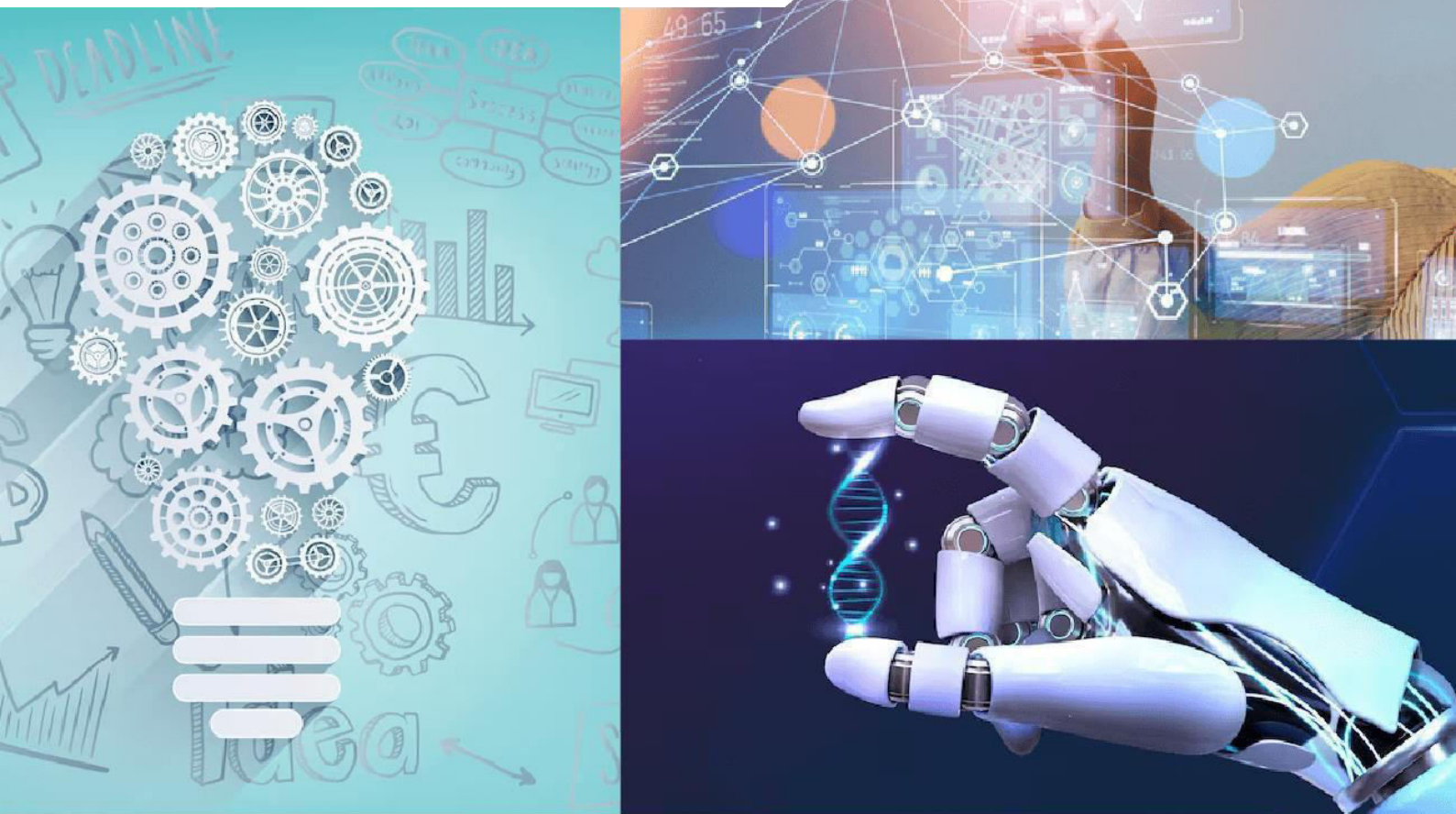




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A Study on Marketing Operations Analytics in SKL Exports, Tirupur

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ABSTRACT: Marketing operations analytics uses data, tools, and analytical techniques to improve marketing efficiency and effectiveness. It involves data management, performance measurement, campaign tracking, and analytical tools to support decisions. Data collected through surveys or secondary sources can be analyzed using statistical methods. Effective analytics improves customer targeting, decision-making, productivity, and return on investment. The study concludes that analytics-driven marketing provides competitive advantage and supports sustainable business growth through better performance and customer engagement.

