

Report on
GMS Composite Knitting Ind. Ltd.:
A focus on knitting industrial operations

By

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An internship report submitted to Executive Development Centre, BRAC Institute of Governance and Development (BIGD), BRAC University in partial fulfillment of the requirements for the degree of Post Graduate Diploma in Knitwear Industry Management (PGD-KIM).

Executive Development Centre

BRAC Institute of Governance and Development

BRAC University

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Declaration

It is hereby declared that

1. The internship report submitted is my own original work while completing degree at BRAC University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

Academic Supervisor's Full Name & S



Md. Mobarak Hossain

Mohammad Saiful Islam

Senior Academic Coordinator, BIGD, BRAC University

Letter of Transmittal

Mohammad Sirajul Islam

Senior Academic Coordinator, BIGD

BRAC University

Subject: Submission of Internship Report on GMS Composite Knitting Ind. Ltd.: A focus on knitting industrial operations.

Dear Sir,

This is my pleasure to submit my internship report based on my industry attachment with GMS Composite Knitting Ind. Ltd.

I have attempted my best to finish the report with the essential data and recommended proposition in a significant compact and comprehensive manner as possible.

I trust that the report will meet the desires.

Sincerely yours,

Md. Mobarak Hossain

1000055572

Post Graduate Diploma in Knitwear Industry Management (PGD-KIM)

Executive Development Centre, BIGD, BRAC University

10 March 2026

Non-Disclosure Agreement

This agreement is made and entered into by and between GMS Composite Knitting Ind. Ltd. as the First Party and the undersigned student at Executive Development Centre, BRAC Institute of Governance and Development, BRAC University as the Second Party. The First Party has allowed the Second Party to complete three months long internship in partial fulfillment of the requirements for the degree of Post Graduate Diploma in Knitwear Industry Management. The Second Party will have the opportunity to work closely with the company's officials and access official data and information. Based on work experience and data, data, and information collected during the internship and Party will prepare an internship report. The Second Party will use all sorts of data and information for academic purposes and will not disclose to any party against the interests of the First Party.

Student's Full Name & Signature:

Industry Supervisor's Full Name & Si



Md. Mobarak Hossain

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Md. Rafiqul Islam

Senior Manager

Merchandising & Marketing, GMS Composite Knitting Ind. Ltd.

Acknowledgment

At the very beginning, I would like to express my sincere gratitude to Almighty Allah for granting me the strength, good health and opportunity to successfully complete my internship and prepare this report.

I am deeply thankful to my academic supervisor, Mr. Mohammad Sirajul Islam, Deputy Director, EDC and Senior Academic Coordinator at BRAC Institute of Governance and Development, BRAC

University, for his continuous guidance, valuable advice and encouragement throughout my internship and report preparation. His constructive feedback and support helped me organize my work properly and complete this report in a professional manner. I would also like to express my heartfelt appreciation to my industry supervisor, Mr. MD. Rafiqul Islam, Sr. Manager of Merchandising & Marketing at GMS Composite Knitting Ind. Ltd., for his kind supervision, cooperation and willingness to share his practical knowledge and experience. His guidance helped me understand the real working environment of the knit garment industry.

Furthermore, I am sincerely grateful to all the department heads, supervisors and employees of GMS Composite Knitting Ind. Ltd., especially those from Supply Chain, IE & Planning, Quality, Merchandising & Marketing, Production and Sustainability departments. Their support, time and clear explanations allowed me to gain practical knowledge and hands-on experience in different operational areas.

Finally, I would like to thank BIGD and BRAC University for designing such a practical and industry-focused PGD-KIM program. The theoretical knowledge gained from this program helped me understand factory operations more effectively during my internship. This internship has been an important learning experience in my academic and professional journey and I am truly grateful to everyone who contributed to making it successful.

Executive Summary

This report is based on my internship at GMS Composite Knitting Ind. Ltd., one of the leading knit garment manufacturers in Bangladesh. This company started its commercial production in 2000 and has since established itself as a reputed and competitive organization in the global apparel market. This company holds Oeko-Tex Standard 100 (Product Class I), WRAP for Social Compliance as

well as ISO 9001:2015 certifications. As part of the PGD-KIM program, I completed my industry attachment where I had the opportunity to work in several core departments including Supply Chain, IE & Planning, Quality, Merchandising & Marketing, Production and Sustainability. During this internship period, I was exposed to the real working environment of a large-scale knit composite factory. I watched how they source yarn and materials, plan and run production lines, check quality at every step, handle buyer communications and apply sustainability practices to meet global standards.

This report is organized into several chapters to present a clear overview of my learning experience. The first chapter introduces the company profile, including its background, products, organizational structure and operational capacity. The second chapter explains the complete industrial operational process and the functions of different departments where I worked. It describes how Supply Chain ensures timely material sourcing, how IE & Planning controls efficiency and capacity, how Quality team maintains standards, how Merchandising & Marketing communicates with buyers, how Production manages daily output and how Sustainability team ensures compliance and environmental responsibility. The third chapter provides an analytical review of my internship works at various departments. It also connects my academic learning from the PGD-KIM program with real factory practices. This chapter also presents the strengths, weaknesses and possible improvement suggestions for the company along with my personal reflections on skills development and self-improvement. The fourth chapter presents the conclusion of the report along with the list of references.

Overall, this internship report shows one clear thing: good garment manufacturing needs strong teamwork between departments, always trying to improve, keeping quality high, and doing things responsibly. My internship at GMS Composite Knitting Ind. Ltd. helped me a lot. It built up my technical knowledge and also made me more confident. I got better at communicating, thinking like a professional and handling real work pressure. Now I feel

much more ready to start in the garment industry. I understand the daily operations better and know what challenges actually come up. This experience prepared me well for the next step.

Keywords: Supply Chain; IE & Planning; Quality; Acceptable Quantity Label; Merchandising & Marketing; PP Sample; Knitting, Dyeing; Finishing; Certification and Sustainability

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List of Acronyms

AQL	Acceptable Quantity Label
BCI	Better Cotton Initiative
BIGD	BRAC Institute of Governance and Development
BS	Basic Starter

BSCI	Business Social Compliance Initiative
CAD	Computer-Aided Design
CAPA	Corrective and Preventive Actions
CM	Cost of Making
CVC	Chief Value of Cotton
DGM	Deputy General Manager
EGB	Exhaust Gas Boiler
Emb.	Embroidery
ERP	Enterprise Resource Planning
ETP	Effluent Treatment Plant
GHG	Greenhouse gas
GM	General Manager
GMS	Golam Mostafa & Sons
GPQC	Garment Production Quality Checker/Controller
GSM	Gram per Square Meter
GOTS	Global Organic Textile Standard
HR	Human Resources
IEP	Industrial Engineering & Planning
Ind.	Industry
IoT	Internet of Things
LED	Light Emitting Diodes
LEED	Leadership in Energy and Environmental Design
Ltd.	Limited
M&M	Merchandising and Marketing
MIS	Management Information System

MSDS	Material Safety Data Sheets
MWp	Megawatt peak
OCS	Organic Content Standard
PGD-KIM	Post Graduate Diploma in Knitwear Industry Management
PC	Polyester Cotton
PO	Purchased Order
PP	Pre-Production
QA	Quality Assurance
QC	Quality Checker/Controller
RCS	Recycled Claim Standard
RMG	Ready-Made Garments
RPM	Revolutions Per Minute
SEDEX	Supplier Ethical Data Exchange
T&A	Time and Action
TE	Textile Exchange
TF	Technical File
USGBC	United States Green Building Council
WRAP	Worldwide Responsible Accredited Production
WIP	Work-In-Progress

Chapter 1: About GMS Composite Knitting Ind. Ltd.

1.1 Overview of the Company

GMS Composite Knitting Ind. Ltd. is a very well-known for the Ready-Made Garments sector in Bangladesh. It is a 100% export-oriented ready-made knit garments manufacturing company of Bangladesh. This company was founded in 1999 and began its commercial production in 2000. GMS Composite Knitting Ind. Ltd. is fully incorporated and independent in this sector. It has modern knitting, dyeing, printing, embroidery, yarn dyeing, finishing and stitching units. This company has modern facilities and skilled workforce and globally it has a reliable exporter of quality knitted fabrics. This company has also got the ISO 9001:2015 certification. The Head Office of the company is located at Mohakhali, Dhaka and the main factory is situated at Kashimpur, Gazipur.

GMS Composite Knitting Ind. Ltd. has achieved a strong reputation for his updated machinery, skillful workers and strict quality control systems. There is also a Design and Development department for keeping the spirit of diversification and innovation to grow up the company. It also follows all the criteria of international compliance and sustainability standards. To ensure product quality, worker safety and environmental protection, it holds several certifications such as ISO 9001, WRAP, BSCI, SEDEX, and OEKO-TEX.

