

Take-Two Interactive (TTWO)

\$177.52 (As of 08/04/20)

Price Target (6-12 Months): **\$186.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 07/02/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:D

Value: D

Growth: A

Momentum: F

Summary

Take Two's first-quarter fiscal 2021 results benefited from heightened user engagement levels attributed to coronavirus-led lockdown. Revenues grew steadily on sturdy demand for *NBA 2K20*, *Grand Theft Auto Online* and *Grand Theft Auto V*, *Red Dead Redemption 2* and *Red Dead Online*, *Borderlands 3*, *Sid Meier's Civilization VI*, Social Point's mobile games, *WWE Series* and *The Outer Worlds*. Moreover, stellar growth in digitally-delivered net bookings aided revenue growth. However, intensifying competition from the likes of EA and Activision is compelling the company to spend more on software development and advertising. This is keeping margins under pressure. Notably, shares have underperformed the industry on a year-to-date basis.

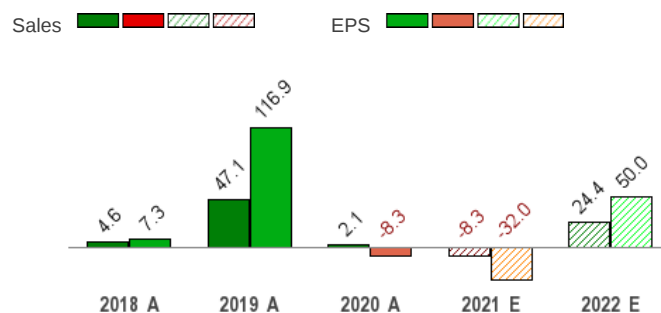
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$180.61 - \$100.00
20 Day Average Volume (sh)	1,435,581
Market Cap	\$20.3 B
YTD Price Change	45.0%
Beta	0.62
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Toys - Games - Hobbies
Zacks Industry Rank	Top 26% (65 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	69.6%
Last Sales Surprise	18.0%
EPS F1 Est- 4 week change	-1.2%
Expected Report Date	11/05/2020
Earnings ESP	13.3%
P/E TTM	22.4
P/E F1	47.2
PEG F1	4.2
P/S TTM	6.0

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	613 E	925 E	1,266 E	756 E	3,411 E
2021	996 A	754 E	650 E	515 E	2,742 E
2020	422 A	951 A	888 A	729 A	2,990 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.78 E	\$1.57 E	\$2.40 E	\$1.22 E	\$5.64 E
2021	\$2.68 A	\$1.11 E	\$0.70 E	\$0.46 E	\$3.76 E
2020	\$0.24 A	\$1.89 A	\$1.68 A	\$1.66 A	\$5.53 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/04/2020. The reports text is as of 08/05/2020.

Overview

Based in New York City, Take Two Interactive Software is a leading developer and publisher of video games.

Take Two's games can be played on video consoles, personal computers, mobile devices and tablets. The company earns revenues from the sale of disk-based video game products (known as packaged goods), downloadable contents (DLCs), subscription, micro-transactions and advertising.

Take Two reported net revenues of \$3.08 billion for fiscal 2020. The U.S. accounted for 57% of revenues, while the rest came from International operations. Channel-wise, digital online contributed 77% to net revenues, while the rest came from Physical retail and other segment.

The company develops and publishes games through Rockstar Games, 2K, Private Division and Social Point.

Rockstar publishes *Grand Theft Auto (GTA)* and *Red Dead Redemption* among others.