KEYWORDS: Marketing Operations Analytics, Data Analysis, Campaign Performance, Customer Insights, Decision Making, Return on Investment, Marketing Strategy.

I. INTRODUCTION

In today's competitive and data-driven business environment, traditional marketing based on intuition is insufficient. Marketing Operations Analytics integrates marketing activities with data, technology, and analytical tools to improve decision-making and organizational performance. It involves collecting, measuring, analyzing, and interpreting marketing data to optimize campaigns, allocate resources, enhance customer engagement, and maximize return on marketing investment. With CRM, ERP, digital platforms, and automation software generating large data volumes, analytics has become essential. Across industries, it supports demand forecasting, segmentation, campaign evaluation, customer analysis, and data-driven strategies aligned with organizational and market needs.

Statement of the Problem

Competitive export markets require data-driven marketing, yet SKL Export faces limited analytics adoption. This study evaluates marketing operations analytics, identifies gaps, and recommends improvements to enhance decision-making, operational efficiency, market performance, and profitability.

Objectives of the Study

The objectives of this study are

1. To study the existing marketing operations followed by SKL Exports (P) Ltd, Tirupur.
2. To understand the role of marketing analytics in planning and decision-making.
3. To analyze how data analytics is used in customer acquisition, retention, and sales forecasting.
4. To evaluate the effectiveness of marketing operations analytics in improving export performance.
5. To identify challenges faced by SKL Export in implementing marketing analytics

Scope of the Study

1. This study analyzes marketing operations including research, segmentation, pricing, promotion, and distribution.
2. It examines analytics tools, data sources, employee awareness, and usage in marketing.
3. It identifies operational and technological challenges affecting effective marketing analytics.

Limitations of Study

1. The study is limited to SKL Export and specific operations.
2. Findings may contain respondent bias due to limited participation and sample.
3. Limited time and sample size restricted comprehensive data collection.

II. REVIEW OF LITERATURE

From the study made by **Rao, S. and Klein, J. A.** (2023) studied “Marketing Operations Analytics and Export Performance”, published in International Journal of Export Marketing, Vol. 7, Issue 2, pp. 145–160. The study found that analytics-based marketing operations significantly improve export sales forecasting and international market planning

In the study made by **Kiron, D., Prentice, P. K., and Ferguson, R. B.** (2023) conducted a study titled “The Analytics Advantage in Marketing Operations”, published in MIT Sloan Management Review, Vol. 64, Issue 3, pp. 55–63. The study concluded that organizations using marketing analytics outperform competitors in operational efficiency and strategic execution.

Yet another study made by **Bhimani, A., Willcocks, L., and Mikalef, P.** (2024) in their research “Analytics-Driven Marketing Control Systems”, published in Management Accounting Research, Vol. 63, Issue 1, pp. 1–14, found that marketing operations analytics strengthens planning, control, and performance measurement in manufacturing and export-oriented firms.

Further study made by **Kumar, V., Dixit, A., Javalgi, R. G., and Dass, M.** (2025) conducted a study titled “Marketing Operations Analytics and Firm Performance: Evidence from Export-Oriented Firms”, published in Journal of Business Research, Vol. 163, Issue 1, pp. 113–126. The study concluded that effective use of marketing analytics significantly improves export performance, customer acquisition, and overall business profitability.

Company Profile

Established in 1995 by Mr. Mani, S.K.L. Exports is a Government-recognized garment manufacturer and exporter based in Tirupur. The company provides quality garments with timely delivery through integrated manufacturing processes and international quality standards. It serves customers across Europe, the U.K., U.S.A., and other markets, supported by technically qualified professionals.

World Scenario

The global garment industry is a major, dynamic sector driven by mass production, fast fashion, e-commerce, and changing consumer preferences. China, Bangladesh, Vietnam, and India are leading producers and exporters. Sustainability, ethical fashion, automation, digitalization, and supply-chain resilience are increasingly shaping the industry.

India Scenario

India is a major textile and garment producer, supported by abundant raw materials, skilled labour, strong domestic demand, and export markets. Key clusters include Tirupur, Bengaluru, Delhi-NCR, Ludhiana, Surat, and Kolkata. Government initiatives such as PLI, Make in India, and PM MITRA Parks support modernization and exports.

