

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

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JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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UNDERSTANDING SEASONALITY AND ITS IMPACT ON DEMAND FORECASTING: THE CASE OF INDIAN PAINT INDUSTRY

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ABSTRACT

Demand forecasting is a preliminary and mandatory exercise for a company to strategically accomplish its planning and execution route map at all levels and business functions. Forecasting becomes easier if the industry and the organization are operational for a considerable amount of time as the historical data can be consumed to arrive at informed alternatives for decision making. One of these techniques that help us in making better forecast is time series with seasonality. Traditionally Indian paint industry has been driven by seasonality, which has been established by wide discussions and research. Off late, this trend is experiencing a paradigm shift which has been identified by industry bigwigs but the empirical evidence has not yet been established in the available literature both at industry and organizational level. So, the objective of this paper is to understand the seasonality pattern and latest demand trends in Indian paint industry, not only at industry level but also for each organized player in particular, thereby paving the way for data driven demand forecasting & management and aggregate planning. The time series with seasonality technique is being applied to understand the demand patterns in the Indian paint industry.


KEYWORDS

seasonality, demand forecasting, decorative paints, aggregate planning.

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INTRODUCTION

 Seasonality is a numeric index of seasonal buying behavior that is consistent from year to year (Mahesh Kumar, Nitin R. Patel and Jonathan Woo, 2002). Understanding seasonality is very much important because the swings in sales and business operations inherent in seasonality may give rise to slow or lost sales, unpredictability of business conditions and cash flow problems (Koenig & Bischoff, 2005; Spencer & Holecek, 2007; Jeffrey Shields & Joyce Shelleman, 2013). Experts can avoid the use of seasonal factors in areas where there is no reason to expect seasonality (such as in the stock market) and rely on them in areas where seasonal factors are obvious, such as for ice cream sales (JS Armstrong, 2006).

Seasonality of demand has been under observation and experience in various businesses. It has been widely quoted in numerous research works too! One best example is decorative segment of Indian paint industry. Sales in the decorative paint segments are seasonal with more than half of the sales coming in the September-November festival season (Ramanuj Mazumdar, 2004). Demand is somewhat seasonal in nature- low during monsoon months and high during festive months. (Ramaswamy, V.S., S. Namakumari, 2002). The demand for decorative paints is highly price sensitive and seasonal. Demand in the festive season (September-December) is significant, while monsoon is the slack season. (V.C.Malshe and Meenal Sikchi, 2008). The demand for these paints is just prior to the festival seasons (Waman S Jawadekar, 2006).

As per the sector analysis report published by equity master, Indian paint industry is currently pegged at Rs 350 billion, dominated by decorative segment at 70% market share and the rest by industrial segment. With respect to decorative segment, 65% of the market is controlled by organized players like Asian paints, Berger paints, Kansai-Nerolac, Akzo Nobel, Shalimar paints and Jenson-Nicholson.

The operational nature of the paint industry is highly working capital intensive with 40-45% of the funds being employed by working capital (Ramanuj Mazumdar, 2004). Low fixed capital is employed for manufacture of paints. The working capital requirements are huge (V.C.Malshe and Meenal Sikchi, 2008). In an interview given to Financial Express on 20th November 2005 by Ashwin Dani, then vice chairman & managing director, of Asian Paints Limited confirms it, as he said "Managing working capital is critical to be successful in the paint industry, primarily because you have to manufacture a range of products in different sizes and shades. Also there are a number of raw materials used for the manufacture of paints. Hence inventory management is important in our set-up". Hence understanding seasonality of demand is very crucial in paint industry. This paper attempts to explore and establish the evidences of seasonality and its trends, by enabling the paint industry to come up with accurate sales forecast.

LITERATURE REVIEW

Efforts to understand seasonality in paint industry wide research has been observational in nature. Towards establishment of empirical evidence through utilization and representation of historical sales data has not yet been done.

