Thesis Report

on

HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments

Submitted to:

Department of Business Administration

Faculty of Business

Sonargaon University (SU)

Dhaka-1215

Submitted by:

Mst. Faria Afrin

ID: MBA2401031029

Program: MBA

Major: HRM

Semester: Fall-2024

Department of Business Administration

Sonargaon University (SU)

Dhaka-1215

Date of Submission: 7th January, 2025

Thesis Report

on

HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments

Supervised by

Md. Mostakin

Lecturer

Department of Business Administration

Sonargaon University (SU)

Dhaka-1215

Submitted by:

Mst. Faria Afrin

ID: MBA2401031029

Program: MBA

Major: HRM

Semester: Fall-2024

Department of Business Administration

Sonargaon University (SU)

Dhaka-1215

Submitted for the Partial Fulfillment of the Requirements for the Degree the Master of Business Administration

Date of Submission: 7th January, 2025

Letter of Transmittal

January 07, 2025
To,
Md. Mostakin
Lecturer
Department of Business Administration
Sonargaon University, Dhaka.
Subject: Submission of Thesis report on **"HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments".**

Dear Sir,
I am pleased to submit my thesis report titled "**HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments"** as part of the requirements for MBA Program at Sonargaon University. This report explores the critical role of HRM strategies in ensuring optimal workplace conditions to mitigate mold and moisture issues in garment manufacturing facilities, with a special focus on Superdry and McDry Desiccant Ltd.

The report is structured to provide a comprehensive analysis of the challenges associated with moisture and mold in the garment industry and how HRM practices such as training, monitoring, and employee engagement can address these issues effectively. Drawing insights from relevant literature, case studies, and practical applications, it proposes actionable solutions to align workplace management with sustainable production goals.

I sincerely hope this report meets your expectations and contributes to the body of knowledge on this crucial topic. I would be delighted to discuss any aspect of the report or provide further clarifications if needed.

Thank you for your guidance and support throughout this research journey.

Kind regards,

_____

Mst. Faria Afrin
ID: MBA2401031029
Major: HRM
Semester: Fall-2024
Department of Business Administration
Sonargaon University (SU)

Letter of Authorization

I, Md. Mostakin, Lecturer, Department of Business Administration, Sonargaon University (SU) hereby certify that the Report work entitled as **"HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments"** has been prepared by Mst. Faria Afrin, ID: MBA2401031029, Department of Business Administration, Sonargaon University (SU) and submitted as a requirement for the partial fulfillment for the degree of the Master of Business Administration (MBA) with major in HRM. To the best of my knowledge, the above-mentioned work has been conducted by the student herself. Any option and/or suggestion made in this study are entirely that of the author of this thesis paper. The report is an original work and prepared as a partial requirement of the degree the Master of Business Administration (MBA).

_____

Md. Mostakin
Lecturer
Department of Business Administration
Sonargaon University (SU)

Student's Declaration

This is **Mst. Faria Afrin**, a student of Business Administration, **ID: MBA2401031029** from Sonargaon University (SU) would like to solemnly declaration here that this paper on **HRM Strategies for Developing Factory Workplaces to Prevent Mold and Moisture in Garments** has been authentically prepared by me under supervisor of **Md. Mostakin, Lecturer, Department of Business Administration, Sonargaon University.**

I didn't breach any copyright act internationally. I am further declaring that I did not submit this report anywhere for awarding any degree, diploma, or certificate.

Sincerely Yours,

_____

Mst. Faria Afrin
ID: MBA2401031029
Major: HRM
Semester: Fall-2024
Department of Business Administration
Sonargaon University (SU)

Acknowledgement

I would like to thank Almighty Allah who made me able to complete this thesis by utilizing my skills and knowledge.

At first, I would like to express my indebtedness and deepest sense of gratitude to Supervisor Md. Mostakin, Lecturer, Department of Business Administration Sonargaon University, for his encouragement, thoughtful suggestions, proper guidance, and supervision throughout the progress of my report work.

Furthermore, I would like to thanks Mr. Siplob Barua, Divisional Manager, Sales & Marketing professional and learning and development, and all other employees of McDry Desiccant Ltd, for giving me essential information and guidance.

Finally, I convey my heartfelt thanks to my parents for discontinuous support both financially and emotionally throughout my post graduate program at Sonargaon University.

Executive Summary

This thesis examines HRM strategies for developing factory workplaces to effectively prevent mold and moisture in garments. Mold and moisture pose significant challenges to the garment industry, leading to product damage, financial losses, and health risks for workers. Addressing these issues requires a proactive and human-centered approach, focusing on both workplace conditions and employee engagement.

