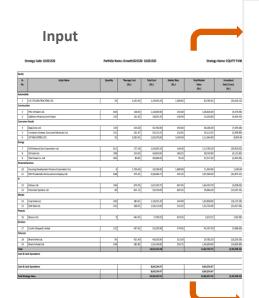


Advanced Natural Language Generation FOR WEALTH MANAGEMENT COMPANIES

Output



Portfolio Analysis

Only 2.74% of your stocks and schemes investment is recommended as sell by our research house due to weak fundamentals

Your portfolio has the **right weightage of stocks and schemes** which is in line with an ideal portfolio.

Your portfolio has the **right weightage of sectors and fund houses** which is in line with an ideal portfolio.

Your portfolio is **over diversified to 27 stocks and schemes** , an ideal portfolio should be restricted to not more than 15-20 stocks or schemes.

A negligible amount of your portfolio is invested into small cap which forms 1.86% of your portfolio and hence they are not rated at our research house

KEY QUESTIONS ANSWERED



- How is Natural Language Generation the new wave in AI?
- Practical use cases of how advanced NLG is used in wealth management
- Recommendations to be a future-ready wealth management company
 - Emerging AI-NLG trends in wealth management

EXECUTIVE SUMMARY

Today, wealth management firms have adopted the finest of data analytics applications but manual processes have hindered their ability to fully leverage the financial insights embedded within the data. Advanced natural language generation(NLG) technology offers a great opportunity to overcome this drawback. It gathers financial data from disparate sources, analyses it and translates it into text tailored for a wide variety of audiences. Also, by integrating NLG capabilities with existing business intelligence platforms like Tableau, MicroStrategy, Qlik etc., wealth management firms can convert insights into human-sounding narratives to deliver an advisor-like experience to customers. Relieved from manual data analysis, relationship managers will be able to focus on business development activities vital for growth and survival of the organization.

On the technical front, basic NLG, which simply translates raw structured data into text, has evolved to advanced NLG, which is driven by user intent and provides insightful, audience-relevant information written in easy-to-comprehend language. Previously, it was a tedious and resource-intensive job on the part of NLG users: They had to know basics of coding, write rules and actually set parameters to create report templates. That can now all be automated, so that anyone who is comfortable using a spreadsheet or common business intelligence tools can also use NLG. Another big driver of NLG is the growing awareness of how much data simply goes unanalyzed, which means insights are buried. Astonishingly, only 1% of the world's data is being analyzed. Advanced NLG is a way to make data more accessible and more understandable.

The global natural language generation market size is expected to grow from USD 322.1 million in 2018 to USD 825.3 million by 2023, at a Compound Annual Growth Rate (CAGR) of 20.8% during the forecast period.

NATURAL LANGUAGE GENERATION – THE NEW WAVE IN AI

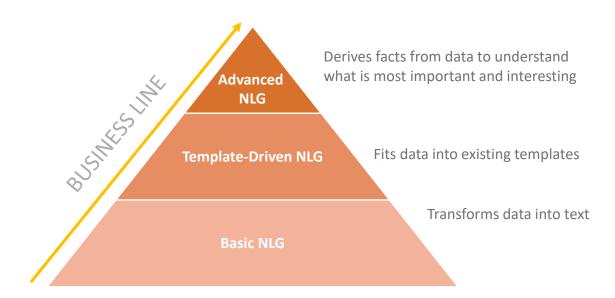
Natural language technology is all set to take deep learning and AI algorithms from the 'data' stage to the 'knowledge' stage. Statistical machine learning techniques are good at learning from data, but are not very good at reasoning. Knowledge-based AI approaches are good at reasoning, but cannot learn from data. Advanced NLG combines the two, so you have a system that is good at learning from data, and also good at reasoning.

While today's technology helps process the data, and the rest of the process is either human-driven or preset through human conditions, advanced NLG aims to evolve this to the next step, wherein the human-level effort would lie only in implementing the knowledge.