The earliest discussion on declining seasonality in Indian decorative paints segment could be traced in a report published in Economic times in 2010. Mr. Hemant Somani, then head of marketing at Akzo Nobel India Ltd had his observations quoted in that report as "With the rise in disposable income and rapid urbanization, the seasonality of the business is flattening out—paints are selling all round the year. Some years ago, the peak period, 45-60 days before the festive season, amounted to 40-45% of yearly sales, but now that number has declined to around 30%"

Devendra Kumar Pandey and Ronald V Mani, (2013) in their research found that "Rising aspirational levels, shift in the perception of paints as having a protective value rather than a mere decorative have diminished the impact of seasonality".

Both the findings were observational in nature and not clearly represented with historical sales data.

Abhishikh K.N. and Sudeep Kundu (2011) attempted to identify the seasonality effect on sales and de-seasonalizing it for Asian paints. So, even in this report, seasonality aspect has been observed but their research objective has not been focused on identifying the declining seasonality and they tried to de-seasonalize the seasonality in order to come up with a better sales forecasting model. Historical sales data has been taken into consideration as they employed Time-series analysis but, their observation has been limited till 2010 sales figures and specific to Asian paints but not to the entire industry.

RESEARCH METHODOLOGY

SAMPLING

- Since this study has taken organized players into consideration all of them have been taken into account as there are only 6 organized players in the industry
- Locations of survey have been shortlisted using selective diversity sampling but with respect to identifying a retail outlet simple random sampling has been employed

DATA COLLECTION

The quarterly sales data of all listed organized players for the 15-year period i.e. from financial year (FY) 2000-01 to 2014-15 has been taken into consideration. For Akzo Nobel, sales data from FY 2008-09 to 2014-15 has been considered as it entered the Indian market by acquiring ICI paints. To identify seasonality, proportion of each quarter sales with respect to average annual sales has been tabulated and charted, both for industry as well as for each company. Also, close to 100 retailers have been contacted and a survey has been undertaken in Ranchi, Raipur, Nagpur, Vijayawada, Guntur, Bhubaneswar, Hyderabad, areas closer to Rural markets like Angul, Sangareddy, Medak, and rural stretches around Guntur and Hyderabad. Irrespective of the locations, retailers have confirmed that seasonality is a thing of past and sales figures is uniform throughout the year with only little variations in monthly demand. Retailers annual revenues were in the range of 60 lakhs to one and a half crore. Hence the variation may not be more at retailer level and they have written off the seasonality factor. But at a macro level, when all retailers are take into consideration, the variation i.e. seasonality factor is clearly visible, but gradually waning.

INSTRUMENT

- For fetching sales data companies' annual reports and www.moneycontrol.com has been accessed.
- An open ended questionnaire has been prepared to collection data from retailers with the help of a survey technique.
- Seasonality factor is represented by Seasonal Index which is calculated as
- **Seasonal Index= Quarterly sales/Average Annual sales**

