



EFFECTIVENESS OF SALES ANALYTICS IN SALES PERFORMANCE OF FAST-MOVING CONSUMER GOODS (FMCG)

Nagesha R¹, Dr. R. Thimmarayappa²

¹Research Scholar, Department of Commerce, Maharaja's College, University of Mysore, Mysuru-570005, Karnataka.

²Professors, Department of Commerce, Maharaja's College, University of Mysore, Mysuru, Karnataka, India

ABSTRACT

DOI No: 10.36713/epra20467

Article DOI: <https://doi.org/10.36713/epra20467>

Marketing analytics refers to qualitative and quantitative, structured and unstructured data used to drive strategic decision in relation to brand and revenue outcomes. Sales analytics is a sub-set of marketing analytics used to gather sales data and gauge sales performance. The Key Performance Indicator (KPI) of sales analytics is sales growth. Sales growth is a metric that measures the ability of sales team to increase revenue over a fixed period. The present paper is focusing on the factors influencing on sales growth of selected FMCG.

KEYWORDS: Sales Analytics – Sales Growth, Metrics – sales growth factors.

INTRODUCTION

Sales analytics is used in identifying, modelling, understanding and predicting sales trends and outcomes while aiding sales management in understanding where salespeople can improve. Sales analytic systems specifically provide functionality that supports discovery, diagnostic and predictive exercises that enable the manipulation of parameters, measures, dimensions or figures as part of an analytic or planning exercise.

Sales analytics refers to the technology and processes used to gather sales data and gauge sales performance. Sales leaders use these metrics to set goals, improve internal processes, and forecast future sales and revenue more accurately. The goal of sales analytics is always to simplify the information available. It helps one clearly understand a team's performance, sales trends, and opportunities.

Divisions of sales analytics into four categories

Descriptive: Descriptive analytics entails tracking historical sales data-revenue, number of users, etc. which can make comparisons and understand better what's currently happening.

Diagnostic: Diagnostic analytics involves examining and yapping into the data to determine exactly why something occurred.

Predictive: Predictive analytics is taking what has been learnt about past sales and using it to gauge patterns and trends. This allows one to make educated predictions.

Prescriptive: Prescriptive analytics involves assessing all the data and recommending the best plan of action.

Data is at the heart of one's analytics. Before one can dive into any sales analysis, one needs to understand the metrics and Key Performance Indicators (KPIs) one is looking at and why one is measuring them. One's team can track and analyse a variety of sales metrics, among the sales analytics metrics, sales growth metric playing important role in sales analytics.

Sales Growth: Sales growth is a metric that measures the ability of your sales team to increase revenue over a fixed period of time. Without revenue growth,

businesses are at risk of being overtaken by competitors and stagnating. Sales growth is a strategic indicator that is used in decision making by executives and the board of directors, and influences the formulation and execution of business strategy.

Key Indicators of Sales Growth

- A positive sales growth percentage over the specified time period
- A negative sales growth percentage over the specified time period

Few sales metrics have the potency of sales growth. All eyes are focused on sales numbers and achieving monthly, quarterly, and annual growth. What’s fascinating about the sales growth metric is that it can act as a rallying call for your entire team, by aiming to achieving an organizational target, like percentage growth in revenue. one can develop a cascade of interdependent metrics at each level of your sales team.

REVIEW OF LITERATURE

Social media is a primary source for collecting major data. Data analysis converts this significant data into smart data. Smart data is acquired with the help of Apache tools. Social media platforms are used to gather extensive data andData analysis techniques are used to transform big data into smart data. (Karthika et al., 2016)

Business to business customer relationships and driving sales growth.Big data analytics can significantly improve customer relationship performance.An analytics culture within a firm can moderate the effects of big data analytics. (Hallikainen et al., 2019)

The approach adopts data analysis methods and tools to analyse the sales data of cloud computing products.A case study is made on the sales data analysis of cloud computing products by the consequential approach. The sales strategy improvement for cloud computing products is provided for the company. (Zhang et al., 2022)

Sales managers are unlikely to reap the benefits of implementing predictive analytics applications especially when sales people show aversion to or lack of understanding of these applications. For managers, it is essential to understand which factors improve or worsen these challenges. (Habel et al., 2023)

Given the widespreadfrequent of data, sales practice is moving swiftly into an era of predictive analytics,

using quantitative methods, including machine learning algorithms, to reveal unknown information, such as customers’ personality, value, or churn probabilities. (Habel et al., 2023)