Every day, we inevitably miss valuable data points and insights as well as critical knowledge. Information across organizations or even within organizations, are not easily shared because of use of jargons, different terms that mean the same thing or the same terms that mean different things. The volume of information available is overwhelming – more than anyone has time to read. The data of interest is buried in this information. The way data is presented makes it hard to "connect the dots" regarding trends and relationships. As a result, text information languishes in data repositories and is not effectively utilized.

In this case, advanced NLG provides contextual answer to your natural questions and extracts a suite of signals from text to provide you with in-depth insight and can help you to discover knowledge in your data you didn't even know was there. For wealth management companies, this can provide an edge in investment analysis.

STAGES OF NATURAL LANGUAGE GENERATION



BENEFITS OF NATURAL LANGUAGE GENERATION







PRACTICAL NLG USE CASES FOR WEALTH MANAGEMENT

Customer Engagement

Trust is an important aspect of the client/wealth manager relationship and NLG technology enables personalization of customer relationships on a large scale. This becomes a source of competitive advantage for wealth management firms. Additionally, NLG capabilities facilitate the development of long-term, dynamic relationships with customers. Professionals may always look back at historic customer information and identify trends in long-standing customer behavior to help them plan for the future.

NLG systems can help automate reporting processes and provide advisors with information such as client investment objectives, risk profile, portfolio performance, investment recommendations, market insights, and house views. Based on this information, advisors can create customized plans and reports for clients.

Wealth management firms should aim at a 720-degree customer view that provides a comprehensive understanding of client needs, behavior, life stage, and investment patterns helping them predict their clients' future actions and deliver relevant offers and experiences.

EXAMPLE USE CASES:

Dear John,

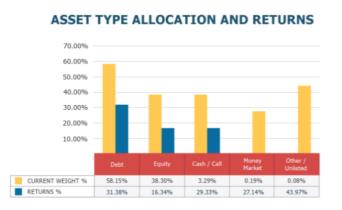
PORTFOLIO ANALYSIS

Good news about your investments, your total portfolio has grown. The net worth has increased by 24.02% to \$44431 as compared to the previous year.

ASSET TYPES THAT YOU HAVE INVESTED IN

You have a moderately risky and a rather balanced portfolio with a risk score of 0.5.

58.15% of your investments amounting to Rs.16.17 lac are in Debt. Although you have allocated most of your funds in Debt, it didn't turn out to be the top performer.



Equity Snapshot - Current Portfolio

- The largest allotment of your Equity investment is in Large Cap which has brought the lowest return of -5.59%.
- Your Equity investment in Small Cap has brought the highest return of 1.41%.
- The largest allotment of your Equity investment is in Automobiles Tractors which has brought a return of -4.51%.
- · Your Equity investment in Banks has brought the highest return of 7.04%.

Top Losers 74.76% Sundaram Select Micro Cap - Series Vi - Regular - Growth None of your schemes have given a negative Equity 72.09% Sundaram Select Micro Cap - Series Vii - Regular - Growth Equity 48.03% Reliance Close Ended Equity Fund - Series B - Dividend

Wealth management firms can empower their customers with timely and personalized portfolio analysis. This can help alert them if they have deviated from their planned risk profile and uncover bad practices that negatively impact optimal investments.

QUARTERLY EARNINGS

OVERVIEW

Apple Inc.(U.S.: Nasdaq)

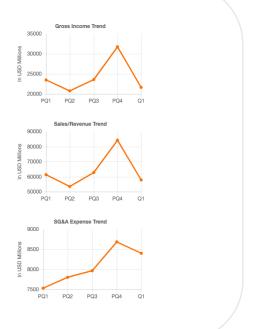
Sales/Revenue had a decline of 5.4% in Q1 as compared to the corresponding quarter last fiscal, going from USD 61,224 Millions to USD 57,918 Millions.