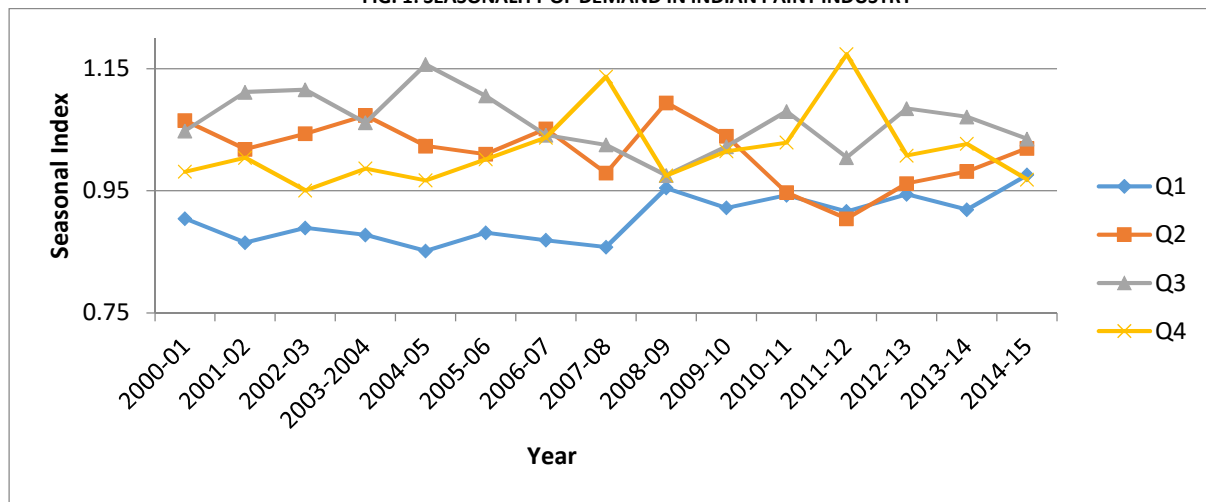
DATA ANALYSIS AND INTERPRETATION

TRENDS IN INDUSTRY

Till 2008-09 financial year, sales in first quarter i.e. during April-June period posted least sales among all quarters, whereas for Quarter 3, i.e. during October-December period sales recorded were highest, which highlights the role of festive season. Sales of Quarter 2 and Quarter 4 fall in between these two quarters. From 2009-10 financial year onwards the difference of sales among four quarters has been slowly declining. The steep increase of Quarter 4 sales 2011-12 financial year marks the acquisition of ICI paints by Akzo-Nobel. Otherwise the sales gap among four quarters is only declining which emphasizes the following

- Seasonality trend is slowly waning in Indian paint industry.
- Demand patterns are slowly moving from linear growth with seasonality to linear growth.
- Accuracy in forecasting is also being improved with 2 month average giving better sales forecast with little error. This has been observed by doing a trend line fitting, which is a close match to the actual sales.

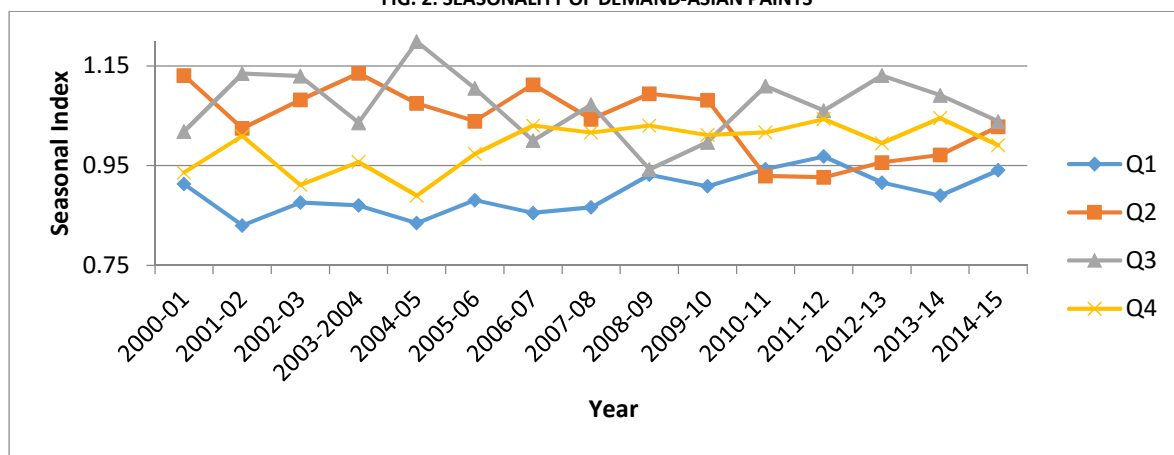
FIG. 1: SEASONALITY OF DEMAND IN INDIAN PAINT INDUSTRY



ASIAN PAINTS

For Asian paints, the industry leader, Q3 is still the highest revenue earner followed by a close fight between second and fourth quarters for the second spot. Quarter 1, which used to be in the last spot, has gained momentum after 2007-08 financial year. The decreasing sales gap among all quarters only confirms its market leadership which is able to even out the demand among four quarters through strong advertisement spend and distribution network.

