Report on
Operational Procedure
of Avery Dennison

By

Iffath Ara Eva
ID: 1000055590

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
March 2026

Declaration

It is hereby declared that

1. The internship report submitted is my/our 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/We have acknowledged all main sources of help.

Student's Full Name & Signature:

Iffath Ara Eva

ID: 1000055590

Academic Supervisor's Full Name & Signature:

James Ward Khakshi

Program Coordinator

BRAC U

Letter of Transmittal

James Ward Khakshi
Program Coordinator
BIGD, BRAC University
66 Mohakhali, Dhaka-1212

Subject: Operational Procedure of Avery Dennison

Dear Sir,

With due respect, I would like to submit my internship report as a partial requirement of successful completion of PGD-KIM at the BIGD, BRAC University on the topic of "Operational Procedure of Avery Dennison".

It was really an overwhelming experience for me to work on the selected topic in the organization. The main goal is to highlight the operational procedure of a label making industry and its different stages. Also focusing on the key learnings and focus point of each product line.

I therefore with humble submission, request that you would accept the report for assessment and help to proceed further.

Sincerely yours,

_____

Iffath Ara Eva
ID: 1000055590
Executive Development Center, BIGD
BRAC University
Date: March 15, 2026

Non-Disclosure Agreement

This agreement is made and entered into by and between Avery Dennison and Iffath Ara Eva, student of PGD-KIM, BIGD, BRAC University for the purpose of receiving certain confidential information of Company to enable the intern to undertake the project.

Company and Intern hereby agree as follows:

- ➢ Intern are required to do their job effectively, impartially and to the best of their competency.
- ➢ Intern shall maintain accurate records and keep files associated with their work up to date.
- ➢ Intern shall carry out any agreed plans for improving work performance within timeframe.
- ➢ Intern shall comply with any Departmental policies in the workplace.
- ➢ "Confidential Information" means proprietary and confidential information of Company.
- ➢ To be treated as Confidential Information, any information provided by Company to Intern in tangible form shall be marked "Proprietary and Confidential" or similar markings.

Student's Full Name & Signature:

_____

Iffath Ara Eva

ID: 1000055590

Industry Supervisor's Full Name & Signature:

_____

Aumi Monnan Antar

Manager, Global Product Development

Avery Dennison Bangladesh

Acknowledgement

With the utmost respect, I would like to thank and acknowledge my esteemed academic supervisor, James Ward Khakshi, Program Coordinator, BIGD for providing the necessary guidance throughout the internship. I was able to finish the internship report while juggling my hectic work schedule thanks to his encouragement and assistance.

I want to thank the BIGD authority and the course organizer for starting the course and for providing the helpful support we required over the full duration of the program. I am also appreciative of my office coworkers, department heads, and instructors at Avery Dennison Bangladesh for making time out of their extremely hectic schedules to help me comprehend and finish my internship.

Also, I would like to express my gratitude to Aumi Monnan Antar, Manager (Global Product Development), Avery Dennison Bangladesh my industrial supervisor at Avery Dennison Bangladesh, for serving as my mentor throughout my internship.

Finally, I would like to express my sincere gratitude to my parents whose continued inspiration, sacrifice and support encouraged me to complete the project successfully. I would like to express my gratitude and sincere thanks to all the esteemed teachers and staff of BRAC Institute of Governance and Development (BIGD), BRAC University. Above all, I see this opportunity as a major milestone in my future career development. BIGD for its sincere cooperation and valuable advice to complete this Postgraduate Diploma in Knitwear Industries Management. I will try to use my skills and knowledge in the best way possible.

Executive Summary

This internship report provides a comprehensive overview of the operational procedures at Avery Dennison Bangladesh, focusing on the practical application of material science and digital identification solutions within the apparel industry. It details a multi-departmental rotation spanning Operations (Offset, Digital, RFID, Thermal, and PFL), Global Product Development, Human Resources, Procurement, and Demand Planning.

The report highlights key learnings regarding cross-functional business operations, data-driven strategies, and the integration of sustainable manufacturing practices. It serves as a bridge between academic theory and real-world industrial application, emphasizing the importance of technical expertise, collaboration, and adaptability in a global corporate environment. Furthermore, it includes strategic recommendations for enhancing operational efficiency and outlines a structured professional development plan aimed at fostering future growth in supply chain optimization and product development.

Keywords: Multinational Corporation, RFID, IPPS, Supply Chain Transparency, Operation Efficiency, Customer Satisfaction.

Table of Contents

Letter of Transmittal iii

Non-Disclosure Agreement iv

Acknowledgement v

Executive Summary vi

List of Tables 3

List of Acronyms 4

Chapter 1: About Organization 6

1.1 Overview of Avery Dennison Bangladesh 6

1.2 Company Vision, Mission and Values 6

1.3 Bangladesh Operation 8

1.4 Products/services produced by the Industry 8

1.5 Avery Advantages as a competitors 9

1.6 Key Brands of Avery Dennison 9

1.7 Organogram of Avery Dennison Bangladesh 10

Chapter 2: Description about task accomplishment 11

2.1 Operations Department 12

2.2 Global Product Development 18

2.3 Human Resources (HR) Department 19

2.4 Procurement Department 20

2.5 Demand Planning Department 21

Chapter 3: Critical Assessment of Internship 22

3.1 Application of Generic and Industry specific courses during internship 22

3.2 Recommendation for Industry Improvement.....27

3.3 Learning for Self-Improvement.....29

Chapter 4: Conclusion and Closing Remarks.....30

References.....31

List of Tables

Table 1: Areas I worked on 11

Table 2: IPPS machines.....14

Table 3: GPD Core Functions.....18

Table 4: Key HR Roles and Responsibilities……...19

Table 5: Demand Planning Key Roles and Responsibilities…….21

List of Acronyms

IPPS	In-Plant Printing Solutions
RFID	Radio Frequency Identification
HR	Human Resources
ADBD	Avery Dennison Bangladesh
PFL	Printed Fabric Label
GPD	Global Product Development
EPZ	Export Processing Zone
HTL	Heat Transfer Label
RB	Retail Brand
USA	United States Of America
QA	Quality Assurance
UV	Ultra Violet
RM	Raw Material
QC	Quality Control
PET	Polyethylene Terephthalate
ERP	Enterprise Resource Planning
ISO	International Organization for Standardization
PLM	Product Lifecycle Management
PSS	Product Specification Sheet
EHS	Environmental, Health, and Safety
GPS	Grow Perform Succeed
CSR	Corporate Social Responsibility
AD	Avery Dennison
PR	Purchase Request
PO	Purchase Order