SG&A Expense was USD 8,406 Millions with a decline of 3.21% compared to the previous quarter. It can be attributed to Other SG&A that had a decline of 6.79% and contributed 53.03% to the total SG&A Expense.

EBITDA by 38.39% as compared to the previous quarter in Q1 to USD 16,282 Millions from USD 26,429 Millions.

Gross Income declined by 31.75% as compared to the previous quarter and 8% as compared to the corresponding quarter last fiscal and was USD 21,648 Millions in Q1.

With a decline of 43.36% QoQ and 4.86% YoY, Income Tax was USD 2,232 Millions in the present quarter.



Let the customers gauge the financial health of their potential investments by an easy-to-consume and generate quarterly earnings report. NLG technology automates the analysis, creation and syndication of this report in a matter of seconds. Important insights like cyclical trends, adjusted earnings per share, sales growth etc. can be highlighted and shared with the customers at scale.

PORTFOLIO RECOMMENDATIONS

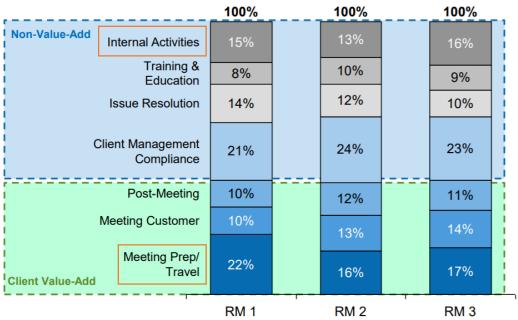
Current Risk: 24%		Optim	▼ Optimized Risk: 9%			Current Return: 15% ▼ Optimized Return ₁ : 14%			
Current Portfolio	Buy More No. of Holdings:		Hold as is No. of Holdings: 0 Value: ₹ 0 Value			Reduce	Sell No. of Holdings: 7	Proposed Portfolio No. of Holdings: 14	
Value: ₹ 7,01,118	Value: ₹ 53,16	3 Value:			: ₹ 0 Va	lue: ₹ 2,96,708	96,708 Value: ₹ 1,82,898	Value: ₹ 2,74,681	
Scrip Name Sector	Holding Qty	Mkt Price Mkt Value		able Qty able Value	Final Qty Final Value		Research Remarks/Rationale		
Dewan Housing Finance Corporation Ltd Banking	е 34	388.60 13,212	⊕ Buy	2 777	36 13,990	Strong preser tier-iii cities (3)Wide res presence (4) I	It enjoys several long-term earnings growth drivers: (1) Strong presence in relatively less competitive tier-ii and tier-iii cities (2) Presence across customer segments (3)Wide reach- only LMI focused HFC with pan India presence (4) Rising average ticket size and market share gains (5) Robust asset quality (6) Falling cost of funds.		
United Spirits Ltd Consumer	18	1,906.65 34,320	⊕ Buy	11 20,973	29 55,293	change, cost	We expect the company to improve margins led by mix change, cost rationalization on packaging and overheads front as well as lower leverage post debt repayment		
Sun Pharmaceutical Industries Ltd Health care	25	683.25 17,081	⊕ Buy	2 1,367	27 18,448	We believe SUNPHARMA would continue to trade at premium valuations due to superior execution track recore high ROIC (46%) and potential for accretive M&A.		execution track record,	
Hindustan Petroleum Corporation Ltd Oil & Gas	20	542.45 10,849	⊕ Buy	5 2,712	25 13,561	HPCL's fy16 margin of INI reduced by	An INR 0.5/ltr increase in diesel marketing margin increases HPCL's fy16E EPS by 32%. We model additional diesel margin of INR 0.5/ltr in fy16/fy17. hpcl's gross debt has reduced by 31% YTD to INR200b led by lower working capital and improving marketing division's profitability		

Advisors can generate personalized, professional and easy to understand portfolio recommendations reports which can be edited and customized via an intuitive report builder to then download as PDFs and send straight to the customers. The internal research can also be mapped alongside to recommend personalized investment opportunities to customers.