Sales forecasting is crucial for businesses to plan and allocate resources effectively. Traditional methods often rely on historical data and statistical models. Previous generations have implemented various forecasting scenarios using machine learning algorithms. These methods have shown promise but are often limited by the availability and quality of data. (Ma and Xie., 2023)

Digital transformation by integrating big data and Artificial Intelligence to gain a competitive edge and address challenges proactively through sound data governance, strategic investments, and workforce development. It further explores the multifaceted impact of sales digitization, focusing on long-term effects and case studies of successful implementations. (Yuxin Ling, 2024)

OBJECTIVE OF THE STUDY

1. To evaluate effectiveness of sales growth metrics in sales analytics of FMCG

HYPOTHESIS

1. There is positive relationship between sales growth metrics and sales analytics of FMCG

METHODOLOGY

Data Base

Primary data were collected from four leading FMCG companiesviz. Hindustan unilever Ltd, ITC Ltd, Proctor and Gamble (P&G) Ltd, Godrej Groups. The data related sales growth metrics and its factors are considered for analysis.

Secondary data were tapped from the sources of Annual Reports of companies, Marketing Research Journals and Articles, etc.

ANALYSIS AND RESULTS

The sales growth metric acts as a rallying call for entire business, focused on sales numbers and aiming to achieve an organisational target. To analyse the impact of sales growth metric on FMCG sales performance 14 factors are considered and KMO and Bartlett’s with VARIMAX – Rotated Component Technique are used to check reliability of sample adequacy. An alpha value of the entire variable under consideration to be 0.50, which is commonly accepted value.

Table 1:KMO and Bartlett's Test for Sales Growth

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.523
Bartlett's Test of Sphericity	Approx. Chi-Square	196.967
	Df.	91
	Sig.	.003**