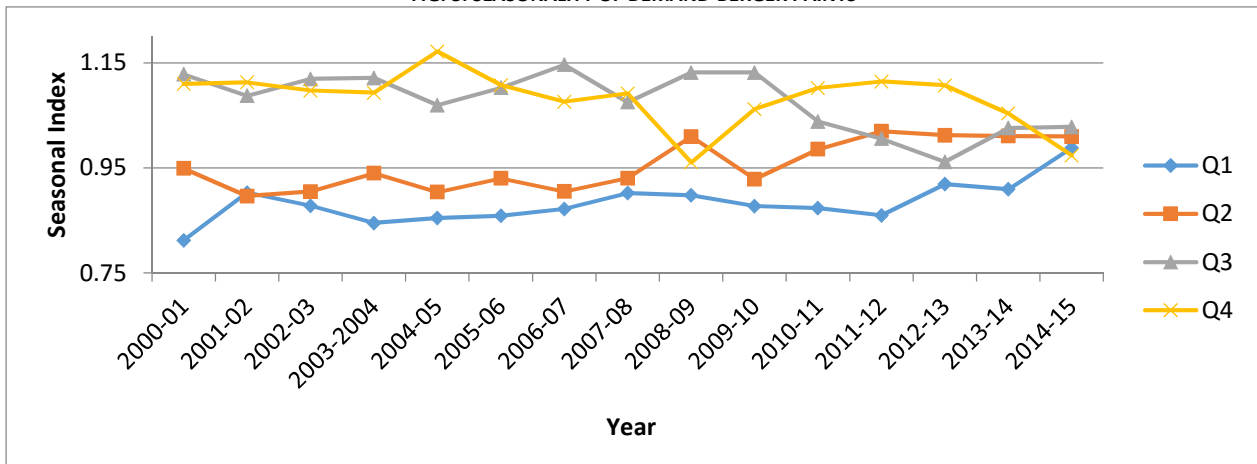
FIG. 2: SEASONALITY OF DEMAND-ASIAN PAINTS



BERGER PAINTS

For Berger paints comparatively Quarter 4 has been the front runner on many occasions for the past 15 years. It is quite surprising to notice that their performance has been stronger in the last quarter of the financial year rather than the industry peak demand season i.e. Quarter 3. The sales gap between Q3 & Q4 and Q1 & Q2 has been wide till 2008-09 period post which the performance of Q2 & Q1 has been so much improved that the sales gap has almost been negligible among all quarters.

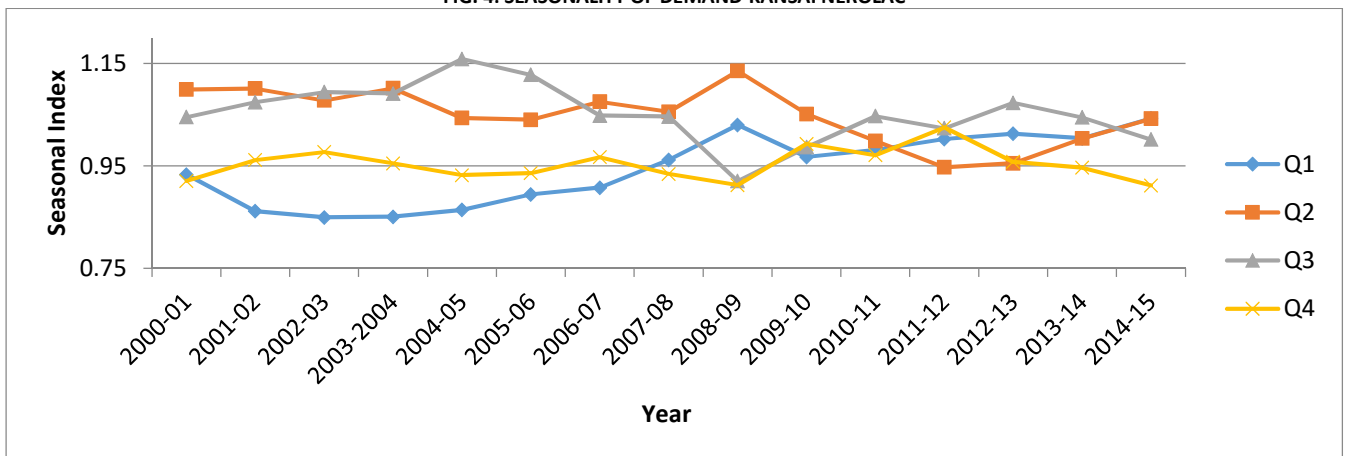
FIG. 3: SEASONALITY OF DEMAND-BERGER PAINTS



KANSAI NEROLAC

This company consistently reported strong Q2 sales except for the period 2010-11 to 2012-13. Q1 has been on the rise since 2004-05 and now occupied top spot along with Q2. Q4 has a dream run from 2008-09 but its decline started from 2011-12 and it continues since then pushing itself to last position. Though the company performs well in Q3 too, the peak demand season, its highest demand season has been Q2 and now Q1 as well.