GMS Composite Knitting Industry Ltd. has achieved several important milestones recognitions over the years such as LEED Platinum Certification (2025) with 92 points, it is the highest score in Bangladesh globally second for and existing building under the U.S. Green Building Council (USGBC). For being a top manufacturer from Bangladesh it also repeatedly achieved National Export Trophy (Gold). This achievement proves that it is a leading company in the Bangladesh RMG sector. These are also showing that the company manufacturers the quality products with caring the workers and the environment.

1.2 Vision and Mission

As a leading RMG exporters in Bangladesh, the vision of GMS Composite Knitting Ind. Ltd. is to enhance the technologies and to meet the global demand for ready-made garments industry. One of the most important aim is to produce a high-quality garment by maintaining an effective quality control and quality assurance system from the beginning to the shipment of an order. This company is highly committed to its customers, employees, society and meeting international market demands.

The company follows a stated mission to achieve its vision that is to maintain a smooth business operation. As a leading RMG manufacturer in Bangladesh the main concern is to keep successfully running the business. This company want to stay as one of the top companies in ready-made garments (RMG) from Bangladesh. To provide high-quality knit garments for the global customers by efficient exporting process, skilled workers, strong quality control and ensuring environmental sustainability are most important aim of GMS.

1.3 Goals & Objectives

To produce best quality garments for its customers is the main goal of GMS. To become a leading and reliable exporter of in the global market, it always maintains an international quality standard for their customers satisfaction. From the raw material sourcing to final product GMS check everything carefully at every stage. To build a long-term relationship with customers the company always offering competitive prices, dependable service and high-quality products.

The important objective of GMS is to ensure a safe and ethical workplace for workers by maintaining full compliance with international labor, safety and environmental standards. To remain competitive in the global apparel industry GMS also focus heavily on sustainability and eco-friendly operations by using less water and chemicals, energy-efficient processes and modern technology.

The big dream of GMS is to help Bangladesh's economy and keep improving every day.

1.4 Organizational structure, Organogram, Branches and Departments

GMS Composite Knitting Ind. Ltd. is operating under a centralized organizational structure that integrates all stages of production. This structure supports seamless communication and workflow across various branches and departments. Top management such as Managing Director, CEO and responsible General Manager control overall business activities and make important decisions such as planning and policy-making. Under the supervision of them each department ensure the production efficiency, compliance and quality. This structure allows the company to maintain smooth coordination between management and production teams.

The company is headed by Managing Director. Under his leadership, the Chief Executive Officer looks after the overall management of the company. There are five departments which are headed by General Managers. The organogram of the company is given in Figure 1.



Figure 1: Organogram of GMS Composite Knitting Ind. Ltd.

GMS Composite Knitting Ind. Ltd. is a well-known reputation for quality knitwear exporter and known for its integrated production facilities. In terms of branches, GSM Composite Knitting Ind. Ltd. mainly operates from Head Office located in Mohakhali, Dhaka and from the main factory from Kashimpur, Gazipur. Head office handles management and commercial activities. And the main factory looks after all the manufacturing activities and buyer communication. There is also a textile unit called GSM Textiles Ltd. which is located in Kaliakoir, Gazipur, an independent testing lab called GSM Testing Laboratory Ltd. under the roof of GSM Composite Knitting Ind. Ltd. GSM Trims Ltd. has also incorporated for the trims and accessories facilities which is also located in Kashimpur, Gazipur besides the main factory. This centralized facility allows the company for maintaining consistency in quality, reducing the dependency on outsourcing, ensuring timely delivery and streamline coordination.

As a prominent composite knit factory, this company has several departments to ensure smooth manufacturing process. The production side departments are Knitting, Dyeing, Finishing, and Stitching departments, each department managed by experienced supervisors and managers. There is also Quality Control, Human Resources, Commercial & Accounts, Audit Merchandising & Marketing, Compliance, Procurement, Maintenance, Logistics, Security, Environment and sustainability to support these core units. To meet global buyer demands this integrated framework works together to ensure smooth production, high quality knitted fabrics and garments, worker safety and timely delivery of products to customers.

1.5 Key Products of the Company and Export Destination

GMS Composite Knitting Ind. Ltd. produces a wide range of knitted garments, fabrics and textile products through its integrated knitting, dyeing, finishing and stitching facilities. GSM mainly produces T-shirts, polo shirts, sweatshirts, pullovers, cardigans, vests, knit tops, joggers, boxers, singlets, skirts, shorts, home-wear and other casual knitwear for men, women and kids. The key products and export data of the company is given in Table 1.

Product	Year	Business Turnover (USD)	Export Destination	Export (%)
T-Shirts, Boxers Sweatshirts, Polo-Shirts and Fashion Knitwear	2023	\$252.70 Million	Europe	42%
			USA	34%
			Canada	14%
			Other Countries	10%
T-Shirts, Boxers, Sweatshirts & Pullover, Polo-Shirts and Fashion Knitwear	2024	\$270.50 Million	Europe	45%
			USA	33%
			Canada	12%
			Other Countries	10%
T-Shirts, Boxers, Sweatshirts & Pullover, Polo-Shirts, Knit Tops, Casual Wear and Fashion Knitwear	2025	\$305.40 Million	Europe	48%
			USA	33%
			Canada	10%
			Other Countries	9%

Table 1: Key products and export data of GMS Composite Knitting Ind. Ltd.

GMS produces 6-7 million of pieces each month by its distinct 140 lines with focusing on eco-friendly processes with low water and chemical usage, recycled materials and high compliance to meet global standards. This company supplies its products to various international markets around the world. This company has built a strong market in Europe and North America by exporting high-quality knitted garments. Denmark is one of its biggest markets followed by Germany, France, Canada, Netherlands, New Zealand and Australia which regularly purchase large quantities of knitted garments from the company.

Chapter 2: Description of Internship Work

At the beginning of my internship at GMS Composite Knitting Ind. Ltd., I gained practical experience by working in different important departments of the company. My internship period was 69 days, during this time I worked in different functional areas to learn about the complete operations of a knit composite factory. I worked 10 days in the Supply Chain department, where I gained knowledge about sourcing raw materials, communicating with suppliers and managing inventory. After that, I spent 10 days in the IE & Planning department, where I observed production planning, line balancing and efficiency monitoring. Then I worked 12 days in the Quality department, where I learned about maintaining product standards, quality control procedures and inspection methods. Following this, I participated 12 days in the Merchandising & Marketing department, where I learned about buyer communication, booking procedure, order management and product development. Then I spent 15 days in the Production department, which helped me to understand the complete garment manufacturing process and production flow. Finally, I worked 10 days in the Sustainability department, where I learned about compliance, environmental practices and responsible manufacturing initiatives. This departmental rotation helped me to gain a clear understanding of how different units work together to maintain smooth operations in the factory. This chapter presents my internship work in details.

2.1 Supply Chain Department

I worked closely with the Supply Chain Department to understand their daily activities and working processes during my internship at GMS Composite Knitting Ind. Ltd. At this time, I observed that the Supply Chain Department plays a very important role in the company's overall operations. I sat with the Supply Chain Department Manager as well as the other concerned persons and they explained the overall supply chain process to me. I also worked directly with the supply chain team to understand the overall process of supply chain in ready-made garments industry. Through this

experience, now I know how raw materials, semi-finished items and finished garments are moved and managed across different production units. The Supply Chain Department always tries its best to ensure that the knitting, dyeing, finishing and stitching sections receive the necessary materials on time.

I observed that the process starts after receiving buyer orders from the merchandising and marketing department. With the guidance of the manager, I collected the order information such as style, quantity and delivery schedule from the concerned persons. I also collected pre-production (PP) sample updates from the merchandisers and checked according to buyer's requirements. During this time, I also attended in a PP sample meeting with all the concern production persons to know details process. In addition, I participated in several team meetings to understand how the team plans and arranges raw materials like yarn, fabric, dyes, chemicals, sewing thread, trims and accessories. I was also introduced to basic backup planning and risk analysis practices used to avoid production delays. This helped me to understand that the supply chain department plays a vital role in connecting procurement with production.

After planning, I cooperated with the supply chain team as a part of them and coordinated with the approved departments to complete knitting, dyeing and finishing of fabrics. During this time, I collected important dates from concern departments such as Knitting Complete Date (KCD), Dyeing Complete Date (DCD) and Fabric Delivery Date (FDD) to ensure the overall production was not delayed. After getting the bulk fabric cutting approval from the concerned QC, I worked with the team to monitor and follow up on embellishment, sewing and finishing activities to maintain the production timelines. I regularly communicated with different departments and closely monitored the entire process to avoid delays and ensure on-time delivery as per buyer requirements.

2.2 Industrial Engineering (IE) and Planning Department

As an intern, I spent 10 days in the Industrial Engineering (IE) and Planning Department of GMS Composite Knitting Ind. Ltd. This department plays a crucial role in optimizing production processes. During this period, I observed the daily activities of the department and learned about production planning, line balancing and efficiency monitoring. I focused on improving productivity by proper utilization of manpower, machines, materials and time. With the guidance of IEP manager, I participated with the IE and Planning team to reduce production waste, balance workloads and improve efficiency. But at the same time, I always maintained the quality standards and delivery schedules.

