

Report On
Fakir Apparels Ltd
A Study of Operational Procedures for Fast Fashion

By
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An internship report submitted to the Executive Development Center, 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 Center, BIGD
BRAC University
November 2025

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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:



Mahfuj Anam
24281031

Academic Supervisor's Full Name & Signature:



Ali Navir Khan
Lead, Grants Management, BIGD
BRAC University

Letter of Transmittal

Ali Navir Khan

Lead, Grants Management,

BIGD, Brac University

66 Mohakhali, Dhaka-1212

Subject: Submission of Internship Report

Dear Sir,

I am pleased to submit my internship report titled as “A Study of Operational Procedures for Fast Fashion” at Fakir Apparels Ltd.

This report is to fulfill the requirement of the Post Graduate Diploma in Knitwear Industry Management.

Thank You.

Sincerely,



Mahfuj Anam

24281031

Executive Development Center, BIGD

Brac University

November 17, 2025

Non-Disclosure Agreement

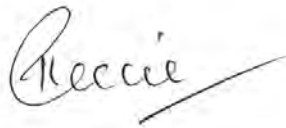
This agreement is made and entered into by and between Fakir Apparels Ltd and the undersigned student at EDC, BIGD, Brac University.

Student's Full Name & Signature:



Mahfuj Anam
24281031

Industry Supervisor's Full Name & Signature:



Md. Hadiuzzaman
Assistant Manager, Marketing & Merchandising
Fakir Apparels Ltd.

Acknowledgement

I would like to start by thanking my academic supervisor, Ali Navir Khan. Without his continuous guidance, this report would not be as structured and organized as it is. His valuable words inspired me to put forth my best effort to make this report readable and understandable.

I am indebted to my industry supervisor and reporting manager at work, Md Hadiuzzaman, who provided me with the NOC to join this prestigious program. He also guided me on how to manage my time for this internship without disturbing my daily work.

This report would not have been possible without the following people from the various departments where I completed my internship (listed alphabetically): Ashraf Ahemd, Anik Das, Mehedi Hasan, and Pronab Kumar Paul. Your years of experience and insightful comments greatly shaped this report. I am more thankful than I can say.

I could not have finished this report without my classmates. Their continuous reminders in our WhatsApp group that we were running out of time pressurized me to finish this report on time. I would like to mention some names (listed alphabetically): Md Fazley Rabby, Muntaha Anis, and Rumky Islam. Thank you, friends; I am glad I met you here.

Finally, I would like to thank Microsoft Corporation for creating the software in which I am writing, Microsoft Word. It is only when writing a report that one feels the true necessity of such a tool. And thank you to the countless YouTube channels that have helped me become an intermediate user of MS Word.

Executive Summary

This report covers an internship at Fakir Apparels Ltd. (FAL), a leading knit garment manufacturer in Bangladesh. The internship is a required part of the PGD-KIM program at Brac University. The author worked in five main departments: Marketing & Merchandising, Fakir Apparels Design Studio (FADS), Knitting, Dyeing, and Quality.

During the internship, the author observed the entire production process. In Marketing & Merchandising, the tasks included calculating the price (FOB) for new styles from buyers like Inditex and managing orders from order entry to raw material booking to fabric booking through the ERP system. In the FADS department, the focus was on innovation, using trend analysis from WGSN to help create new fashion collections. In the Knitting department, the author learned how engineers translate a designer's fabric sketch into actual physical fabric. Work in the Dyeing department involved matching buyer color samples by first making "Lab Dips" to find the right recipe, then managing the bulk production dyeing. Lastly, in the Quality department, the author learned how to maintain quality at every step, including approving fabric color, checking the first trial cut garments, and performing the final AQL inspection before shipment.

The report concludes that the PGD-KIM courses were very useful for solving real problems. For example, the "Introduction to Garments Industry" course helped with product costing, and the "Communication Skills" course helped make factory meetings more efficient. The report gives three main suggestions for Fakir Apparels to improve. First, the Marketing department should create a "Fast-Track Team" to manage quick order changes from fast-fashion buyers, because the main ERP system is too slow to manage frequent changes. Second, the Knitting department should build a new, quiet "R&D Lab" to give engineers a better place to think and to create new fabrics. Third, the Dyeing department should buy "soft-flow" dyeing machines, as fast-fashion brands increasingly prefer mixing Knit & Woven fabrics on the same garment. This will allow the factory to dye woven fabrics for such styles and avoid the process loss that occurs when using the knitting dyeing machines for this purpose. This internship was a very important experience and helped the author change from a student mindset to a professional mindset.

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List of Acronyms

FAL	Fakir Apparels Ltd
R&D	Research & Development
ERP	Enterprise Resource Planning
SOP	Standard Operating Procedure
QC	Quality Control
GPQ	Guideline for Production and Quality
AQL	Acceptable Quality Level
PO	Purchase Order
FOB	Free on Board
SCM	Supply Chain Management
PI	Proforma Invoice
TNA	Time and Action
SMV	Standard Minute Value
CM	Cost of Making
CAD	Computer Aided Design
Q/A	Quality Assurance
GPT	Garments Performance Test

Chapter 1

About Organization

1.1 Overview of the Industry

Fakir Apparels Ltd. (FAL) was founded by Fakir Maniruzzaman, who drew inspiration from a strong family legacy in the Narayanganj textile industry. [1] This legacy began in the early 1960s with his father, Al Haj Yousuf Ali Fakir. The family's involvement in manufacturing was further cemented in the 1990s when Mr. Maniruzzaman's brother, Fakir Akhtaurzzaman, established the region's first ready-to-wear factory, Fakir Knitwear Ltd. [2]

Initially, Fakir Apparels Ltd. operated as a subcontractor for Fakir Knitwear Ltd. A pivotal moment in the company's history was securing its first direct orders from H&M. This strategic partnership was instrumental, as H&M's collaboration and support enabled FAL to significantly upgrade its infrastructure. [3]

Today, Fakir Apparels Ltd. has evolved into a fully vertically integrated, 100% export-focused textile composite knit manufacturing company. This is a composite factory. This means that all the steps to make a garment happen in one place, under one roof.

