

VALUATION SUMMARY

Stocks Undervalued	56.55%	Stocks Overvalued	43.45%
Stocks Undervalued by 20%	24.87%	Stocks Overvalued by 20%	15.51%

ValuEngine currently finds the markets attractive with the majority of stocks covered undervalued according to the research.

INDEX OVERVIEW

Index	Date	Last Close	MTD	QTD	YTD
S&P 500	4/25/2019	2,926.17	3.24%	5.09%	16.73%
Dow 30	4/25/2019	26,462.08	2.06%	2.11%	13.44%
Nasdaq	4/25/2019	8,118.68	5.04%	7.78%	22.36%
Russell 2000	4/25/2019	1,575.61	2.33%	0.00%	16.84%

PERFORMANCE HISTORY



SECTOR AVERAGE COMPARISON

Sector Name	Valuation	Momentum	P/E Ratio	Sharpe Ratio
Oils-Energy	22.00% undervalued	-13.55%	19.48	-0.4223
Basic Materials	11.28% undervalued	-17.13%	21.38	-0.1598
Transportation	6.37% undervalued	2.64%	17.77	-0.1310
Auto-Tires-Trucks	4.63% undervalued	-12.31%	11.47	-0.1225
Finance	2.82% undervalued	-1.29%	16.26	0.1901
Consumer Discretionary	1.23% undervalued	1.51%	25.11	0.0116
Retail-Wholesale	1.22% undervalued	6.73%	22.47	-0.0184
Multi-Sector Conglomerates	1.10% undervalued	-0.04%	17.66	0.0166
Industrial Products	0.98% undervalued	2.46%	20.33	0.0469
Construction	0.69% undervalued	-5.97%	19.24	0.0658
Medical	0.30% overvalued	10.98%	28.94	-0.1341
Aerospace	2.20% overvalued	5.25%	23.76	0.2371
Consumer Staples	4.62% overvalued	10.08%	24.84	0.1367
Business Services	5.03% overvalued	6.30%	25.52	0.0444
Utilities	6.60% overvalued	7.30%	23.68	0.1725
Computer and Technology	13.85% overvalued	16.22%	33.73	0.1370

TOP INDUSTRIES

Industry Name	Valuation	Momentum	P/E Ratio	Sharpe Ratio	Market Cap (bil)
Solar	5.72%	20.73%	55.57	-0.3186	1.0764
Communications Components	14.98%	37.70%	33.89	-0.0594	3.9206
Transportation-Truck	-11.80%	10.72%	19.05	-0.0134	2.1813
Transportation-Ship	-9.63%	13.85%	22.55	-0.5221	0.9989
Retail-Home Furnishings	-5.24%	2.91%	19.07	-0.1220	2.0132
Retail-Drug Stores	-33.79%	69.89%	11.70	-0.3905	17.8634
Pollution Control Eq & Svs	25.03%	7.06%	29.68	-0.0137	1.5231
Medical Instruments	10.55%	24.97%	41.39	-0.0991	3.3473
Machinery-Material Hdlg	-6.54%	-8.77%	11.99	-0.1202	0.8900
Bldg-Resident/Commrc	15.78%	-12.33%	17.92	-0.0775	4.4480

STOCK OF THE WEEK - PEGA

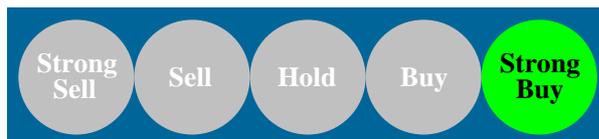
Company Name: Pegasystems Inc

Sector: Computer and Technology

Industry: Computer-Software

ValuEngine Recommendation

ValuEngine recommendation covers more than 5000 companies. The recommendations are based on the proprietary ValuEngine one-year forecast return model output for each individual equity. ValuEngine's Five-Engine rating stocks have an averaged annual return of 13.11% since 2002.



Data Summary

Trade Date: Apr 25, 2019	Last Close: \$74.65	Avg Volume: 397426
1-Yr Forecast: 12.96%	Valuation: 116.50%	1-Yr Momentum: 23.18%
Market Cap (bil): \$5.70	EPS Growth: -100.00%	Beta: 1.38
5-Yr Avg Return: 26.06%	Volatility: 31.78%	Sharpe Ratio: 0.82
P/S Ratio: 6.39	M/B Ratio: 10.39	Forward Dividend: \$0.12
Dividend Yield: 0.16%	Alpha: -0.03	52-Wk High: \$75.60

Forecast Analysis

The predictive variables used in Valuengine's forecast model include both proprietary and well-established variables derived from credible financial studies and publications. We use a distinct forecasting model for each time horizon and apply the most advanced statistical/econometric techniques to ensure that our stock return forecasts are as reliable as possible.