I started the work of the IE Department with analyzing buyer styles, delivery date and production requirements. I calculated the Standard Minute Value (SMV) for each operation by using a stopwatch to find out how many minutes each sewing job should take. Then I saw that the basic T-Shirt SMV is 4.20-5.50, Polo Shirts SMV is 10.00-13.00, Crew Neck Sweatshirt SMV is 8.00-10.00, Hoodie Sweatshirt SMV is 15.00-18.00, Joggers/Sweat Pants SMV is 14.00-16.00 etc. The SMV is varied due to the workmanship of the styling. I also performed in the process of determining line capacity, manpower allocation and machine requirements. I can now identify the production bottlenecks and suggests improvements to increase line efficiency through time and motion study. Along with the IE team, I regularly observed and monitored line performance, efficiency percentage and daily output to ensure production targets were met.

During my internship at GMS Composite Knitting Ind. Ltd., I prepared a production schedule with the help of the respective Planning Department manager. Based on buyer order quantity, delivery timelines and available production capacity I made that production plans. I and the planning team prepared daily, weekly and monthly production plans in coordination with the merchandising, supply chain and production departments. If the order quantity or delivery dates change then the planning team revises the production plan to maintain smooth workflow. I observed that the proper planning,

monitoring and efficiency control, the department helps ensure timely production and on-time shipment of garments.

2.3 Merchandising and Marketing (M&M) Department

At the first day of my internship in Merchandising and Marketing department, the senior manager of this department, who is also my industrial supervisor, stated the purposes, importance, objectives, roles and responsibilities of the Merchandising and Marketing department within the organization. He said that ‘This department is the heart of the company. If this department falls then the company will also fall. So, we have to be careful to do any task which is related to merchandising’. Then he introduced me to his team as an intern. At first, I tried to learn about the fabric and accessories booking to the respective supplier and also tried to recognize some common fabric such as single jersey, pique, terry, fleece, rib and interlock. I also learned the mailing system with buyers and other internal departments such as production, supply chain, IE & Planning, quality, embellishment, trims and accessories suppliers. I was introduced to sample section where all the samples such as development sample, fit sample, pre-production sample are made. I worked with sample section as well as production section to deliver the goods on time.

I looked after buyer Jules, Stella+Gemma and Jovie, three different regions brands during my internship. Under the direction of my industrial supervisor, I started my work from the sample section as the entire process of a garments begins from this section. I studied some t-shirts, polo-shirts and sweatshirts technical files from Jules buyer which was given for Autumn/Winter 2026 season. From those technical files, I confirmed the fabric composition, garments color, embellishment, trims and accessories needed to develop the samples. Then I booked the fabric by Logic ERP software to the sample knitting and dyeing department for getting the required fabric as well as sewing thread, trims and accessories department with a required delivery date. Then the knitting department let us know the grey fabric delivery date and some limitations of the fabric via e-mail. After receiving the limitations from knitting department, I also shared those fabric limitations

with buyer for their reference so that the production would not be hamper in future. Then I regularly followed-up to get the fabric from knitting. After getting the undyed fabric from knitting department, I contacted with the sample dyeing departments concerned person to complete the dyeing according to my booking. At the same time, I sent the TF to the CAD and design department for getting the pattern and embellishment design of the required styles.

When I received the finish fabric, I checked the fabric with the TF for color and quality. If everything is okay then I proceeded for cutting and sent the cut panel to the print and embroidery department. After completing the embellishment then I proceeded for sample sewing and sent the complete sample to buyer for their review. Throughout this process, I always touched with the respective department/team to avoid any kind of mistakes or delays. At the same time, I conducted a physical test on the samples to ensure the quality, measurement, pilling, Ph value and others parameter with buyer requirements.

Under the guidance of my merchandising team, I also learned how costing sheet is prepared. I was prepared a cost sheet based on the fabric consumption, SMV, trims cost, CM cost, embellishment cost and other related costs. I was more careful to prepare costing because the profit and loss of the company depends on this pricing calculation. Then I saw how to negotiate pricing with buyer. After confirming the price, buyer places the order to the merchandisers with the delivery date and price quotation. Sometimes buyer place the order after reviewing the samples and sometimes place the order with sending the TF to the merchandisers. After receiving the orders from buyer, the respective merchandiser make a T&A plan to meet the shipment date and ensure smooth coordination of all production activities. A senior merchandiser from my team described me all the process of production to shipment and assigned me to make a sample T&A for a 60 days lead-time shipment. Then I prepared a sample T&A which is given in Table 2.

Activity	Responsible	Planned Date
PO Received	Merchant	Day 1
Fabric Booking	Merchant	Day 2
Trims Booking	Merchant	Day 3
Lab Dip Submission	Dyeing	Day 5
Lab Dip Approval	Buyer	Day 10
Fit Sample Submission	Sample Team	Day 14
Fit Sample Approval	Buyer	Day 18
PP Sample Submission	Sample Team	Day 23
PP Sample Approval	Buyer	Day 28
Fabric In-house	Store	Day 36
Trims In-house	Store	Day 36
Size Set Sample	QA	Day 37
PP Meeting	QC and Others Concern Team	Day 40
Cutting Start	Cutting Department	Day 41
Embellishment (Print/Emb.)	Concern Department	Day 42
Sewing Start	Production	Day 46
Finishing Start	QC / Finishing	Day 48
Sewing Finish	Production	Day 53
Finishing Finish	QC / Finishing	Day 55
In-line Inspection	GPQC	Day 56
Packing & Cartooning	Finishing	Day 57
Final Inspection	Buyer / QC	Day 58
Shipment	Export Department	Day 60

Table 2: Sample T&A for Merchandising (Leadtime 60 Days)

After getting the PO from buyer, I worked to book all the materials. If sample is not approved then I worked to send the sample to buyer for approval. The above T&A helped me to track every step to avoid any delays. I always tried to communicate in all the respective department to know the real time update. If any issue comes up, like fabric or accessories arrival, I quickly informed my senior merchandiser and find the solutions. During my internship on M&M, I learned how to communicate with buyers and handle all communication until the goods are shipped. I actively assisted my senior merchandiser in order-related activities. To organize the important documents, updated order files and maintained proper records for buyers and styles, I supported the team regularly.

I observed how merchandisers focused on marketing part. They always try to find new buyers and keep good relation with existing buyers. On my internship period, I saw a M&M team has gone to Denmark for marketing purpose. They took several types of print and embroidery strike-offs, different types of samples and different composition fabric swatches for attracting the buyers. I also assisted my senior to create a mood board, fabric catalogs and collected some print and embroidery strike-off to send the for-marketing purposes. I also collected some seasonal designs and eco-friendly fabric options from the design team to send the buyer. Actually, I observed that merchandising and marketing are handled by the same team- called it M&M.

I worked mainly with the senior merchandiser and assistant merchandiser under the supervision of my industrial supervisor. I also interacted regularly with supply chain team, IE & Planning team, sample manager and predistortion officers to assure the timely shipment. During my time in this department, I saw the importance of fast communication and keeping everyone updated. I gained practical knowledge about order processing, sample management and production follow-up. This merchandising and marketing experience helped me to applied this in real life industrial operations.

2.4 Quality Department

During my internship at GMS Composite Knitting Ind. Ltd. I also worked carefully with the quality department under the direction of an Assistant General Manager. He always guided me and gave suggestion to gain practical knowledge about quality control activities in a garment manufacturing environment. I also cooperated with quality officers, floor QC, GPQC, AQC, supervisors and inspectors to know the complete quality assurance. Through my daily interaction and guidance with them, I learned how quality standards are maintained at different stages of sample and production to meet buyer requirements. This department involved at every stages of an order such as knitting, dyeing, printing, embroidery, sewing, finishing to final inspection. Regarding the quality issue, I also cooperated with the merchandising, supply chain and IE & Planning departments to minimize defects and ensure buyer satisfaction.

I started the quality control process from raw material inspection. I learned in what way fabric, trims and other accessories are checked as per appropriate sample and buyer requirements. I worked with knitting quality officers and concern persons to know the knitting quality issue. Some of the common knitting quality issues are drop stitches, broken or missing needles, uneven loop, tight and loose stitches, knitting holes, oil stains, spirality and fabric thickness. Mainly the knitting quality check and focuses on identifying this type of quality issues. I also collected knowledge from dyeing department about the fabric defect identification, uneven dyeing, GSM checking, shade variation, poor color fastness, color bleeding, excessive shrinkage, harsh hand feel, pilling and crease marks. I focused on these fabric qualities because its directly impact on fabric appearance and durability. Besides these, I participated in the initial quality inspection of trims and accessories like labels, cartons, sewing thread, zippers, buttons, hangtags, drawcords, stickers, polybags and tapes through random sampling to ensure the buyers quality standards. Before using the accessories in garments, I saw a final quality check is done by comparing to the approved sample to confirm correct labeling, consistent color and accurate size.