The relationship with H&M remains the cornerstone of FAL's business, with the buyer accounting for 70% of the company's total orders, making FAL one of its trusted suppliers. The remaining 30% of its portfolio consists of other major international buyers, including Primark, C&A, POP, s.Oliver, and Inditex. By leveraging its vertical integration and state-of-the-art technology, Fakir Apparels effectively meets the dynamic requirements of the global fast-fashion market. [1]

1.2 Vision & Mission

At Fakir Apparels, we have a very big dream. Our vision is to be the world's favorite company for making clothes. We want to be the number one choice for everyone, everywhere. To do this, we use new ideas and the very best technology. It is also very important to us that our clothes make a positive difference. We want our products to be good for all people and good for our planet.

To make this big dream come true, we have a clear mission. This mission starts with our people. We believe our team is our greatest strength. We help our workers learn new skills so they can grow in their jobs. We listen to them and help them build a clear career path. We want to build a happy, fair, and purposeful workplace where everyone feels welcome and valued. This is a big part of our mission on sustainability. For us, sustainability means taking care of people. We are building a kind and ethical company that includes everyone. We want our work to be good for our team and for our communities.

We also focus on our customers. We want to build strong, lasting friendships with the clients we have now. We also want to find new customers and partners to work with. A big part of our mission is to tell our story. We want the world to know who Fakir Apparels is and what we stand for. We will share our story online and show everyone the good work we do.

Finally, we are always trying to do our job in the best and smartest way. We are making our work processes simple and clear for everyone. We check our work carefully to make sure it is excellent. We use smart technology to help us, like special machines that use the perfect amount of dye for our fabrics or help with sewing. This helps us be very precise and efficient. We also work closely with our suppliers to make sure we get good quality materials at a fair price. This helps us track every customer's order perfectly, from the very beginning to the very end. [1]

1.3 Goals & Objectives

The primary goals and objectives of Fakir Apparels Ltd. revolve around quality, sustainability, compliance, and customer satisfaction.

At Fakir Apparels Ltd., we have a very clear plan for our future. Our main goal is to be a company that everyone can trust.

First, we care about our customers. We work hard to make clothing that is excellent. We want every shirt, pair of pants, and dress to be made perfectly. It is also very important to us that we deliver these clothes on time, every time. We want to be a strong and lasting partner for all the big companies we work with around the world.

We also care very deeply about our planet. We have a big promise: by 2025, we want to use many more recycled and "green" materials in our clothes. We are also working hard to help with climate change. We plan to use much less energy in our factories. Our goal is to lower our carbon footprint by 56% before the year 2030.

Finally, we want to be a company that you can be proud of. A big part of this is "compliance," which is a simple idea that means we always follow the rules and do the right thing. We work hard to pass important international checks like ISO, GOTS, and OEKO-TEX. This is our promise to everyone. These checks mean that our factories are safe places to work and that we treat all our workers with respect and fairness. They also mean our clothes are safe for you and your family, made without any harmful chemicals.

At the same time, we are always learning new, smarter ways to make clothes. We use modern machines and ideas so we don't waste time or materials. Following all these rules and always getting better is our promise. It shows that we are a company you can trust.

This is our simple promise: to make great clothes, to help the planet, and to be a good, fair, and smart company. [1]

1.4 Organizational structure, Organogram, Branches and Department

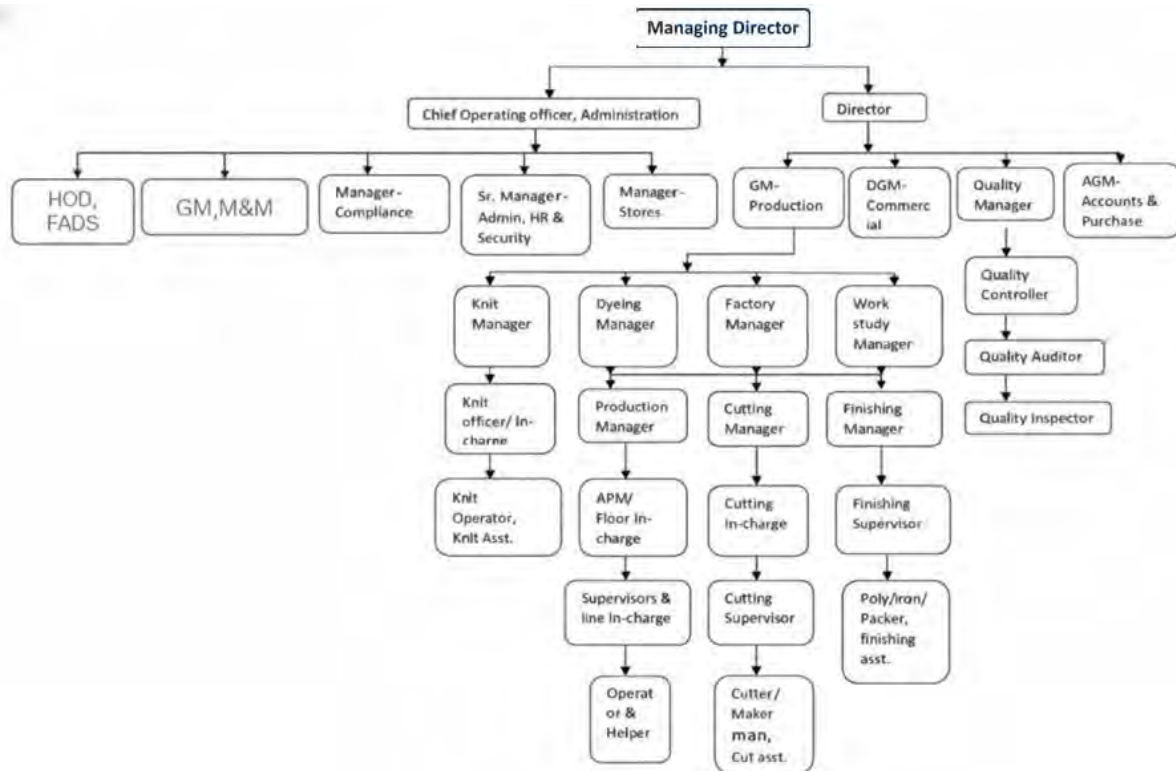


Figure 1 Organizational Chart-Fakir Apparels Ltd

1.5 Products/services produced by the Industry

Fakir Apparels mainly produces knitwear for men, women, and kids. The factory makes a wide variety of items such as T-shirts, polo shirts, hoodies, sweatshirts, leggings, sportswear, and other casual clothing. Along with these garments, the company also offers extra facilities like all-over printing, embroidery, washing, and packaging so that buyers can get everything done in one place. [1]

Apart from making garments, Fakir Apparels also provides some important extra services that add value for the buyers. One of these is Fakir Testing Services (FTS), which works together with Brachi Italian Lab. This lab is located inside the company premises and is accredited by BAB and NABL, [1] so it can do independent chemical and physical tests for different brands. Through this, Fakir Apparels can make sure that its products meet the safety and quality standards required by well-known brands like H&M, Esprit, s.Oliver, C&A and Next. The lab also has a seam tape testing facility which checks waterproof garments during bulk production.

