INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

A STUDY ON PRODUCT LINE LIFE CYCLE MANAGEMENT ON KESORAM CEMENT INDUSTRY LIMITED , HYDERABAD

PANDHIRI SUDHEER[1], Dr. MANDALA SREENIVAS[2]

[1]II MBA,Department of MBA,Malla Reddy Engineering College(A),Hyderabad, India.,E-mail:pandhirisudheer@gmail.com

[2] Professor,Department of MBA, Malla Reddy Engineering college(A),Hyd, E-mail: sreemandala@gmail.com

ABSTRACT

This project study focuses on Product Life Cycle Management (PLM) at Kesoram Cement Industries Limited, a leading cement manufacturing company in India. Product Life Cycle Management is a strategic approach that manages a product from its conception, development, growth, maturity, and eventual decline. The study examines the importance of PLM in improving product quality, customer satisfaction, operational efficiency, and market competitiveness.

The research highlights the different stages of the product life cycle and their impact on marketing, production, and business strategies. It also analyzes the Indian cement industry, its growth prospects, market trends, and the role of Kesoram Cement in meeting customer requirements through quality products marketed under the Birla Shakti brand. The study relies primarily on secondary data collected from company reports, industry publications, books, and online sources.

The findings reveal that effective product life cycle management helps organizations optimize resources, enhance product performance, reduce costs, and maintain a competitive advantage. The study concludes that Kesoram Cement Industries Limited has successfully adopted PLM practices to improve product quality, strengthen customer relationships, and sustain its position in the cement market. The research also provides suggestions for continuous improvement in product development, innovation, and lifecycle management strategies.

KEY WORDS : Product Life Cycle Management, Product Development, Customer Satisfaction,Kesoram Cement Industry

INTRODUCTION

Management of a product's whole lifespan:

Companies and their extended enterprises benefit from PLM because it brings together people, data, processes, and business systems to establish a solid foundation for product data.

Product lifecycle management (PLM) focuses on the product's description and attributes throughout its creation and useful life, while product lifecycle management (PLCM) focuses on the product's lifespan in the market with regards to business/commercial pricing and sales measurements.

One of the four pillars of a company's information technology framework is product lifecycle management. A company's resources should be distributed across the company so that it may effectively communicate with its customers, suppliers, and other departments, as well as effectively plan for its future growth and development (ERP, or Enterprise Resource Planning) (SDLC-Systems Development Life Cycle). Manufacturing engineering firms should also create, characterize,

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

maintain, and convey data about their products. They should.

NEED OF THE STUDY

1. Product and service creation has resulted in a change in emphasis away from producers to buyers, and as buyers become more involved in the selling process, there is a greater need for information on the buyer's demands.
2. As a result, semiconductor diode has been forced to undertake more and more research in order to better understand customer preferences and make them satisfied with the product and services.
3. As a result of this study, firms may become aware of their flaws and, in turn, make improvements to their products based on how satisfied their consumers are with their services in the market place.

SCOPE OF THE STUDY

1. In order to have a better understanding of what goes on at the fund manager level, the research only looks at Kesoram cement products. Only one man's contribution, i.e. the phases of the product's life cycle that would be made by the organization, has been ordered to be studied, and so the research is referred to as Kesoram cement business only.
2. The breadth is highly limited due to the fact that the perspective of the people changes with time.
3. Each Hyderabad and Ranga Reddy District is limited to a hundred participants in the research.

OBJECTIVE OF THE STUDY

1. Lifecycle management of a product.
2. Managing the whole lifespan of a product, from creation to disposal, is known as "product lifecycle management," or "PLM." For organizations and their extended enterprise, PLM offers a product information backbone that connects people, data, processes, and business systems.
3. In contrast to product life cycle management (PLCM), which focuses on the life of a product on the market in terms of business/commercial costs and sales measures, product life cycle management (PLM) is more concerned with managing descriptions and properties of a product throughout its development and useful life.