Advisor Performance Management & Business Efficiency

NLG solutions can provide on-demand or periodic performance reporting solutions which can help empower the advisors to easily set and manage performance goals against benchmarks. Wealth management firms are focused on increasing sales force productivity rather than simply recruiting more advisors. Increasing sales force time spent with clients requires a reduction in non-value-add activities and NLG can positively impact the business efficiency.

Time spent analysis by RMs



^{*}Factors where NLG impacts your business extensively.(marked above)

How can NLG technology be embraced to increase productivity in RMs?





Generation of Mobile/Tablet-Friendly Reports

Data



Can be extracted from various multiple sources. E.g. ERP/CRM, Excel, PPT etc.

Analytics



Derives insights from massive & complex datasets.

Infrastructure



Deployment oncloud, on-prem or embed within your application

EXAMPLE USE CASES:

RM PERFORMANCE

TARGET vs ACHIEVED

ACTION POINTS

- In Acquisition, you have managed to achieve 73 counts out of 105 counts which was your Aug '18 YTD target. In order to cover for this, and to achieve the annual target, you will now have to acquire 164 counts more in this annual year.
- As your Aug '18 YTD target of INR 138.0 Cr in Revenue was underachieved by INR 36.7 Cr, you will now have to achieve INR 230.1 Cr to meet your annual target of INR 331.4 Cr.
- In CASA AYB, as you fell short of your Aug '18 YTD target of INR 2,735.2 Cr by INR 219.1 Cr, you will now have to achieve INR 529.5 Cr to meet your annual target of INR 3,045.7 Cr.

NLG solutions help in automated creation of personalized performance report for every relationship manager, providing him 'Target vs Achieved' insights and an overview of how the other RMs are performing. RMs can also know the untapped and open opportunities for driving sales growth.

Research

Prudent investors consider investing in companies with audited financial statements, which are a requirement for all public-traded companies. Even before digging into company's financials, investors look into the company's annual report. Wealth management firms can share the quarterly and annual statements of the recommended companies and let them explore the array of investment opportunities within seconds and without any external help, only by using the reporting solutions backed by the natural language generation technology.

Advisors have to spend many hours working on personalized analysis and recommendations for each recipient. NLG solutions can help in executing these tasks in very less time hence advisors can invest in building customer relationships, cross-selling and upselling opportunities.

EXAMPLE USE CASES:

QUARTERLY & ANNUAL STATEMENT ANALYSIS

3 Years Key Indicators

- Revenue of the Company increased throughout the review period registering a CAGR of 26.44%. In FY 2014, increase in revenue was driven by growth in domestic revenue by 60.91%. Revenue from overseas markets remained near stagnant in FY 2014. The Company was able to increase its share of revenue from domestic market gradually during the review period and it constituted about 80.82% of total revenue in FY 2014. Also, there was increase in orders bagged from INR 26,630,000 Thousand in FY 2013 to INR 30,780,000 Thousand in FY 2014. In FY 2015, revenue has increased by 11.29% due to increase in oversees revenue.
- ✓ Net profit of the Company showed increasing trend during the review period. Net profit increased marginally in FY 2014 on account of increase in operating profit and decline in interest expenditure as a percentage of revenue. It further increased in FY 2015 on account of increase in non-operating income and decline in total tax provision as a percentage of revenue. This is partially offset by increase in direct expenditure, general and administrative expenses and interest expenditure.
- Tangible networth of the Company increased during the period under review. It increased in FY 2014 and FY 2015 on account of retention of profits in the business with the retention ratio at 44.27% and 66.28% in FY 2014 and FY 2015 respectively. In FY 2014, the Company allotted 100,000,000, 0.1% fully and compulsorily convertible, non -cumulative, non-participatory preference shares of INR 10 each to Shapoorji Pallonji & Company Limited. This increase in tangible networth in FY 2014 was also on account of merger of Afcons Infrastructure International Limited with Afcons.
- Capital employed by the Company depicted an increasing trend during the review period. It increased in FY 2014 and FY 2015 on account of increase in tangible networth and total debt.
- ✓ Total borrowings of the Company depicted an increasing trend during the period under review. It increased in FY 2014 due to increase in both long term and short term funds. Further, despite decline in short term debt; it increased in FY 2015 on account of increase in long term debt.