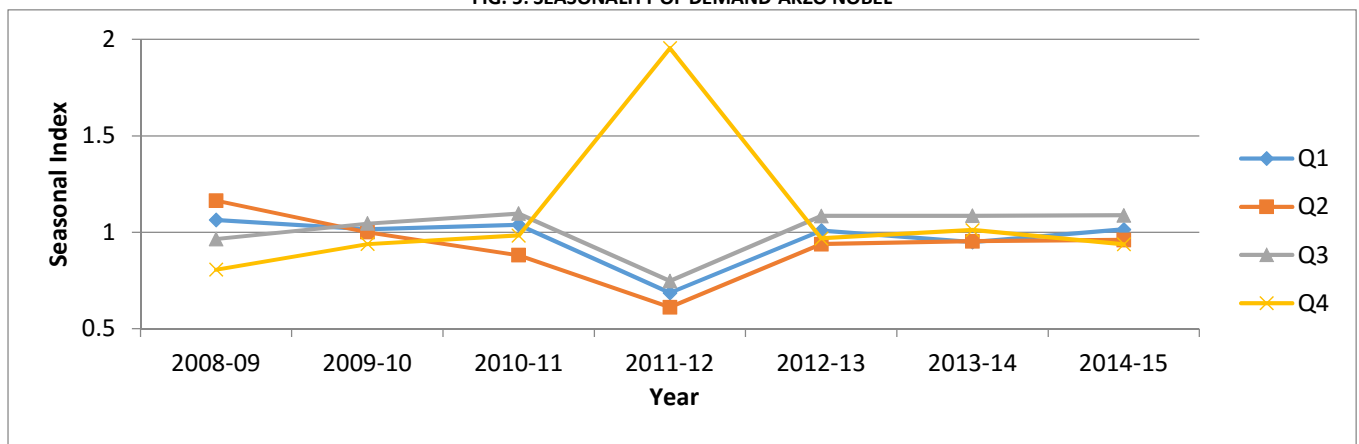
FIG. 4: SEASONALITY OF DEMAND-KANSAI NEROLAC



AKZO-NOBEL

Except for 2011-12 financial year, where Q4 experienced record sales, it has been a clear dominance of Q3, followed by Q1. Surprisingly Q2 stands last with Q3 taking the third place. But the interesting aspect is the variation in demand has been almost flat with the positions of quarters easily predictable. Also to notice is the sales gap is not so huge among quarters which enable the company in smooth aggregate planning.