Another unique facility is the Fakir Apparels Design Studio (FADS). This studio plays a big role in product development and innovation. It is equipped with advanced design software such as 3D CLO and even has a virtual sample room that helps in faster sample making. The design team includes both local and international designers, and they often work with WGSN, a world-famous fashion trend agency, to stay updated with global fashion trends. They also travel abroad to study markets and bring new ideas.

Because of these facilities, Fakir Apparels is not just a garment producer but also a partner that can provide testing, designing, and full product development support. This helps the company meet the changing demands of global buyers while at the same time focusing on sustainability, innovation, and eco-friendly production.

Chapter 2

Description about task accomplishment

Through the course of my Post Graduate Diploma program, I gained theoretical knowledge that inspired me to polish my learning through practical work. With a goal of refining my knowledge, I interned in various departments. This included:

- 2.1 The Marketing & Merchandising department, the brain of the overall business;
- 2.2 Fakir Apparel Design Studio, where innovation takes place;
- 2.3 The Knitting department, where all yarn is knitted as per the designer's design;
- 2.4 The Dyeing section, which makes a product colorful to attract customer attention;
- 2.5 Finally, the Quality department, which ensures that the clothing a customer buys with their hard-earned money is the best possible product.

In the following section, I will try to provide a narrative of how I performed my work from order receipt to final shipment, in the eyes of these departments.

2.1 Marketing & Merchandising

My internship journey began with the Marketing & Merchandising department. As the name implies there are two departments combined together. Whoever works here has to perform two things simultaneously, one is Marketing, another one is Merchandising.

I would love to focus on the Merchandising part. A new mail had arrived where my counterpart, a buyer from Inditex, was querying about selected style FOB & Lead time. Thus, I had to calculate the FOB correctly, one miscalculation can lead to significant financial loss.

I opened my Microsoft Excel Quotation Sheet; what I had to do in that cost sheet was to input data correctly. There are different sections in the Cost Sheet, first section is Basic Data, such as Style Name, (for my case, it was Sudadera Interlock Polo), Fabrication (86% Organic Cotton, 14% Recycled Polyester), Construction (Interlock) GSM (260 GSM), Offer Quantity (10000 Units) Buyer Expected Delivery Date (30th December), and Buyer Target Price: (8 Dollars). Once the basic portion data insertion was complete, the next section was Fabric Part Calculation.

To calculate this, we must have some data provided by other departments. Our Quotation sheet is designed to do costing for one dozen. We divided by 12 to get the FOB of a single unit. I sent my query about Fabric Consumption data to the CAD section. After analyzing this style Tech Pack, they gave Fabric consumption per dozen sheet; this sheet has a special name called Costing Marker. Using the costing marker, I inserted consumption data, which is 7 kg per dozen, in that excel. That means to make 12 complete clothes, we need 7 Kg of fabric.

To make fabric, we need yarn. A yarn is defined by its Count, a numbering system that defines how thick or thin a yarn is. In my case, I needed Yarn that would achieve a final composition of 86% Organic Cotton, 14% Recycled Polyester & 260 GSM, maintaining the Bonded Interlock fabric construction. I sent my query to the Knitting department to confirm Yarn Count & Knitting Price. A fabric is generally made in a Circular Knitting machine which converts yarn to wearable fabric. I have to include this Knitting charge in my cost sheet. I received confirmation that the Yarn Count was 24s 100% Organic Cotton & 75D/96F Recycled Polyester, and the Knitting Charge was 0.70 Dollars per Kg.

Once the fabric is made, it has to go under the dyeing machine where it will get its desired color. Thus, I needed a dyeing charge. To obtain this data, I asked the Dyeing Department. After receiving the data, 1.30 dollars per Kg of fabric, I inserted it in my cost sheet. The fabric portion calculation was done.

Next was the Trims & Accessories Costing section. Trims are components that are permanently attached to garments, whereas accessories are the components that will be required for packaging, branding, or presentation purposes, which are removed before wearing. Common trims include Main label, Care Label, Sewing Thread, Rfid Label, Button, and Zipper, and common accessories include Hang Tag, String, Inner board, Poly, Tissue Paper, and Carton. After analyzing my Sample, I inserted all the trims and accessories required for this, and I cross-checked all of these items with our Trims Supply Chain department and inserted them in the cost sheet.

Another portion in the Cost sheet is CM Calculation, which is the cost of Manufacturing the Product (in our case, to Cut & Sew the products). To calculate CM Cost, I needed our factory's Cost Per Minute value, which I obtained from the Accounts & Finance Department. I needed another two things, which were SMV & Efficiency. I got these from the Industrial Engineering department.

The Value Addition section followed, which is Printing, Embroidery & Wash Cost. For this particular sample, there were none of these, so I left them blank in the excel.

Apart from this costing, I inserted some other values in the Cost Sheet that included Operating Expense, Commercial Expense, Interest Expense, Depreciation, and Income Tax.

The excel sheet is designed in a way that it shows the Final FOB with our desired profit at the end. Once I received my final cost from my data, I negotiated with the buyer about the Final FOB & Lead time. To finalize the price, I had to lower SMV and increase Efficiency in the cost sheet after discussing with the IE department. I had to adjust some other prices in the trims & accessories section. I got a Purchase Order almost instantly after price confirmation from the buyer. Since my buyer is Inditex and this is one of the FAST FASHION brands, they do not create unnecessary delays. At Fakir Apparels, once an order is confirmed, everything has to go through ERP. After receiving the order, I mailed the ERP department to add this specific style in the Style Library tagged to the buyer Inditex.

Once the style id was created, I went to the Price Quotation Module in the ERP. Basically, this is a module where the excel quotation is converted into a digital quotation. Once the quotation was created, I went to the Order Entry by Matrix page in the ERP. As the name implies, I entered order details in a matrix grid cell: color, size-wise quantity, and handover date. My next step was to create a Yarn Purchase Requisition through ERP, followed by subsequent actions like Bulk Fabric Booking & Trims & Accessories booking to secure all the materials to successfully execute the order.