Tamil Nadu Scenario

Tamil Nadu is a leading textile hub, with Tirupur, Coimbatore, Erode, and Salem as major centres. The state specializes in garments, spinning, yarn, and textiles.

Future Outlook

Growth opportunities include sustainable textiles, technical textiles, digital supply chains, e-commerce, and expanding international markets.

III. RESEARCH METHODOLOGY

Research methodology refers to the systematic procedures used to collect, process, analyze, and interpret information. The study uses surveys and questionnaires to obtain relevant data.

Research Design

The study adopts a descriptive research design to examine characteristics, behaviours, and relationships among variables.

Data Collection

Primary data were collected through a structured questionnaire. Secondary data were obtained from magazines, journals, websites, and annual reports.

Sample Size

The study selected 120 respondents from a total population of 300.

Sampling Procedure

Non-probability sampling was adopted, where respondents do not have equal selection opportunities.

Convenience Sampling

Convenience sampling was used to select respondents based on accessibility and availability. The methodology focuses on describing facts and characteristics of the selected customer group.

Tools Used for Analysis

The collected data were analyzed using percentage analysis, Chi-square test, and correlation analysis to identify patterns, relationships, and significant findings related to freight forwarding operations.

Percentage Analysis: Percentage analysis was used to compare data and express relationships between different categories in percentage terms.

$$\text{Percentage} = \frac{\text{No.of Respondents in a Category}}{\text{Total No.of Respondents}} \times 100$$

Chi-Square Test: Chi-square determines whether variables are associated, including analytics usage, performance, awareness, decision-making, and departmental usage.

$$\chi^2 = \frac{\sum (O_i - E_i)^2}{E_i}$$

Correlation Analysis: Correlation analysis is a statistical tool used to measure the relationship between two variables. It is denoted by “r” and shows the strength and direction of the relationship. It helps to identify whether variables such as business analytics usage and organizational performance are related

$$r = \frac{n (\sum xy) - (\sum x) (\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2] [n \sum y^2 - (\sum y)^2]}}$$

Data Analysis and Interpretation

Data analysis involves systematically organizing and examining data to answer research questions, often using visual tools like tables and charts. Data, collected through various methods, is meaningless until analyzed. Analysis identifies patterns and insights through techniques like classification and comparison. Interpretation gives meaning to findings, aligns them with research goals, and generates insights for informed decision-making and future studies.

Table: 1 Age of the Respondents

Age	No. of Respondents	%
Below 25	19	16
25-35	59	49
36-45	31	26
Above 45	11	9
Total	120	100

From the above table, it is interpreted that, 16 % of the respondents belong to below 25 age group, 49 % to 25 – 35 Age group, 26 % to 36 – 45 age group, 9 % to above 45 age group.

Table: 2 Gender

Gender	No. of Respondents	%
Male	68	57
Female	52	43
Total	120	100

From the above table, it is interpreted that 57 % of respondents are male and 43 % are female.

Table: 3 Educational Qualification

Educational Qualification	No. of Respondents	%
SSLC	18	15
HSC	20	17
Diploma	29	24
Under graduate	43	36
Post graduate	10	8
Total	120	100

From the above table it is interpreted that 15 % of respondents have SSLC, 17% have HSC, 24 % have diploma, 36% have Undergraduate and 8 % have Post graduate qualification.

Table: 4 Type of Business Activities focused

Type of Business Activities focused	No. of Respondents	%
Market Research	59	49
Customer Relationship Management	22	18
Pricing Strategy	12	10
Promotion and Branding	15	13
Distribution and Logistics	12	10
Total	120	100

It is interpreted that 49 % of business focused on market research 18 % on CRM activity, 10 % on Pricing Strategy, 13 % on Promotion and Branding and 10 % on Distribution and Logistics.

Table: 5 Effectiveness of Marketing Operations Analytics

Effectiveness of Marketing Operations Analytics	No. of Respondents	%
Good	52	43
Average	38	32
Poor	30	25
Total	120	100

It is interpreted that 43 % of respondents recorded good, 32 % recorded Average and 25 % recorded poor on the effectiveness of Business Operations.