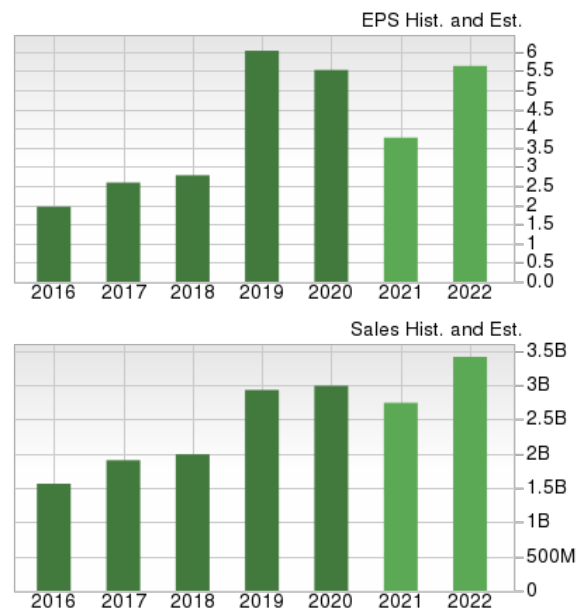
On Feb 7, 2020 Take Two's *Grand Theft Auto V* became the best-selling game of the past decade while *Red Dead Redemption 2* became the best-selling game in the past four years. Both the games sold more than 150 million units worldwide combined since their launch.

2K's internally owned and published franchises include *BioShock*, *Mafia*, *XCOM* and *Sid Meier's Civilization*. It also publishes externally developed franchises such as *Borderlands*. Moreover, 2K's realistic sports simulation titles include *NBA 2K* series, the *WWE 2K* series, and the *Golf Club*.

Take Two's Private Division is the publisher of *Kerbal Space Program*.

Social Point develops and publishes popular free-to-play mobile games that include *Dragon City* and *Monster Legends*.

The company sells games both physically and digitally through direct relationships with large retail customers and third-party distributors. GameStop, Microsoft, Sony, Steam and Wal-Mart are the top customers. In fiscal 2020, the five largest customers accounted for 71.5% of net revenues, with Sony and Microsoft each accounting for more than 10% of net revenues.



Reasons To Buy:

- ▲ Take Two's growth is primarily driven by its popular franchises — *Grand Theft Auto (GTA)* and *Red Dead Redemption*. Notably, GTA generated 23% of net revenues in fiscal 2020. *Sid Meier's Civilization VI* also outperformed management's expectation owing to its expansion packs and the popularity of the Nintendo Switch skew. The company's portfolio strength and robust slate of releases, including *Borderlands 3*, *Ancestors: The Humankind Odyssey* and *The Outer Worlds*, are key catalysts for the long haul.
- ▲ The growing traction in NBA franchise bodes well for the company. Take Two expects NBA 2K net bookings to continue the momentum owing to strong growth in recurrent consumer spending, which increased 29% year over year in fiscal 2020. Meanwhile, NBA 2K Online was the most played PC game in China and the franchise has about 49 million registered users, which is expected to drive recurrent consumer spending. Moreover, the NBA 2K League started its 2020 regular season on May 5, 2020 with at least six weeks of remote gameplay after coronavirus lockdown. This is expected to further boost top-line growth in the near term..
- ▲ Take Two's acquisition of Barcelona-based free-to-play mobile game developer, Social Point, is helping it fast penetrate the rapidly growing mobile gaming market. Social Point continues to expand its gaming portfolio with the launch of *Tasty Town* and *Word Life*. It has a robust slate of new releases (10 games) for the remainder of 2021.
- ▲ Compared with the physical platform, digital games are more profitable due to minimum packaging cost. This cost effectiveness helps publishers like Take Two to keep a popular franchise running profitably over a longer period of time. In first-quarter fiscal 2021, digital online revenues rallied 69.8% and accounted for 87.4% of net revenues. Moreover, net bookings from recurrent consumer spending grew 127% and accounted for 65% of total net bookings. The consumer spending momentum, driven by rapid adoption of NBA2K (including NBA 2K Online in China), Grand Theft Auto Online and NBA 2K20, will be a major growth driver for bookings in fiscal 2021.
- ▲ Take Two has been cautious in its approach towards e-sports market, which refers to live video game tournaments. With continued increase in viewership, corporate sponsorships and growing media coverage, e-sports is here to stay. To grab a share of this lucrative opportunity, in February 2017, Take Two inked a deal with NBA to launch NBA 2K eLeague. This made NBA the only professional sports league to have its own e-sports league. Additionally, the company has a total of 21 teams. Notably, Take Two has been conducting an NBA e-sports tournament for the last two years.
- ▲ Take-Two's improved liquidity makes the stock attractive to investors. As of Jun 30, 2020, cash, cash equivalents and short-term investments totaled \$2.75 billion or \$2.56 billion in net cash. Take Two had cash, cash equivalents and short-term investments of \$2.54 billion as of Mar 31, 2020. Although total debt of \$181.1 million on Jun 30, 2020 increased from \$177.2 million as of Mar 31, 2020, it should not be a bother for Take-Two due to its solid cash balance.