FIG. 5: SEASONALITY OF DEMAND-AKZO NOBEL

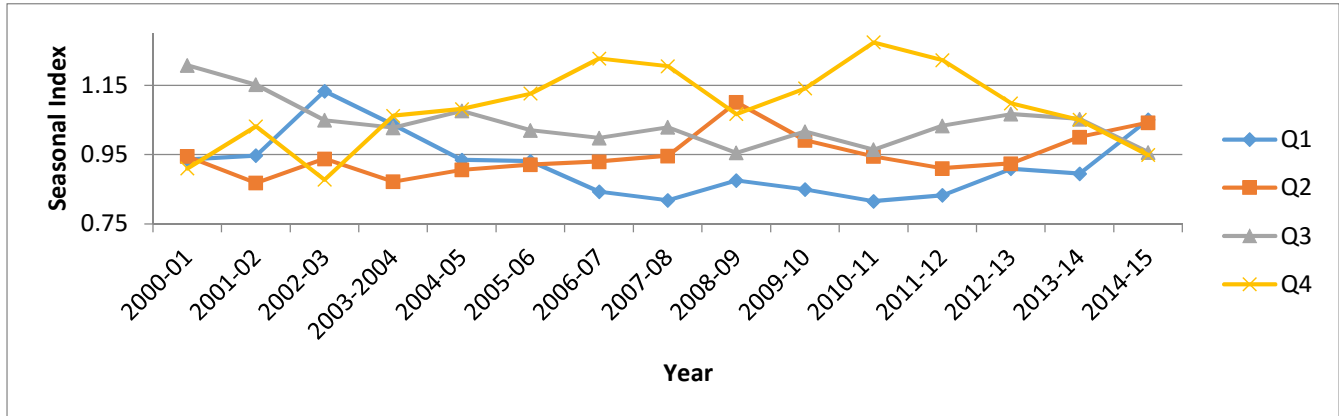


SHALIMAR PAINTS

For Shalimar paints Quarter 4 earmarked highest sales till 2012-13 financial year. And there has been no noticeable sales trend which could help the company to plan for better demand forecasting. The variation in sales among all quarters has not only been uneven but also the aspect of seasonality couldn't be attributed

to any of them. Off late, sales data of past three year denote stability in sales across 4 quarters with the gap declined to a greater extent. It is so evident that Q1 & Q2 started outperforming other two quarters for the past two years, which otherwise ranked first.

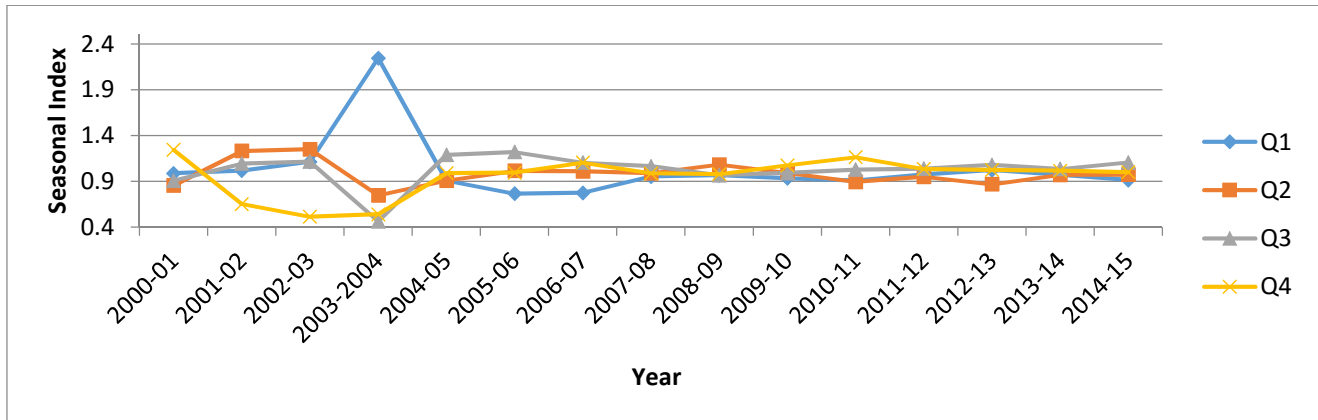
FIG. 6: SEASONALITY OF DEMAND-SHALIMAR PAINTS



JENSON-NICHOLSON

From 2004-05 onwards the concept of seasonality has become a history with Jenson-Nicholson. Though Q3 is still a strong performer the difference in sales with respect to other quarters is minute. There is greater amount of sales fluctuations in Quarter 2 when compared to other quarters for the past 5 years.

FIG. 7: SEASONALITY OF DEMAND-JENSON NICHOLSON



IMPLICATIONS

This research helps in understanding the trends in seasonality in Indian Paint Industry and visualizes how the industry should focus going forward.

- Change in seasonality indicates changing consumer preferences. So, product positioning should be revisited by the companies.
- Will there be any impact on sales during relatively lean quarters by increasing marketing spend during those particular quarters?
- Shall discounts or promotional offers be made available during relatively lean periods so that the impact of seasonality completely wanes out, thereby facilitating better forecast and aggregate planning by the companies?

The above mentioned observations themselves lead to further research and give a better clarity of thought in these perspectives.

LIMITATIONS

This research has its own limitations and the findings need to be taken into observation by considering them, which are listed as below.

- This study has taken only organized players into consideration which represent 70% of the market.
- Monthly sales figure would have given better understanding and representation of seasonality rather than quarterly sales figures.
- Correlation coefficient between Quarterly advertisements spends and Quarterly sales would have helped in understanding the impact of seasonality by taking advertising into consideration. Since the data on Quarterly ad spend has not been found during the study, this impact has not been highlighted and discussed.
- Sales data of ICI paints from financial years 2000-01 to 2007-08 has not been found in the noted sources of data. Hence, sales data from financial year 2008-09 to 2014-15 for Akzo Nobel, which acquired ICI paints, has been considered.