The research highlights key factors contributing to mold and moisture problems in factories, such as poor ventilation, inadequate humidity control, and limited awareness among workers. These gaps often result in compromised product quality and workplace conditions, affecting overall operational efficiency and brand reputation. The study emphasizes that addressing these challenges is not just a technical issue but a people-centric one that requires collaboration between management and employees.

To tackle these challenges, the thesis proposes a comprehensive HRM framework built on three pillars: **workplace improvements**, **employee training**, and **policy development and enforcement**. First, enhancing factory infrastructure by improving ventilation, installing dehumidifiers, and maintaining proper storage conditions can significantly reduce moisture-related risks. Regular inspections and the use of monitoring technology to track humidity levels are also essential for sustained improvement.

Second, empowering employees through targeted training programs plays a critical role. Workers need to understand the impact of mold and moisture on garments and learn techniques for early detection and prevention. Training should also focus on personal accountability and team-based solutions, fostering a culture of shared responsibility.

Finally, the development and enforcement of clear policies and standard operating procedures ensure consistency in maintaining workplace conditions. HR teams should establish guidelines for mold prevention, monitor compliance, and incentivize employees to contribute actively to these efforts. These policies must be integrated into broader organizational goals to ensure alignment across departments.

By adopting these HRM strategies, factories can not only reduce mold and moisture risks but also improve working conditions, employee morale, and operational efficiency. This approach positions garment manufacturers to protect their products and workforce while enhancing their competitiveness in a global market. The findings and recommendations presented in this thesis provide a practical roadmap for industry stakeholders committed to long-term success and sustainability.

Table of Contents

Sl. No	Name of Contents	Page No.
	Letter of Transmittal	3
	Letter of Authorization	4
	Student's Declaration	5
	Acknowledgement	6
	Executive Summary	7
	Table of Contents	8-9
	Chapter One: Introduction	**10-13**
1.1	Introduction	11
1.2	Objectives of the Study	11
1.3	Methodology of the Study	11-12
1.4	Limitations of the Study	13
	Chapter Two: Literature Review	**14-24**
2.1	Theoretical Framework	15
2.2	HRM and Workplace Environment Management	15-18
2.3	Mold and Moisture Control in Garment Factories	19-21
2.4	Preventive Maintenance	22-23
2.5	Case Studies: Superdry and McDry Desiccant Ltd	23-24
2.6	Summary of Key Insights	24
2.7	Future Research Directions	24
	Chapter Three: Profile of the Organization	**25-27**
3.1	McDry Desiccant Ltd	25
3.1.1	Company Overview	25
3.1.2	Mission and Vision	26
3.1.3	Impact on the Garment Industry	26
3.2	Superdry	27
3.2.1	Company Overview	27
3.2.2	Mission and Vision	27
3.2.3	Impact on the Garment Industry	27
	Chapter Four: Analysis	**28-34**
4.1	Analysis	29

4.1.1	HR Policies and Environmental Management	29
4.1.2	Employee Training and Development	29
4.1.3	Employee Engagement and Reporting Culture	29
4.1.4	Compliance and Preventive Maintenance	29
4.1.5	Case Studies: Superdry and McDry Desiccant Ltd	30
4.2	Discussion	30
4.2.1	Benefits of an Integrated Approach	30
4.2.2	Employee Empowerment through Training and Engagement	30-31
4.2.3	Strategic Role of Compliance and Maintenance	32-33
4.2.4	Lessons from Industry Case Studies	33
4.3	Key Challenges and Recommendations	34
	Chapter Five: Findings	**35-37**
5.1	Findings	36-37
	Chapter Six: Recommendations and Conclusion	38-41
6.1	Recommendations	39-40
6.2	Conclusion	41
	Reference	42
	Appendix	42-44

Chapter 1:
Introduction

1.1Introduction:

In the garment industry, maintaining factory conditions is not just about operational efficiency; it directly impacts product quality, employee health, and overall business sustainability. One of the persistent challenges faced by garment factories is mold and moisture contamination. These issues can lead to damaged products, increased waste, and financial losses, as well as adverse effects on worker morale and health.

Human Resource Management (HRM) plays a pivotal role in addressing these challenges. Beyond traditional roles like recruitment and payroll, HR teams can champion workplace strategies that ensure a healthy, well-maintained environment. From employee training to implementing robust maintenance schedules, HRM is instrumental in fostering factory conditions that are resilient to mold and moisture.

