

# An Analysis Of The Efficiency And Effectiveness Of Automation In Digital Marketing At Lakshmi Machine Works Ltd

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**Abstract-** *In a constantly evolving business environment, the ability to recognize and respond to market trends is crucial for maintaining competitiveness and driving strategic growth. This study investigates the influence of market trends on business decision-making, with a focus on Lakshmi Engineering Products in Coimbatore. It explores how shifts in consumer preferences, economic conditions, and technological advancements shape market behavior and business performance. By analyzing real-time and historical data, this research aims to uncover patterns that guide product development, pricing strategies, and marketing efforts. The findings provide actionable insights that can help organizations enhance customer engagement, anticipate future changes, and achieve long-term sustainability through informed strategic planning.*

## I. INTRODUCTION

A market trend refers to the prevailing direction of prices or customer behaviors over a specific period, influenced by broader economic, social, and technological factors. These trends are generally categorized into three types—upward (bull market), downward (bear market), and sideways movements. Recognizing such trends is essential for investors and businesses alike, as they influence strategic decisions ranging from product innovation to pricing and promotional tactics.

In the field of technical analysis, trends are identified by studying price patterns and drawing trend lines that reflect the movement of asset prices. Analysts also classify trends by their time horizon: secular (long-term), primary (medium-term), and secondary (short-term). The interpretation of these patterns provides valuable foresight into future market behavior, enabling firms to make proactive adjustments.

As global markets become more volatile and competitive, understanding market trends has become vital for companies looking to sustain their market presence. Organizations that monitor these trends gain strategic

advantages such as improved forecasting accuracy, better alignment with consumer needs, and quicker adaptation to technological disruptions.

## II. REVIEW OF LITERATURE

A comprehensive literature review reveals the importance of trend analysis in strategic business planning. Scholars have emphasized the need for continuous monitoring of market patterns to maintain competitive advantage:

- **Porter (1980, 1985 and 2008):** Introduced the Five Forces Model and emphasized the significance of market trends in shaping industry competition.
- **Kotler (1984, 2017):** Highlighted the critical role of market trends in marketing strategy and customer engagement.
- **Levitt (1983):** Advocated for global standardization by tracking global market patterns.
- **Grant (1991):** Stressed that analyzing trends is fundamental to strategic management.
- **Christensen (1997), Bower & Christensen (1995):** Developed the theory of disruptive innovation, emphasizing the role of trend analysis.
- **Kim & Mauborgne (2004):** Proposed the Blue Ocean Strategy, encouraging firms to seek new market spaces by analyzing trends.
- **Barney (1991), Peteraf (1993):** Linked internal resources and core competencies with external trends for sustainable advantage.
- **Teece (1986), Ghemawat (2001):** Discussed trend-driven innovation and global strategic behavior.
- **Day & Wensley (1988), Ansoff (1987), Rumelt (1991):** Analyzed how trend alignment influences firm performance.
- **Kahneman (2011):** Provided psychological insights into consumer behavior influencing market trends.

- **Rigby & Bilodeau (2007), Mintzberg (1994), Galbraith (2002):** Advocated for flexible planning models based on real-time trend tracking.

**OBJECTIVES OF THE STUDY**

- To analyze the impact of market trends on strategic business decisions.
- To identify and interpret emerging patterns in consumer behavior.
- To assess the influence of economic, technological, and social changes on market dynamics.
- To evaluate competitive positioning through trend-based strategic planning.
- To offer insights for optimizing marketing, product, and investment strategies.

**SCOPE OF THE STUDY**

This study is centered on Lakshmi Engineering Products in Coimbatore, with the goal of understanding how market trend analysis can support business development. It considers both macro- and micro-level influences on consumer demand, innovation, and competition. By mapping these trends, the research aims to inform marketing and operational strategies that align with real-world conditions.

**III. RESEARCH METHODOLOGY**

This study employs a mixed-methods approach, combining both qualitative and quantitative data. Primary data was gathered through structured questionnaires and interviews, while secondary data was sourced from industry reports, academic journals, and company records. Key methodologies include:

- Descriptive statistics to summarize demographic and response patterns.
- Trend analysis to identify dominant market movements.
- Forecasting models (e.g., ARIMA) to predict future shifts.
- Comparative analysis to benchmark company performance against competitors.

**IV. DATA ANALYSIS AND FINDINGS**

**SIMPLE PERCENTAGE ANALYSIS**

**Table no 4.1.1 Gender of the respondents**

| S. No | Gender       | Frequency | Percentage |
|-------|--------------|-----------|------------|
| 1.    | Male         | 52        | 57         |
| 2.    | Female       | 40        | 43         |
| 3.    | <b>Total</b> | <b>92</b> | <b>100</b> |

Source: Primary Data

**Interpretation:** While considering the gender of the respondent, from the above table 4.1, it is clear that 57 percentages of the respondents are male and 43 percentages of the respondents are female.

**EMERGING TRENDS**

Emerging trends are categories into AI, sustainability, digital transformation, remote work.