Take Two benefits from the popularity of *GTA*, *Red Dead Redemption*, NBA and WWE franchises, strength in digital business, and expanding footprint in the e-sports space.

Reasons To Sell:

- ▼ Video games are hit driven. Though Take Two has a powerful line-up of games that can be repeatedly upgraded, there is no assurance that a particular game will be a hit. Moreover, the video game business is highly cyclical and heavily dependent on time-to-time upgrade/introduction of new game software and hardware systems. This always keeps the margins under pressure.
- ▼ Moreover, the video game publishing industry is intensely competitive. The resultant pressure could tell on margins and also lead to market share losses. On the other hand, continued investment in the digital market may hurt its profitability in the near term. Notably, operating expenses increased 10.2% year over year, primarily due to higher selling & marketing (S&M) and research & development (R&D) expenses, up 13.3% and 6%, respectively, in the first quarter of fiscal 2021.
- ▼ Take Two's biggest problem is that it depends heavily on a handful of franchises, including *GTA*, *Red Dead Redemption* and *NBA 2K* series. The five best selling franchises make up for a major chunk of its revenues (87.4% in fiscal 2020). Underperformance of any of these franchises is bound to have a negative impact on the top line and profitability.
- ▼ Take Two is highly dependent on its few retail customers and third-party distributors to drive sales. Its top five customers accounted for 71.5% of net revenues in fiscal 2020. Sony and Microsoft each accounted for more than 10.0% of the company's net revenues. Customer concentration does not bode well for growth, as loss of any one such customer can drastically hurt financials.

Take Two's dependence on few franchises for top-line growth and customer concentration, and intensifying competition in the video game industry beget caution.

Last Earnings Report

Take Two's Q1 Earnings and Revenues Increase Y/Y

Take Two Interactive Software reported first-quarter fiscal 2021 GAAP earnings of 77 cents per share, up 87.8% year over year.

Net revenues increased 53.8% from the year-ago quarter to \$831.3 million. The top line was driven by heightened user engagement levels and net bookings growth attributed to coronavirus-led lockdown.

Grand Theft Auto (GTA) Online and GTA V, NBA 2K20, Red Dead Redemption 2 and Red Dead Online, Borderlands 3, Sid Meier's Civilization VI, Social Point's mobile offerings, the WWE series and The Outer Worlds were the biggest contributors to the company's first-quarter fiscal 2021 top-line growth.

Recurrent consumer spending (virtual currency, add-on content and in-game purchases, including the allocated value of virtual currency and add-on content incorporated in special editions of certain games) increased 52% and accounted for 58% of total GAAP net revenues.

The Zacks Consensus Estimate for earnings and revenues was pegged at \$1.58 per share and \$823 million, respectively.

Top-Line Details

Digital revenues (87.4% of revenues) increased 69.8% year over year to \$726.2 million. Revenues from Physical retailer and other segments (12.6% of revenues) declined 6.7% year over year at \$105.1 million.

Region-wise, revenues from the United States (56.6% of revenues) increased 42.4% year over year to \$470.5 million. Moreover, revenues from International markets (43.4% of revenues) increased 71.8% to \$360.8 million.

On the basis of platforms, revenues from console (73.6% of revenues) increased 40.7% to \$611.7 million while revenues from PC and other (26.7% of revenues) surged 107.9% to \$219.6 million.