REVIEW OF LITERATURE

1. According to **Cooper (2019)** Cooper emphasized that innovation and new product development are essential for sustaining business growth. Continuous improvement helps organizations extend product life cycles and respond effectively to changing market demands.
2. According to **Kahn (2018) Kahn** highlighted the importance of cross-functional teamwork in product development. Effective collaboration between marketing, production, and engineering departments improves product quality and market success.
3. According to **Kotler and Keller (2016)** Kotler and Keller explained that products pass through different life cycle stages

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

and require different marketing strategies. Effective lifecycle management helps organizations maximize profits and customer satisfaction.

4. According to **Ulrich and Eppinger (2016)** The authors emphasized structured product development processes to improve innovation and product quality. Proper planning reduces development costs and ensures products meet customer expectations.

RESEARCH METHODOLOGY

My research was based on a wide range of sources, including the Internet, books on financial services, and company brochures.

Primary sources

People in the workplace, as well as their interactions with others, serve as a major source for primary research

Secondary sources

Secondary sources mostly include company manuals, records, brochures, publications, standards, and the internet, among other things.

SOURCES OF DATA

The following sources provide the data necessary for this project:

1. Only secondary sources are used for the information.
2. Theoretical material was selected from just the most reputable textbooks and sources.
3. Annual reports of the company provide the financial facts and knowledge.

SAMPLE SIZE

The sample size includes 100 workers who are working in the KEOSRAM CEMENT INDUSTRY LIMITED, Limited.

LIMITATIONS OF THE STUDY

1. As a result of this project's restrained nature, it is possible that some of the information it provides may be modified from time to time based on the company's norms and competitors' strategies (or) based on the portfolio structure or other constraints like nature on strategic money decisions originating from there.
2. The study is limited into the date and information provided by the BIRLA SHAKTI CEMENT.
3. The report may not provide exact fixed assets status and position of BIRLA SHAKTI CEMENT; it may be varying from time to time and situation to situation.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

DATA ANALYSIS

TABLE NO.4.1: AGE OF EMPLOYEES

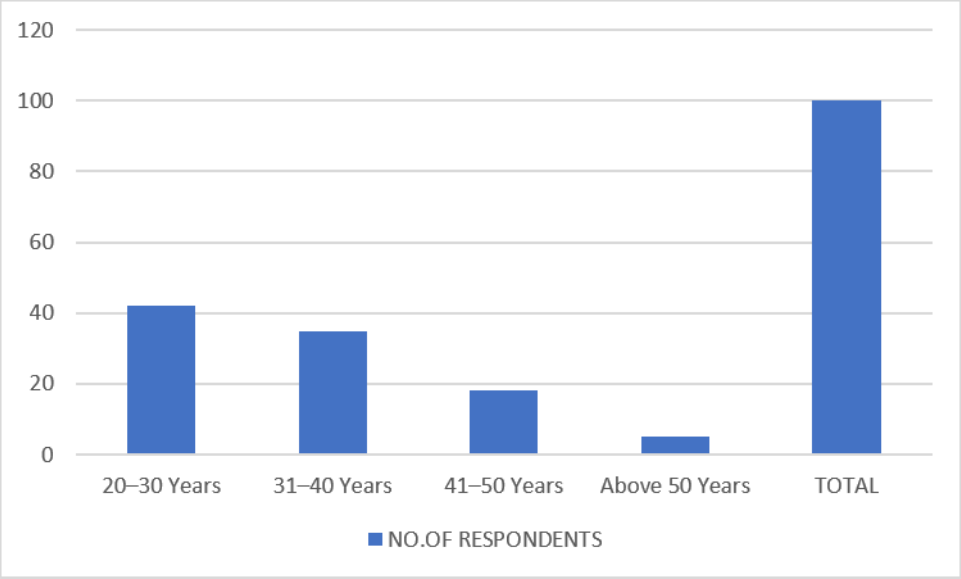
PARTICULARS	NO.OFRESPONDENTS	PERCENTAGE
20–30Years	42	42%
31–40Years	35	35%
41–50Years	18	18%
Above50Years	5	5%

SOURCE: SECONDARY DATA CHART NO.4.1 AGE OF EMPLOYEE

SOURCE: SECONDARY DATA

INTERPRETATION

The majority of employees (42%) belong to the 20–30 years age group, followed by 35% in the 31–40 years category. This indicates that the company has a young and energetic workforce.



INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

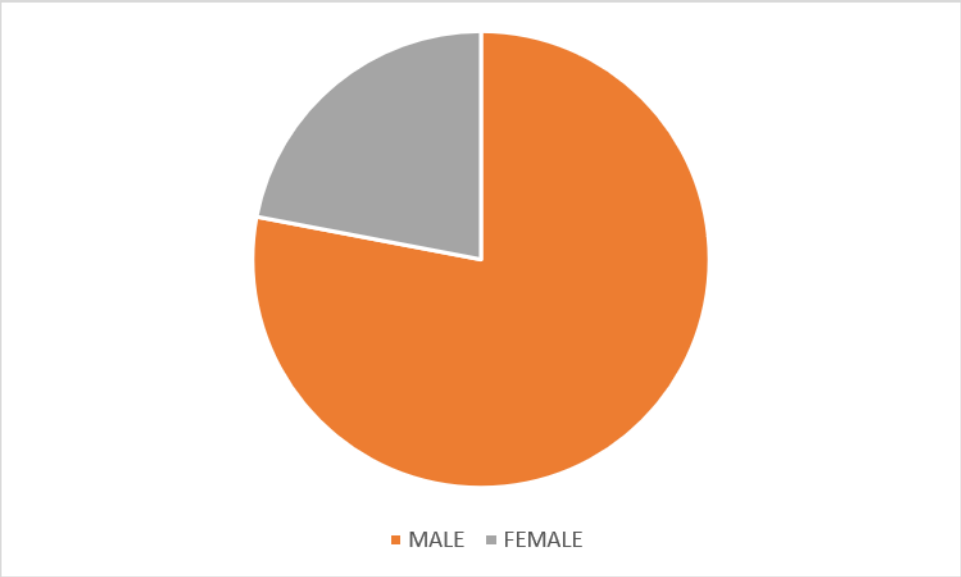
editor@ijemss.com

TABLE NO.4.2: GENDER OF EMPLOYEE

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
MALE	78	78%
FEMALE	22	22%

SOURCE: SECONDARY DATA

CHART NO.4.2: GENDER OF EMPLOYEE



SOURCE: SECONDARY DATA

INTERPRETATION

The survey shows that 78% of employees are male and 22% are female. This indicates that the workforce is predominantly male, which is common in the cement manufacturing industry.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

TABLE NO.4.3: WORK LOCATION

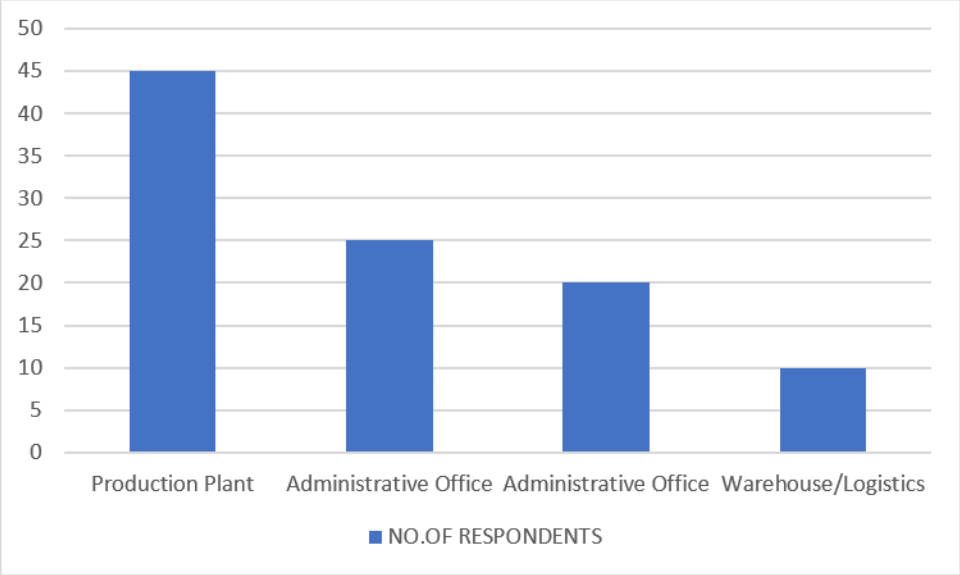
PARTICULARS	NO.OFRESPONDENTS	PERCENTAGE
Production Plant	45	45%
Administrative Office	25	25%
Administrative Office	20	20%
Warehouse/Logistics	10	10%