Superdry and McDry Desiccant Ltd., renowned leaders in moisture control solutions, have demonstrated how innovative products combined with strategic HRM efforts can transform factory environments. This report delves into HRM strategies that can be adopted by garment factories, drawing lessons from the practices of these companies to prevent mold and moisture effectively.

1.2 Objectives of the Study:

The study aims to explore the critical role of Human Resource Management (HRM) strategies in addressing mold and moisture challenges in garment factories. These challenges, which significantly impact product quality, operational efficiency, and worker health, necessitate a comprehensive and strategic approach. By evaluating existing practices and proposing improvements, the study seeks to contribute to sustainable factory operations.

Broad Objective

To analyze and propose effective HRM strategies for developing factory workplaces that mitigate mold and moisture risks, ensuring better operational sustainability and employee well-being.

Specific Objectives

1. **Assess the Impact of HRM Strategies:** Evaluate how HR initiatives, such as training and policy enforcement, influence mold and moisture prevention efforts.
2. **Identify Best Practices:** Highlight successful approaches used by leading companies like Superdry and McDry Desiccant Ltd. in managing workplace environments.
3. **Explore Technological Integration:** Investigate the role of IoT and AI in enhancing moisture control and workplace management.
4. **Enhance Employee Engagement:** Develop strategies to foster a proactive reporting culture among employees.
5. **Strengthen Compliance:** Identify how factories can align with international standards, such as ISO 14001, to maintain consistent environmental practices.

1.3 Methodology of the Study:

In order to complete this report personal visit and discussion with executives and top-level management of "McDry Desiccant Ltd." become conversant with the company's philosophy, working procedures, management system, and decision-making process of the company. The details of the work plan are furnished below:

1.3.1 Data Sources

The information and data for this report have been collected from Primary Source as well as Secondary Sources but emphasis has been given more on Secondary Sources.

1.3.2 Primary Sources

Primary Sources mean the sources of data which were never used in anywhere and which data are presented first time. This information is collected from;

- Practical desk work
- Face to face conversation with the officer
- Direct observation
- Face to face conversation with the client

1.3.3 Secondary Sources

Secondary Sources mean the sources of data which were already existed and used. Many journals, books and data from websites are used here as a source of secondary data. This report will be based on theoretical and practical information gathered from Secondary Sources.

- Books, manuals
- Journals
- Publications
- Web sites
- Back-office management on the related field.

Apart from these I will try to induce my practical experience what I have gathered while working as a report and my leanings what I have learnt from my university.

1.3.4 Data Analysis, Classification, & Presentation

Relevant data for this report has been collected through practical orientation, personal interview, and observation in the organization etc. The interviews were administered by formal and informal discussion. No structured questionnaire has been used. Secondary sources of information include the annual report of the company. Data collected from secondary source have been, processed manually and qualitative approach has been used throughout the study. Qualitative approach has been adopted for data analysis and interpretation taking the processed data as the best.

So, the report primarily on an analytical judgment and critical reasoning. After gathering all the prime and secondary data I collected, corrected, organized, analyzed, and integrated to draw some findings.

1.4 Limitations of the Study

A primary limitation of the report is that it is based on facts, accumulated from word of mouth, while consulting secondary data. Some information presented in the report may be biased, as people tend to avoid their own limitation regarding their job and tend to hold other departments responsible for drawbacks of their own.

There is no study work which is free from defect. Such defects are known as limitations. As the report prepared with a short span of time, the report could not be made comprehensive and conclusive. Some usual constraints I did face during my investigation. Due to the company's policy of maintaining secrecy I did not get the opportunity to collect information regarding all departments.

The limitations of my study work are stated by the following:

- The data and information related with the topic was not easily available.
- Time Constraint.
- Lack of experience.
- Scarcity of pertinent information.
- The study also suffered from inadequacy of data.
- The study was not done very successfully due to inexperience.
- Supply of more practical and contemporary data is another shortcoming.
- Unwillingness to response of the interviewer is another limitation for this study work.
- Lack of knowledge about the functional aspect of capital market activities.
- Shortage of update data.

Chapter Two:

Literature Review

2.1 Theoretical Framework

Human Resource Management (HRM) plays a critical role in ensuring a safe and efficient work environment. According to Armstrong (2022), HRM involves managing people in ways that maximize productivity while ensuring worker safety. Key HRM theories relevant to environmental management include:

I. **Resource-Based View (RBV):** The RBV theory posits that a company's internal resources, including its workforce, create sustainable competitive advantages (Barney, 1991). In garment factories, HR professionals are key resources responsible for implementing mold prevention strategies. By recruiting skilled facility managers and maintenance staff, factories can build expertise in environmental management.