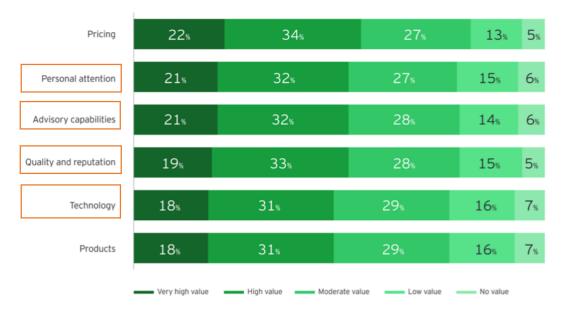
Key financial highlights like cash flows, achievements, milestones and how exactly is the company making money for investors, can be displayed as per the client preferences & needs using NLG's completely customizable reporting solutions.

Source: www.vphrase.com

FACTS YOU NEED TO KNOW

- The global volume of net investable assets of high-net-worth individuals (HNWI+) will increase by around 25% to almost US\$70 trillion by 2021.
- Holistic wealth management will emerge as a new kind of digitalized business model. Holistic wealth managers are expected to gain a market share of 30% by 2025.
- Wealth managers with traditional business models will largely disappear from the market as a result.
- Traditional wealth managers located in or operating out of the United States are likely to survive in the international offshore business thanks to increasingly favorable conditions.
- The service offering of wealth managers with an offshore business model will increasingly mirror that of onshore wealth managers.

Clients ranking of individual dimensions of the wealth management relationship by level of value



^{*4} Factors where NLG impacts your business extensively.(marked above)

Clients using Fintech providers today and in the next three years Millennials Gen X Boomers 24% 39% Use today Expect to use

EMERGING AI-NLG TRENDS FOR WEALTH MANAGEMENT

Holistic wealth managers

Holistic wealth managers are the ones who take a digital advisory approach driven by life events to deliver genuine added value for wealthy clients. New technologies and client affinity for digital frameworks are smoothing the way for profitable business model design. They are set to become significantly more important in the next 10 years. Their estimated share of the global market will increase from practically zero to between 20% and 30%.

(68%) the delivery of holistic advice as being driven by and dependent on the capture of broader sets of data to build more sophisticated analytics that create opportunities for increased immediacy and relevance. In addition, 78% believe that AI can improve the goal planning and portfolio creation processes. They also see cognitive computing's potential to advance the goal of the right advice, at the right time, to the right client, through the right channel.

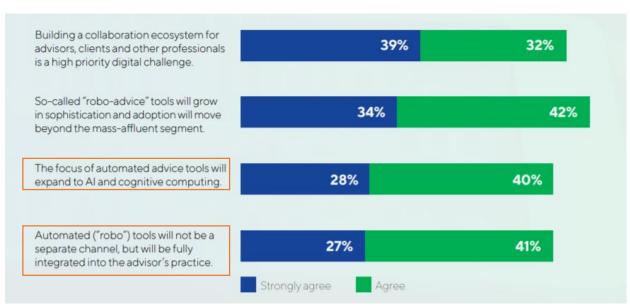
Customer Experience

Future customer experience is largely shaped by technology. Seventy-one percent identify as a very high or high priority building digital tools, analytics and channels to enable and support the experience qualities — available, transparent, responsive and holistic — demanded by clients.