LT	Lead Time
IQC	Incoming Quality Control
GRN	Goods Received Note
CRD	Customer Request Date
FG	Finished Goods
HRM	Human Resources Management
MRP	Material Requirement Planning

Chapter 1: About Organization

1.1 Overview of Avery Dennison Bangladesh

As a prominent Fortune 500® leader in materials science and digital identification, Avery Dennison Bangladesh operates a state-of-the-art facility in the Dhaka Export Processing Zone, employing over 2,000 professionals to deliver innovative, sustainable, and data-driven labeling solutions that empower the global apparel industry.

The story of the Avery Dennison starts in 1935 with a loan of $100, some spare components, and a clever idea. Ray Stanton Avery created the first self-adhesive label in history, known as Sticker, to market as a product. In 1935, he established Avery Adhesives in downtown Los Angeles. In 1990, this business amalgamated with Dennison Manufacturing to become Avery Dennison.

1.2 Company Vision, Mission and Values

Vision Statement

Avery Dennison's vision is to be a global leader in materials science and digital identification solutions that make every brand more inspiring and the world more intelligent.

Additional perspectives on the company's vision include:

Strategic Partnership: Being a strategic partner that enables business through collaboration, engagement, and excellent financial management.

Digital Integration: Connecting the physical and digital worlds to solve complex global challenges.

Sustainability: Pioneering a world where everyday items are smarter and more sustainable.

Mission Statement

Avery Dennison's mission is to be the trusted, innovative partner enabling brands to enhance identity, improve customer experience, and drive operational efficiency through materials science and digital identification.

Key components of this mission involve:

"Making Possible": Delivering products and solutions that advance industries while focusing on sustainability, connectivity, and efficiency.

Operational Excellence: Delivering Finance best practices, compliance, and controllership.

Customer Centricity: Directly targeting brands as primary partners to enhance their identity and performance.

Innovation: Using material science innovations, such as RFID solutions, to make products more intelligent and connected.

Values

Avery Dennison is guided by eight core values that shape its culture and business operations:

- Integrity: Prioritizing ethical behavior, honesty, and transparency.
- Courage: Taking risks, challenging the status quo, and standing up for what is right.
- External Focus: Listening to customers and exploring the external environment to drive innovation.
- Diversity: Fostering an inclusive environment that values different perspectives and ideas.
- Sustainability: Focusing on environmental responsibility and the long-term health of the planet and community.
- Innovation: Using imagination and intellect to create new possibilities and disrupt the status quo.
- Teamwork: Collaborating across global boundaries to leverage collective strengths and achieve goals.
- Excellence: Setting high standards for performance and quality and delivering on commitments.

1.3 Bangladesh Operation

Avery Dennison Bangladesh (ADBD) operates as a significant hub within the global materials science industry, centered in a state-of-the-art facility spanning approximately 240,000 square feet within the Dhaka Export Processing Zone (DEPZ) in Savar. This expansive manufacturing site is supported by a strategic administrative presence, including a high-speed support unit in Uttara and a corporate headquarters located in Uday Tower, Gulshan 1. The scale of the operation is substantial, employing over 2,000 professionals across three dedicated units to manage its diverse production requirements.

The facility's output is characterized by its high-volume manufacturing capabilities, which generate an estimated annual sales revenue of $100M. This robust financial performance reflects ADBD's critical role in the regional supply chain, delivering a wide array of specialized products including integrated Radio Frequency Identification solutions, woven and heat transfer labels, and various digital and offset paper items. The concentration of these multifaceted operations within the DEPZ allows the company to leverage specialized infrastructure and logistics, ensuring efficient delivery of innovative, sustainable labeling solutions to the global apparel market.

1.4 Products/services produced by the Industry

Avery Dennison Bangladesh produces a diverse range of specialized labeling and packaging solutions designed to meet the complex needs of the global apparel industry. Its portfolio includes integrated RFID solutions, which utilize radio frequency identification inlays to provide advanced tracking and inventory management. The company also manufactures Printed Fabric Labels (PFL), typically care instructions printed on ribbon, and Woven Labels created through precise yarn weaving. These products are essential for conveying brand identity and regulatory information directly on garments.

Furthermore, the industry produces Heat Transfer Labels (HTL), which are applied to clothing using heat, and a variety of digital and offset items such as paper tags and over riders. Its flexography capabilities allow for the production of paper items in roll form, while In-Plant Printing Solutions (IPPS) empower customers to print variable data labels directly at their own facilities. This comprehensive product line demonstrates a strategic integration of material

science and digital technology, allowing the company to serve as a one-stop shop for branding and information solutions that enhance supply chain visibility and consumer engagement.

1.5 Avery Advantages as a competitors

Avery Dennison maintains a formidable competitive position through two primary, distinguishable advantages: its unmatched global scale and its deep vertical integration in materials science.