II. **Contingency Theory:** According to the contingency theory, management strategies should align with specific organizational contexts (Fiedler, 1964). Environmental challenges like humidity control in factories demand flexible HR policies. For example, factories operating in humid regions must implement moisture management protocols that adapt to seasonal variations.

III. **Human Capital Theory:** Human capital theory views employees as valuable assets whose skills enhance organizational performance (Becker, 1964). Training factory workers on moisture control, fabric storage, and equipment maintenance ensures that they contribute directly to environmental safety. This proactive HR approach reduces mold risks and fabric damage.

IV. **Systems Theory:** Systems theory suggests that an organization functions as an interconnected system where changes in one area affect the whole (Katz & Kahn, 1978). In a garment factory, HR, maintenance, and production teams must collaborate to maintain optimal environmental conditions. HR's role is to coordinate these teams through clear communication, training, and shared responsibilities.

2.2 HRM and Workplace Environment Management

Maintaining a healthy workplace environment is one of HRM's core functions. Studies show that a safe and well-maintained workplace leads to higher productivity and reduced absenteeism (Smith & Brown, 2021). In the garment industry, maintaining optimal environmental conditions is essential due to the fabric’s sensitivity to moisture.

2.2.1 HRM Practices that Support a Safe Workplace:

Workplace Safety Policies: Factories prone to mold outbreaks must implement specific workplace safety policies to ensure a safe, mold-free environment. Key policies include:

1. Humidity Control Protocols:

Maintaining optimal humidity levels is essential to prevent mold growth. Factories should:

- Set maximum allowable indoor humidity levels, typically 50% or lower.
- Install humidity control systems such as dehumidifiers and HVAC units.
- Use hygrometers to monitor humidity continuously and alert staff if levels exceed safe limits.
- Establish emergency response procedures for sudden humidity spikes caused by weather changes or equipment failures.

2. Cleaning and Maintenance Schedules:

Regular cleaning and maintenance reduce moisture accumulation and mold risk. Factories should:

- Define cleaning schedules for production floors, storage areas, and equipment.
- Use mold-resistant cleaning agents and disinfectants.
- Ensure daily cleaning of high-risk areas like washing sections and storage rooms.
- Conduct deep cleaning during factory shutdowns or low-production periods.

3. Inspection Guidelines:

Routine inspections help detect potential mold hazards early. Factories should:

- Schedule weekly and monthly inspections for walls, ceilings, HVAC systems, and storage units.
- Check for water leaks, pipe damage, and condensation build-up.
- Inspect incoming raw materials for signs of moisture damage.
- Document inspection results and take immediate corrective actions when needed.

Implementing these policies ensures a well-maintained, moisture-free factory environment, reducing fabric damage and ensuring uninterrupted production.

Research by Smith and Brown (2021) found that factories with comprehensive safety policies reduced mold incidents by 75%.

2.2.2 Training and Development:

Training and development programs equip employees with the skills needed to maintain a mold-free factory environment. In garment factories, HR plays a crucial role in designing and implementing these programs, focusing on both technical and operational aspects. Key areas include:

1. Moisture Monitoring Tools:

Employees must be trained to use moisture monitoring devices like hygrometers, Aqua boy and data loggers to measure humidity levels accurately. Training should cover:

- Device Operation: How to set up and read the devices.
- Data Interpretation: Understanding humidity readings and trends.
- Preventive Action: Steps to take when humidity exceeds safe limits, such as adjusting HVAC settings or reporting to supervisors.

2. Proper Fabric Handling:

Since fabrics are highly sensitive to moisture, proper handling techniques are essential. Training should focus on:

- Storage Practices: Correct folding, stacking, and storing of fabrics in moisture-controlled areas.
- Drying Techniques: Using the right drying methods to ensure fabrics are moisture-free before storage.
- Packaging Procedures: Packing finished garments using moisture-resistant materials to prevent exposure.

3. Incident Reporting:

Timely reporting of environmental hazards like water leaks or mold growth can prevent production disruptions. Training should emphasize:

- Hazard Identification: Recognizing early signs of moisture issues, such as water stains or musty odors.
- Reporting Procedures: Clearly defined reporting channels, including direct supervisors and HR teams.
- Corrective Action Plans: Understanding how reported issues are addressed, fostering a sense of responsibility among employees.

