.0x
WACC Calculation	
Risk Free Rate	0.06%
Beta	0.71
Market Risk Premium	8.00%
Cost of Equity	5.7%
Pre-Tax Cost of Debt	1.69%
Market Cap	\$ 52
BV of Debt	\$ -
Equity-to-Value	100.0%
Debt-to-Value	0.0%
<b>WACC</b>	<b>5.74%</b>

## IV. Conclusion

	Risk	Mitigation
1	<p><b>Limited Switch Pro adoption/lack of release</b></p> <ul style="list-style-type: none"> <li>• Saturation of Market - sales cannot remain strong forever as target audience becomes saturated.</li> <li>• No Switch Pro “for the foreseeable future”.</li> </ul>	<ul style="list-style-type: none"> <li>• COVID seems to be here to stay due to variants, which has proven fantastic for console &amp; title sales</li> <li>• News may be due to new model release</li> </ul>
2	<p><b>Chip Shortages - Switch sale slowdown</b></p> <ul style="list-style-type: none"> <li>• Due to global semiconductor shortage there is a state of continued uncertainty</li> <li>• Revising its Switch sales forecast for the financial year down by 1.5 million units (Down to 24 million units this fiscal year)</li> </ul>	<ul style="list-style-type: none"> <li>• Nintendo isn’t altering its expectations for revenue, and actually expects operating profit to be 4 percent higher than previously predicted.</li> <li>• Most profit is driven from game sales, and the switch is rivalling the Wii in lifetime sales (Large customer base for title releases built up)</li> </ul>
3	<p><b>Reliance on switch and upcoming game releases</b></p> <ul style="list-style-type: none"> <li>• 95% of Nintendo’s Revenue during 2021 is from the Switch Platform.</li> <li>• With low margins (estimated ~\$20 per console), title releases are driving almost all profit</li> <li>• Nintendo does not expect sales to slow down well into 2022</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy Investment in R&amp;D : Nintendo's research and development expenses have increased 8.8% YoY at \$627.8 million. Nintendo forecasts a 7.7% rise to 75 billion yen, or \$676.28 million.</li> <li>• Heavy Expansion into Digital platforms &amp; Mobile. (General Industry Trend), release of old games</li> <li>• Long-Term plan to expand access to Nintendo's intellectual property through movies, merchandise, mobile games, and theme parks,</li> </ul>

## Low Valuation, Low risk financials

- Nintendo shares currently have a PE of 13 which is less than 50% of 5-year average (27.49x)
- Nintendo ended FY 2021 with \$8.4 billion in cash & equivalents and negligible debt
- Management recently announced a stock buyback of 1.51% of the company's total shares to return some of the excess cash to shareholders. The stock also has a Trailing Annual Dividend Yield of 2.89%

## Strong performing Core Business

- Nintendo Switch has been best selling console for 33 months in a row, with the PS5 as best selling console only for one month before OLED model release pushed it back up.
- List of Highly anticipated Title Releases in 2022 (Zelda sequel, Mario, and Pokemon, Bayonetta, Kirby)

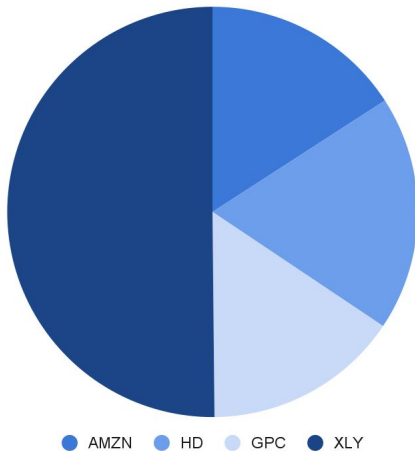
## Revenue Diversification & Market Size Increase

- Long-Term plan to expand access to Nintendo's intellectual property through movies, merchandise, mobile games, and theme parks,
- COVID variants such as Omicron May shift user behaviour more towards gaming.
- Increased diversity in gaming

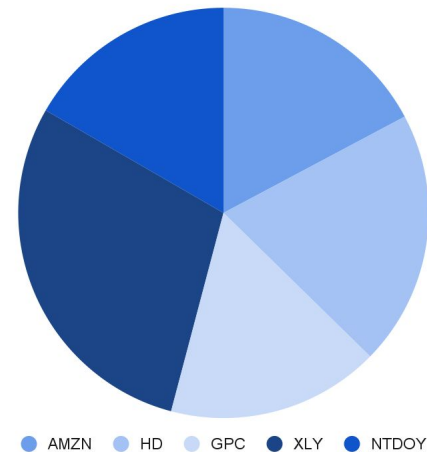
## Rationale: Replace 1.5% Discretionary ETF (XLY) with NTDOY