Unmatched Global Scale and Agility:
Avery Dennison operates an expansive footprint in over 50 countries with approximately 200 manufacturing and distribution facilities. This global reach, which includes a dominant presence in high-growth emerging markets like India and China, allows the company to serve a diverse array of industries from apparel and general retail to pharmaceuticals and automotive with unparalleled agility.

Vertical Integration and Innovation Leadership:
A second core advantage is the company's deep vertical integration, particularly in adhesives and polymer chemistry. As the only major vertically integrated player in its field, Avery Dennison maintains superior control over costs, supply reliability, and product performance. This expertise is bolstered by a consistent annual investment in R&D. By focusing on high-value categories like Intelligent Labels (Radio Frequency Identification) and sustainable, eco-friendly materials, the company consistently outperforms competitors in profitability and sets the global standard for performance and quality.

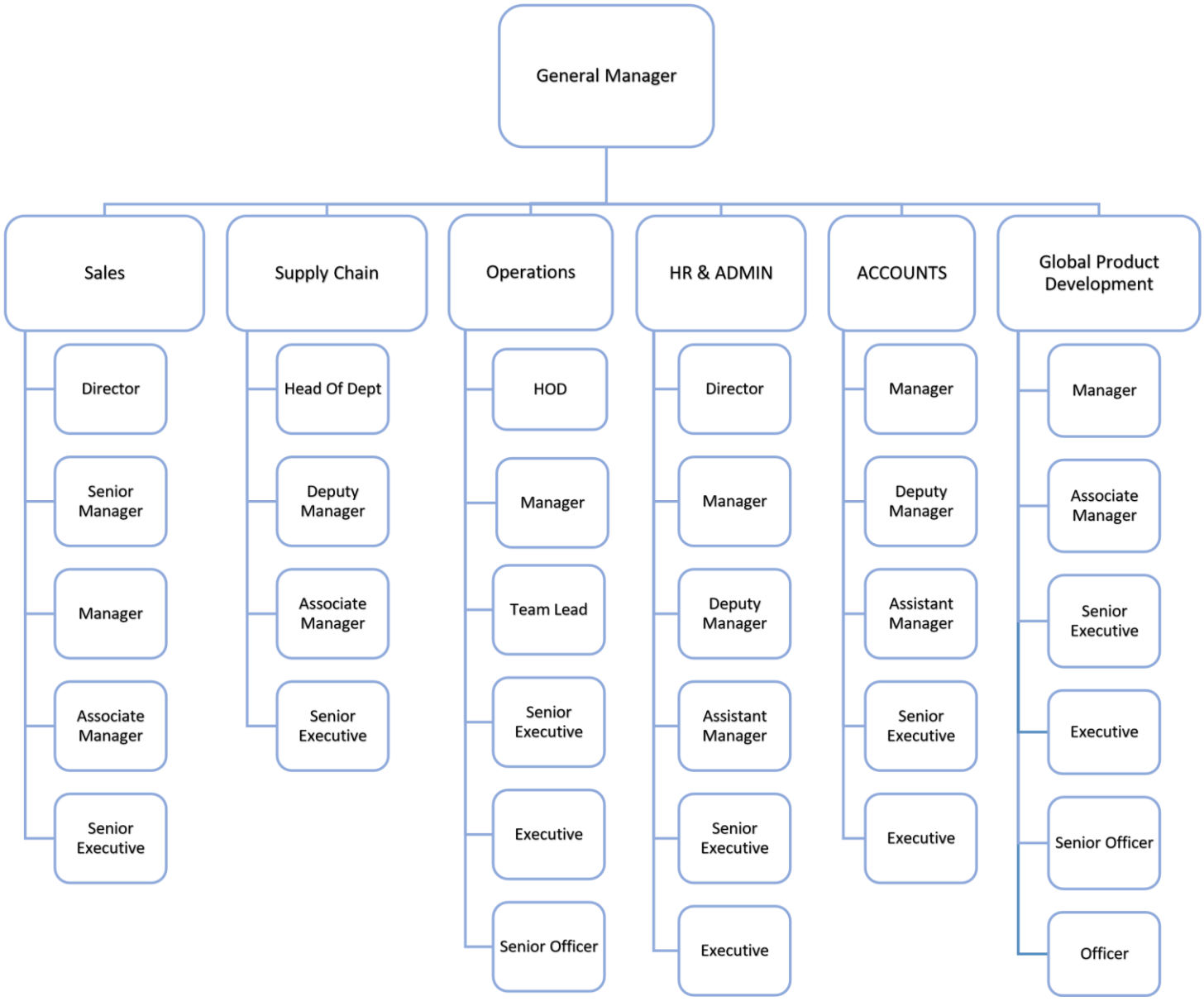
1.6 Key Brands of Avery Dennison

Avery Dennison Bangladesh maintains strategic partnerships with a diverse portfolio of prestigious global Retail Brands (RBOs), primarily originating from Europe and North America. These collaborations highlight its capacity to meet the stringent quality and operational standards of industry leaders such as:

- H&M (Hennes & Mauritz): A major partner from Sweden.
- Inditex S.A.: The Spanish owner of globally recognized brands like Zara.

- Marks & Spencer (M&S) and C&A: Representing key European markets in the United Kingdom and the Netherlands, respectively.
- American Eagle and J.C. Penney: High-profile partners from the United States.
- Decathlon: A significant partner for which specialized products, such as lifting straps and boxing wraps, are developed and tested.

1.7 Organogram of Avery Dennison Bangladesh



Chapter 2: Description about task accomplishment

This chapter provides a comprehensive account of the activities, responsibilities, and key observations documented during my internship at Avery Dennison Bangladesh (ADBD). The primary objective of this phase was to gain a holistic understanding of the cross-functional operations within a global manufacturing leader. To achieve this, I rotated through several critical departments, including Operations (Offset, Digital, Radio Frequency Identification, and Printed Fabric Label), Global Product Development (GPD), Human Resources, Procurement, and Demand Planning.