Booking Details

Net bookings of \$996.2 million increased 136% on a year-over-year basis.

Net bookings from recurrent consumer spending grew 127% year over year and accounted for 65% of total net bookings. Notably, growth was driven by *GTA Online and GTA V, NBA 2K20, Red Dead Redemption 2 and Red Dead Online, Borderlands 3, Social Point's mobile offerings, Sid Meier's Civilization VI, the WWE series and The Outer Worlds*.

Notably, Catalog accounted for \$915.5 million of net bookings. Strong demand for *Grand Theft Auto, Borderlands 3, Red Dead Redemption, Sid Meier's Civilization VI* and Social Point's mobile offerings was observed in the reported quarter.

Digitally-delivered net bookings (91.9% of net bookings) grew 139% to \$915.2 million. Moreover, bookings from Physical retail (8.1% of net bookings) and other segments increased 103.9% to \$81.1 million.

Operating Details

Take Two's gross profit increased 18.6% year over year to \$354.6 million. Reported gross margin of 42.7% contracted from 55.3% in the year-ago quarter.

Reported operating expenses increased 10.2% year over year to \$272.5 million, primarily due to higher selling & marketing (S&M) and general & administrative (G&A) expenses in the quarter. S&M and G&A expenses increased 13.3% and 11.3%, respectively, on a year-over-year basis.

Meanwhile, research & development (R&D) expenses increased 6% year over year to \$73.1 million in the reported quarter.

Income from operations came in at \$82.1 million, up 58.8% year over year. Operating margin expanded 30 basis points (bps) from the year-ago quarter.

Balance Sheet

As of Jun 30, 2020, Take-Two had \$2.75 billion in cash, cash equivalents and short-term investments compared with \$2.54 billion as of Mar 31, 2020.

Guidance

For the second quarter of fiscal 2021, Take Two expects GAAP net revenues between \$750 million and \$800 million. The company projects GAAP earnings between 85 cents and 96 cents per share.

Net bookings are projected between \$775 million and \$825 million. Significant contribution to net bookings is expected to be made by *Grand Theft Auto Online and Grand Theft Auto V and NBA 2K20, Red Dead Redemption 2 and Red Dead Online and Borderlands 3*.

The company expects digitally delivered net bookings to be flat year over year, driven by growth in recurrent consumer spending, offset by lower digitally delivered sales of *Borderlands 3*. The company assumes that 63% of current generation console games will be delivered digitally, up from 51% in the same period last year.

For fiscal 2021, net bookings are expected between \$2.8 billion and \$2.9 billion. The largest contributors to net bookings are expected to be *NBA*

Quarter Ending 06/2020

Report Date	Aug 03, 2020
Sales Surprise	18.00%
EPS Surprise	69.62%
Quarterly EPS	2.68
Annual EPS (TTM)	7.91

2K, GTA Online and GTA V, Red Dead Redemption 2 and Red Dead Online, Borderlands 3, Social Point's mobile games, Sid Meier's Civilization VI and The Outer Worlds.

Take-Two expects geographic net bookings split to be about 60% United States and 40% International.

The company expects digitally delivered net bookings to increase about 3% from the last year against its prior expectation of an 8% decline. As a percentage of business, digital is projected to represent 87%, up from 82% last year.

GAAP net revenues are likely to be in the range of \$2.8-\$2.9 billion. Take Two projects GAAP earnings of \$3.04-\$3.3 per share.

Total operating expenses are expected to range between \$1.15 billion and \$1.17 billion.

Take Two expects recurrent consumer spending to grow 15% against its prior expectation of flat and represent 61% of net bookings compared with 51% last year, driven primarily by growth in NBA 2K, GTA Online and Social Point.

Note: The EPS data mentioned in the text of this section differs from the rest of report due to the difference in calculation or consideration of one-time items.

Recent News

On Jul 30, Take Two's division 2K announced a partnership with OneTeam Partners and the National Football League Players Association (NFLPA) to include NFL players in multiple football games set to launch starting 2021.