I also cooperated with the quality team during the cutting inspection and I learned how fabric spreading, marker placement and cutting accuracy are checked. At that time, I have tried to identify the fabric running shade problem, grainline, twisting and size problem. After checking the cutting part, the cut panel were sent to embellishment department for printing and embroidery. Once the cut panels were received from embellishment department I performed a final check before sending these to the sewing section. During the sewing process, I participated in inline and end-line inspection activities. I cooperated with quality inspectors to identify and record the sewing defects such as skipped stitches, broken stitches, puckering, sharing, Loose threads, measurement variation and workmanship issues. I also found the needle damage, improper seam allowance, open seams, poor bar tack and oil stains problem is occurred at the sewing stage. I cooperated with the concerned

quality person, line supervisors and sewing operators to reduce rejection and rework. To continue the sewing line, I understood how corrective actions are taken immediately.

Then I carried out the main quality checking in garments finishing department. I started the checking process in the garments finishing department after receiving the goods from the sewing section. At first all the garments are checked for styling, stitching quality, measurements, stains, labeling and overall appearance. If any defects or rejection are found, those garments are sent for alteration and rework. Then I saw the garments are sent to iron section and after completing the iron, the garments are sent for final checking, folding and packing section. On this time, I checked some complete garments and found some goods with oil stains, uncut thread and poor workmanship issue. Then I informed the concerned quality for reworking those garments. On the checking process, the garments were examined using a metal detector to ensure that no metal contamination remained. Then all the garments were proceeded for packing and final inspection.

From the finishing department I learned how final garment appearance, measurement, labeling and packing methods are checked according to buyer requirements. Based on AQL standards, I cooperated with the quality team during in-line final, pre-final and final inspections. I acquired basic knowledge in inspection report preparation and cross-departmental quality communication. I assisted with in-line quality inspections when 10%–30% of the garments were completed and final inspections when production reached 80%–100%. I learned that AQL helps to decide how many garments should be inspected from a lot. It also sets the acceptable number of critical, major and minor defects to ensure products quality standards.

I learned how to use the AQL standards chart during my internship in the quality department at GMS. I used this method during inline, end-line and final quality inspections. It means how many garments to check from a total order quantity and how many defects are allowed to accept or reject from the total order quantity. GMS follows AQL 1.5, 2.5 and 4.0 for different brands. The AQL chart

is given in Table 3 that was followed during inspection to determine sample size and acceptance criteria.

Total Order Quantity (Pcs)	Inspection Sample Quantity	Normal Inspection Acceptable Quantity Label					
		AQL 1.5		AQL 2.5		AQL 4.0	
		Accept (Ac)	Reject (Re)	Accept (Ac)	Reject (Re)	Accept (Ac)	Reject (Re)
51-90	13	0	1	1	2	1	2
91-150	20	1	2	1	2	2	2
151-280	32	1	2	2	3	3	4
281-500	50	2	3	3	4	5	6
501-1200	80	3	4	5	6	7	8
1201-3200	125	5	6	7	8	10	11
3201-10,000	200	7	8	10	11	14	15
10001-35000	315	10	11	14	15	21	22

Table 3: Normal Inspection Acceptable Quantity Label (AQL)

I got a clear understanding of the importance of quality control in ready-made-garments industry through my internship experience in the Quality Department at GMS. I tried to maintain the teamwork, proper communication and continuous monitoring and it helps to ship the good quality product and ensure on-time shipment. It helps me to take more responsibilities and it will support my future career in the garment industry.

2.5 Production Department

During my internship at GMS Composite Knitting Ind. Ltd., I cooperated with the Production Department and it is the core department of the company. According to buyer requirements, this department is responsible for producing the finished garments. For knowing all the process of production, I worked closely with several sub-departments such as knitting, dyeing, fabric finishing, cutting, printing or embroidery, sewing and finishing. I connected with all these departments to keep production running smoothly and ensure on-time shipment. I always tried to cooperated with production managers, production officers, supervisors and operators in each section to understand their working procedures and responsibilities.

I started to learn the production process from the knitting section where yarn is converted into grey fabric according to fabric booking program. In this section I saw how yarn count, machine setting and production planning affect fabric quality. I saw the knitted fabric consists of horizontal parallel courses of yarn which is different from woven cloth. The courses of threads or yarn are joined to each other by interlocking loops in which a short loop of one course of yarn or thread is wrapped over another course. Knitting machine operators described me that it is a process of fabric forming by interlinking the loops of yarns. When one loop is drawn through another, loops are formed in horizontal or vertical direction.

After getting the fabric booking from merchandisers, I cooperated with the knitting officer to execute the knitting program. I worked with them to allocate the required yarn according to the production plan and ensure smooth processing. If the yarn is special and stock in GMS knitting section then I have to book the yarn to the required spinning mill for getting the yarn. I have received a fabric booking program with special fabrication and I worked to book the yarn to Square Textile Mills with required delivery timeline. If the yarn is available in stock for respective buyer, I cooperated to plan for produced the grey fabric. There are several types of fabric produce by GMS Composite Knitting Ind. Ltd. such as single jersey, interlock, single lacoste, double lacoste, double pique, french terry, normal fleece, double tuck fleece, diagonal fleece, various types of rib, Ottoman Rib, Waffle, jacquard fabric and so on.

There are several types of fabric faults I saw during grey fabric production in knitting department. The common fabric faults, I found, are needle marks or vertical stripes, count mix, slub, lycra out, yarn mix, broken needle, black oil stripe, thick and thin, pin hole, patta/barry mark, hole and so on. To sort out the fabric faults I have taken various methods for measuring quality of the knit fabric such as two-point system, four-point system, six-point system and ten-point system. Then I worked for delivering the fabric to dyeing department with batch number for proceeding dyeing.

In the dyeing section, I cooperated with dyeing officers, lab technicians and machine operators to learn the full dyeing production process. At first, I checked a batch card where all the necessary information is available such as booking reference, order quantity, style, color, yarn count, yarn lot, stitch length, fabric structure, M/C dia/size, M/C guage, Finish dia, number of rolls and target shade information. Then I collected the approved sample for color and quality matching for the production fabric. After getting the approved sample I cooperated with dyeing lab technician for getting the target lab recipe. Once the target lab was received and If everything is ok to proceed dyeing then I worked with dyeing manager for fabric dyeing. In this process, I collected knowledge about how dyeing recipes are prepared based on fabric type, GSM and buyer requirements.

There are two types of dyeing processes, one is fabric dyeing for solid color and another is yarn dyeing. For the solid color dyeing I checked the dyeing parameters such as temperature, time, pressure, and chemical dosing are controlled in dyeing machines. I collected knowledge of different dyes, temperature and time which was followed for the different types of fabric, for 100% cotton fabric dyed with reactive dyes and the dyeing temperature is generally maintained at 60°C to 80°C. Total dyeing process time for cotton fabric is approximately 5–6 hours. For 100% polyester fabric dyed with disperse dyes and the dyeing temperature is at 130°C to 135°C. Total dyeing process time is about 4–5 hours. For CVC or PC blended fabrics total dyeing process time is approximately 10–12 hours.

For the yarn dyed fabric, I participated with the concern yarn dyeing persons for proceeding the yarn dyeing in approved color. The yarn dyeing booking was given by knitting section and after completing the yarn dyeing the dyed yarn was sent to knitting section and knitting section turn the dyed yarn into fabric. After completing the knitting of the yarn dyed fabric I again participated to do the batch for this fabric. As this fabric was already dyed in yarn form, there is no need to proceed for solid dyeing except washing.

After completing the dyeing and washing process, I coordinated with the respective person to send the dyed fabric to the fabric finishing section for further processing. From this section, I ensured that the fabric need to achieve all of the parameters with the approved sample such as shade, GSM, width and overall quality. I also participated during fabric quality checking in finishing section. I saw some fabric defects such as holes, oil stains, color variation and knitting faults during fabric inspections. Before sending the finish fabric to the cutting section, I understood that proper dyeing and finishing control is very important to maintain color fastness, dimensional stability, pilling, shrinkage and overall fabric performance. I developed a clear understanding of the dyeing and fabric finishing processes which helped me to ensure consistent fabric quality and smooth production flow.

After the fabric dyeing and finishing, I worked to send the fabric to the cutting section for the fabric cutting as per buyer styling. At the same time, I ensured the pattern from the CAD department for the respective styling. I also cooperated with the cutting section to cut the finished fabric into garment panels according to approved patterns and size breakdown. After receiving the finished fabric, I cooperated with the supply chain team to make the size set sample before cutting the bulk fabric. Once the size set sample has done I participated in PP sample meeting to get the cutting permission from the respective quality inspector. At first, the bulk fabric needs to be relaxed properly to control shrinkage before spreading. When I got the cutting permission, I cooperated with the cutting section to cut the bulk fabric. I cooperated with the cutting supervisor and learned how marker planning is done to reduce fabric wastage and maintain correct size ratio.