2.2 Fakir Apparels Design Studio

I work for the Inditex brand, in the ZARA MAN department. This is one of the world's leading fast fashion brands. I always wanted to figure out how a designer crafts a design with his pencil on a piece of white paper that will attract the buyer's attention. The more I paid heed, the more I understood that in this world everything is a copy of a copy of a copy.

The business strategy of Fakir Apparels is to capture high-FOB orders from its own high-end sample development. Every three months, FADS sends its collection to the Inditex Spain

Head office. From there, samples are selected and PO Sheets are received after price negotiation. During my internship, I went through the complete process of making a collection.

First, I gave my collection a name, Candela_October_SS26. The next step was Trend Analysis. This trend analysis part was already done by WGSN, a website that analyzes global fashion trends, consumer insights, and product design according to season.

In the fashion industry, the entire calendar revolves around two primary seasons: Spring/Summer, typically launched in stores from January/February through June/July. The other is Autumn/Winter, typically launched in stores from July/August through December/January.

Fakir Apparels Ltd has an annual premium subscription to WGSN. I logged into that website and downloaded some articles on upcoming men's fashion, such as the WGSN Trend SS-26 for the T-shirt, the Vacation Striped, the Sweatshirt, the Henley & the Short. After carefully reading all the documents from WGSN, I had all the information needed to launch my new collection. I got a clear idea of what my color range should be, my fabric construction type (for example, Bonded Interlock, Variegated Rib, Heavy Jersey fabric with mercerized finish), GSM range, and the silhouette type (for example, boxy fit, oversized & slim fit).

The selling price of a garment for Zara Man lies between 20 dollars and 100 dollars. There are thousands of clothing brands in this world whose selling prices start above 200 dollars. I analyzed those luxury clothing brands to gather fabric construction ideas. Based on those, I crafted my own fabric construction on paper. Then, I converted my pencil & paper sketches into CAD using Adobe Illustrator.

Once the fabric structure was selected, I paid attention to the fabric composition part. For the top items, my selection was 100% Cotton, Cotton with Elastane, and Cotton with polyester. For the bottom items, I relied on synthetic fibers like Polyester, Nylon, and Polyester-Nylon blends.

Once the fabric portion was done, I moved on to the trims selection part. From the catalogs provided by the suppliers, I selected buttons, zippers, herringbone tape, and woven fabric to be used for each style.

My next task was measurement chart selection for various garment styles (Tee Shirt, Polo Shirt, Sweatshirt, Henley). This task was very easy to do because each buyer's measurement patterns are almost similar. I used the previous season's measurement sheet provided by ZaraMan to make my new collection.

My next step was a very crucial thing to do. I had to make a complete techpack for each style. A techpack is like the DNA of a garment, where one can find all the information they are looking for, about that particular item. This included Style Name, Season, Color code (pantone or physical reference), GSM, Fabrication, Construction type, CAD design of the front, back and side views of the garment, molecular label design of the fabric construction, all design details (side seam, collar types, stitches), trim details, and the measurement sheet. I made this file using Adobe Illustrator.

Once the tech pack was complete, I handed over this file to the concerned personnel in the Merchandising department. He was responsible for making the physical sample. I was there to assist with any kind of confusion or difficulties because on paper everything seems possible but reality often hits hard.

2.3 Knitting

The fast fashion brands need new and good-quality fabrics. Because consumers always want something different. Since items are almost fixed for example T-shirt, Long Sleeve Polo, Cardigan etc. But the fabric which is used to make them has no limit. One can make an infinite number of fabric structures of different properties. Circular knitting machines are very crucial in this regard because they are fast and can make infinite fabric structures. The main goals of this internship were to learn how to use a double-knit machine and make a new fabric design called Variegated Rib. A key task was to produce this fabric using 100% organic cotton. The final fabric needed to have a target weight of 260 GSM (grams per square meter). I also needed to write down all the machine settings and steps in the process.

First, I studied the drawing for the variegated rib fabric. This drawing sketch is provided by a designer from the FADS department. I needed to find the repeating stitch pattern. The pattern for this fabric was: two knit stitches, one tuck stitch, two knit stitches, and one miss stitch. A

knit stitch is the normal loop in a fabric. A **tuck** stitch holds an old loop and gets a new one, which makes a raised texture. A **miss** stitch is when the needle does not get any new yarn. This makes the yarn float on the back of the fabric. This mix of knit, tuck, and miss stitches creates the special look of the variegated rib.

After analyzing the fabric structure, I had to choose the knitting machine. I used a Double-Knit Circular Knitting Machine with an electronic jacquard. This machine was needed because it can select each needle for the complex pattern. The machine gauge was 20 Gauge. We used 100% Organic Cotton yarn with a count of 26 Ne. This yarn was chosen based on experience and from fabric GSM wise count data sheet to help us get the 260 GSM target weight.

After the yarn count was chosen, I programmed Yarn Store department to provide me with a baby cone of that particular yarn. After receiving the baby cone, I send it to Physical Lab to perform the test respectively Yarn Count, Yarn Composition, Twist Per Inch, Evenness & CSP. The CSP test (Count Strength Product) is a standard measure of yarn quality that combines yarn count and tensile strength to evaluate the overall suitability of yarn for weaving or knitting.

The next step was to set up the machine correctly. It was the most important part. I programmed the machine to follow the knit, tuck, and miss pattern. I also had to control the **stitch length**. Stitch length is the key setting for changing the fabric's weight (GSM). I carefully adjusted the yarn tension to make sure all loops were even. This stops problems in the fabric. Finally, the take-down tension was set to pull the fabric gently from the needles.

The following step was SOP batch knitting. Generally, 4 kg fabric is knitted first. The grey fabric is thoroughly inspected and sent to lab to test the fabric parameter again.

I did not get the perfect fabric on the first SOP batch. I had to knit several SOP batches samples. My first sample weighed only 230 GSM, which was too light. To make the fabric heavier, I had to make the stitch length shorter. I made small changes and tested the fabric again and again. After many tests, I found the correct stitch length that made the fabric 260 GSM. After knitting, I also let the fabric rest. This is important because cotton shrinks, and this changes the final GSM.

The project was a success. The final variegated rib fabric matched the design drawing perfectly and had the correct texture. We also achieved the target weight of 260 GSM. This showed that we can control the fabric weight by carefully changing the stitch length.