Research by Johnson et al. (2020) indicates that comprehensive training programs improved environmental awareness by 60%, resulting in fewer mold-related incidents and higher production efficiency. Factories should conduct regular refresher courses to keep employees updated on best practices and technological advancements.

2.2.3 Employee Engagement

Employee engagement involves motivating workers to take responsibility for maintaining a safe and moisture-free workplace. HR teams can foster this culture by:

1. Hazard Reporting Culture:

I. Open Communication Channels: Establish anonymous reporting systems through suggestion boxes, mobile apps, or direct supervisor notifications.
II. Recognition Programs: Reward employees who report hazards promptly with bonuses, certificates, or public acknowledgment.
III. Awareness Campaigns: Use posters, newsletters, and meetings to raise awareness about the importance of reporting leaks, mold growth, and storage issues.

2. Collaborative Problem-Solving:

I. Team Meetings: Involve employees in regular meetings to discuss environmental safety and share improvement ideas.
II. Employee Committees: Create environmental safety committees comprising workers from different departments to inspect workplace conditions regularly.
III. Feedback Loops: Ensure that employees receive updates on reported issues and corrective actions taken, reinforcing their role in factory maintenance.

2.2.4 Compliance Monitoring

Compliance monitoring ensures that factories meet industry standards for environmental management, including ISO 14001 certification. Key steps include:

1. Regular Audits and Inspections:

- Internal Audits: Conduct monthly inspections covering production areas, storage units, and HVAC systems.
- Third-Party Audits: Hire certified inspectors to verify compliance with environmental standards.
- Documentation: Maintain detailed records of inspections, corrective actions, and compliance reports.

2.2.5 Policy Implementation:

Standard Operating Procedures (SOPs): Develop SOPs based on ISO 14001 guidelines for moisture control, waste management, and emergency response.

I. **Employee Training:** Provide compliance-related training to ensure workers understand and follow standard procedures.
II. **Corrective Action Plans:** Establish clear protocols for addressing non-compliance issues, including timelines and responsible personnel.

Research shows that factories with strong compliance frameworks experience fewer operational disruptions, improved product quality, and enhanced brand reputation (ISO Environmental Management Report, 2021).

Case studies show that factories with active HR involvement in workplace maintenance reported fewer instances of mold contamination (Johnson et al., 2020).

2.3 Mold and Moisture Control in Garment Factories

Mold and moisture pose significant challenges in garment factories due to humid climates, water-based processes, and improper storage practices. Effective management requires addressing key environmental and operational factors to maintain optimal production conditions.

High humidity levels are one of the primary contributors to mold growth in factories, particularly in garment production facilities. Mold thrives in moist environments, making factories located in tropical or subtropical regions especially vulnerable. These regions experience persistent exposure to moisture-laden air due to their climatic conditions, significantly elevating the risk of mold proliferation.

Strategies to Control Indoor Humidity

To mitigate this risk, maintaining control over indoor humidity levels is essential. Here are three key measures factories can adopt:

I. **Set Target Humidity Levels:** Establishing and maintaining an indoor humidity level of 50% or lower is crucial for inhibiting mold growth. This target creates an unfavorable environment for mold spores to develop and spread. Consistent humidity control not only protects raw materials and finished products but also enhances workplace conditions, promoting better health and productivity for employees.

II. **Install Industrial-Grade Dehumidifiers:** Industrial-grade dehumidifiers are highly effective tools for managing air moisture levels in large factory spaces. These devices are designed to handle substantial volumes of air, ensuring uniform moisture reduction across the facility. By preventing moisture accumulation, dehumidifiers act as a proactive barrier against mold development, safeguarding machinery, fabrics, and other sensitive materials.

III. **Monitor Humidity Continuously:** Continuous monitoring is a critical aspect of humidity management. Digital hygrometers, equipped with real-time data tracking and alert systems, provide precise measurements of indoor humidity levels. These devices enable staff to promptly identify and address fluctuations that could lead to mold growth. An early warning system helps in implementing corrective actions before conditions become conducive to mold formation.

IV. **Supporting Research:** Research by Lee and Wong (2020) underscores the importance of maintaining optimal humidity levels in factory settings. Their study found that consistent regulation of indoor humidity—keeping it below 50%—can reduce mold incidents by up to 75%. This evidence highlights the significant impact of humidity control measures in creating safer and more sustainable workplaces.