I saw the marker paper is placed on top of the fabric lay and cutting is done using straight knife or other cutting machines. After cutting the bulk fabric, the panels are bundled according to size, color and style number for sending to the printing, embroidery or sewing section as per style requirement. I cooperated with the quality checker after cutting the fabric to ensure no size variation, fabric fault or shade mixing happens. From my internship experience, I can state that the proper control in the

cutting section helps to reduce the fabric wastage and ensure smooth production flow in the sewing department.

After completing my learning in the cutting section, I participated in the Printing and Embroidery Department to know how the garment panels are embellished according approved samples. I cooperated with printing and embroidery concerned team to know how the cut panels are received along with approved artwork and design placement details. Then I worked with printing and embroidery designers for making the design before proceeding bulk production. After completing the design of print, I cooperated with the screen preparation, color matching and strike-off approval. After getting the printing screen I cooperated with the bulk printing process. During this period, I got some common printing defects such as misalignment, shade variation and print crack. And I also know how corrective actions are taken. There are various types of print technique, I saw in production such as pigment print, discharge print, foil print, rubber print, silicon 3D print, puff print, glitter print and others.

At the same time, I participated in embroidery section for doing the bulk production. Before bulk production, I participated in checking embroidery design files, machine setting and thread shade selection with the approved sample. And also make some piece of embroidery as per approved artwork for the bulk production approval. If I got the embroidery approval then proceeded for the bulk production. There is also some embroidery technique I saw in this part such as plain embroidery, 3D embroidery, Applique embroidery, sequins embroidery and others. After completed the print and embroidery then I worked to send all the panels to cutting section for rechecking.

After completing my practical internship in the cutting, printing and embroidery production sections, I participated in the sewing department to understand how cut panels are assembled into complete garments. I closely cooperated with the production manager, line supervisors, IE officers, quality inspectors and sewing operators to learn the full sewing process of readymade garments industry. I collaborated with the IE officers for sewing line is set up according to the SMV. I also gathered

knowledge about line balancing, operator allocation and machine layout for maintaining smooth production flow. I always tried to achieve the targeted production output for the respective orders. I collected data from the sewing line to identify how many sewing machines are required for each style. I saw the number of sewing machines increased or decreased depending on the styles. I collected knowledge about different types of sewing machines such as plain machine, lockstitch, overlock, flatlock, bar tack, buttonhole, kansai and button attach machines. I also saw their specific functions in garment manufacturing.

I monitored hourly production reports and efficiency calculations for measuring the productivity. I cooperated to identify bottlenecks with the IE team and how corrective actions are taken to improve line performance. During inline checking period, I identified some sewing defects such as broken stitch, skip stitch, puckering, uneven seam, open seam, oil stain and measurement variation. I also cooperated to take corrective action to reduce the rejection percentage. I also collected knowledge of rework management and how quality and production teams coordinate to maintain buyer-required standards.

After completing the sewing part, I worked to deliver the garments to finishing section for final garment preparation and shipment process. I aligned with the finishing manager, supervisors, quality inspectors and packing in-charges to know the total finishing process. During this time, I understand about thread trimming, loose thread removal, stain cleaning, measurement verification, metal detection and garment appearance checking. To ensure proper shape and presentation, I learned how garments are ironed using steam iron and vacuum tables. After the ironing process I coordinated with the quality control team to verify that the garments met buyer requirements and AQL standards before shipment approval.

I checked the care labels, size labels, brand labels on the garments to ensure all is okay as per buyer requirement. Then I verified the price tickets, hangtags, poly bags and carton markings were applied according to the buyer's packing instructions. According to packing ratio I participated in size-wise

and color-wise assortment preparation and carton packing. I participated in carton sealing and final audit processes before shipment. During my internship in the Sewing and Finishing sections, I gained a strong knowledge of production control, quality management, efficiency optimization and teamwork.

2.6 Sustainability Department

As part of my internship, I participated in the activities of the Sustainability Department at GMS Composite Knitting Ind. Ltd. to develop a clear understanding of environmental management and social compliance in the garment industry. To learn about sustainable practices followed in the factory, I cooperated with compliance officers, EHS (Environment, Health & Safety) executives, chemical management team and utility managers. I participated in the areas of integrated and sustainable manufacturing, waste management, water treatment, energy control, climate risk management, sustainable cotton supply, biodiversity management and chemical management procedures. GMS Composite align with United Nation Sustainable Development Goals.

Furthermore, I gained knowledge about different social and environmental compliance requirements defined by buyers and international standards.

Initially, I participated in the integrated and sustainable manufacturing process which is a key aspect of producing the products using green manufacturing practices. This sustainable manufacturing enables the company to guarantee the safety of products, workers, communities and clients. I participated in the Life Cycle Analysis (LCA) of products to find out more efficient ways to minimize the environmental impact along the entire value chain. During my internship, I also involved in Reverse Resource (RR) activities to promote eco-friendly practices and support circular economy project. I closely worked with sustainable raw materials including organic cotton, standard organic & 100, GOTS, TE, RCS, OCS, BCI and recycled cotton to know their certification requirements and environmental benefits. I also took part in Zero Discharge of Hazardous Chemicals

(ZDHC) standard, LEED and bluesign certification. A proper sustainable manufacturing has shown in below figure-

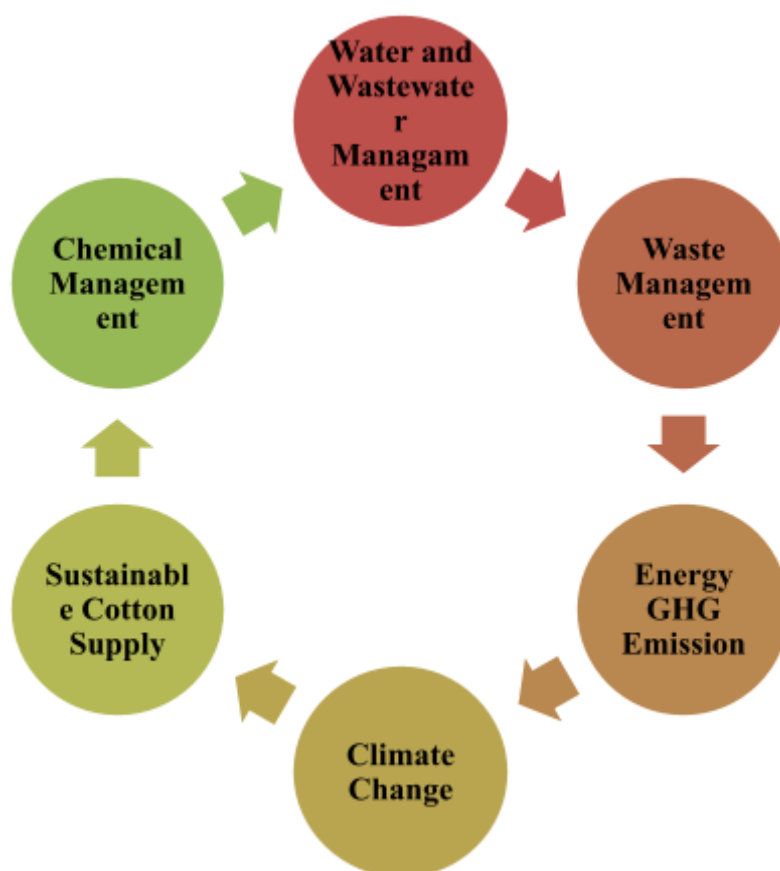


Figure 2: Integrated and Sustainable Manufacturing Process of GMS

In waste management, I was involved in supervising proper solid waste segregation, including fabric waste, paper, plastic and hazardous materials. I gained practical knowledge about how recyclable waste is separated and stored in central wastage godown of GMS. These wastages are sent to authorized vendors and the hazardous waste is handled following safety guidelines. I worked with the sustainability team to introduce and promote the 3R principles (Reduce, Reuse, Recycle) across different departments. I assisted in organizing a 3R awareness meeting with various departments which was hosted by sustainability department. This meeting inspired me to promote proper waste management practices throughout the organization. In this period, I cooperated to reduce operational and non-operational waste. I also cooperated with the ETP team to understand the effluent treatment

process in the water treatment section. I involved in practical knowledge about pH control, chemical dosing, biological treatment, sludge management and safe discharge of treated water in compliance with environmental standards. Additionally, I learned about various water recycling initiatives to reduce freshwater consumption and promote sustainable water management practices.