	Target Price	Exp. Return
1-Month	\$75.46	1.08%
3-Month	\$76.47	2.44%
6-Month	\$79.26	6.17%
1-Year	\$84.32	12.96%
2-Year	\$86.37	15.70%
3-Year	\$92.93	24.48%

[Click for more information on ValuEngine's models.](#)

STOCK OF THE WEEK - PEGA

Price And Recommendation History



ValuEngine Evaluation & Rankings

	Value	Ranking
1-Yr Forecast	12.96%	99
Valuation	116.50%	3
1-Yr Momentum	23.18%	87
P/E Ratio		30
Market Cap(bil)	5.6995	83
EPS Growth	-100.00%	3
5-Yr Avg Return	26.06%	96
Volatility	31.78%	50
Sharpe Ratio	0.8202	94
P/S Ratio	6.39	17
M/B Ratio	10.39	14
Surprise	-176.56%	4

Just as important as the percentages shown for our predictive variables for each stock is the way they are ranked against @7000 stocks in our database. This is sometimes confusing to newcomers to ValuEngine. Each of these quantitative measurements is ranked on a scale of 1 to 100. Generally the higher the ranking, the more positive the influence each measurement has on the overall attractiveness of the stock. In other words a high rank is always better. For example:

- * Forecast rank 99: 1% of stocks have higher forecast returns.
- * Valuation rank 3: 97% of stocks are more undervalued.
- * Momentum rank 87: 13% of stocks have higher momentum.
- * P/E rank 30: 70% of stocks have lower P/E ratios.
- * Size rank 83: 17% of stocks have higher market capitalization.
- * Volatility rank 50: 50% of stocks have less volatility.

Business Summary

Pegasystems Inc. is a leading provider of Customer Relationship Management software that enables transaction-intensive organizations to manage a broad array of customer interactions. Their software enables organizations to deliver high-quality, consistent customer service across today's preferred interaction channels, from the traditional call center environment to Internet self-service. The company's customers represent a wide range of industries, including banking and financial services, insurance, healthcare management, and telecommunications.

VALUENGINE SERVICE DESCRIPTIONS**Investing Should Not Be Emotional
Investing Should Be Based Upon Information & Knowledge
Improve your investment returns with ValuEngine**

ValuEngine provides research on over 5,000 stocks with stock valuations, Buy/Hold/Sell recommendations, and forecasted target prices, so that you the individual investor can make informed decisions, not emotional ones!
VE employs a complex Quantitative model that evaluates all available data, all the time.

ValuEngine Stock Analysis Service

- Research on over 4,000 US and 1,000 Canadian stocks
- Updated DAILY (when stock markets open)
- Fair market valuations, forecasted target prices, Buy/Hold/Sell Recommendations
- Industry and Sector Group analysis
- Screener to find top forecasted, or most undervalued stocks (and much more)
- Portfolio functions to maximize performance
- Portfolio wizard to build list of stocks to fit specific investment goals
- Daily Market Bulletin and Weekly newsletters
- Individual stock financials

For more information about ValuEngines research [CLICK HERE](#)

Two-week Free Trial available! [CLICK HERE](#)

ValuEngine Professional Subscription

- Everything in above Stock Analysis Service, PLUS
- Data file download of ValuEngine research outputs: Valuations, Forecasts, Ratings
- Import portfolio functions
- View unlimited ValuEngine stock reports on over 5,000 companies
- Unlimited access to 16 Sector and over 140 Industry reports
- Track portfolios of unlimited size
- ValuEngine View Portfolio Strategy: Flagship portfolio of 16 stocks
- ValuEngine REIT Strategy: Portfolio of 15 Real estate investment trust stocks
- ValuEngine Diversified Strategy: Portfolio of ETF's for a general market strategy

Two-week Free Trial available! [CLICK HERE](#)

ValuEngine Daily and Weekly Financial Newsletters

- Published most trading days
- Analysis of various ValuEngine stock picks, newsletters, economic commentary, and market insights
- Additional critical data on market and sector valuations
- Frequently includes links to free ValuEngine stock reports, newsletter samples
- Notification of ValuEngine investor events in your area
- Demonstrates the use of the tools and features at www.valuengine.com
- Provides analysis for key indices, sectors, and industries
- Analysis of individual stocks that are key in current news cycles
- Provides the latest results for a variety of VE portfolios and newsletters

For FREE access to ValuEngine blogs and articles! [CLICK HERE](#)

Data Feeds/Consultancy

- Real time data feeds of ValuEngine model outputs
- Quantitative consulting such as model creation, testing, backtesting
- Other customized services

Please call (321) 325-0519 or contact support@valuengine.com

VALUENGINE'S METHODOLOGY

ValuEngine's research combines the most advanced academic concepts with real world Wall Street practice. The result is state-of-the-art fair market valuation and price forecasting technologies.