Table: 6 Collection of Data for Marketing Operations Analytics

Data Collection for Marketing Operations Analytics	No. of Respondents	%
Always	12	10
Often	94	78
Sometimes	14	12
Total	120	100

It is interpreted that 10 % of respondents recorded as always, 78 % as Often and 12 % as Sometimes for collection of data for marketing operational analytics.

Table:7 Area where Marketing Operations Analytics used

Area where Marketing Operations Analytics used	No. of Respondents	%
Sales Forecasting	26	22
Customer Behaviour	25	21
Market Trend	54	45
Organizational Performance	15	12
Total	120	100

It is interpreted that 22 % of data for marketing operational analytics is used in Sales forecasting, 21 % to study customer behavior, 45 % to study market trend and 12 % to study Organizational performance

Table: 8 Types of Data where Marketing Operations Analytics used

Types of Data where Marketing Operations Analytics used	No. of Respondents	%
Sales data	37	31
Customer data	33	28
Market data	29	24
Competitor Data.	21	17
Total	120	100

It was found that Sales data is highest at 37 respondents (31%), followed by customer data 33 (28%), market data 29 (24%), and competitor data 21 (17%) where marketing operation analytics is used.

Table: 9 Frequency of using Data in Marketing Operations Analytics

Frequency of using Data in Marketing Operations Analytics	No. of Respondents	%
Daily	29	24
Weekly	43	36
Monthly	24	20
Half yearly	24	20
Total	120	100

The table shows that 43 respondents (36%) use data weekly, followed by 29 (24%) daily. 24 (20%) use data monthly, while 24 (20%) use it half-yearly.

Table: 10 Challenges in using Marketing Operations Analytics

Challenges in using Marketing Operations Analytics	No. of Respondents	%
Lack of skilled staff	36	30
Inadequate tools	42	35
Data quality issues	20	17
High implementation cost	22	18
Total	120	100

The table shows that the major challenge is inadequate tools, reported by 42 respondents (35%), followed by lack of skilled staff 36 (30%), high implementation cost 22 (18%), and data quality issues 20 (17%).

Table: 11 Respondents Opinion with usage of Marketing Operations Analytics

Opinion with usage of Marketing Operations Analytics	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Res*	%	Res*	%	Res*	%	Res*	%	Res*	%
Effective Marketing Operations	42	35	45	38	9	7	9	7	15	13
Analytics-Driven Marketing Decisions	42	35	62	52	7	6	2	1	7	6
Analytics supporting Forecasting	36	30	30	25	28	23	20	17	6	5
Improving Decision Making	42	35	30	25	19	16	22	18	7	6
Improvement in Sales Performance	32	27	21	17	15	13	6	5	46	38
Improved Targeting & Segmentation	60	50	26	22	19	16	12	10	3	2
Better Pricing and Promotion decision	42	35	21	17	24	20	19	16	14	12
Improved coordination in Marketing	42	35	29	24	27	22	19	17	3	2
Requirement of Improved Analytics	33	27	34	29	18	15	17	14	18	15

Res* Respondents

Interpretation

The table indicates that the maximum value is observed for Analytics-Driven Marketing Decisions, where 62 respondents (52%) agree, representing the highest percentage under the Agree category. Among Strongly Agree responses, Improved Targeting and Segmentation records the maximum value of 60 respondents (50%). For Neutral, Analytics Supporting Forecasting has the highest value of 28 respondents (23%). Under Disagree, Analytics Supporting Forecasting records the maximum of 20 respondents (17%). The highest Strongly Disagree response is for Improvement in Sales Performance, with 46 respondents (38%). Overall, the maximum positive responses demonstrate strong acceptance of analytics-driven marketing decisions and improved targeting and segmentation.

IV. CHI SQUARE TEST-I

A chi – square test is a statistical test that is used to compare observed and expected results.

Relationship between Gender and Requirement of Improved Analytics

Null Hypothesis: H0: There is no significant relationship between Gender and Requirement of Improved Analytics.

Alternative Hypothesis: H1: There is significant relationship between Gender and Requirement of Improved Analytics.