The following sections detail the operational workflows, technical processes, and departmental roles I observed and participated in. Each sub-section highlights the integration of advanced technology such as ERP systems and automated printing machinery with strategic management practices to meet the evolving demands of the global apparel industry. By documenting these task accomplishments, this chapter illustrates the practical application of theoretical business and supply chain concepts in a high-volume, professional industrial environment.

Table 1: Areas I Worked on

Department I Worked On	**Timeline**
2.1 Operation Department	25 days
a. Offset	5 days
b. Digital	4 days
c. HTL (Heat Transfer Label)	4 days
d. RFID (Radio Frequency Identification)	4 days
e. Thermal	4 days
f. PFL (Printed Fabric Label)	4 days
2.2 Global Product Development	19 days
2.3 HR Department	7 days
2.4 Procurement Department	7 days
2.5 Demand Planning Department	8 days

2.1 Operations Department

The Operations Department at Avery Dennison Bangladesh is structured around multiple specialized production units. Each sub-department plays a critical role in fulfilling diverse customer requirements, ensuring product quality, and supporting innovation.

Offset Printing Department:

In my internship at Avery Dennison Bangladesh, I had the opportunity to visit and observe the Offset Printing Department, where high-quality printed labels and packaging materials were produced for global brands. The department operates under a highly structured workflow, integrating both manual precision and automated systems to ensure consistency, color accuracy, and efficiency in bulk production.

Process Flow Chart of Offset Printing Method

Artwork & Design Approval

↓

Plate Making (CTP Process)

↓

Ink Mixing & Color Matching

↓

Machine Setup (Feeding, Registration & Calibration)

↓

Printing Operation (On GTO/CD74 Machines)

↓

Quality Inspection (Color, Registration, Print Defects)

↓

Drying & Curing

↓

Cutting (Polar Machine)

↓

Bundling & Dispatch to Finishing Department

Offset Operational Description

The offset printing process begins with artwork approval from the GPD or customer service teams, followed by creating aluminum plates for each CMYK color via Computer-to-Plate (CTP) technology. Special inks are then matched to the Pantone Color System, with technicians using viscosity and density meters to maintain consistency. During the printing phase, ink is transferred from the plate to a rubber blanket and then to the substrate under continuous operator monitoring. Finally, random samples undergo quality checks for color and defects before the printed sheets are dried, UV-cured, and precision-trimmed using a Polar 115 cutting machine.

Digital Printing

I also visited the Digital Printing Department, which mainly handles short-run, variable data, and high-speed color label printing. This department is ideal for customers requiring frequent artwork changes, personalized designs, or barcoded items. Digital printing eliminates the need for plates and offers fast turnaround with consistent quality.

Process Flow Chart of Digital Printing

Artwork & File Preparation

↓

Printer Setup & Media Loading

↓

Digital Printing (HP Indigo / Konica Minolta)

↓

Color & Quality Inspection

↓

Lamination / Varnish (if required)

↓

Cutting & Finishing

↓

Final QC & Dispatch

Digital Operational Description

The digital printing workflow begins by optimizing artwork files through AI software for superior color and resolution. Operators then load the appropriate substrate rolls, such as paper, film, or PET, into the machinery. The department utilizes HP Indigo presses, which employ electro-ink technology to achieve quality comparable to offset printing. A critical color calibration process is performed to ensure all prints maintain consistency with Pantone references. Once printed, labels are laminated or varnished to enhance their durability. Finally, the sheets are precision-cut into their final forms using Graphtec or Polar cutting machines.

IPPS Department

The In-Plant Printing Solution (IPPS) is one of Avery Dennison's most innovative service models. Instead of producing all labels in the factory, Avery provides customers (factories, vendors, or brands) with on-site printing systems, allowing them to print variable data labels directly within their own facilities. This includes care labels, price tickets, barcode labels, and RFID-enabled labels. During my internship, I observed how the Avery IPPS team installs, calibrates, and supports these systems for efficiency and compliance.

Table 2: IPPS machines

Machine Name	**Function**	**Remark**
ADTP-1 / ADTP-2 Printer	Printing & RFID encoding	Avery Dennison industrial printers
Zebra ZT600 / SATO CL4NX	Thermal printing	Used at customer sites
NiceLabel / Bartender	Label design software	Integrates with ERP data
RFID Encoder Module	Data writing	Encodes EPCs into RFID labels
Barcode Scanner	Quality verification	Ensures data accuracy

IPPS Process Flow Chart

Customer Enrollment & System Setup

↓

Software Integration (ADTP / Bartender)

↓

Template & Database Configuration

↓

Label Media & Ribbon Loading

↓

On-Demand Printing (Care, Price, or RFID Labels)

↓

Quality Verification (Barcode, Alignment)

↓

Label Application & Record Sync

↓

Technical Support & Maintenance

IPPS Operational Description

The IPPS workflow begins with installing workstations and training operators on template selection and troubleshooting. The system integrates with ORACLE to import product data, using locked templates to ensure brand consistency. Avery Dennison provides thermal ribbons and label rolls for industrial printers like the ADTP or Zebra series. Quality is verified through barcode scanners and automated RFID encoding checks. Finally, the IPPS team offers remote technical support and periodic calibration to maintain consistent global output quality.

RFID Department: RFID (Radio Frequency Identification) is one of Avery Dennison's smart labeling technologies. This department combines printing, encoding, and verification processes to produce RFID-integrated labels used in retail.