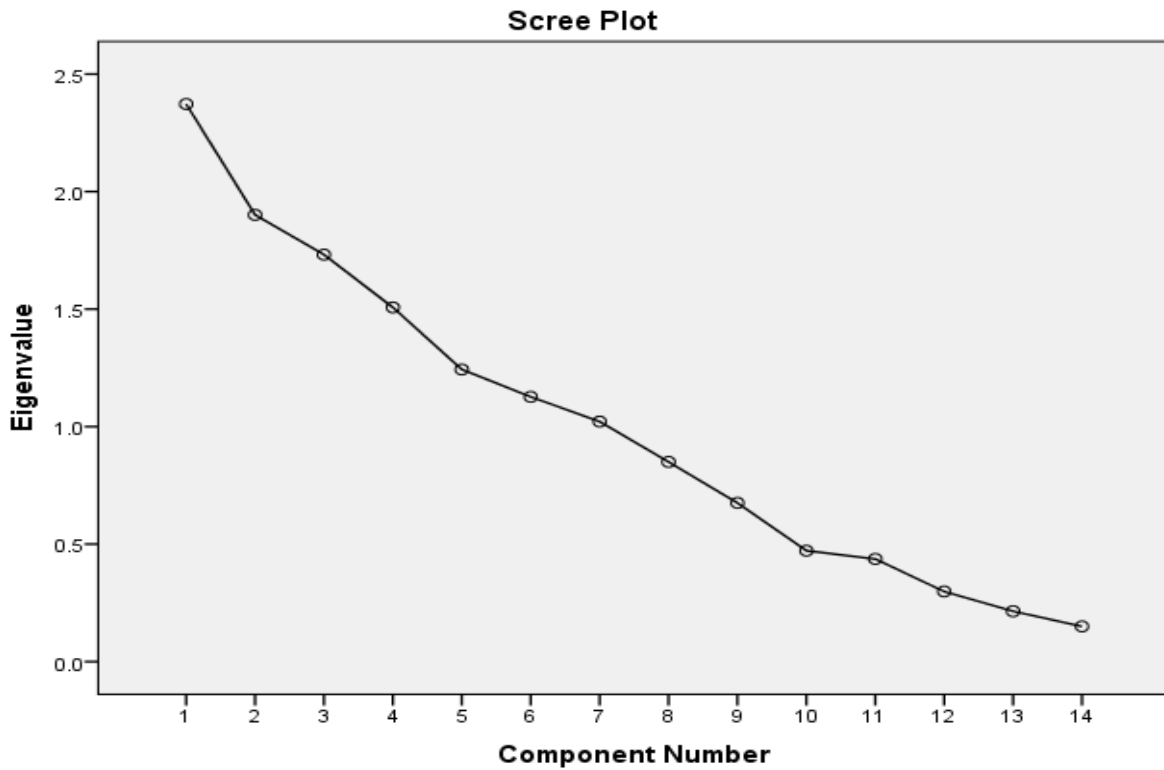
**at 1% level of significance

ANALYSIS ON FINANCIAL PROPOSITIONS

Table 1 shows the opinion of respondents on propositions of Sales Growth information through sales analytics in selected FMCG Companies. To measure the degree of effectiveness of sales analytics related to propositions on sales growth 14 variables are considered as factors. All those 14 variables are

statistically significant as indicated by Chi-Square test value of 196.967 and collectively meet the necessary threshold of sampling adequacy with KMO value of 0.523 respectively. All the tested variables in respect of adequacy of variables indicates that, the set of variables are appropriate for analysis to ascertain the effectiveness of 14 variables in sales growth through sales analytics in selected FMCG Companies.

Figure 1: Sales Growth



This plot represents the relationship between eigenvalues and the number of factors. According to the principle, only factors with eigenvalues greater than one are considered for analysis. Figure 1 the scree

plot clearly identifies seven components or factors with eigenvalue exceeding one indicating the optimal numbers of factors to use for analysis.

Table 2: VARIMAX - Rotated Component Factors (Sales Growth)

Sl.No.	Factors	Rotated Component Factors							Communalities
		1	2	3	4	5	6	7	
1	Sales Analytics help sales growth	.131	.713	.003	.167	.106	-.003	.440	.758
2	Sales Analytics reflects the success of sales strategies	-.386	-.113	.600	.282	.338	.067	.270	.793
3	Sales Analytics minimize the market risk of being overtaken by competitors	-.246	-.123	-.470	.244	-.392	.525	.104	.796
4	Sales Analytics directly helps revenue and profitability	.110	.127	.852	-.115	-.185	.100	-.063	.816
5	Sales Analytics helps positive sales growth percentage over the specified time period	.302	-.261	.183	-.421	-.153	.178	.531	.707
6	Sales growth indicates the consistency of good business	.068	-.047	-.093	.030	.845	.078	.068	.740
7	Sales growth reflects the success of sales strategies.	-.108	.325	.259	-.591	.356	.267	-.101	.742

Sl.No.	Factors	Rotated Component Factors							Communalities
8	Business is overtaken by competitors due to lack of sales growth	-.455	.359	-.432	.014	.299	.339	.054	.729
9	Sales growth is a strategic indicator of decision making	.921	.014	.134	-.011	.028	.073	.022	.872
10	Increased sales growth optimizes all the stakeholders	.851	-.050	-.088	.220	.089	.065	.001	.795
11	Sales metrics is crucial in overall development of both company and shareholders	.155	.127	.045	.854	.089	.074	-.005	.784
12	Sales metrics focuses on the number of sales of monthly and quarterly achievements	.175	-.066	.130	-.071	.143	.878	-.011	.849
13	Sales metrics aims at achieving targets set by the organization	.113	-.882	-.077	.043	.116	.094	.094	.830
14	Sales growth is the collective outcome of sales metrics and performance metrics	-.076	.125	-.056	.053	.086	-.030	.809	.690
	Eigen Values	2.198	1.674	1.657	1.495	1.324	1.311	1.245	10.904
	Percentage of Trace	15.701	11.958	11.833	10.678	9.456	9.362	8.890	77.879

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

Table 2 presents the Varimax rotated component analysis with Kaiser Normalization technique for ascertaining the effectiveness of the variables on sales growth. The result of analysis indicates that the total amount of variance extracted is 77.88%.

- **It is observed from the result of Varimax rotated factor solution component factor -1:** Sales growth is a strategic indicator of decision making (0.921) and increased sales growth optimizes all the stakeholders (0.851) which are very effective propositions for sales growth accounting for 15.70%.
- **In Rotated Factor solution-2:** Sales Analytics help sales growth (0.713) impact of 11.99%.
- **In Rotated Factor Solution-3:** Sales Analytics directly helps revenue and profitability (0.852) and Sales Analytics reflects the success of sales strategies (0.600) accounting for 11.833%.
- **In Rotated Factor Solution-4:** Sales metrics is crucial in overall development of both company and shareholders (0.854) and profitability accounted for 10.678%.
- **In Rotated Factor Solution-5:** Sales growth indicates the consistency of good business (0.845) which accounted for 9.456%.
- **In Rotated Factor Solution-6:** Sales metrics focuses on the number of sales of monthly and quarterly achievements (0.878) and Sales Analytics minimizes the market risk of being overtaken by competitors (0.525) which are accounted for at 9.362%.
- **In Rotated Factor Solution-7:** Sales growth is the collective outcome of sales metrics and performance metrics (0.809) and Sales Analytics helps positive sales growth percentage over the

specified time periods (0.531) which are accounted for at 8.890%.