SOURCE: SECONDARY DATA CHART
NO.4.3: WORK LOCATION

SOURCE: SECONDARY DATA

INTERPRETATION

Most employees (45%) work in production plants, while 25% work in administration, 20% in marketing and sales, and 10% in logistics operations.



INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

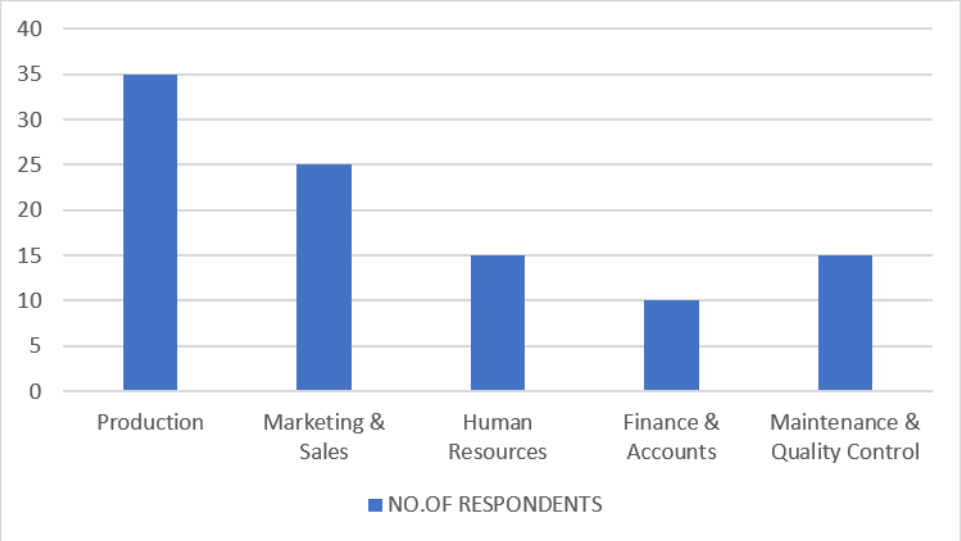
editor@ijemss.com

TABLE NO.4.4: DEPATMENT OF EMPLOYEE

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
Production	35	35%
Marketing & Sales	25	25%
Human Resources	15	15%
Finance & Accounts	10	10%
Maintenance & Quality Control	15	15%

SOURCE: SECONDARY DATA

CHART NO.4.4: DEPATMENT OF EMPLOYEE



SOURCE: SECONDARY DATA

INTERPRETATION

The highest number of respondents (35%) belong to the production department, followed by marketing and sales (25%). This reflects the operational focus of the cement industry.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