I also collected information on energy management system of GMS Composite. I analyzed electricity, gas and steam consumption to understand the proper energy management system. I also learned how energy-saving technologies of GMS such as 3.5 MWp solar panels, LED lighting, efficient boilers and monitoring systems help to reduce energy use. To achieve the goal of carbon neutrality by 2050, I cooperated to reduce the energy footprint and explored ways to replace conventional energy sources with renewable forms of energy. I worked for replacing old/fluorescent energy saving lights with LED lights, replacing conventional sewing machine clutch motor by energy efficient servo motor, installing 2 EGB boilers, reducing compressor operating pressure. I also developed an understanding about climate risk management practices by assessing risk assessment of flood, excessive heat or cold and other environmental challenges that may affect factory operations. I involved in reviewing preventive strategies to maintain operational continuity. Then I participated in sustainable cotton supply of the company that can support environmentally friendly support. I was involved in managing traceability certification processes to verify that raw materials were sourced from approved and certified suppliers. This documentation and traceability systems verify the sustainable cotton procurement. The biodiversity management practices also enhanced my internship practices on sustainability. This knowledge enables me to maintain green areas inside the factory premises by controlling emissions and minimizing waste generation. Through the biodiversity management practices, I am able to promote green initiatives within the factory. I also developed my knowledge of chemical management practices in the dyeing and finishing departments. I visited and gathered information from empty chemical drum areas of GMS. I participated with the concerned personnel to understand proper chemical storage procedures, labeling

requirements, maintenance of MSDS documentation, verification of approved chemical lists and the implementation of safe handling practices. During my internship in the Sustainability Department, I gained in-depth knowledge of how sustainable strategies are systematically applied to maintain environmental compliance and long-term operational sustainability. During my internship in this department I found all the practices are aligned with the GMS CEO's message "We're driving sustainability with green manufacturing, circular system and responsible resource use."

Chapter 3: Critical Assessment of Internship Work

During my internship at GMS Composite Knitting Ind. Ltd., I worked with different departments and gained practical experience about the complete garment manufacturing process. I participated in Supply Chain, IE & Planning, Merchandising and Marketing, Quality, Production and Sustainability department and this experience will enhance my future career. To understand how garments are produced step by step, I participated in knitting, dyeing, fabric finishing, cutting, printing/embroidery, sewing and finishing in the production department. Due to the connection of various level of employee, IE officers, quality inspectors, and operators, I learned about line balancing, production monitoring, defect control and shipment preparation. I learned about SMV calculation, production planning and efficiency control from the IE & Planning Department. To execute the orders efficiently, I gained knowledge from the Merchandising and Marketing Department regarding the garments costing, buyer communication, decision making and raw material sourcing.

As an intern at GMS Composite Knitting Ind. Ltd., I also participated in the Quality Department to learn about inline inspection, pre-final inspection, final inspection and AQL standards to maintain buyer quality requirements. I also worked with the Sustainability Department, where I learned about better environmental management practices such as ETP operations, energy-saving programs, climate risk mitigation, responsible cotton sourcing, biodiversity initiatives, and chemical management procedures. By working with multiple departments, I understood how all sections are connected and support each other to ensure good quality products, smooth production flow, environmental protection, and on-time shipment. This experience played an important role in shaping my professional development.

3.1 Critical Assessment of Internship Experience Across Various Departments

During my internship, I realized that one of the major strengths of the Supply Chain Department is its strong coordination and communication with production, merchandising and suppliers. As GMS has in-house facilities for knitting, dyeing, finishing, yarn dyeing, printing, embroidery, cutting, sewing, trims and accessories, it reduces the dependency on outside vendors. This internal setup helps me to maintain the follow-up process easily and met the delivery date. I followed proper sourcing plans and inventory control methods which help minimize material shortages and support smooth production flow.

From my observation, one of the main weaknesses of the Supply Chain Department is its dependency on imported raw materials such as special yarn, dyes, chemicals, trims and accessories. These imported items can sometimes cause delays due to shipping problems or customs clearance issues. I realized that when I failed to communicate properly between different departments, it could lead to wrong material ordering or delays in delivery. In addition, I also noticed that weak forecasting and last-minute style or order quantity changes from buyers can disrupt the planned supply chain schedule and create production pressure.

From my internship experience, I can also state that the major strengths of the IE and Planning Department is its systematic and organized way of working. The department uses Standard Minute Value (SMV), line capacity calculation, proper knowledge of current situation of the orders and manpower planning to ensure efficient use of resources. My regular monitoring of line efficiency, output and work-in-progress (WIP) helps the team identify problems early and take corrective actions. I always connected with the IE & Planning team to execute the order easily. I regularly communicated with sewing, cutting and finishing units to balance workloads and avoid production delays.

There are some weaknesses I noticed in the IE and Planning Department. One of the main challenges in the IE and Planning Department is the frequent changes in buyer styles, order quantities or delivery schedules. It often requires revising production plans. During my internship I faced some difficulties due to the revision of order and styles. These types of sudden changes created a pressure on me to plan effectively and may affect line balancing and efficiency. In some cases, I also observed that production data collection and reporting were done manually which increased the risk of errors and delayed decision-making. Another weakness I faced is that limited use of advanced digital tools and automation sometimes makes real-time tracking of production progress difficult.

During my internship at GMS Composite Knitting Ind. Ltd. I closely observed the several strengths and weaknesses of M&M department. I observed this based on my day to day experience, interaction with team members and production members, booking and approval process and practical operation in a knit composite factory.

I saw the strong communication and quick response with buyers and internal departments is the major strength of this department. All the merchandisers maintain regular contact with buyers or liaison office for order status sample approvals, pricing and delivery schedules which also an important characteristic of this department. If they fail to meet the delivery date of an order due to quality issues or any kind of internal problem, the merchandisers take the responsibility and communicate with the buyer to manage the situation. I saw how they request to buyer for delivery extension when necessary. The clear understanding of costing, fabric consumption, trims and accessories, buyer handling capability gradually grow up GMS day by day. I noticed that the regular follow-up and proper documentation of merchandisers on sample and bulk production ensure timely shipment and buyer satisfaction. The close teamwork is also an important strength of this department. I saw a member of the team faced a sample approval issue then all the members of the team combinedly work with him and help him to solve the problem. This kind of dedication to work has transformed GMS into a leading company in RMG sector.

I also noticed some weaknesses in the Merchandising and Marketing Department at GMS. Main challenges are the approval issue, frequent buyer changes in style, quantity or delivery schedule, fabric rejection issue. Another problem of this department is fabric and other materials booking process. In GMS, merchandisers use a software to book the fabric and trims items but the software is not updated and slow in process. Many brands work with GMS through liaison offices. For sample approvals or other production approvals, the items are sent to the buyer through these offices which causes significant time loss. If approvals could be obtained by sending samples directly to the buyer, a considerable amount of time could be saved. This is a major challenge I faced in the merchandising department. I also observed that handling lots of style and buyers at the same time creates work pressure and communication gaps.

I closely cooperated with the Quality Department and gained practical knowledge about its working system. Based on my learning experience, I found that the department has several strengths in maintaining product quality but it also faces some challenges during production and sample. Some of the strengths and weaknesses of the Quality Department is given below.

During my internship at GMS Composite Knitting Ind. Ltd., strong monitoring system at every stage of production is one of the main strengths of the Quality Department. I observed that quality checking begins with raw materials and continues through cutting, sewing, finishing and final inspection. This systematic monitoring helps to identify the defects or alteration early and minimizes final-stage rejections. Since I participated with quality inspectors during inline, pre-final, end-line and final inspections and learned how to take corrective action to maintain consistent quality.

I also observed that the good coordination and communication between the quality team and production department is another strength of GMS Composite. If any defect is identified, the quality team quickly communicates with respective department concerned person to solve the issue. I noticed that strong follow-up of buyer requirements and maintaining AQL standards is the important

strength of this department. It helps to ensure buyer satisfaction and on time delivery of high-quality products.

Besides the above strength I also found some weaknesses in the Quality Department. One of the main challenges is production pressure during peak time and controlling the rejection of the garments. Sometimes it is difficult to maintain the strict quality checking and deliver the defective products to buyer. For this reason, buyers may raise claims and the company has to bear the losses. During my internship period, I saw a buyer raise a claim for measurement and print quality issue. I realized repeated defects may occur due to operator skill limitations or lack of proper training. It increases the workload of the quality team. Delays in decision-making of any issue is also affect production flow. I noticed is that some inspection reports and records are maintained manually and it increase the risk and delay in data analysis.

From my internship experience in the Quality Department at GMS Composite Knitting Ind. Ltd. I identified several areas where improvement can enhance overall performance. I suggested the concerned person for increasing the use of digital quality management systems instead of maintaining records manually. For defect tracking, inspection reporting and data analysis GMS can use the modern software. It will reduce human error and help management for taking faster decisions. I also emphasized to arrange regular training programs with the quality team, supervisors and the operators. It will reduce repeated defects and improve workmanship standards. Also, I observed the skill development training can significantly reduce rework and increase the productivity.

Besides, good coordination among the quality, production and merchandising departments should be maintained through regular meetings and clear communication. Early identification of any quality issues and preventive actions can reduce production pressure from the sewing line to final inspection. Improving the quality audit team for random checks and continuous improvement activities may also enhance overall quality performance and ensure buyer satisfaction.

My internship in the Production Department of GMS Composite Knitting Ind. Ltd., I participated in knitting, dyeing, fabric finishing, cutting, printing and embroidery, sewing and finishing sections. I gained knowledge about the operational strengths and also identified some areas where improvement is needed in production department. Based on my practical experience, the strengths and weaknesses of production department are described below.