- Discretionary sector currently has high exposure to XLY ETF
- Gives us exposure to a new industry that we previously had no/very little exposure to within ETF
- Lowers the portfolio beta and transitions from growth-heavy stocks (highly concentrated in AMZN) to sustainable value-oriented company that is projected to grow steadily long-term

### Current Portfolio



### Prospective Portfolio





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# V. Appendix

# Discounted Cash Flow



	Historical			Expected	Projected				
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	\$ 9,528	\$ 10,829	\$ 12,037	\$ 16,592	\$ 15,265	\$ 14,807	\$ 15,103	\$ 15,707	\$ 16,492
% YoY Growth	N/A	13.65%	11.15%	37.84%	-8.00%	-3.00%	2.00%	4.00%	5.00%
Cost of Goods Sold	\$ 5,886	\$ 6,309	\$ 6,134	\$ 7,437	\$ 6,844	\$ 6,640	\$ 6,774	\$ 6,597	\$ 6,927
Gross Profit	\$ 3,642	\$ 4,521	\$ 5,903	\$ 9,155	\$ 8,421	\$ 8,167	\$ 8,328	\$ 9,110	\$ 9,566
% Margin	38.23%	41.75%	49.04%	55.17%	55.16%	55.15%	55.14%	58.00%	58.00%
EBITDA	1,684	2,339	3,329	6,145	5,501	5,588	5,851	5,497	5,937
% Margin	17.68%	21.60%	27.66%	37.04%	36.04%	37.74%	38.74%	35.00%	36.00%
Less: Depreciation	82	86	88	102	92	88	88	90	93
EBIT	1,603	2,252	3,241	6,043	5,409	5,500	5,763	5,407	5,844
Less: Taxes	469	659	949	1,769	1,584	1,610	1,687	1,583	1,711
EBIT*(1-T)	1,133	1,593	2,292	4,274	3,825	3,890	4,075	3,824	4,133
Add: Depreciation	82	86	88	102	92	88	88	90	93
Less: Inc. in NWC		626	(243)	(128)	(77)	(24)	22	57	54
Less: CapEx	87	97	91	66	76	89	105	125	148
FCF to Firm	1,128	956	2,532	4,438	3,919	3,913	4,036	3,732	4,024
PV Factor					0.95	0.89	0.85	0.80	0.76
PV of FCF					3,706	3,500	3,414	2,985	3,044
PV of Terminal Value									44914.6

	Historical			Expected	Projected				
	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Drivers:</b>									
Revenue Growth	N/A	13.65%	11.15%	37.84%	-8.00%	-3.00%	2.00%	4.00%	5.00%
Margin Expansion:									
Gross Margin	38.23%	41.75%	49.04%	55.17%	55.16%	55.15%	55.14%	58.00%	58.00%
EBITDA Margin	17.68%	21.60%	27.66%	37.04%	36.04%	37.74%	38.74%	35.00%	36.00%
Depreciation (% of Sales)	0.9%	0.8%	0.7%	0.6%	0.60%	0.59%	0.58%	0.57%	0.56%
Net Working Capital:									
A/R	\$ 657.0	\$ 705.0	\$ 1,230.0	\$ 1,270.0	\$ 1,172.6	\$ 1,141.5	\$ 1,168.4	\$ 1,219.5	\$ 1,285.0
DSO	25.17	23.76	37.30	27.94	28.04	28.14	28.24	28.34	28.44
Inventory	\$ 1,335.0	\$ 1,223.0	\$ 826.0	\$ 785.0	\$ 724.2	\$ 704.5	\$ 720.6	\$ 703.5	\$ 740.6
DIO	82.8	70.8	49.2	38.5	38.6	38.7	38.8	38.9	39.0
A/P	\$ 1,229.0	\$ 539.0	\$ 910.0	\$ 1,037.0	\$ 956.1	\$ 929.5	\$ 950.1	\$ 927.0	\$ 975.3
DPO	76.2	31.2	54.1	50.9	51.0	51.1	51.2	51.3	51.4
NWC	\$ 763.0	\$ 1,389.0	\$ 1,146.0	\$ 1,018.0	\$ 940.7	\$ 916.5	\$ 938.9	\$ 995.9	\$ 1,050.3
Change in NWC		\$ 626.0	\$ (243.0)	\$ (128.0)	\$ (77.3)	\$ (24.2)	\$ 22.4	\$ 57.1	\$ 54.3
CapEx (% of Sales)	0.91%	0.90%	0.76%	0.40%	0.50%	0.60%	0.70%	0.80%	0.90%