On Jul 29, Take Two's Private Division announced that it has three new publishing agreements with top independent developers Moon Studios, League of Geeks, and Roll7.

On Jul 8, Take Two's division 2K announced that WWE 2K Battlegrounds, the arcade-style brawler featuring a roster of more than 70 WWE superstars and legends, will be released worldwide on Sep 18 for the PS4 system, the Xbox One family of devices, including the Xbox One X and Windows PC via Steam, Nintendo Switch system and Stadia.

On Jun 16, Take Two's Private Division and V1 Interactive announced the launch of *Disintegration*, its first-person shooter multiplayer game available digitally for \$49.99 on PC, PS 4, PS4 Pro, and across the Xbox One family of devices, including Xbox One X.

On May 19, Take Two's division 2K and its Hangar 13 development studio announced the launch of *Mafia: Trilogy*, a new collection featuring the only interactive entertainment series that lets players live the life of a gangster across three distinct eras of organized crime in America. Players who purchase *Mafia: Trilogy* digitally prior to Aug 28 will be able to access *Mafia II: Definitive Edition* and *Mafia III: Definitive Edition* immediately on PS 4, Xbox One, and Steam, and will be able to download *Mafia: Definitive Edition* as soon as it becomes available.

On May 18, Take Two's Private Division and Squad announced a partnership with the European Space Agency (ESA) to launch a *Kerbal Space Program* update, titled Shared Horizons. The launch on PC is planned for Jul 1, 2020.

On May 14, Take Two's division 2K announced that *PGA TOUR 2K21*, its forthcoming, officially licensed golf simulation video game, is scheduled for worldwide release on Aug 21, 2020 for the PS4 system, the Xbox One family of devices, including the Xbox One X and Windows PC via Steam, Nintendo Switch system and Stadia.

On May 11, Take Two announced the release of Sid Meier's *Civilization VI - New Frontier Pass* starting May 21, 2020 through March 2021.

On May 7, Take Two's Private Division and V1 Interactive announced that *Disintegration*, the debut title from the 30-person independent studio, will release digitally for \$49.99 on PC, PS4, PS4 Pro and across the Xbox One family of devices, including Xbox One X on Jun 16, 2020.

Valuation

Take Two shares are up 45% in the year-to-date period and 42.5% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 30.5% while stocks in the Zacks Consumer Discretionary sector are down 5.5% in the year-to-date period. Over the past year, the Zacks sub-industry and sector are up 49.2% and 4.4%, respectively.

The S&P 500 index is up 2.3% in the year-to-date period and 14.6% in the past year.

The stock is currently trading at 40.22X forward 12-month earnings, which compares to 32.83X for the Zacks sub-industry, 33.97X for the Zacks sector and 22.58X for the S&P 500 index.

Over the past five years, the stock has traded as high as 55.61X and as low as 21.56X, with a 5-year median of 33.88X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$186 price target reflects 42.23X forward 12-month earnings.

The table below shows summary valuation data for TTWO

Valuation Multiples - TTWO					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	40.22	32.83	33.97	22.58
	5-Year High	55.61	32.83	33.97	22.58
	5-Year Low	21.56	19.51	16.12	15.25
	5-Year Median	33.88	25.48	19.84	17.55
P/S F12M	Current	6.87	6.39	2.36	3.6
	5-Year High	6.87	6.39	2.95	3.6
	5-Year Low	1.53	3.5	1.68	2.53
	5-Year Median	4.31	4.81	2.5	3.04
EV/EBITDA TTM	Current	26.62	29.58	10.65	12.76
	5-Year High	34.91	29.58	17.81	12.76
	5-Year Low	3	11.2	8.34	8.24
	5-Year Median	15.5	14.98	12.24	10.89

As of 08/04/2020

Industry Analysis Zacks Industry Rank: Top 26% (65 out of 254)