RFID Process Flow Chart

RFID Inlay Preparation

↓

Label Printing (Offset / Digital / Thermal)

↓

RFID Chip Encoding

↓

Antenna & Chip Verification

↓

Quality Testing (Read Range, Memory)

↓

Cutting & Final Packing

RFID Departmental Operations

The IPPS workflow begins with installing workstations and training operators on template selection and troubleshooting. The system integrates with ORACLE to import product data, using locked templates to ensure brand consistency. Avery Dennison provides thermal ribbons and label rolls for industrial printers like the ADTP or Zebra series. Quality is verified through barcode scanners and automated RFID encoding checks. Finally, the IPPS team offers remote technical support and periodic calibration to maintain consistent global output quality.

Printed Fabric Label Department

During my internship in PFL department I observed, that Printed Fabric Label Department produces soft, durable care labels printed on satin, nylon, or polyester tapes. These labels are sewn into garments, providing wash care, size, and brand information. This is the label that attached also with the garments and kept with the finished product.

Flow Chart:

Material Loading (Satin / Nylon Tape)

↓

Printing (Flexo / Thermal / Digital)

↓

Drying / Curing

↓

Slitting & Cutting

↓

Quality Check

↓

Packing & Dispatch

PFL Operational Details

The PFL production process starts with loading fabric tapes onto the machine and guiding them through rollers. Water-based or resin inks are applied based on customer needs, followed by drying using IR or hot-air dryers. Finally, labels are precision-slit and stacked to meet the order quantity.

Tasks and Contributions:

Assisted in production monitoring by observing the end-to-end workflow, from initial artwork approval to final cutting and bundling. This included performing quality checks for color accuracy and identifying potential print defects to ensure all products met global standards.

Learning:

Gained a deep understanding of the Pantone Color System's role in maintaining consistency across various substrates such as paper, film, and fabric. Additionally, it learned to identify process challenges and realized the importance of Lean 5S principles in maintaining machine organization and workplace cleanliness.

2.2 Global Product Development

The Global Product Development (GPD) Department at Avery Dennison Bangladesh is the central hub for innovation, product engineering, and technical development. The team works closely with global and regional Avery Dennison units to design, test, and commercialize new labeling, packaging, and branding solutions for the apparel industry.

GPD bridges the gap between concept and production, converting customer ideas into manufactured, cost-effective, and sustainable solutions.

Table 3: GPD Core Functions

Function	Description
Product Design & Development	Creating new concepts, materials, and finishes based on needs.
Material Innovation	Developing sustainable substrates, inks, adhesives, and finishes aligned with Avery Dennison's ESG goals.
Sample Creation & Prototyping	Producing mockups for customer approval.
Technical Validation	Conducting performance, wash, and durability.
Process Optimization	Collaborate with production to ensure efficiently.
Customer Support & Technical Consultation	Assisting brands and factories in choosing the right label solution for fabric and application type.
Global Standardization	Ensuring every regions follow consistent quality guidelines.

Detailed Operational Description

The Global Product Development (GPD) process starts with gathering requirements from product briefs to assess material and sustainability needs. Designers then use tools like PLM to create functional prototypes, selecting substrates from a library to ensure compatibility with printing methods. After rigorous internal testing for durability and color fastness, designs are sent for customer approval and documented in ORACLE. Finally, a Product Specification Sheet (PSS) is released to operations for mass production.

Tasks and Contributions

Actively participated in prototype creation and technical validation, which involved conducting internal lab tests such as wash tests, peel and adhesion tests, and barcode readability checks. It also assisted in preparing Product Specification Sheets (PSS) to ensure that accurate technical data was handed over to the production and supply chain teams.

Learning

Observed how creative design and engineering merge to transform customer ideas into viable products. It developed a critical understanding of how color variance affects production and learned the necessity of a highly structured project tracking system to meet strict timelines.

2.3 Human Resources (HR) Department

During my internship at Avery Dennison Bangladesh, I had the opportunity to learn about the Human Resources (HR) Department, which plays a vital role in managing the organization's most valuable asset its people. This department ensures a safe, engaging, and inclusive workplace by aligning employee capabilities with the company's global business goals.

This department focuses on Talent Acquisition, Training & Development, Performance Management, Compensation & Benefits, and Compliance. It serves as a strategic partner to every other department, ensuring that people, processes, and policies work together efficiently.

Table 4: Key HR Roles and Responsibilities

HR Sub-Function	Responsibility
Talent Acquisition	Recruiting and onboarding skilled candidates
Employee Relations	Maintaining workplace harmony and communication
Compensation & Benefits	Payroll, benefits, and performance-based increments
Learning & Development	Conducting skill enhancement and leadership training
Compliance & Audit	Ensuring legal and ethical compliance in operations

Operational Description

HR department manages the employee lifecycle by collaborating with department heads on workforce planning and recruitment through internal posts and platforms like LinkedIn. They identify training needs through annual reviews, offering technical, leadership, and EHS workshops. Using the GPS system, they oversee performance goals and conduct bi-annual reviews.

Tasks and Contributions

Collaborated with the event management team to help organize several corporate programs, which enhanced skills in team coordination and logistical planning.

Learning

Gained exposure to data-driven HR strategies, understanding how succession planning and performance metrics directly support employee career growth and organizational stability. It also learned how HR serves as a vital bridge between management and employees to ensure a respectful work environment.

2.4 Procurement Department

I explored the workings of the Procurement Department, a vital function that ensures a continuous and cost-effective supply of raw materials, consumables, and services necessary for the company's production and operations. The procurement team acts as a strategic bridge between suppliers and internal departments, maintaining Avery Dennison's global standards in sourcing, quality, and sustainability.

Detailed Operational Description

The procurement process begins by identifying material needs through a Material Requirement Plan (MRP), which includes both raw and indirect materials. Requesting departments then submit a Purchase Requisition (PR) in ORACLE, detailing the required items, quantities, and urgency. After the PR is approved, the procurement team evaluates quotations from at least three vendors based on price, quality, and lead times before issuing a formal Purchase Order (PO). Upon delivery, goods are inspected by the Incoming Quality Control (IQC) team to ensure they meet specifications. Finally, the Finance department verifies the supplier's invoice against the PO and Goods Received Note (GRN) to process payment according to the agreed cycle.

