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A STUDY ON BUSINESS PROCESS ANALYSIS AND PERFORMANCE IMPROVEMENT TOWARDS CORNATION CREATION PRIVATE LIMITED

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ABSTRACT: In today's competitive manufacturing environment, improving operational efficiency and maintaining consistent product quality are critical for organizational success. This study focuses on Business Process Analysis and Performance Improvement in a Production Company using the structured framework of Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) methodology. The primary objective of this research is to identify inefficiencies in production processes and suggest appropriate strategies to enhance overall performance. Data for the study was collected through a structured questionnaire designed based on the DMAIC phases, targeting employees across various departments. The questionnaire captured key aspects such as awareness of production goals, frequency of defects, process efficiency, root causes of inefficiencies, and the effectiveness of existing improvement practices. In conclusion, this study highlights the importance of adopting a systematic and data-driven approach to business process analysis in production companies. The application of the DMAIC methodology can significantly improve operational efficiency, ensure quality consistency, and support sustainable organizational growth

CHAPTER 1.1 INTRODUCTION

In the modern manufacturing environment, organizations are increasingly focusing on improving operational efficiency, minimizing defects, and enhancing product quality to remain competitive. Production companies face continuous pressure to optimize their processes while maintaining cost-effectiveness and meeting customer expectations. In this context, systematic

evaluation and improvement of business processes have become essential.

This study focuses on analyzing production processes using the Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) approach, which provides a structured framework for identifying inefficiencies and implementing performance improvements. The DMAIC methodology helps organizations define problems clearly, measure current performance, analyze root causes, implement improvements, and sustain results through effective control mechanisms.

The data for this study is collected using a structured questionnaire designed based on the DMAIC phases. The questionnaire captures employee insights regarding process efficiency, quality issues, root causes of defects, and existing improvement practices. By analyzing these responses, the study aims to identify key problem areas and suggest actionable strategies for enhancing production performance.

1.2 STATEMENT OF THE PROBLEM

Despite having defined production systems, many organizations struggle with inefficiencies such as delays, quality defects, machine breakdowns, and poor coordination among departments. These issues often result in increased operational costs, reduced productivity, and customer dissatisfaction.

The lack of structured problem-solving approaches and insufficient use of data-driven methodologies like Six Sigma leads to ineffective identification of root causes and improper implementation of corrective actions. Additionally, limited employee involvement, inadequate training, and poor monitoring systems further contribute to process inefficiencies.

Therefore, the key problem addressed in this study is the absence of an effective and systematic approach to analyze production processes and improve performance. This research seeks to identify process gaps using the DMAIC framework and provide recommendations to enhance efficiency, reduce defects, and ensure continuous improvement

1.3 OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE

- To analyze and improve production processes using the Six Sigma DMAIC approach.

SECONDARY OBJECTIVES

- To identify major problems affecting production efficiency.
- To evaluate current process performance and defect levels.
- To analyze root causes of inefficiencies and quality issues.
- To assess the effectiveness of existing process improvement techniques.
- To suggest appropriate strategies for process improvement.
- To examine the level of employee awareness and involvement in quality initiatives.
- To ensure sustainability of improvements through proper control measures

1.4 SCOPE OF THE STUDY

This study is focused on analyzing business processes within a production company using a Six Sigma-based approach. The scope includes:

- Evaluation of production-related activities such as planning, operations, and quality control.
- Collection of data from employees across different departments using a structured questionnaire.
- Analysis of process performance based on the DMAIC phases.
- Identification of key issues such as defects, delays, and inefficiencies.
- Suggestion of practical improvement strategies based on findings.

The study is limited to internal operational processes and does not cover external factors such as market conditions or customer behavior in detail. It is primarily focused on improving efficiency and quality within the production environment.

1.5 LIMITATIONS OF THE STUDY

- The study is based on responses collected through a questionnaire, which may be subject to personal bias or inaccurate reporting.
- Limited sample size may affect the generalization of results.
- Time constraints may restrict in-depth analysis of all production processes.

- The study focuses only on selected departments and may not represent the entire organization.
- Lack of access to detailed company data (such as financial or confidential operational data) may limit analysis

2. RESEARCH METHODOLOGY

2.1 INTRODUCTION

Research methodology is the systematic framework that guides the collection, analysis, and interpretation of data to arrive at meaningful conclusions. For this study on business process analysis and performance improvement at Coronation Creation Private Limited, a structured and scientific approach has been adopted to ensure accuracy, reliability, and validity of the findings.

2.2DATA COLLECTION METHOD

2.21 PRIMARY DATA

Primary data has been collected through direct observation of business processes within the organization. Observation is used as the primary tool to record workflow patterns, employee activities, time taken for tasks, process sequences, and deviations from standard procedures. A structured observation checklist was prepared and used to ensure consistency and objectivity in data collection.

- Advantages of Observation Method used in this study:
- Provides real-time, firsthand information about processes.
- Eliminates response bias associated with questionnaires.
- Captures actual behavior rather than reported behavior.
- Helps identify hidden bottlenecks that employees may not verbalize.