After making 100 Kg grey fabric, 5 roll of 20 Kg fabric, I sent the grey fabric for offline inspection. In offline inspection, a 4-point system for grey fabric method is followed.

This system assigns penalty points to defects based on their size (length or width):

- **1 Point:** Defects up to 3 inches.
- **2 Points:** Defects over 3 inches but not exceeding 6 inches.
- **3 Points:** Defects over 6 inches but not exceeding 9 inches.
- **4 Points:** Defects over 9 inches.
- **4 Points:** Any hole or opening (regardless of size).

The total points for a roll are calculated, and the "Points per 100 Square Yards" is determined using the following formula: [5]

$$\text{Points per 100 sq. yards} = \frac{\text{Total points in roll} \times 3600}{\text{Fabric length (yards)} \times \text{Fabric width (inches)}}$$

Figure 2 Formula for four-point inspection system

2.4 Dyeing

My internship in the knitting department had just finished. I had successfully produced five rolls of our new 260 GSM variegated rib fabric. I felt a sense of accomplishment, but I had only completed the first step. That fabric was still in its "grey" state, a dull, off-white color, bearing the natural oils and impurities from the cotton and the knitting process. My journey was to follow this exact fabric into the dyeing section, to capture the whole process and to know why the dyeing section takes so much time dyeing a fabric.

In this world, there is no ultimate truth. We need a reference to compare who we are, where we are. This is the same for a dyeing section also. To dye the grey fabric, buyer has provided 5 small swatches, each a different, beautiful color: a deep 'Navy Blue', a bright 'Sun-kissed

Yellow', a rich 'Olive Green', a soft 'Dusty Rose', and a pure 'Optic White'. These small swatches are my reference. I will compare dyed fabric shade with this reference swatches.

My first stop was not the giant dyeing machines, but the "Lab Dip" section. This was like a miniature version of the whole dye house. Here, I observed the lab technicians working like scientists. They took a tiny, 10-gram cutting from my variegated rib fabric swatches. Then, using a "color matching computer" (a spectrophotometer), they scanned one of the Spanish swatches, the 'Olive Green'. The computer provided a starting "recipe" of different dyes.

I watched the technician use tiny pipettes to measure dyes and chemicals with an accuracy of 0.001 grams. The sample was dyed in a small, pressurized lab machine. This, I learned, is where all the trial and error happen before risking hundreds of kilograms of fabric. Our first attempt came out a little too dark. The technician adjusted the recipe, and we tried again. After three attempts, we had a perfect match. I personally took the lab dip and the original Spanish swatch to the light box. Under all the different light sources (Daylight, Store Light, Sunlight), they looked identical. We repeated this process for all five colors, creating a unique, approved recipe for each.

With the five color recipes approved, it was time for "bulk production." The rolls of my variegated rib fabric were brought from the store. My first task was to help the operators in the "batching" section. We had to weigh the fabric and sew the end of one roll to the beginning of the next, creating one continuous "rope" of fabric. We prepared five separate batches, one for each color.

I then followed the 'Optic White' batch. Because it needed to be perfectly white, it went through the most intensive "pretreatment." I watched it get loaded into a massive, stainless-steel dyeing machine. Before any "dyes" were added, it was washed at high temperature with scouring agents (to remove oils) and hydrogen peroxide (a bleaching agent). My supervisor explained, "You can't dye a clean color onto a dirty fabric." For the white, this "deep clean" was the *entire* process.

For the 'Navy Blue' batch, the process was different. After its pretreatment, the machine began the dyeing cycle. I observed the "color kitchen," a separate area where all the chemicals and dyes were stored in large tanks. Following the exact recipe from our lab dip, a computerized system automatically "dosed" the correct amount of dyes and salts into the machine. I spent hours monitoring the machine's control panel, watching the temperature rise to 60°C and hold there for an hour, allowing the dye to fix onto the cotton fibers.

The most intense part of my day was the "shade check." Before the machine was drained, an operator pulled out a small cutting of the 'Navy Blue' fabric. We had to quickly dry it and run it to the light box. I held my breath as I held our dried sample next to the original Spanish swatch. It was a perfect match on the first try. The operators were relieved; this meant no "additions" (adding more dye) were needed, saving time and money.

Once the dyeing was approved, the fabric was unloaded. My next observation was the finishing process. The soaking wet fabric was put into a "hydro-extractor," which spun at high speed, acting like a giant salad spinner to remove 80% of the water. From there, the fabric, which was still in a "rope" form, was passed through a "slitter" to open it into a wide, flat piece.

Then, it went to the "stenter." This machine was easily 30 meters long. It grabbed the fabric by its edges (selvages) with tiny pins and pulled it through a series of hot ovens. I watched as it perfectly dried the fabric and stretched it to the exact width the customer had ordered. This is also where they applied a "silicone softener" finish to give that variegated rib a soft, luxurious feel.

Finally, I spent my last few days with the final inspection team. Here, I watched every single meter of our five colored fabrics roll over a large light table. My task was to look for any defect, a small dye spot, a streak, or a change in shade. It was meticulous work. Seeing the final, perfect rolls of 'Navy Blue', 'Sun-kissed Yellow', 'Olive Green', 'Dusty Rose', and 'Optic White' all pass inspection was the perfect end to my internship. I had seen the fabric's entire journey, from a "grey" roll I helped knit to a vibrant, high-quality product ready to be sewn as per tech pack.

2.5 Quality

My internship transitioned from the chaotic world of the dyeing department to the realm of Quality Assurance. Working under a General Production Quality (GPQ) supervisor, I quickly learned that "quality" isn't just a final check; it's a series of crucial gates and preventative measures woven into the entire production story. My role was to be the guardian of that story, ensuring that what we promised the client is exactly what we delivered.

My first responsibility was at the very beginning of the garment's life. When a roll of fabric arrived from the dyeing department, it was my job to give it the first "go" or "no-go." I unrolled a section of the fabric and held it against the original, client-approved color standard. This was done under specialized D65 which is daylight and TL84 light which is commercial lighting to simulate different environments, from daylight to a store's indoor lighting. Fortunately, the roll that I inspected matched correctly so I approved the lot. I reviewed the technical report from our physical lab. This document told me everything the naked eye couldn't that is if the fabric would shrink too much, if the color would bleed in the wash, or if it was strong enough.

With the shade approved and the lab report passed, I gave the final approval to send the fabric to the cutting department. If it failed at either step, a shade mismatch or a poor lab result, I rejected it and sent it back to the finishing department for reprocessing. This single checkpoint saved thousands of dollars by stopping flawed material before it was cut.