CONCLUSION

Seasonality factor still exists in Indian paint industry as a whole, but it is slowly decreasing with each year. Though the sales gap among the quarters is decreasing, seasonality of sales is not same across the companies. For them, no single quarter holds numero uno position over a period of time and each quarter can emerge as a leader. Whichever company understands this change in demand well in advance can emerge as a winner with minimum or no stock-outs or stock surplus.

REFERENCES

1. Abhishikh K.N. and Sudeep Kundu (2011), "Analyzing Sales Trend and Forecasting Demand - A Quantitative Research on Asian Paints Applying Time Series Modeling" Asia Pacific Journal of Research in Business Management, Volume: 2, Issue: 5. pp 1-13. Viewed on December 19th 2015 at <http://www.indianjournals.com/ijor.aspx?target=ijor:apjrbm&volume=2&issue=5&article=001>
2. Ashwin Dani (2005), "Managing working capital is key to success in paint industry", published in The Financial express, 20th November 2005. Viewed on December 20th 2015 at <http://archive.financialexpress.com/news/-managing-working-capital-is-key-to-success-in-paint-industry-/159435/0>
3. Devendra Kumar Pandey and Ronald V Mani, (2013), "INFLUENCERS AND THEIR IMPACT ON DECORATIVE PAINT TRADE" International Journal of Marketing, Financial Services & Management Research, Vol. 2, No. 6, June (2013). pp 139-144. Viewed on December 18th 2015 at <http://indianresearchjournals.com/pdf/IJMFMSR/2013/June/12.pdf>

4. Jeffrey Shields & Joyce Shelleman (2013), "Small Business Seasonality: Characteristics and Management", Small Business Institute Journal, Vol. 9, No. 1, pp 37-50. Viewed on December 20th 2015 at <http://www.sbij.org/index.php/SBIJ/article/viewFile/167/108>
5. JS Armstrong, 2006, "Findings from evidence-based forecasting: methods for reducing forecast error", International Journal of Forecasting, Volume 22, Issue 3, Pages 583–598. Viewed on December 20th 2015 at http://repository.upenn.edu/cgi/viewcontent.cgi?article=1001&context=marketing_papers
6. Mahesh Kumar, Nitin R. Patel and Jonathan Woo (2002), "Clustering Seasonality Patterns in the Presence of Errors". Paper 155. Viewed on December 20th 2015 at http://ebusiness.mit.edu/research/papers/155_orlinpatelseasonality.pdf
7. "Paint sector analysis report" by Equity master. Accessed on Feb 14th 2016 at <https://www.equitymaster.com/research-it/sector-info/paint/Paints-Sector-Analysis-Report.asp>
8. Ramanuj Mazumdar, (2004). Product Management in India, 2nd edition. PHI Learning Pvt. Ltd, New Delhi. Page 284.
9. Ramaswamy, V.S., S. Namakumari, 2009. "Distribution Strategy: The case of Asian Paints" in Marketing Management Global Perspective, Indian Context 4th Edition. Macmillan publishers India Ltd, New Delhi. Page 544.
10. Sunanda Poduwal. (2010). "Paint industry indicates resurgent real estate sector" in The Economic Times, 17th October 2010 issue. Viewed on December 17th 2015 at http://articles.economictimes.indiatimes.com/2010-10-17/news/27605004_1_paint-industry-paint-makers-kansai-nerolac
11. V.C.Malshe and Meenal Sikchi, (2008). "An overview of Indian Paint Industry" in Basics of Paint Technology Part II, Part 2. First Edition. Antar Prakash, center for Yoga, Hardwar. Page1, 5.
12. Waman S Jawadekar, (2006). "Development of MIS" in Management Information Systems: A Global Digital Enterprise Perspective, 3rd edition. Tata McGraw Hill publishing company Limited, New Delhi. Page 307.
13. www.moneycontrol.com to fetch quarterly sales data of all organized paint manufacturing companies.

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