2.2.2 SECONDARY DATA

- Secondary data has been gathered from:
- Company records, reports, and process manuals
- Annual performance reports and internal documents
- Published journals, textbooks, and research articles related to business process management and performance improvement
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2.3 POPULATION OF THE STUDY

The population of the study includes all employees, processes, and operational units of Coronation Creation Private Limited across various departments involved in the day-to-day functioning of the organization.

2.4 SAMPLE SIZE

The sample size for this study is above 150 units, which includes process observations, workflow instances, and employee work cycles recorded across multiple departments during the study period. A large sample size ensures greater reliability and minimizes sampling error.

2.5 SAMPLING TECHNIQUE

Purposive Sampling (Non-probability sampling) has been adopted for this study. Specific processes, departments, and operational units were selected based on their relevance to the research objectives. This technique ensures that only the most informative and representative processes are observed and analyzed.

2.6TOOLS AND TECHNIQUES USED FOR ANALYSIS

- The following tools and statistical techniques are used to analyze the collected data:
- Tool / Technique
- Purpose
- Process Flow Charts
- To map existing business processes
- Bar Charts & Pie Charts
- To represent process performance data visually
- Percentage Analysis
- To analyze frequency of observations
- SWOT Analysis
- To assess strengths, weaknesses, opportunities, and threats
- Fishbone (Ishikawa) Diagram
- To identify root causes of process inefficiencies
- Pareto Analysis (80/20 Rule)
- To prioritize key problem areas

2.7PERIOD OF STUDY

The study was conducted over a period of 4 to 6 weeks within the premises of Coronation Creation Private Limited, during which process observations were systematically recorded.

2.8LIMITATIONS OF THE STUDY

- The study is limited to Coronation Creation Private Limited and findings may not be generalized to other organizations.
- Observation as a method may sometimes alter the natural behavior of employees (Hawthorne Effect).
- The study is time-bound and may not capture seasonal variations in business processes.
- Access to certain confidential operational data was restricted.
- The findings are based on observations made during the study period only.

2.9 TOOLS AND TECHNIQUES USED FOR ANALYSIS

Tool / Technique	Purpose
Process Flow Charts	To map existing business processes
Bar Charts & Pie Charts	To represent process performance data visually
Percentage Analysis	To analyze frequency of observations
SWOT Analysis	To assess strengths, weaknesses, opportunities, and threats
Fishbone (Ishikawa) Diagram	To identify root causes of process inefficiencies
Pareto Analysis (80/20 Rule)	To prioritize key problem areas

TABLE 2.1 – AGE OF RESPONDENTS

Category	No. of Respondents	Percentage
Below 25 years	20	20%
26–35 Years	40	40%
36–45 Years	10	10%
46–55 Years	17	17%
Above 55 Years	13	13%
Total	100	100%

INTERPRETATION:

The majority of respondents (40%) are aged 25–35 years, followed by 20% below 25 years. Smaller proportions fall in the 36–45 years (10%), 46–55 years (17%), and above 55 years (13%) categories, indicating a predominantly young respondent group with moderate representation of older age groups.

TABLE 2.2 – ORGANISATION CLEARLY DEFINES BUSINESS GOALS AND OBJECTIVES

Category	No. of Respondents	Percentage
Strongly Agree	80	80%
Agree	20	20%
Neutral	–	–
Disagree	–	–
Strongly Disagree	–	–
Total	100	100%

INTERPRETATION:

80% strongly agree and 20% agree that the organization clearly defines its business goals, showing complete positive consensus among respondents

TABLE 2.3 – BUSINESS ANALYSIS PRACTICES ARE EFFECTIVELY IMPLEMENTED

Category	No. of Respondents	Percentage
Strongly Agree	80	80%
Agree	15	15%
Neutral	5	5%
Disagree	–	–
Strongly Disagree	–	–
Total	100	100%

INTERPRETATION:

80% strongly agree and 15% agree that business analysis is effectively implemented. Only 5% are neutral, indicating strong confidence in the organization's implementation

TABLE 2.4 – COMPANY REGULARLY ANALYSES MARKET TRENDS AND COMPETITORS

Category	No. of Respondents	Percentage
Strongly Agree	75	75%
Agree	15	15%
Neutral	10	10%
Disagree	–	–
Strongly Disagree	–	–
Total	100	100%

INTERPRETATION:

75% strongly agree and 15% agree on market trend analysis effectiveness. Only 10% are neutral, indicating strong confidence in the organization's analytical capabilities.

TABLE 2.5 – DATA-DRIVEN DECISION MAKING IS ENCOURAGED

Category	No. of Respondents	Percentage
Strongly Agree	88	88%
Agree	10	10%
Neutral	2	2%
Disagree	–	–
Strongly Disagree	–	–
Total	100	100%

INTERPRETATION:

88% strongly agree and 10% agree that data-driven decision-making is encouraged. Only 2% are neutral, showing near-universal positive perception.