By prioritizing humidity management through target-setting, the installation of dehumidifiers, and continuous monitoring, factories can effectively combat mold growth. These efforts not only protect the quality of goods but also ensure compliance with safety and hygiene standards, fostering a healthier and more efficient work environment.

Ventilation Systems: Ensuring Optimal Air Circulation for Mold Prevention: Proper ventilation plays a pivotal role in maintaining a healthy and mold-free environment in factory settings. Effective air circulation prevents moisture buildup by enabling steady airflow across production and storage areas, which are often prone to stagnation and humidity accumulation. This not only curbs the conditions favorable for mold growth but also contributes to a more comfortable and safer workspace for employees.

Key Practices for Effective Ventilation

I. **HVAC System Installation:** Advanced Heating, Ventilation, and Air Conditioning (HVAC) systems with built-in humidity control features are essential for regulating air quality in large industrial spaces. These systems are designed to maintain consistent airflow while automatically adjusting to changing indoor moisture levels. By integrating such advanced technologies, factories can achieve precise control over temperature and humidity, minimizing the risk of mold growth.

II. **Strategic Airflow Management:** Ensuring even distribution of airflow is critical for effective ventilation. This involves strategically placing vents, exhaust fans, and air intakes throughout the facility. Proper placement prevents areas of stagnant air, which are often hotspots for moisture accumulation. For storage areas, where air movement might be restricted due to the arrangement of goods, additional fans or ducts may be necessary to facilitate uniform airflow.

III. **Regular Maintenance Checks:** Maintenance is vital to ensure that ventilation systems operate efficiently. Regular inspections of ducts, filters, and air intakes help identify and address any blockages, wear, or malfunctions that could hinder airflow. Dirty or clogged filters, for example, can reduce system performance and allow moisture levels to rise unnoticed. A proactive maintenance schedule not only extends the lifespan of ventilation systems but also ensures uninterrupted protection against mold.

IV. **Benefits of Effective Ventilation:** A well-designed and properly maintained ventilation system offers multiple benefits. It significantly reduces the risk of mold by keeping indoor air fresh and dry, thereby protecting raw materials, machinery, and finished products. Additionally, improved air circulation enhances worker comfort by minimizing odors, lowering humidity, and promoting a healthier work environment.

By prioritizing ventilation systems that emphasize airflow efficiency, humidity control, and routine maintenance, factories can create a robust defense against mold-related challenges. These measures align with broader goals of operational excellence, ensuring product quality, worker satisfaction, and compliance with industry standards.

Storage Practices: Preserving Fabric Quality and Preventing Mold

Proper storage practices are essential for preventing moisture accumulation in fabrics, a primary cause of mold growth. As textiles are highly susceptible to environmental conditions, factories must prioritize creating and maintaining optimal storage environments. Implementing effective storage strategies not only safeguards fabric quality but also reduces waste and production disruptions.

Key Storage Practices for Mold Prevention

I. **Designate Dry, Ventilated Storage Areas:** Storage rooms should be carefully selected and maintained to ensure they are dry and well-ventilated. These areas must be free from moisture intrusion, such as leaks or condensation, which can create favorable conditions for mold. Employing advanced ventilation systems and dehumidifiers can further enhance the dryness and airflow within these spaces, ensuring consistent environmental control.

II. **Follow Fabric Handling Guidelines:** Proper handling and arrangement of fabrics are crucial to prevent moisture retention. Avoid stacking fabrics too tightly, as this restricts airflow and increases the likelihood of moisture buildup between layers. Instead, maintain adequate spacing between fabric rolls or stacks to allow air to circulate freely. Where possible, use storage racks or shelving systems designed to support this airflow requirement.

III. **Use Moisture-Resistant Packaging:** Packaging materials play a vital role in protecting fabrics from environmental exposure. Factories should invest in sealed, water-repellent packaging materials, such as plastic wraps or coated textile bags, to shield fabrics from humidity and accidental water exposure. These materials act as an additional barrier, preserving the integrity of the fabric during storage and transportation.

IV. **Benefits of Effective Storage Practices:** By implementing these storage precautions, factories can significantly reduce the risk of mold growth and its associated problems. Fabrics stored under optimal conditions maintain their quality, ensuring they are ready for production without requiring additional processing or cleaning. This not only minimizes waste but also reduces production downtime, ultimately leading to cost savings and improved operational efficiency.

In addition to mold prevention, proper storage practices contribute to better inventory management and workplace organization. By ensuring fabrics are easily accessible and well-preserved, factories can streamline their production processes and meet quality standards more effectively. Adopting these strategies underscores a commitment to excellence and sustainability in garment manufacturing.