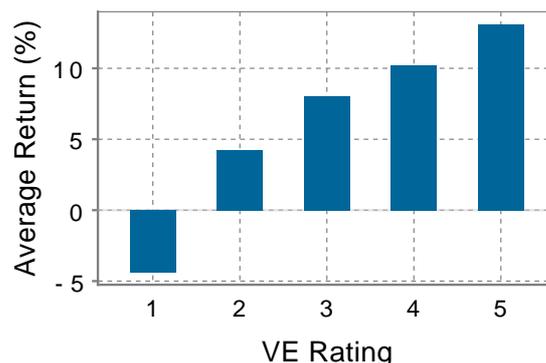
ValuEngine's stock valuation employs a sophisticated, three-factor approach. Fundamental variables, such as a company's trailing 12-month Earnings-Per-Share (EPS), the analyst consensus estimate of the company's future 12-month EPS, and the 30-year Treasury yield, are all used to create a more accurate reflection of a company's fair value. Together with eleven additional variables, ValuEngine paints a detailed picture of a company's fair value, represented by the model price.

ValuEngine's stock forecasts capture several important tendencies that stock prices consistently exhibit over six time horizons to ensure forecasts are established relative to a stock's proper peer groups. Advanced statistical/econometric techniques are used to run thousands of simulations estimating the probability of a double in stock price, as well as the probability of meeting and exceeding any given portfolio or stock investment target.

VE Engine Rating is an assessment of a stock's overall attractiveness. It is based on the one year forecast target price, which is the final evolution of VE's equity modeling. On average, only 2 percent of ValuEngine's 5,500 stocks under coverage achieve a 5 rating. 5 and 4 rated stocks are expected to outperform the overall markets, 3 rated to roughly match market performance, and 2 and 1 rated are expected to underperform.

For additional information about ValuEngine's financial research and financial modeling, please click www.valuengine.com

VE Rating and Average Annual Return
(Jan 2002 - Mar 2019)



DISCLOSURES

ValuEngine offers equity recommendations and related return estimates to investors and their advisors. It uses a three-class Buy-Hold-Sell rating system. This is a consolidated version of the firm's five class rating system: most favorable and favorable ratings are buys; neutral ratings are holds and the categories unfavorable and most unfavorable are sells.

STOCK RATINGS: The terms below are used to rate a stock's 12-month performance:

1. Buy: Expected to outperform the SP500 producing above average returns.
2. Hold: Expected to perform in line with the SP500 with average returns.
3. Sell: Expected to underperform the SP500 producing below-average returns.

ValuEngine does not offer brokerage or investment banking services. ValuEngine adheres to professional standards and abides by formal codes of ethics that put the interests of clients ahead of their own. The following are specific disclosures made by ValuEngine with regards to this research report:

1. ValuEngine, Inc. does not make a market in this security.
2. ValuEngine, Inc. has not received compensation from the companies discussed above in the last 12 months.
3. ValuEngine has not managed or co-managed a public offering for any companies in the above report in the last 12 months.
4. None of ValuEngine's management, the analysts involved, nor a member of the research analyst's household serves as an officer, director or advisory board member of the companies discussed in this report.
5. The research analyst over this company or members of his/her household do not have a financial interest in these companies discussed in this report.
6. ValuEngine, Inc. or its affiliates do not beneficially own 1% or more of any class of common equity securities of the subject companies.
7. Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: a). all of the views expressed accurately reflect his or her personal views about those securities or issuers; and b). no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

DISCLAIMERS

This report is intended for informational purposes only and does not constitute a recommendation, or an offer, to buy or sell any securities or related financial instruments. The report has no regard to the specific investment objectives, financial situation, or particular needs of any specific recipient. The information contained herein accurately reflects the opinion of ValuEngine at the time the report was released. The opinions of ValuEngine are subject to change at any time without notice and without obligation of notification. ValuEngine does not provide investment banking or consulting services to the companies mentioned in this report. ValuEngine does not receive any compensation from companies mentioned in this report. The author, officers, or affiliates of ValuEngine do not hold positions in the securities of the companies mentioned in this report. No warranty is made as to the accuracy of the information contained herein. This information is intended for the sole use of clients of ValuEngine, Inc. Any other use, distribution, or reproduction is strictly prohibited. Quotes provided by Zacks.