TABLE 2.6 – EMPLOYEES ARE INVOLVED IN THE BUSINESS ANALYSIS PROCESS

Category	No. of Respondents	Percentage
Strongly Agree	–	–
Agree	–	–
Neutral	75	75%
Disagree	15	15%
Strongly Disagree	10	10%
Total	100	100%

INTERPRETATION:

75% of respondents are neutral about employee involvement in business analysis, while 15% disagree and 10% strongly disagree, suggesting the process may not be effectively understood or communicated.

TABLE 4.10 – ORGANISATION USES APPROPRIATE TOOLS FOR BUSINESS ANALYSIS

Category	No. of Respondents	Percentage
Strongly Agree	75	75%
Agree	25	25%
Neutral	–	–
Disagree	–	–
Strongly Disagree	–	–
Total	100	100%

INTERPRETATION:

All respondents show complete agreement: 75% strongly agree and 25% agree, indicating that the tools and techniques used are effective and well-understood.

3.FINDINGS, SUGGESTION AND CONCLUSION

3.1 FINDINGS

1. The majority of respondents (40%) belong to the 26–35 years age group, indicating a young and active workforce.
2. Male employees constitute 75% of the respondents, showing male dominance in the workforce.
3. Most employees (45%) have more than 10 years of experience, reflecting strong organizational knowledge and stability.
4. 80% of respondents strongly agree that the organization clearly defines its business goals and objectives.
5. 95% of employees believe that business analysis practices are effectively implemented in the organization.
6. A majority of respondents agree that the company regularly analyzes market trends and competitor activities.
7. 98% of employees agree that data-driven decision-making is encouraged within the organization.
8. Employee involvement in the business analysis process is comparatively low, with 75% remaining neutral and 25% expressing disagreement.
9. Most employees agree that appropriate business analysis tools and techniques are used effectively.
10. 98% of respondents believe that business analysis helps identify risks effectively.
11. Employees strongly feel that business analysis contributes to operational efficiency and productivity.
12. Performance goals are clearly communicated to employees, with 97% expressing strong agreement.
13. Training and development programs are viewed positively by employees and are considered effective in improving performance.
14. Regular performance reviews and feedback mechanisms are effectively implemented.
15. Rewards and recognition systems are strongly linked to employee performance.
16. Chi-square analysis revealed no significant association between demographic variables and perceptions of business analysis practices.

3.2 SUGGESTION

1. The organization should increase employee participation in business analysis activities to improve involvement and ownership.
2. Regular workshops and awareness programs should be conducted to educate employees about business analysis processes.
3. Cross-functional teams can be formed to encourage collaboration and better problem-solving.
4. Management should establish structured feedback channels to gather employee suggestions regarding process improvements.
5. Advanced analytical software and digital tools may be introduced to enhance process monitoring and decision-making.
6. Continuous training programs should be provided to improve analytical and technical skills.
7. The company should strengthen communication regarding business analysis outcomes and improvement initiatives.
8. Periodic process audits should be conducted to identify inefficiencies and implement corrective actions promptly.
9. Employee recognition programs should be expanded to encourage active participation in improvement initiatives.
10. Management should focus on strengthening the integration between business analysis activities and performance improvement programs.
11. Benchmarking with leading textile companies may help identify best practices for process improvement.
12. Continuous monitoring and evaluation mechanisms should be established to sustain long-term performance improvements.

4. CONCLUSION

The study entitled "A Study on Business Process Analysis and Performance Improvement at Carnation Creations Private Limited" was conducted to evaluate the effectiveness of business analysis practices and their contribution to organizational performance. The findings reveal that the organization has successfully implemented various business analysis and performance management practices, including clear goal setting, data-driven decision-making, risk identification, employee training, performance evaluation, and reward systems.

Employees expressed a highly positive perception of the organization's business analysis processes and performance improvement initiatives. The study also found that the company effectively communicates organizational goals, provides regular feedback, and encourages continuous learning through training and development programs. These practices have contributed significantly to operational efficiency and productivity.

However, the study identified employee involvement in the business analysis process as an area requiring improvement. Increasing employee participation in decision-making and process improvement activities can further strengthen organizational performance. Overall, the research concludes that Carnation Creations Private Limited maintains effective business analysis and performance management systems that support organizational growth, operational excellence, and long-term sustainability.

Statistical Summary of Findings

Statistical Tool	Result	Inference
Percentage Analysis	40% aged 26–35; 75% male; 45% above 10 years experience	Young and experienced workforce
Descriptive Analysis	80–98% positive responses	Highly positive perception of business analysis
Chi-Square Test 1	χ^2=0.089, df=2, p>0.05	No significant association between gender and BA perception
Chi-Square	χ^2=0.327, df=4,	No significant

Test 2	$p>0.05$	association between experience and employee involvement
Chi-Square Test 3	$\chi^2=0.014$, df=2, $p>0.05$	No significant association between education and productivity perception
ANOVA	$F=1.335$, $p>0.05$	No significant difference between BA and performance improvement
Correlation	$r=-0.2128$	Very weak negative correlation
Overall Finding	75% neutral on employee involvement	Employee participation should be improved