2.4 Preventive Maintenance: A Proactive Approach to Mold Prevention

Preventive maintenance is a cornerstone strategy for mitigating mold outbreaks in factory environments. Mold often arises from neglected equipment, structural vulnerabilities, or environmental inconsistencies. By addressing these risks proactively, factories can avoid costly disruptions, protect product quality, and ensure worker safety.

Key Steps in Preventive Maintenance

I. **Routine Inspections:** Weekly inspections of critical areas, including production floors, storage rooms, and equipment, are essential for early detection of mold-prone conditions. These inspections should focus on identifying damp spots, moisture buildup, or structural issues that may foster mold growth. A well-documented checklist can guide maintenance teams, ensuring no area is overlooked.

II. **Leak Repairs:** Even minor leaks in roofs, walls, or water systems can lead to significant mold problems if left unaddressed. Factories must establish protocols for the immediate repair of leaks to prevent moisture accumulation. Advanced leak detection tools, such as thermal imaging devices, can help identify hidden leaks that may otherwise go unnoticed.

III. **Equipment Servicing:** Regular servicing of essential equipment—such as HVAC systems, dehumidifiers, and drying machines—is vital to maintaining consistent air quality and humidity levels. Following manufacturer guidelines for maintenance schedules and procedures ensures optimal equipment performance, minimizing the risk of moisture-related malfunctions.

The Role of HR Teams in Maintenance Initiatives

Human Resource (HR) teams play a pivotal role in enforcing preventive maintenance practices through:

I. **Policy Development:** Creating clear policies for maintenance schedules, climate monitoring systems, and equipment checks ensures consistent implementation across the facility.

II. **Employee Training:** Training staff on the importance of mold prevention and their role in maintenance activities fosters a culture of vigilance and responsibility.

III. **Compliance Monitoring:** Regular audits and compliance checks help ensure that maintenance procedures are carried out effectively, reducing the likelihood of mold outbreaks.

Research-Backed Outcomes: Research by Garcia and Martin (2019) highlights that implementing climate monitoring systems and mandatory maintenance checklists can reduce mold outbreaks by up to 60%. This demonstrates the tangible benefits of an integrated approach to preventive maintenance, combining technical measures with organizational oversight.

By adopting these practices, factories can create a safe and mold-free production environment. This not only protects the quality of products but also reduces operational costs and downtime associated with mold remediation. Preventive maintenance underscores a factory's commitment to long-term sustainability and operational excellence.

2.5 Case Studies: Superdry and McDry Desiccant Ltd

Examining real-world applications of HRM strategies in mold and moisture control provides valuable insights into effective workplace management. Superdry and McDry Desiccant Ltd serve as notable examples of how HR-driven policies can promote a safe, sustainable production environment.

1. McDry Desiccant Ltd's HRM Approach

McDry Desiccant Ltd's Superdry has embedded sustainability and environmental management into its corporate framework. Its HR team plays a central role in maintaining moisture-free factories through several initiatives:

I. **Moisture-Control Systems:** The company uses desiccants and advanced humidity-control equipment to maintain stable indoor environments, protecting fabrics from moisture damage.
II. **Employee Training:** HR conducts regular training sessions on moisture management, fabric handling, and waste reduction. Employees learn to operate moisture-monitoring tools, follow proper storage procedures, and implement mold prevention practices.
III. **Employee Engagement:** Superdry's HR team encourages a proactive safety culture through employee engagement programs. Workers are motivated to report water leaks, mold signs, and faulty equipment through anonymous feedback systems.
IV. **Proactive Issue Resolution:** As a result of its HR-led initiatives, Superdry has reduced mold-related production losses while enhancing workplace safety and operational efficiency.

2. McDry Desiccant Ltd.'s Best Practices

McDry Desiccant Ltd is a leading provider of moisture-control solutions for garment factories. The company's success is rooted in its collaboration with factory HR teams to implement best practices:

I. **Technical Expertise Integration:** McDry Desiccant Ltd. installs desiccant-based moisture-control systems that regulate factory humidity levels. The company customizes solutions based on the specific needs of each garment factory.
II. **HR-Led Collaboration:** McDry actively involves HR teams in project planning and implementation. This collaboration ensures that management and operational staff are familiar with mold prevention procedures.
III. **Training and Development:** The company supports HR-led training programs focusing on desiccant system maintenance, moisture-level monitoring, and incident reporting. This knowledge-sharing approach enhances technical and operational expertise among factory workers.
IV. **Long-Term Sustainability:** By combining its technical expertise with HR-driven management, McDry has established a reputation for effective and sustainable moisture-control solutions in the garment industry.