My next task was a perfect example of "measure twice, cut once," but on an industrial scale. Fabric isn't like paper; it stretches, it shrinks, and it behaves differently depending on its composition. To account for this, I oversaw the cutting trial.

The cutting department would first cut just five pieces for each size (S, M, L, XL etc.) which is called trial cutting. These pieces would go to sewing and be fully assembled. Once I had these first garments, my analysis began. I laid them flat and, with an approved measurement chart from the buyer's end in my hand, I checked every possible dimension, chest, waist, sleeve length, hem, etc. I also assessed "shape retention," or how well the garment held its form.

Based on these findings, I set the "allowance" for the bulk cut. This meant I was giving the cutting department precise instructions, like "add 0.5 cm to the sleeve pattern" or "reduce the waist by 0.25 cm," to ensure that after sewing and finishing, the final product would be a perfect match to the client's specifications.

One of the most empowering parts of my internship was leading the Pre-Production (PP) meetings. Before a new style went into bulk production, I would gather the leaders from every single department: knitting, dyeing, cutting, sewing, printing, embroidery, and washing.

In this meeting, I presented the new product and my findings from the trial runs. My job was to instruct everyone on the potential risks and how to avoid them.

Once production began, my role became one of constant vigilance. I couldn't just wait until the end to see if we'd made a mistake. I was responsible for sending samples directly to the Inditex office in Spain at key milestones, which acted as a "pulse check" for the entire line.

- **10% Sample:** When the first 10% of the garments were sewn, I pulled one, inspected it thoroughly, and immediately shipped it to Spain. This was our "first look" to confirm we were on the right track.
- **30%, 70%, 100% Samples:** I repeated this process as the production hit 30%, 70%, and finally 100% completion.

If the client in Spain had any comments, perhaps they wanted a button moved slightly or a label stitched differently, I was the one who received that feedback. I would then go directly to the head of the responsible department (like sewing or finishing) and instruct them on the corrective measures needed for the rest of the batch.

After the last stitch was sewn, the garments moved to finishing. This involved final pressing, trimming all loose threads, and folding. I was responsible for ensuring that all garments were packed precisely according to Zara's very specific standards. This included the exact type of polybag, the placement of stickers, the folding method, and how the garments were ratio-packed into the final shipping cartons. A perfect garment can feel "cheap" if it's poorly presented, so this last step was crucial for the customer's first impression.

My final task was the most critical: the final self-inspection. The self-inspection means after sewing & finishing is complete, the factory which produced the garments will do the final inspection, not the buyer or any third party organization. Many buyers now give me the factory itself to do the final inspection.

For a huge order of, say, 200,000 garments, it's impossible to check every single piece. This is where I used the AQL system.

AQL (Acceptable Quality Limit) is the simplest way to answer the question: "How many bad apples are we allowed before we have to reject the whole cart?" [6]

AQL inspection standard		2.5 AQL normal level	
		Major /Minor defects	
Order / Lot size	Sample size	Accept	Reject
91-150	20	1	2
151-280	32	2	3
281 – 500	50	3	4
501 – 1.200	80	5	6
1.201 – 3.200	125	7	8
3.201 – 10.000	200	10	11
10.001 – 35.000	315 **	14	15
35.001 – 150.000	500 **	21	22
150.001 – 500.000	800 **	21	22
500.001 & over	1250 **	21	22

Table 1 AQL Level & Inspection Standard

It's not about finding zero defects; it's a powerful statistical tool that allows me to confidently accept or reject an entire shipment based on a small, random sample.

This internship taught me that quality is not a single act but a constant, dynamic process of prevention, inspection, and communication. I wasn't just checking boxes; I was the final guardian of the brand's promise to its customer.

Chapter 3

Critical assessment of Internship work

This chapter is the most important part of my internship report. My PGD-KIM program was designed in two parts: first, learning the theory in the classroom, and second, applying the theory in the real world. This chapter is my critical assessment of that application. I did not join this program just to add a line in the CV. My goal was to reflect, analyze, and truly understand what I learned. This internship, as described in my course (KIM 300: Industry Attachment), was a "total factory management" experience. This means I had the great opportunity to work in various functional units of the factory.

In this section, I will not just describe the tasks I performed. Instead, I will evaluate my experience, my education, and my own personal growth. I will show how the courses from Term 1 and Term 2 helped me solve real problems in Term 3. I will also provide my own suggestions for improvement, based on my observations. Finally, I will reflect on how this entire process changed me and made me a better professional. This chapter connects the classroom to the factory floor.

3.1 Application of Generic and Industry specific courses during internship

My PGD-KIM program was built on two types of courses: Generic Courses and Industry Specific Courses. The Generic Courses gave me the foundation of professional skills, like how to think and how to manage people. The Industry Specific Courses gave me the technical knowledge I needed for the knitwear industry. During my internship, I found that I needed *both* types of courses every single day. One without the other is not enough.

First, I will discuss the Generic Courses from Term 1.

The course **KIM 101: HR Skills and Competencies** was important for my role in the merchandising department. The course taught us about organizational behavior, teamwork, and motivating employees. At first, I thought this was only for the Human Resources (HR) department. I was wrong. I was working as a team leader for a major buyer, and I had to manage several team members. Now, I can better accept mistakes from my team members

and from myself. Before this course, I used to have too much control over every person. Now, I give each team member their own tasks to do independently. The results are surprisingly much better.

Next, **KIM 102: Analytical Skills and Competencies** was a course that changed my way of thinking. Our course professor told us that many managers use data analysis tools, like Microsoft Excel, but they do not first learn the *concepts* of analytical thinking. This was very true for me. I thought "analytical skill" just meant knowing Excel formulas. This course taught me the *principles* behind the data. For example, I learned the financial principle that "money present is more valuable than money later."

I applied this principle directly in my job. We often receive orders that have a very long lead time, maybe four or five months. Before, I used to wait to order the yarn, thinking I had plenty of time. But the price of cotton yarn changes every day, like the price of gold. After KIM 102, I analyzed the risk. I understood that waiting was a big gamble. It was better to secure the yarn at a known price *today* than to risk a higher price *tomorrow*. This course taught me how to use data to make smart business decisions, not just how to make a report.