2.5 Demand Planning Department

I learned about the Demand Planning Department, which serves as a vital connection between Sales, Production, and Supply Chain. The department aims to guarantee timely material delivery and production scheduling based on customer forecasts and business needs. Demand Planning analyzes customer demand, tracks inventory levels, and works with procurement and production to keep a steady and efficient supply chain. This helps Avery Dennison meet customer needs effectively while reducing excess inventory and operational delays.

Table 5: Demand Planning Key Roles and Responsibilities

Role	Responsibility
Demand Planner	Analyze forecasts and demand trends, by coordinating with production
Material Planner	Manage material in-housing, MRP execution, and stock maintenance
Production Scheduler	Create daily and weekly production plans aligned with CRD
Planning Manager	Oversee planning strategy, forecast, and departmental coordination

Tasks and Contributions

Assisted in the material allocation process and observed how the team sources materials and executes Material Requirement Planning (MRP) to determine the exact quantity and timing of materials needed.

Learning

Learned how forecast errors can directly impact inventory costs and delivery timelines. It also understood the importance of seamless cross-functional communication between sales and production teams to avoid both material shortages and overproduction.

Chapter 3: Critical Assessment of Internship

My internship at Avery Dennison Bangladesh was a great chance to see how a manufacturing organization works, especially in terms of quality, creation, and sustainability. It helped me link what I learned in school to real-life practices and see how different departments work together to meet business goals. I rotated through various departments, including GPD, Offset, Digital, and RFID Printing, Procurement, Demand Planning, and Human Resources (HR). This experience let me watch the whole process from development to delivery.

The internship also helped me build professional skills like time management, adaptability, analytical abilities, and teamwork. Each department needed different focuses, whether it was reviewing technical print data or understanding capacity forecasts or HR documentation. These experiences boosted my flexibility and professional confidence.

There were challenges too. At first, grasping ERP systems, MRP reports, and technical production terms took extra effort. However, this pushed me to be more proactive and self-motivated in my learning.

Overall, this internship provided me with a solid understanding of product development and supply chain operations in a multinational setting. It also strengthened my interest in a career in supply chain and sustainable manufacturing, which aligns with Avery Dennison's mission of responsible and innovative business practices.

3.1 Application of Generic and Industry specific courses during internship

The internship served as a vital testing ground for academic concepts within a high-pressure, global manufacturing framework. It moved beyond theoretical understanding to require the direct application of complex business and technical theories. Below are the course details and their applications to the Industry.

HR Skills and Competencies

Academic Knowledge: Academic courses in HR Skills and Competencies offer a comprehensive, multidisciplinary framework designed to manage an organization's most critical asset: its human capital. This field of study integrates strategic business management with behavioral sciences to align workforce capabilities with overarching corporate objectives.

The curriculum delves into technical domains such as Workforce Planning, which utilizes data-driven forecasting to identify talent gaps, and Talent Acquisition, focusing on the end-to-end recruitment lifecycle from job analysis to onboarding. Students master Performance Management through systems like Avery Dennison's "Grow Perform Succeed" (GPS), learning to design frameworks for goal alignment, continuous feedback, and professional up skilling. The study also encompasses Total Rewards and Compensation, emphasizing the design of equitable salary structures and benefits such as medical insurance and annual bonuses balanced against market benchmarks and financial constraints. Furthermore, it provides deep expertise in Employment Law and Compliance, ensuring organizational adherence to labor regulations and ethical standards. Beyond technicalities, the course cultivates vital soft skills like Relationship Management, Conflict Resolution, and Ethical Leadership, empowering HR professionals to act as strategic partners and cultural architects who foster inclusive, high-performance environments.

Industrial Reality: At ADBD, these theories were applied through the Grow Perform Succeed (GPS) system, which manages goal alignment and continuous feedback. I observed how HR collaborates with department heads for workforce planning and uses digital systems for payroll and benefits administration.

Analytical Skills and Competencies

Academic Knowledge: Academic courses in Analytical Skills and Competencies focus on the systematic process of decomposing complex information into smaller, manageable components to facilitate logical decision-making. Students are trained to identify cause-and-effect relationships and patterns through diverse methodologies, including Quantitative Analysis for interpreting large datasets and Qualitative Analysis for assessing non-numerical evidence. The curriculum emphasizes mastering tools like spreadsheets and SQL, alongside cognitive skills such as Critical Thinking, which involves questioning assumptions and assessing the reliability of information. Furthermore, these courses cover Predictive Analytics and Forecasting to anticipate future trends and Problem-Solving techniques to identify root causes and design effective solutions. A key academic priority is also placed on Communication, ensuring that complex analytical findings can be clearly synthesized and presented to diverse stakeholders.

Industrial Reality: I applied these skills to interpret complex **Material Requirement Planning (MRP)** reports and supply chain datasets at ADBD. Quantitative analysis was essential for evaluating production efficiency and forecasting demand, transforming raw data into actionable business insights.

Communication Skills

Academic Knowledge: Communication Skills provide a robust theoretical and practical foundation for mastering human interaction in professional, social, and organizational contexts. The curriculum covers foundational principles like verbal and non-verbal messaging, perception, and active listening, while delving into the interpersonal dynamics of trust-building, rapport, and conflict resolution. Students develop advanced competencies in public address, learning to organize thoughts for specialized audiences and master delivery through voice and technology. Furthermore, the study includes strategic and professional communication, such as report writing and meeting facilitation, alongside organizational theories for leading teams and managing group dynamics. By integrating behavioral science to address biases and improve emotional intelligence, these courses equip learners with essential tools to inspire action and foster a culture of mutual respect within a global workforce.