Observed Frequency: The observed frequency for Chi Square Test is given in the table below:

Table 12: Observed Frequency

Gender	Requirement of Improved Analytics					Total
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Male	19	19	10	10	10	68
Female	14	15	8	7	8	52
Total	33	34	18	17	18	120

Source: Primary Data

$$\text{Expected Frequency} = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$$

The Calculation is as follows

1. Row1 Total × Column1 Total / Grand Total	=	68 x 33 / 120	=	18.70
2. Row1 Total × Column2 Total / Grand Total	=	68 x 34 / 120	=	19.27
3. Row1 Total × Column3 Total / Grand Total	=	68 x 18 / 120	=	10.20
4. Row1 Total × Column4 Total / Grand Total	=	68 x 17 / 120	=	9.63
5. Row1 Total × Column5 Total / Grand Total	=	68 x 18 / 120	=	10.20
6. Row2 Total × Column1 Total / Grand Total	=	52 x 33 / 120	=	14.30
7. Row2 Total × Column2 Total / Grand Total	=	52 x 34 / 120	=	14.73
8. Row2 Total × Column3 Total / Grand Total	=	52 x 18 / 120	=	7.80
9. Row2 Total × Column4 Total / Grand Total	=	52 x 17 / 120	=	7.38
10. Row2 Total × Column5 Total / Grand Total	=	52 x 18 / 120	=	7.80

Table 13: Expected Frequency

Gender	Requirement of Improved Analytics					Total
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Male	18.70	19.27	10.20	9.63	10.20	68
Female	14.30	14.73	7.80	7.37	7.80	52
Total	33	34	18	17	18	120

$$\chi^2 = \frac{\sum (O_i - E_i)^2}{E_i}$$

Table 14: Calculation of Chi Square

Observed frequency	Expected frequency	O _i -E _i	(O _i -E _i) ²	(O _i -E _i) ² /E _i
19	18.7	0.3	0.09	0.004
19	19.27	-0.27	0.073	0.004
10	10.2	-0.2	0.04	0.004
10	9.63	0.37	0.137	0.014
10	10.2	-0.2	0.04	0.004
14	14.3	-0.3	0.09	0.006
15	14.73	0.27	0.073	0.0005
8	7.8	0.2	0.04	0.005
7	7.37	-0.37	0.137	0.019
8	7.8	0.2	0.04	0.005
120			Total	0.07

$$\sum[(O_i - E_i)^2 / E_i] = 0.07$$

Degrees of freedom = (No. of Rows - 1) (No. of Columns - 1) = (2-1) x (5-1) = 4

At 5% level of significance the value is **9.488**. Calculated value = **0.07**

Table value > Calculate value, H₀ is accepted.

Inference

Hence there is no significant relationship between Gender and Requirement of Improved Analytics.

Coefficient of Correlation

Correlation coefficient is the statistical tools used to measures the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

Table 15 Relationship Between Educational Qualification and Improved Coordination in Marketing

Educational Qualification (X)	Improved Coordination in Marketing (Y)	X ²	Y ²	XY
18	42	324	1764	756
20	29	400	841	580
29	27	841	729	783
43	19	1849	361	817
10	3	100	9	30
ΣX = 120	ΣY = 120	ΣX² = 3514	ΣY² = 3704	ΣXY = 2966

Source: Primary Data

Formula:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

$$r = \frac{5 \times (2966) - (120) \times (120)}{\sqrt{(5 \times (3514) - (120)^2) \times (5 \times (3704) - (120)^2)}}$$

r = 0.12

Calculated value = **0.12**

Interpretation

It is inferred that the correlation value $r = 0.12$ is **positive**, therefore there is a positive relationship between the Educational Qualification and Improved Coordination in Marketing

Suggestions for Better Prospects

SKL Exports should invest in modern marketing analytics software to improve forecasting, customer analysis, and export planning. Regular employee training should strengthen analytical and data interpretation skills. The company should effectively utilize customer, competitor, and sales data for better decisions. Analytics should integrate with production, sales, and export planning to improve coordination. Data-driven targeting can identify new markets and expand exports. Managers should increasingly use analytics insights for pricing, promotion, and market expansion decisions.

V. CONCLUSION

The study on Marketing Operations Analytics at SKL Exports, Tirupur, examined its role and effectiveness in marketing activities. Findings show that analytics supports market trend analysis, customer segmentation, demand forecasting, and decision-making. Customer and market data are regularly utilized, positively influencing export sales, pricing, and departmental coordination. However, limited skilled personnel and training needs remain challenges. Overall, marketing operations analytics improves marketing efficiency, strengthens data-driven decisions, and enhances export performance, highlighting its importance for organizational growth.

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