The **KIM 103: Communication Skills** course was perhaps the most useful course for my day-to-day work. The course taught us how to write professional memos, emails, and reports, and how to participate in meetings. In a fast-moving factory, communication is everything. My job as a merchandiser is to be the bridge between the buyer (in another country) and all the factory departments (Knitting, Dyeing, Quality, etc.).

Before this course, our weekly review meetings on every Sunday were often confusing. People would leave without being sure of their tasks. After learning how to chair a meeting and take effective meeting minutes, I changed this. When I had a meeting to discuss about something for example changes on HOD, Quantity, upcoming new orders, I would use the skills from KIM 103. I prepared an agenda. During the meeting, I wrote down every key point and decision. After the meeting, I sent a clear email (a "memo") to everyone. This email listed the "action points," the "responsible person" for each point, and the "deadline." This simple change, which I learned in class, stopped so much confusion, reduced delays, and made our cross-functional teams work much better. It also helped me communicate with my international buyers in a more professional and clear way.

Finally, **KIM 104: Business Operation Skills** gave me the "big picture." This course gave me a basic understanding of management, accounting, marketing, and finance. As a merchandiser, I was confused about why the finance department was so strict about payment terms, or why marketing was so focused on a certain price point. This course connected all the dots. I learned that every department is part of one large business operation.

For example, when I was preparing a product cost sheet, I was not just doing simple math. I was using all the parts of KIM 104. I had to understand the "accounting" part (like overhead costs), the "finance" part (like the cost of money for buying materials), and the "marketing" part (the target price the buyer is willing to pay). This course helped me understand the business strategies of my company. It was the glue that held all the other courses together.

Next, I will discuss the Industry Specific Courses from Term 2. These courses gave me the technical power to do my job.

KIM 201: Introduction to Garments Industry - Knitwear was the most valuable course for my specific role. My job in merchandising is 50% "product costing." Costing is the process of calculating the exact price of a new garment, including all materials, labor, and profit. This course taught me the RMG specific costing process. Before this course, a cost sheet was just a mere page of numbers, that sum up automatically at the end , and we get the FOB.

During my internship, a senior buyer from Zara visited our office. He was looking at a new sample in our showroom and asked me, "What is the price for this?" I could not say, "Please wait, I will email you tomorrow." I had to perform "spot costing," which I had practiced in KIM 201. I quickly calculated the fabric consumption, the yarn cost, the dyeing cost, the cost of making (CM), and all other commercial costs. I gave him a confident price in less than five minutes. This one moment showed me the true value of my education. If I had miscalculated, my company could have lost thousands of dollars. This course gave me the confidence and skill to perform one of the most critical jobs in the industry. When I look at my Excel cost sheet now, I feel like it speaks with me.

The course **KIM 202: Industrial Engineering** was a surprise for me. I thought Industrial Engineering (IE) was only for the sewing floor. The course talks about "work-study,"

"motion economy," and "lean tools" to make production more efficient. As a merchandiser, I work in an office, at a computer. I thought this course would not apply to me.

But after the class on "motion economy," I started to observe my *own* work. I was a "knowledge worker," and my "factory floor" was my computer. I saw so much waste. I saw how many times I clicked to find a file. I saw how I wasted time writing the same email over and over, fixing an excel error. I applied "motion economy" to my desk job. I re-organized all my computer folders. I created email templates for common questions. I learned Excel macros to make my reports automatically. As a merchandiser, I have to maintain several updated Excel reports for example Monthly order receive status, monthly shipped value status, yarn inventory status etc. I applied "lean tools" to my personal workflow. This eliminated my unnecessary "motions" and saved me one or two hours every day. This extra time allowed me to focus on more important analytical work, like finding better suppliers or analyzing sales data, instead of just doing administrative tasks.

KIM 203: Product Management (Fashion & Merchandising) was directly related to my career goal. This course taught me about fashion forecasting, the principles of design, and the role of a merchandiser. It connected the "art" of fashion to the "business" of selling clothes.

My internship was in a "fast fashion" company. This means trends change very, very quickly. My job was not just to take orders. My job was to *understand* fashion. In one product development meeting, the FADS (Fashion & Design Studio) team presented a new sample. Because of KIM 203, I was able to give valuable input. I could speak their language about "principles of design." But I could also add the merchandiser's view. I could explain that "This design is beautiful, but the fabric is too expensive for our target buyer" (product costing). Or I could say, "This color is a big trend in Europe right now, we should show this to the buyer immediately" (fashion forecasting). This course helped me become a true product manager, not just an order-taker. I was able to help guide the development of products that would actually sell.

Finally, **KIM 204: Quality and Supply Management** taught me that "quality" is not just the responsibility of the Quality Department. This course covered the entire supply chain, from raw materials to the final customer. It taught me about inventory management, addressing wastage, and global supply chains.

I applied this knowledge when I was sourcing materials. My company has a strong commitment to sustainability. One day, I had two supplier options for a new fabric. Supplier A was 2% cheaper. Supplier B was 2% more expensive but had a better sustainability report and an Oeko-Tex certificate (which means it is free from harmful chemicals). Before this course, I might have chosen Supplier A to save cost. But after KIM 204, I understood the "global supply chain" and the "importance of quality." A cheap, low-quality, or non-sustainable material is a huge *risk*. The buyer could reject the whole order, or we could fail a social audit. I chose Supplier B and explained my reasoning to my manager. He agreed. This course taught me to think about the *total value* and *long-term risk* of my decisions, not just the *short-term cost*.

3.2 Suggestion for industry improvement

The "total factory management" concept of my internship (KIM 300) allowed me to work in every major department. This gave me a unique "helicopter view" of the entire operation. I could see how a small problem in one department could cause a big problem in another department. I used the "SWOT Analysis" method, which I learned in KIM 201, to analyze the internal Strengths and Weaknesses and the external Opportunities and Threats for each key department.

Based on this analysis, I have several professional suggestions for improvement.

First, for the Marketing & Merchandising Department:

- **Explanation:** This department is the "bridge" between the factory and the buyer. They manage the relationship, take the orders, do the costing, and must communicate all details (like color, size, and shipment date) to the rest of the factory.
- **SWOT Analysis:** The key **Strength** is the strong personal relationship the team has with major buyers like Zara. The primary **Weakness**, however, is the company's ERP (Enterprise Resource Planning) software. This big, complex software is used to manage all orders. But in "fast fashion," buyers change their minds *very* often. They might change the order quantity or the color just weeks before shipment. The ERP system is too slow and rigid to handle these fast changes. This creates a huge **Threat** because competitors who are more flexible can steal our business.