Industrial Reality: Business communication principles were vital for navigating ADBD's matrixes structure. I maintained professional standards when drafting **Product Specification Sheets (PSS)** and coordinated with regional hubs to ensure project alignment.

Business Operation Skills

Academic Knowledge: Business Operation Skills provide a comprehensive foundation in the strategic management of processes, resources, and people to drive organizational efficiency and profitability. This multidisciplinary field of study integrates the core activities of a business including supply chain management, production planning, and quality control to ensure products and services are delivered effectively to meet market demands. The curriculum emphasizes process analysis and improvement through tools like value stream mapping and **Lean Six Sigma** to identify bottlenecks and eliminate waste, alongside operational

planning and control techniques like demand forecasting and capacity scheduling. Students gain essential skills in financial and risk management, learning to interpret P&L statements and implement frameworks for business resilience, while also exploring the human side of operations through strategic leadership and diverse team management. Modern programs further integrate digital transformation by utilizing **ERP systems** like Oracle or SAP and AI-driven analytics to automate workflows. By mastering these competencies, professionals are equipped to streamline complex workflows, optimize resource allocation, and adapt to the dynamic challenges of the global industrial landscape.

Industrial Reality: These skills were applied to the real-time scheduling of high-value machinery like the Heidelberg Speed master. I observed how ADBD manages operational planning to ensure that production flows meet Customer Request Dates (CRD).

Introduction to Garment Industry Knitwear

Academic Knowledge: Introduction to Garment Industry Knitwear provide foundational knowledge of knitwear design and production within the global apparel market. The curriculum explores the modern industry context, focusing on the selection of raw materials, such as various yarn types and counts, and their impact on fabric aesthetics and performance. Students delve into the history and evolution of knitting technology, moving from hand-knitted garments to modern industrial machinery, including circular, warp, and flat-bed technologies. Key modules cover basic and complex knit structures, stitch types, and the mechanics of knitting machinery. The course also emphasizes garment construction methods such as fully fashioned, seamless, and cut-and-sew exploring their impact on production efficiency and sustainability. Advanced topics often include CAD/CAM for digital pattern development, Stoll programming, and garment make-up processes like linking and finishing. By mastering these technical and design skills, including body shapes and silhouettes, learners are prepared for roles such as knitwear product developers, designers, or buyers in the textile and fashion sectors.

Industrial Reality: Understanding knitwear needs, such as wash durability and stretch, was crucial for developing Printed Fabric Labels (PFL) and Heat Transfer Labels (HTL). I learned how to identify knit fabric defects to ensure label compatibility with diverse apparel materials.

Industrial Engineering (IE)

Academic Knowledge: Industrial Engineering (IE) provide a comprehensive education in the analysis, design, and improvement of integrated systems that combine people, technology, and information. The curriculum is grounded in a rigorous foundation of mathematics, natural sciences, and engineering principles, which students then apply to optimize complex processes and systems. Key areas of study include operations research, which uses deterministic and stochastic models for decision support; human factors and ergonomics, focusing on the interface between humans and machines; and manufacturing systems, including production planning and control. Students also gain expertise in data analytics, systems modeling, and supply chain engineering. Through hands-on laboratory experiences and senior design capstone projects, learners solve real-world industrial problems, often in collaboration with industry partners. By mastering methodologies like Lean Six Sigma and statistical quality assurance, graduates are equipped to enhance productivity, reduce waste, and improve the overall efficiency of operational systems in various business and governmental settings.

Industrial Reality: IE principles were evident through **5S standards** and the **Enterprise Lean Sigma (ELS)** approach at ADBD. These methodologies were used to streamline manufacturing workflows and reduce waste during production.

Production Management, Merchandising, and Quality Management

Academic Knowledge: Production Management, Merchandising, and Quality Management provide a comprehensive and integrated approach to the lifecycle of fashion and consumer goods, from initial design to final customer satisfaction. The Production Management component focuses on the essential link between a designer's vision and a retail-ready product, emphasizing technical specification development, global sourcing, logistics, and financial analysis for cost and profitability. Merchandising training develops instrumental skills in fashion forecasting, market analysis, and the creation of assortment plans and merchandise budgets that align with target markets and performance goals. This is further supported by Quality Management modules, which cover concepts of design, assessment, and improvement of quality systems, utilizing statistical process control and experimental design to ensure products meet rigorous standards. Together, these disciplines equip students with the analytical

and technical expertise to manage complex supply chains, apply industry-relevant technology, and implement promotional strategies that enhance company performance in a global marketplace.

Industrial Reality: Merchandising teams at ADBD used the VIPS system to manage order flows between sales and production. Quality theories were applied via AQL 1.5 inspection standards and ISO compliance, ensuring every batch met global brand expectations.

3.2 Recommendation for Industry Improvement

Based on the operational workflows and challenges documented during the departmental rotations at Avery Dennison Bangladesh (ADBD), here is a detailed critical evaluation of each unit:

Global Product Development (GPD)

GPD serves as the innovative central hub of ADBD, bridging the gap between high-level customer concepts and viable, mass-produced labeling solutions. The department demonstrates exceptional technical engineering capabilities, utilizing tools like Product Lifecycle Management (PLM) and Adobe Creative Suite to develop complex prototypes that align with global sustainability goals. However, a critical analysis of the "design-to-print" workflow revealed a significant reliance on manual data entry during the creation of Product Specification Sheets (PSS) in ORACLE. This manual interface introduces a systemic risk; even minor inaccuracies in material codes, ink types, or dimensions can propagate through the supply chain, potentially leading to substantial production delays, material waste, and financial loss during bulk commercialization.