Top Peers

Company (Ticker)	Rec	Rank
Activision Blizzard, Inc. (ATVI)	Neutral	3
Electronic Arts Inc. (EA)	Neutral	2
Glu Mobile Inc. (GLUU)	Neutral	4
JAKKS Pacific, Inc. (JAKK)	Neutral	3
Microsoft Corporation (MSFT)	Neutral	3
Nintendo Co. (NTDOY)	Neutral	3
Tencent Holding Ltd. (TCEHY)	Neutral	2
Zynga Inc. (ZNGA)	Neutral	4

Industry Comparison Industry: Toys - Games - Hobbies				Industry Peers		
	TTWO	X Industry	S&P 500	ATVI	EA	MSFT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	2	3
VGM Score	D	-	-	D	C	A
Market Cap	20.30 B	7.10 B	22.75 B	66.61 B	42.24 B	1,614.10 B
# of Analysts	21	6	14	15	14	14
Dividend Yield	0.00%	0.00%	1.76%	0.47%	0.00%	0.96%
Value Score	D	-	-	D	D	C
Cash/Price	0.14	0.14	0.07	0.09	0.15	0.09
EV/EBITDA	25.76	22.09	13.09	29.34	22.12	26.61
PEG Ratio	4.17	2.98	2.95	1.91	4.01	2.43
Price/Book (P/B)	7.66	5.28	3.16	5.12	5.43	13.64
Price/Cash Flow (P/CF)	30.81	27.26	12.32	30.80	27.26	28.28
P/E (F1)	46.53	28.12	21.81	30.99	27.05	33.36
Price/Sales (P/S)	6.01	4.11	2.46	9.53	7.30	11.29
Earnings Yield	2.12%	3.35%	4.40%	3.23%	3.70%	3.00%
Debt/Equity	0.06	0.12	0.76	0.21	0.05	0.57
Cash Flow (\$/share)	5.76	2.34	6.94	2.81	5.37	7.54
Growth Score	A	-	-	D	A	A
Hist. EPS Growth (3-5 yrs)	29.50%	14.93%	10.46%	13.15%	14.93%	19.44%
Proj. EPS Growth (F1/F0)	-31.96%	25.77%	-7.16%	24.00%	-5.44%	10.99%
Curr. Cash Flow Growth	-8.18%	-3.32%	5.47%	-23.97%	15.43%	17.66%
Hist. Cash Flow Growth (3-5 yrs)	12.57%	6.23%	8.55%	9.90%	7.26%	10.19%
Current Ratio	1.72	1.72	1.32	2.78	2.61	2.52
Debt/Capital	5.47%	15.95%	44.36%	17.04%	4.85%	36.24%
Net Margin	13.22%	10.40%	10.25%	25.96%	34.27%	30.96%
Return on Equity	28.26%	17.86%	14.67%	18.00%	21.32%	39.45%
Sales/Assets	0.68	0.70	0.51	0.37	0.52	0.50
Proj. Sales Growth (F1/F0)	-8.85%	2.59%	-1.71%	11.64%	14.02%	8.57%
Momentum Score	F	-	-	A	D	A
Daily Price Chg	5.87%	0.00%	0.42%	1.96%	2.78%	-1.50%
1 Week Price Chg	5.13%	0.00%	0.14%	3.30%	4.72%	1.84%
4 Week Price Chg	20.54%	0.00%	4.97%	10.13%	8.56%	2.42%
12 Week Price Chg	34.87%	12.16%	15.30%	19.65%	25.74%	16.86%
52 Week Price Chg	42.52%	8.61%	2.34%	85.56%	62.40%	58.36%
20 Day Average Volume	1,435,581	644,309	2,082,836	5,989,223	2,082,836	38,592,256
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%
(F1) EPS Est 4 week change	-1.17%	0.78%	0.93%	1.08%	9.59%	2.51%
(F1) EPS Est 12 week change	-22.76%	1.56%	0.78%	1.78%	9.66%	3.00%
(Q1) EPS Est Mthly Chg	-0.42%	0.00%	0.17%	5.68%	-140.52%	3.89%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	D
Growth Score	A
Momentum Score	F
VGM Score	D

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.