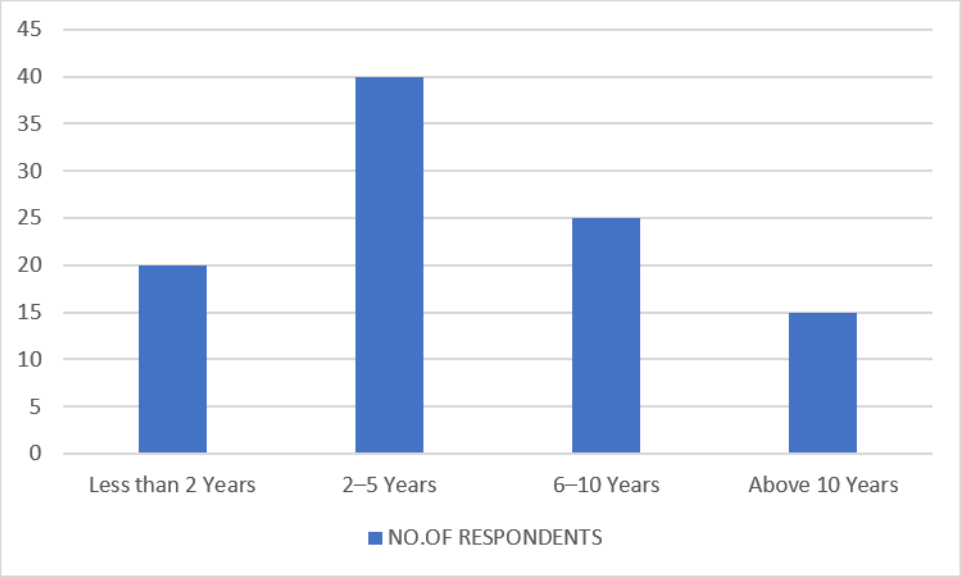
editor@ijemss.com

TABLE NO.4.5: EMPLOYEE EXPERIENCE

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
Less than 2 Years	20	20%
2–5 Years	40	40%
6–10 Years	25	25%
Above 10 Years	15	15%

SOURCE: SECONDARY DATA

CHART NO.4.5: EMPLOYEE EXPERIENCE



SOURCE: SECONDARY DATA

INTERPRETATION

The majority of employees (40%) have 2–5 years of experience, while 25% have 6–10 years of experience. This indicates a balanced workforce with both experienced and developing employees.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

FINDINGS

1. It was a positive experience for the workers.
2. They have a realistic view of their company's performance.
3. In the opinion of employees, there have been prospects for private expansion. •The company's personnel are aware of the importance of production.
4. The employees of a firm are pleased with their co-workers.
5. The workers have a reasonable understanding of the company's communication strategy.

SUGGESTIONS

1. The organization ought to additional focuses on new development programmers.
2. The organization ought to target additional opportunities for private growth of associate degree worker.
3. The management should put an emphasis on increasing the level of cooperation among the employees.
4. The organization's management should put more effort into improving the organization's communication methods.

CONCLUSION

In my project on the product life cycle at Kesoram Cement Limited, I discovered that the product life cycle at Kesoram Cement Limited is strictly regulated, the production within the company is fine, and the production materials are kept in poor condition within the company. This was a shocking discovery.

FUTURE SCOPE FOR RESEARCH

1. Future studies can include a larger sample size covering different regions and customer segments to obtain more comprehensive and reliable results.
2. Researchers can compare the product life cycle management practices of Kesoram Cement with those of other leading cement companies to identify industry best practices.
3. Further research may examine the impact of digital technologies, automation, and data analytics on product lifecycle management in the cement industry.

INTERNATIONAL JOURNAL OF ENGINEERING MANAGEMENT AND SOCIAL SCIENCES (IJEMSS)

www.ijemss.com

Vol. 01, Issue 3, July 2026, pp : 397-406

e-ISSN : 3139-065X

editor@ijemss.com

REFERENCES

1. Cooper, R. G. (2019). Winning at New Products: Creating Value Through Innovation (5th ed.). Basic Books, New York.
2. Kahn, K. B. (2018). The PDMA Handbook of New Product Development (3rd ed.). John Wiley & Sons, New Jersey.
3. Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson Education, New Delhi.
4. Ulrich, K. T., & Eppinger, S. D. (2016). Product Design and Development (6th ed.). McGraw-Hill Education, New York.

WEBSITES

1. www.kesoram.com
2. www.nyse.com
3. www.google.com

BOOKS

1. Security analysis and portfolio management - Fischer & Jordan
2. Financial Management - Prasanna Chandra
3. Financial Management - M.Y

Khan NEWS PAPERS

1. Business to day
2. Economic times.
3. Times of Republic of India
4. Business line MAGAZINES
5. The week
6. India nowadays