Operations (Offset, Digital, RFID, and PFL)

The production floor at ADBD showcases a diverse range of technological expertise, from the high-volume precision of Offset Printing to the agility of Digital Printing.

Offset and Digital: The Offset department utilizes industry-leading machinery like the Heidelberg Speed master to achieve superior color consistency for large orders. In contrast, the

Digital unit provides the flexibility needed for short runs and variable data, though it carries a higher per-unit cost.

RFID: This department highlights the company's "Make Possible" philosophy by encoding intelligence into physical labels for retail transparency. A critical challenge observed here is the need for near-perfect synchronization between print layout and electronic data flow (EPC matching) to avoid bulk errors.

PFL: This unit focuses on comfort and durability, yet it requires rigorous quality inspections under magnifiers to ensure print legibility on textured fabric tapes.

Procurement and Demand Planning

These departments act as the critical nervous system of ADBD, balancing sales forecasts with production capacity. Demand Planning utilizes customer data to schedule multi-million dollar machinery, yet it faces constant challenges from volatile order patterns. A key operational bottleneck identified in Procurement is the management of lead times for imported raw materials. Reliance on global vendors and complex customs procedures can create shortages, as seen in projects where specific paper strings or specialized substrate must meet high Minimum Order Quantities (MOQ) before local production can begin.

Human Resources (HR)

The HR department effectively oversees a massive workforce of over 2,000 professionals through structured systems like Grow Perform Succeed (GPS). While the talent acquisition and employee engagement programs are robust, there is a clear opportunity to optimize the onboarding process. Specifically, providing new joiners with earlier, more structured technical training on ERP systems (Oracle/SAP) would significantly reduce the steep initial learning curve and allow interns and new staff to contribute to high-level technical tasks more rapidly.

3.3 Learning for Self-Improvement

The internship period at ADBD was a transformative stage for my professional development, contributing to the growth of both technical and soft skills. During this period, I developed strong analytical and technical abilities, particularly in interpreting complex technical drawings, analyzing high-volume workflow reports, and using data sets for evidence-based decision-making. I also gained practical familiarity with the Pantone Color System and the compatibility between substrates and inks, which strengthened my technical understanding of production processes.

In addition to technical learning, the internship significantly improved my soft skills. Working across different departments enhanced my time management, multitasking ability, and professional communication. The experience required a high level of adaptability and encouraged proactive problem-solving to identify operational challenges and potential process bottlenecks.

Reflecting on this experience, I have identified several areas for further professional development aligned with my long-term career goals in supply chain optimization and sustainable materials science. In the short term, I plan to strengthen my analytical capabilities by learning advanced data analytics and visualization tools such as Power BI and Tableau to better interpret complex supply chain data. I also aim to pursue professional certification in Lean Six Sigma to deepen my understanding of process optimization and waste reduction. I'll pay more attention to improving my writing skills.

In the long term, I aspire to build a career that integrates sustainable product development with efficient manufacturing practices. By leveraging the technical knowledge, collaborative mindset, and global perspective gained during the internship, I aim to contribute to innovation and sustainable practices within the apparel and materials science industry. Overall, this internship served as a significant milestone in my professional journey, helping transform academic knowledge into practical industry experience while providing a clear direction for future career development.

Chapter 4: Conclusion and Closing Remarks

My internship at Avery Dennison Bangladesh turned out to be far more than merely a learning opportunity; it became a significant period of both personal and professional development. Being part of departments such as GPD, Offset and Digital Printing, Thermal and RFID Label Production, Procurement, Demand Planning, and Human Resources provided me with valuable insights into the workings of a major global manufacturing and supply chain.

I witnessed firsthand how the operations of each department, from forecasting and procurement to sample printing and final dispatch, depend on well-organized workflows, accountability, advanced technology like SAP, ERP, and Power BI, as well as strong communication among teams. These experiences highlighted for me that while having technical skills is vital, they must be complemented by collaboration, analytical thinking, and adaptability.

I also developed a deeper appreciation for workplace culture and ethics. Observing Avery's dedication to sustainability, innovation, diversity, and employee well-being illustrated how a responsible global organization can operate effectively.

On a personal level, this internship equipped me with skills in time management, effective communication across various teams, and the ability to think and act proactively in response to challenges such as material delays or forecasting inaccuracies.

Looking forward, I feel prepared not only with the necessary technical expertise but also with a mindset that is ready to embrace roles focused on product development, supply chain optimization, and process improvement. Overall, this internship represented an essential chapter in my journey, allowing me to transform theory into practice, enhance my professional maturity, and outline a clear direction for my future.

References

1. https://www.averydennison.com/en/home/news/company-blog.html
2. https://www.averydennison.com/en/home/company/overview.html
3. https://en.wikipedia.org/wiki/Avery_Dennison
4. https://fortune.com/company/avery-dennison/?utm_source=search&utm_medium=advanced_search&utm_campaign=search_link_clicks
5. https://fortune.com/company/avery-dennison/?utm_source=search&utm_medium=advanced_search&utm_campaign=search_link_clicks
6. https://supplychain.averydennison.com/retail
7. https://www.forbes.com/companies/avery-dennison/
8. https://rfid.averydennison.com/en/home/about-us/research-and-development.html
9. Matsuura, A., & Teng, C. (2020). Understanding the gender composition and experience of ready-made garment (RMG) workers in Bangladesh (Issue Brief). Geneva, Switzerland: International Labour Organization & UN Women.
10. Tasneem, S. (2024). Is the garment industry a route to economic development in Bangladesh? International Journal of Economics & Business Management, 10(7), 313-329. https://doi.org/10.56201/ijebm.v10.no7.2024.pg313.329
11. Al Mamun, M. A., & Hoque, M. M. (2022). The impact of paid employment on women's empowerment: A case study of female garment workers in Bangladesh.