**Table no 4.1.17 Emerging Trends**

| S.No | Trends                 | Frequency | Percentage |
|------|------------------------|-----------|------------|
| 1    | AI                     | 30        | 33         |
| 2    | Sustainability         | 20        | 22         |
| 3    | Digital transformation | 29        | 31         |
| 4    | Remote work            | 13        | 14         |
|      | <b>Total</b>           | <b>92</b> | <b>100</b> |

Source: Primary Data

**Interpretation:** While considering emerging trends, it is evident that 33.0 percentage of the respondents are AI, 22.0 percentage of the respondents are sustainability, 31.0 percentage of the respondents are digital transformation, 14.0 percentage of the respondents are remote work.

**ANOVA**

**Step1: Formulation of hypothesis**

**H1:** There is no significant difference between gender and advantage.

**H0:** There is significant difference between gender and advantage.

**Step2: Finding calculated value:**

**Table no 4.3 shows the attribute of gender**

**ANOVA**

| Gender         | Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | .706           | 3  | .235        | .930 | .430 |
| Within Groups  | 22.283         | 88 | .253        |      |      |
| Total          | 22.989         | 91 |             |      |      |

**Step3: Interpretation**

From the above table no. 4.3 explains significant value of chi-square test .510 which is above 0.05. So there is significant relationship between gender and advantage. Here, we infer that there is significant mean difference between gender and advantage.

**CHI-SQUARE**

**Step1: Formulation of hypothesis:**

**H0:** There is no significant relationship between occupation and capability.

**H1:** There is significant relationship between occupation and capability.

**Step2:** Finding calculated value:

**Table no.4.3 showing occupation and capability**

**Occupation**

|              | ObservedN | ExpectedN | Residual |
|--------------|-----------|-----------|----------|
| Student      | 3         | 23.0      | -20.0    |
| Employed     | 23        | 23.0      | .0       |
| Selfemployed | 61        | 23.0      | 38.0     |
| Retired      | 5         | 23.0      | -18.0    |
| Total        | 92        |           |          |

**Capability**

|           | ObservedN | ExpectedN | Residual |
|-----------|-----------|-----------|----------|
| Excellent | 6         | 18.4      | -12.4    |
| Good      | 31        | 18.4      | 12.6     |
| Fair      | 34        | 18.4      | 15.6     |
| Poor      | 15        | 18.4      | -3.4     |
| VeryPoor  | 6         | 18.4      | -12.4    |
| Total     | 92        |           |          |

**Test Statistics**

|            | Occupation          | Capability          |
|------------|---------------------|---------------------|
| Chi-Square | 94.261 <sup>a</sup> | 39.196 <sup>b</sup> |
| df         | 3                   | 4                   |
| Asymp.Sig. | .000                | .000                |

**Step3: Interpretation:**

From the above table no. 4.2 explains significant value of chi-square test .000 which is above 0.05. So there is no significant relationship between occupation and capability. Here, we infer that there is significant mean difference between occupation and capability.

**V. FINDINGS**

- A significant portion of respondents are aged 41–50 and hold bachelor’s degrees.
- Most respondents were male and identified as students or early-career professionals.
- Respondents were highly familiar with market trends, particularly economic and technological shifts.
- Market research emerged as the most commonly used tool for trend tracking.
- AI and predictive analytics were identified as valuable tools for future forecasting.
- Economic trends, especially related to consumer spending and technological adoption, were deemed most critical.
- Respondents favored monthly trend analysis, with a preference for real-time data.

- A lack of reliable data was cited as a key barrier to effective trend interpretation.
- Budget allocation and strategic planning efforts were strongly aligned with trend insights.

## VI. SUGGESTIONS

- Firms should integrate real-time analytics to improve market responsiveness.
- Investing in AI-driven tools and machine learning models can enhance forecasting accuracy.
- Businesses must educate staff on trend analysis and its strategic value.
- Companies should tailor marketing and product strategies based on consumer behavior insights.
- Collaborative efforts with market research firms can enhance external data sourcing.

## VII. CONCLUSION

This study reinforces the importance of market trend analysis in shaping modern business strategies. By understanding how trends influence customer behavior and market dynamics, firms can adapt more swiftly and maintain a competitive edge. Lakshmi Engineering Products, like many organizations, stands to gain significantly by embedding continuous trend analysis into its strategic planning framework. Doing so will enhance forecasting capabilities, improve customer alignment, and drive innovation.

## REFERENCES

- [1] Armstrong, J. S. (2001). *Principles of Forecasting*. Springer.
- [2] Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson.
- [3] Fama, E. F. (1970). "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance*, 25(2), 383–417.
- [4] Shiller, R. J. (1981). "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?" *American Economic Review*, 71(3), 421–436.
- [5] Brown, S. J., & Warner, J. B. (1985). "Using Daily Stock Returns: The Case of Event Studies." *Journal of Financial Economics*, 14(1), 3–31.