The major strength of the Production Department is strong coordination among different sections which is align with production purpose. All departments work step by step and good communication between them keeps the production process smooth. I cooperated in line balancing, SMV control, bottleneck solution and hourly production checking in the sewing section help to deliver the goods on time. Skilled operators and experienced employee also ensure better productivity and quality control. I deeply observed the quality awareness at every stage and it is another strength of GMS production department. From knitting to finishing, inline, pre-final and final inspections are conducted to reduce defects. To ensure fabric quality, the dyeing and fabric finishing sections maintain required parameters. By following actual requirements and AQL standards, the finishing section reduces the chance of shipment rejection. Besides, the use of modern machinery and a systematic process in sewing and finishing sections increases the productivity and supports on-time delivery.

Although there are many strengths, I also noticed some weaknesses during my internship of production department. Sometimes production is delayed due to machine breakdown, shade variation in dyeing and rework caused by sewing defects. These types of issues affect overall productivity and rise pressure on the finishing section before shipment. Sometimes communication gaps between production and other departments causes confusion regarding style changes or urgent requirements. During my internship period, I found that one style was shipped without embroidery due to the lack of proper communication. Also, the poor operator skill level is another weakness of production. I observed that new or less experienced operators sometimes reduce line efficiency and create more

quality defects. I noticed that improper planning of workload during peak time can create bottlenecks in sewing and finishing.

Based on my internship experience in the Sustainability Department at GMS Composite, I saw the major strength of GMS Composite is its strong commitment to compliance and environmental responsibility. By maintaining proper documentation and strictly following buyer-required standards for environmental management and worker safety, the company has achieved a leading position in the market. In 2024, GMS achieved the highest LEED certification score in Bangladesh with 92 points, ranking as the second-highest score globally. This company also shows interest in energy-saving practices by implementing 3.50 MWp solar power system, ensuring safe chemical storage and regular safety training for workers. The comprehensive fire safety system, proper use of PPE, and regular emergency preparedness drills are given the highest priority.

Although GMS has implemented many sustainability practices, I found a few areas where improvements are still needed. Some workers follow sustainability rules but they many of the workers are not fully understand the long-term environmental impact. It needs to be more practically and effectively in daily operations. GMS should be decreasing the dependency on conventional energy sources and imported chemicals, which increases costs and environmental impact. There is a need to ensure continuous monitoring of energy and water consumption with more advanced data analysis systems.

3.2 Application of Generic and Industry-Specific Courses during Internship

During my interning time at GMS Composite Knitting Ind. Ltd. really showed me how valuable my Post Graduate Diploma in Knitwear Industry Management (PGD-KIM) has been. The courses built up my maturity at work, sharpened my problem-solving, helped me adapt quickly and shaped my professional behavior in such a demanding, high-speed knit garment setup. The core subjects gave me solid basics in human relations, leadership, ethics and teamwork. I used all of that every single day talking and coordinating with people from different sections. The training on clear

communication, following the proper chain of command and basic office manners gave me the courage to ask smart questions and really listen to supervisors, quality checkers and seasoned machine operators. It also taught me to take good notes on what I saw and learned, while always showing respect to the skilled workers who have spent years mastering knit production.

KIM 101: HR Skills and Competencies- KIM 101 was eye-opening about leadership and how departments should run smoothly together. While I was moving between Supply Chain, IE & Planning, Production, Quality, Merchandising & Marketing and Sustainability, I could see exactly why good HR matters so much. GMS takes worker safety seriously, keeps discipline, handles complaints properly, manages payroll on time and stays fully compliant with Bangladesh labor laws and all the international buyer rules. They've got WRAP, BSCI (usually getting A ratings), SEDEX passing audits left and right.

I also saw what Green HR looks like in practice: regular training, welfare stuff like health check-ups or family events, little motivation programs and treating everyone fairly. It really hit me that when HR does its job well, people stay motivated and disciplined which means the factory keeps running without big interruptions and quality doesn't drop.

KIM 102: Analytical Skills and Competencies- The internship forced me to start thinking more analytically, especially when I was hanging around Production, IE & Planning, Quality Assurance, Supply Chain and Sustainability. I watched how they constantly check and tweak processes to keep things efficient and avoid defects. In the lab and quality section, I learned about various tests such as color fastness, shrinkage, GSM and pilling, as well as the importance of conducting these tests to ensure that defects do not reach the buyer. In IE & Planning they showed me line balancing, how they calculate SMV and capacity planning so lines don't get jammed. One thing that surprised me was how even a small change like 2–3 degrees in dyeing temperature or shifting a production date can mess up quality or delay shipment big time. Being there made me way more comfortable looking at real problems and figuring out what's going wrong.

KIM 103: Communication Skills- Before this course I didn't realize how much talking and writing matters in garments. At GMS I used everything I learned writing clear notes after meetings, making short reports, chatting with supervisors and team members almost every day. I sat in on discussions about production plans, quality issues when materials were coming, sustainability stuff, etc.

The course really improved how I write emails, give small updates, listen without interrupting and follow up properly. I started using those skills when updating people about raw materials, production status, quality fixes, shipping dates or compliance things. At first, I was super shy in meetings and barely said anything but the course gave me enough push to start asking sensible questions and even suggest small ideas sometimes. When supervisors gave me positive feedback on my emails or the way I spoke up, it felt really good and made me more confident communicating in a real factory.

KIM 104: Business Operation Skills- This one helped me to understand why every department has to work together or nothing gets done. At GMS I saw it live: supply chain rushing to get materials so production doesn't stop, Merchandising & Marketing constantly emailing buyers about samples, order confirmations, progress and payments, Production and Quality teaming up to hit targets without compromising on specs. It made the whole "process integration" and "resource optimization" thing from class click. Planning controlling production, checking quality, preparing export papers—they're all connected. If one-part slips, the whole chain to the buyer gets delayed. I realized every small job adds up to delivering good garments on time.

KIM 201: Introduction to Garments Knitwear Industry- This course provided me with fundamental knowledge of knitwear manufacturing, covering the entire process from raw yarn to finished garments. During my internship at GMS Composite Knitting Ind. Ltd., I applied this theoretical knowledge in real industrial operations and developed a clear understanding of the complete production flow, including knitting, dyeing, fabric finishing, cutting, sewing and final finishing. I learned how each stage directly influences fabric quality, garment appearance, shrinkage, pH value, comfort and durability. Through practical exposure to both upstream processes such as yarn

selection, knitting structure development and fabric dyeing and also downstream processes, including garment assembly, quality inspection and final finishing. I realized that proper fabric preparation, shade consistency, finishing treatments and strict quality control measures have a significant impact on product performance and buyer satisfaction. Overall, this course strengthened my understanding of how every step in knitwear manufacturing contributes to delivering high-quality garments to global buyers.

KIM 202: Industrial Engineering- KIM 202 taught me practical stuff like time study, line balancing, layouts and improving output. At GMS I saw it in action in IE & Planning and Production. They calculate SMV per style, balance lines according to each operator's speed, plan capacity so no line sits idle. In Production, good material flow and setup stop bottlenecks and push more pieces out. Even Supply Chain timing helps keep planning realistic. It showed me how everything planning, using people and machines efficiently, coordinating departments directly affects productivity and keeps costs under control.

KIM 203: Production Management & Merchandising – This course explained how merchandising and production have to stay in sync to deliver orders. At GMS I watched Merchandising & Marketing, Supply Chain, IE & Planning and Production do exactly that. They follow T&A schedules strictly, track every order, keep buyers updated. Merchandisers confirm all specs, chase materials so they arrive on time, then pass quality and deadline info to production. When that coordination is strong, things run smoothly and shipments go out on time. When it's weak, delays pile up fast.

KIM 204: Quality Management & Supply Chain Management – KIM 204 felt super relevant once I was in Quality and Supply Chain at GMS. Quality isn't just final checking it's inline inspections using AQL, catching problems early. I saw fabric tests for shrinkage, color fastness, GSM, etc., and how they use CAPA (corrective and preventive actions) when something's off. On the supply chain side, they forecast needs, plan raw materials, keep inventory at the right level, coordinate with

suppliers, handle all paperwork. Good quality control + smart supply chain = consistent production, fewer rejections and on-time delivery to buyers. It's really connected the theory to what keeps a factory successful.

Looking back, these courses transformed what initially seemed overwhelming into something manageable and even enjoyable. The internship brought my classroom learning to life by connecting theory with real-world practice and as a result, I now feel much more confident and well-prepared to pursue a career in this sector.

3.3 Suggestions for the Company

During my internship in supply chain department, I suggested that the company should strengthen its digital inventory and material tracking systems so that materials can be monitored in real time. I think that the company should also develop relationships with more local suppliers to reduce dependency on imported materials and shorten lead time. I tried to create better coordination and communication among merchandising, production and suppliers for reducing the errors and delays. I regularly use the supply chain management software (BS ERP) that will help me to track raw materials, orders, inventory and deliveries more efficiently. Based on my observations, GMS should maintain safety stock for critical and special materials to ensure smooth production by using proper projections from buyers. On this period of internship, I attended several training sessions on planning, modern supply chain analytics and logistics; and I realized that these trainings can improve staff efficiency and reduce mistakes.