- **Suggestion:** My suggestion is not to replace the ERP system, as that is too expensive. Instead, I suggest creating a special "Fast-Track Team" for key buyers. This small team of merchandisers and production planners would use simpler, more flexible tools (like shared online spreadsheets, Trello, or Asana) to manage these last-minute changes. They would work *around* the slow ERP system to get the change done quickly and would only update the final details in the main system later. This would use the **Opportunity** of new, flexible software to solve the **Weakness** of the rigid ERP system.

Second, for the Knitting Department:

- **Explanation:** This department is like the heart of the factory. It takes the raw material, yarn, and uses large circular knitting machines to create the fabric. This department also has an R&D (Research & Development) section to create new fabric designs.
- **SWOT Analysis:** The **Strength** of this department is the high skill of its technicians. The main **Weakness** I observed was the R&D environment. It was noisy, full of cotton dust, and did not have good lighting. This is a poor "ergonomic" environment (a concept from KIM 202) and makes it hard for the engineers to be creative. A further **Weakness** is the lack of modern sampling tools or "kits" to produce advanced fabric structures that buyers want. The **Threat** is that competitors will develop new, fashionable fabrics faster than we can, and we will be left with only the simple, low-profit orders.
- **Suggestion:** My suggestion is to create a new, separate "Knitting Innovation Lab." This lab should be far from the main production noise. It must be clean, quiet, and very well-lit, like a modern office. This new environment would respect the engineers and boost their morale. I also suggest investing in two or three new-model sample knitting machines and the advanced software needed to run them. This lab would be an **Opportunity** to attract new, young, talented engineers. It would also become a powerful "showroom" to impress buyers, showing them we are serious about innovation.
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Third, for the Dyeing Department:

- **Explanation:** The Dyeing department takes the "grey" fabric from Knitting and gives it the correct color. This is a very chemical and water-intensive process, and it must be very precise.
- **SWOT Analysis:** The **Strength** is that the department is very good at dyeing knit fabrics accurately. The major **Weakness**, which I observed many times, is that the factory *cannot* dye woven fabrics. Fast fashion trends (an **Opportunity**) are now demanding "mixed-media" garments. For example, a polo shirt with a knit body but a woven collar. Because the factory has no woven dyeing machine, I saw operators trying to dye woven collars in a knit dyeing machine. This caused a huge "process loss" (a concept from KIM 204). The fabric was damaged, and the shade did not match. This is a big **Threat** because if we cannot make these mixed-media styles, the buyer will give the entire order to another factory that can.
- **Suggestion:** My suggestion is to invest in one or two "soft-flow" dyeing machines. These machines are specifically designed to handle delicate woven fabrics. This investment would immediately solve the quality problem and stop the process loss. More importantly, it would open up a whole new product category for the FADS (design) team and the merchandising team. We could accept more complex, higher-profit orders, which is a major **Opportunity**.

I did not observe any major problems or obstacles in the FADS (Fashion & Design) or Quality departments.

3.3 Learning for self-improvement

I feel very proud to be admitted to this prestigious program. Since the beginning of this program, I have tried to learn and gain what my noble professor has been trying to give us. I didn't really run for good marks; instead, I ran after new ideas and new learning throughout this PGD course.

From the first day until now, as I write my final internship report, this course has been full of self-learning. For example, I didn't really know about advanced Word functions like an automatic Table of Contents, automatic referencing, automatically updating Lists of Tables and Figures, and different section breaks in a single Word file. Thanks to this course, I can confidently use them now.

This course was a real wake-up call for me. In the business operations skills classes, I learned about self-branding. My professor motivated me so much. Now, I want to do something bigger. I want to go beyond my limits. If I summarize what I learned in this program, my answer is simple: I learned how to dream big. I learned to look at the beautiful sky with pride.

This PGD course really changed my thinking. Regular 9-to-6 jobs limit us to a single frame and stop us from looking outside the circle. Thanks to this PGD course, my vision of seeing this field has become wider. I know where to look to get what I deserve, to find the type of work I want to do for the rest of my life, and to gain both work pleasure and financial freedom.

When I was in high school, in a passage in my Bengali textbook, I read a line like this: "When ordinary people see grains of sand and stones, educated people see pearls." Thanks to the lessons of this PGD course, I see many things differently at my work than before.

Finally, this was a wake-up course that transitioned me from an MTO to a professional.

Chapter 4

Conclusion

My journey through Fakir Apparels Ltd. was more than just an internship. It was the place where my classroom studies became real. This report has followed my path, starting as a student with books and theories, and then walking through the most important departments of a busy factory. I began in Marketing and Merchandising, where I learned how an order is born and how to calculate its cost. I moved to the Fakir Apparels Design Studio, where I saw how new fashion ideas are created.

From there, I followed the physical product. I stood in the Knitting department and watched as yarn was turned into a new fabric. I followed that fabric into the Dyeing section, where it was given beautiful, precise colors. Finally, I worked with the Quality team, where I learned how to protect the product and the company's promise to the customer. This was the "total factory management" experience I was hoping for, and it connected every part of my education.

The most important discovery from this journey was the answer to a big question: Does school really prepare you for work? My answer is yes. As I wrote in Chapter 3, every course from my PGD-KIM program was useful. When I had to manage my team, I used the lessons from my "HR Skills" class. When a buyer asked me for a price, I could give him one in five minutes using the "spot costing" method from my "Introduction to Garments Industry" class. Even my "Industrial Engineering" course helped me organize my own desk work and save time.

This internship proved that my education gave me the right tools. I learned that a factory is not just a group of separate departments. It is one big, connected system. A small mistake in my merchandising order can cause a big problem in the knitting department. A delay in my work can stop the entire dyeing plan. Understanding this "system thinking" was the biggest and most important lesson for me.

This new understanding allowed me to see real opportunities for the factory. My suggestions in Chapter 3 like creating a "Fast-Track Team" for merchandising to handle quick changes, building a new "Knitting Innovation Lab" for R&D, and buying "soft-flow" machines for the

dyeing department, all come from this "system view." I believe these ideas can help Fakir Apparels be even more successful in the fast-fashion world.

For me, this internship was a personal change. I did not just gain experience; I gained a professional identity. I started this program as a student with a notebook. I am finishing it as a professional who understands how to apply my knowledge, how to work in a team, and how to add real value to a company. This report is the story of that change, from learning in a classroom to becoming a confident manager on the factory floor.

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