The value of communalities shows the contribution of each variable to total variance exhibited by Varimax Rotated Factor Matrix. The percentage of trace is 77.879%, which is a positive impact at more than 75 percent. it is sufficient to confirm that variables are related to one another. It is concluded that there is a significant difference among the sales growth with regard to sales analytics among the selected FMCG Companies.

CONCLUSION

Sales analytic metrics analyse the sales growth data thoroughly delving deep into what drives FMCG sales to uncover valuable trends that can lead to success. Sales growth metrics beyond understands past sales performances. It is a strategic tool that can help FMCG companies shape sales performance in future.

REFERENCES

1. Bhagwat, S., Jethliya, V., Pandey, A., & Islam, L. (2015). Sales analysis using product rating in data mining techniques. *International Journal of Research in Engineering and Technology*, 4(2), 189.<http://www.ijret.org>
2. Habel, J., Alavi, S., &Heinitz, N. (2023). A Theory of Predictive Sales Analytics Adoption. *AMS Review*, 13.<https://doi.org/10.1007/s13162-022-00252-0>
3. Habel, J., Alavi, S., &Heinitz, N. (2023). Effective implementation of predictive sales analytics. *Journal of Marketing Research*, ISBN:978-1-111-99999-9. DOI: 10.1177/00222437231200708

4. Hallikainen, H., Savimäki, E., & Laukkanen, T. (2023). Fostering B2B sales with customer bigdata analytics. *Industrial Marketing Management*. Retrieved from <https://doi.org/10.1016/j.indmarman.2023.06.007>
5. Karthika, P., Gokulraj, & S. Saravanan (2016). Prediction of sales using big data analytics. *Journal of Advances in Chemistry*, 12(20), 5239. Retrieved from www.cirworld.com
6. Kumar, A., Sharma, K., Singh, A., & Kumar, D. (2018). A Survey Paper on Sales Analysis and Forecasting in Shopping Mart. *IJSART*, 4(12), 69. Retrieved from www.ijart.com
7. Ling, Y. (2024). *Research on Digital Transformation Strategy of Multinational Company Sales Based on Big Data and AI*. School of Economics and Management, Taiyuan University of Technology, Taiyuan, Shanxi, 030000, China.
8. Ma, Q., & Xie, A. (2023). Application of Big Data Analysis in Sales Forecasting. *Journal Name, Volume (Issue), page range*. <https://doi.org/xx.xxx/yyyy>
9. Patel, Z., Jaiswal, R. C., Potdar, G. P., & Khodaskar, M. R. (2022). A survey paper on big data analytics in sales and marketing. *International Journal of Creative Research Thoughts*, 10(11). IJCRT2211279
10. Zhang, X., He, Y., Pan, L., & Zhang, Z. (2022). Sales data analysis of cloud computing products based on big data. *IFAC Papers Online*, 55(10), 1404-1409. <https://doi.org/10.1016/j.ifacol.2022.09.587>
11. https://www.google.com/search?q=sales+analytics+meaning&oq=sales+analytics+&gs_lcrp=EgZjaHJvbWUqBwgDEAAyGAAQyBggAEEUYOzIGCAEQRRg7MgcIAhAAGIAEMgcIAxAAGIAEMgcIBBAAGIAEMgYIBRBFGEAyBggGEEUYOTIHCAcQABiABNIBCjIxMTczajBqMTWoAgiwAgHxBTcRLfMutbgB8QU3ES3zLrW4AQ&sourceid=chrome&ie=UTF-8
12. <https://www.zendesk.com/in/blog/guide-sales-analytics/>
13. <https://www.klipfolio.com/blog/sales-analytics-12-metrics>
14. <https://www.gartner.com/en/informationtechnology/glossary/salesanalytics#:~:text=Sales%20analytics%20is%20used%20in,understanding%20where%20salespeople%20can%20improve.>