From my overall learning experience at GMS Composite Knitting Ind. Ltd., I believe that the IE and Planning Department can improve its performance by increasing the use of digital tools and automation. I suggested the respective manager that using the ERP or production planning software of line efficiency, output, work-in-progress (WIP) and manpower would reduce manual errors and improve decision-making. I presented a data-based forecast to improve production planning and reduce last-minute adjustments. I also suggested improving coordination and communication among

the IE, Planning, merchandising supply chain, and production departments. Regular meetings before line layout will help to reduce the errors and mistake of the respective styles. This will can reduce the planning pressure and improve workflow. In addition, I offered to arrange regular training on modern IE methods, time and motion study, lean manufacturing and production planning to will improve staff efficiency. Based on my overall internship experience at this department, I understood that flexible line capacity and proper workload distribution based on operator skill level can improve productivity and ensure on-time delivery.

Based on my internship experience at GMS Composite Knitting Ind. Ltd. I believe that M&M department could improve in several key areas. First, reducing workload pressure on merchandisers by hiring more staff or assistants such as data entry operator or by distributing tasks to the other department. This would help prevent delays in responses, sample dispatch and report updates. Need to join in regular pre-production meeting before starting the production, it will help to reduce the mistakes in production. Also need to deep attach with supply chain, IE & Planning and quality teams that will help to clarify order details, delivery timelines and material status. There is need to implement better digital software like a more advanced ERP system that would be easy to track the order faster, reduce errors and improve real-time visibility. Also, the approval process needs to be easy from liaison office. I suggested to improve the merchandisers skills and knowledge by internal training so that merchandisers get sharp knowledge about all the process of RMG and buyers demand. I also believe that expanding into new markets and product diversification can reduce the risk of dependency on a limited number of buyers. From my internship in this department, these improvements will help the M&M Department improve more efficiency and overall performance. I recommended the concerned team of GMS Composite Knitting Ind. Ltd. enhance it production department by improving the overall efficiency and implementing advanced automation technologies. Also suggested to maintain strong coordination among knitting, dyeing, finishing, cutting, sewing and quality sections for timely shipment. It can be achieved by regular

inter-departmental meetings and clear communication channels. As identified in prior internship observations a real-time production monitoring system and integrating IoT-enabled machines would reduce the rejection and optimize machine RPM, yarn count and fabric GSM control. Also need to expand regular workshops and training for operators and supervisors on line balancing and work aids. Additionally, Careful production planning and capacity analysis before bulk production can help to minimize bottlenecks and ensure balanced workflow across all sections.

My recommendation for improving sustainability at GMS is to invest more in renewable energy sources such as solar power to reduce electricity costs and carbon emissions. Need to increasing rainwater harvesting and advanced water recycling systems would help reduce dependency on groundwater and promote more sustainable water management. GMS can also arrange regular training programs to build sustainability awareness among all employees, from workers to managers. There is a need to source eco-friendly raw materials and certified chemicals to enhance sustainability performance. Additionally, continuous innovation in energy-efficient modern machinery and greener production techniques will help the company remain competitive in the global market.

3.4 Learning for self-improvement

My internship at GMS Composite Knitting Ind. Ltd. turned out to be a real game-changer for me personally and professionally. Before joining the internship at GMS, my understanding of the garment industry was mostly based on academic knowledge. Working directly in the factory environment across the Supply Chain, IE & Planning, Quality, Merchandising & Marketing, Production and Sustainability departments gave me a deeper and more practical understanding. I realized that successful garment manufacturing depends not only on technical skills but also on coordination, discipline, communication, and responsibility. I understand the importance of working efficiently and staying focused under challenging conditions by observing real production pressure, shipment deadlines and buyer requirements. I learned how critical proper forecasting, inventory control and timely sourcing of yarn, dyes, trims and accessories are for uninterrupted production in

the Supply Chain Department. I understood that even a small delay from suppliers can affect production flow and shipment schedules. In the IE & Planning Department, I developed a clearer understanding of SMV calculation, line balancing, capacity planning and workflow management. I realized how proper planning reduces bottlenecks, increases efficiency and ensures smooth operations. These experiences improved my analytical thinking and problem-solving ability. My experience in the Quality Department made me more detail-oriented and quality-conscious. I learned that quality control is a continuous process that includes inline inspection, AQL standards, laboratory testing. This exposure trained me to be careful, patient and systematic in my approach to work. In the Merchandising & Marketing Department, I improved my communication and coordination skills. I understood the importance of buyer communication, Time & Action (T&A) planning, order tracking and meeting strict delivery deadlines. I realized that strong follow-up and clear communication are essential to maintain buyer trust and long-term business relationships. By working in the Production Department gave me firsthand experience of teamwork and effective pressure. I saw how knitting, dyeing, cutting, sewing, finishing and packing are interconnected. I noticed how daily output depends on proper coordination among departments. This experience taught me the value of teamwork, respect for skilled operators and the importance of maintaining discipline on the production floor. In the Sustainability Department, I gained awareness about environmental responsibility, including waste management, water treatment (ETP), energy conservation, chemical management and worker safety. I began to understand the long-term impact of responsible manufacturing on society and the environment.

Actually, this internship program boosted my confidence, sharpened my communication and analytical skills. I grew more punctual, organized, adaptable and respectful toward seasoned professionals, turning challenges into opportunities for maturity. Overall, it equipped me for a professional career in the garment industry while inspiring lifelong learning, self-improvement and growth.

Chapter 4: Conclusion

My internship at GMS Composite Knitting Ind. Ltd. gave me a complete and realistic understanding of how the knit garment industry works in Bangladesh. I was able to see the full operational process from sourcing raw materials to delivering finished garments to buyers by working in Supply Chain, IE & Planning, Quality, Merchandising & Marketing, Production, HR and Compliance, Testing Laboratory and Sustainability department. It helped me to understand how all departments are connected and depend on each other. In this sector, I learned that the success of a factory does not rely on one team alone. It depends on proper raw material sourcing, accurate production planning, strict quality control, effective buyer communication, efficient production management and responsible environmental practices.

From timely material planning to sustaining line productivity and achieving shipment targets, each step requires proper coordination, strict discipline and collaborative teamwork. This experience helped me understand how small operational decisions can affect the whole factory and even buyer relationships in global markets. Also, I observed planning and clear communication are the backbone of a successful garment factory. During my internship, I clearly understood both the strengths and the ongoing challenges of Bangladesh's ready-made garment industry. Depending on skilled workforce, strong export performance and ability to adjust quickly to changing buyer requirements this sector continues to grow. I saw how factories focus on maintaining quality standards, meeting tight shipment schedules, and ensuring compliance with international codes of conduct. I also observed how factories prioritize maintaining strict quality standards, adhering to tight shipment deadlines and complying with national and international codes of conduct.

Now-a-days clients expect not only good products but also transparency, ethical practices and sustainable production. At the same time, the industry is faced with significant challenges, including rising raw material costs, increased energy and labor expenses and ongoing supply chain disruptions.

I also noticed environmental regulations are becoming stricter and buyers are demanding lower carbon footprints, reduced water usage and safer chemical management. During the period of Sustainability Department, I learned the importance of waste management, ETP operations, energy saving initiatives and worker health and safety programs are for long-term business success. Sustainability is no longer optional, it is a key requirement for survival and growth in the global market.

Working across different departments also helped me understand how factories must continuously improve efficiency to remain competitive in the market. To reduce production delays IE & Planning team do a proper capacity planning, line balancing and workflow control. In Supply Chain, I gathered knowledge of accurate forecasting, timely material sourcing, and proper documentation for avoiding shipment problems. Quality department plays a pivotal role for building buyer trust. I learned from this department about the importance of maintaining standards through inspections, lab testing and corrective actions. Merchandising & Marketing team gave a clear understanding of communication, order follow-up and buyer expectations for maintaining long-term relationships. These combined efforts show that success in the garment industry depends on strong coordination and constant monitoring.

This internship had a profound impact on my personal growth and development. It strengthened my confidence in interacting with supervisors, managers and workers and helped me to improve my ability to express ideas effectively, follow instructions carefully and seek clarification whenever required. By working under actual production pressure taught me how to remain calm and focused in demanding situations. Through this experience, I improved my patience, learned to manage time more effectively and became more accountable for my responsibilities. Overall, this internship shaped my career mindset and prepared me for future challenges. Based on my experienced on various department it strengthened both my technical understanding and soft skills. By supporting efficiency, quality improvement and sustainable practices, I now have a clearer vision of how I can

contribute to the knit garment industry. This experience has given me the confidence and motivation to continue learning and growing as a responsible and capable professional in the garment sector.

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