Automated Advisory

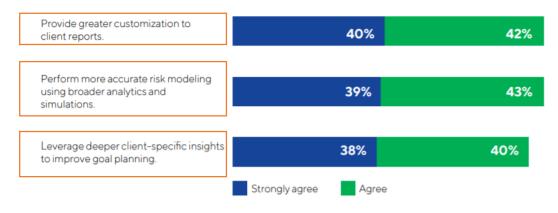
76% of the respondents, believe that automated advice will grow in capabilities and sophistication and will increasingly find adoption beyond the mass affluent channel. "Robo" should not be thought of only as a channel limited to mass affluent clients, but one that will grow in sophistication and application to core high-net-worth (HNW) clients, and 68% believe that robo as a channel should be increasingly integrated into the advisor practice as an enabling tool.

Factors that will shape the future of wealth management advice



Response base: 295 of 351 total respondents

^{*}Factors where NLG fits into the wealth management industry(marked above).



Response base: 295 of 351 total respondents

RECOMMENDATIONS TO BE FUTURE-READY WITH ADVANCED NLG

HYPER-PERSONALIZATION

Investors' goals, values, and preferences are influenced by their demographic segment, life stage, household balance sheet, and specific tax circumstances. To act in your customers' best interests your advice needs to be cognizant of these factors.

The next generation of digital wealth won't just be personalized, but hyper-personalized.

The entire advice ecosystem will be driven by sophisticated analytics enabling microtargeting at scale. This will power the next generation application of digital engagement, prospecting tools, investment solutions, and content management systems to personalize the entire experience for targeted customer profiles.

Personalized Audio/Video reports

In 2020, the number of digital video viewers in the United States is projected to surpass 236 million and in a recent study by Cisco says, there is as much as a 60 percent gap in the market between clients who demand video engagement with their wealth advisors that provide video capabilities. To curb this, advanced NLG technology can create personalized audio and video reports for customers to know about their investment portfolio with recommendations. Here's an example: http://bit.ly/Audio-video-report

Personalized Market Alerts/Notifications

With advanced NLG capabilities, advisors can set personalized alerts on selected economic events, changing trends, warning signs etc. - on any device or medium and provide timely investment consultation to their customers. This NLG feature will save the active investors from the arduous task of market research for validating their investment decisions.

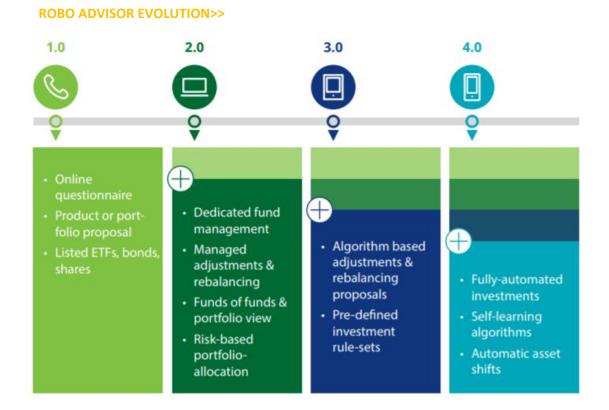
Source: www.vphrase.com

^{*}Areas where NLG fits into the wealth management industry(marked above).

Advanced Robo Advisory

Advanced NLG platforms can build robo advisors which can interact with wealth managers & customers, in a real-time, and get personalized advisory services. These robo-advisors are capable of integrating with popular communication channels like Email, WhatsApp etc.

Estimates for the future robo-advisory market by several well-known institutes predict between \$2.2 trillion and \$3.7 trillion in assets to be managed with the support of robo-advisory services in 2020. By the year 2025 this figure is expected to rise to over \$16.0 trillion assets under management(AUM), roughly three times the amount of assets managed by Blackrock, world's biggest asset manager.



Voice-based query

50% of all searches will be voice searches by 2020, per comScore. Advanced NLG provides a voice-based interface to solve the day-to-day queries of your advisors and customers. This is built on natural language understanding & conversational capabilities.



THANK YOU