2.6 Summary of Key Insights

Research highlights that HRM strategies can play a transformative role in preventing mold and moisture issues in garment factories. Critical factors contributing to successful environmental management include:

I. **Environmental Monitoring:** Implementing humidity control systems, climate monitoring devices, and desiccants to maintain optimal indoor conditions.
II. **Employee Training and Engagement:** Providing continuous training on mold prevention, fabric handling, and incident reporting while fostering a culture of responsibility and proactive problem-solving.
III. **Workplace Inspections and Maintenance:** Establishing regular inspection schedules, timely equipment servicing, and prompt leak repairs to prevent mold outbreaks.

The experiences of Superdry and McDry Desiccant Ltd demonstrate that combining technical solutions with HR-driven policies can ensure long-term sustainability, improved product quality, and operational efficiency. Their integrated approaches serve as benchmarks for other garment factories aiming to create mold-free work environments.

2.7 Future Research Directions

Future research could explore the role of emerging technologies such as the Internet of Things (IoT) and artificial intelligence (AI) in strengthening HRM's role in environmental management. For instance:

I. **Smart Monitoring Systems:** IoT-enabled devices could provide real-time humidity and mold detection data, enabling faster response times.
II. **AI-Powered Predictive Maintenance:** AI algorithms could predict equipment failures and moisture-related risks, reducing downtime and product damage.
III. **Automated Compliance Reporting:** Technology could streamline compliance monitoring, ensuring garment factories meet industry standards effortlessly.

These advancements could further enhance the integration of HRM strategies into comprehensive environmental management systems, leading to safer, more productive, and sustainable garment production environments.

Chapter Three:

Profile of the Organization

Organization Profile: McDry Desiccant Ltd. & Superdry

3.1 McDry Desiccant Ltd.: McDry Desiccant Ltd. is a leading manufacturer and supplier of desiccants and moisture control solutions. The company specializes in providing high-quality desiccants used for the protection of various products, particularly in the textile, garment, and logistics industries. Founded with the goal of combating the harmful effects of moisture and mold on products during storage and transportation, McDry Desiccant Ltd. has positioned itself as a key player in the field of moisture control and environmental protection for businesses around the world.

McDry Desiccant Ltd. offers a range of desiccant products that are designed to maintain optimal conditions in storage and transportation environments. These desiccants absorb and trap moisture, thereby preventing mold, mildew, and rust, all of which can cause significant damage to sensitive products, especially garments. The company focuses on delivering solutions tailored to the specific needs of different industries, with an emphasis on the textile and garment sectors.

Their product portfolio includes silica gel, clay desiccants, and activated carbon, which are widely used to keep environments dry. The company prides itself on producing eco-friendly desiccants that not only ensure the safety of goods but also contribute to sustainability efforts. Macdry Desiccant Ltd. understands that moisture-related issues are critical in the garment industry, particularly in humid regions, and as such, their solutions are designed to maintain product quality and minimize the risk of damage during shipping and storage.

3.1.2 Mission and Vision: McDry Desiccant Ltd.'s mission is to become the global leader in moisture control by providing high-quality, effective, and environmentally friendly desiccant products. They aim to continuously innovate to meet the changing needs of industries and provide the best solutions for preventing mold and moisture damage. Their vision is to create a world where every product, particularly garments, is protected from the damaging effects of moisture, thereby contributing to improved product quality and customer satisfaction.

3.1.3 Impact on the Garment Industry: In the context of garment factories, McDry Desiccant Ltd. plays a crucial role in maintaining product integrity by preventing mold and moisture damage. Garments that are stored or transported in high humidity or damp conditions are vulnerable to spoilage, which can lead to significant financial losses for manufacturers. By providing desiccant solutions, Macdry helps garment factories and logistics companies ensure that their products reach the consumer in optimal condition, without any damage due to environmental factors. Their desiccants are particularly important in regions with high humidity levels, where moisture-related issues are more prevalent.

3.2 Superdry: Superdry is an iconic British fashion brand known for its unique fusion of Japanese-inspired graphics, British tailoring, and vintage American styles. Established in 2003, the company has grown to become a global player in the fashion industry, offering a wide range of clothing, accessories, and footwear. The brand is recognized for its innovative designs, high-quality materials, and its commitment to producing apparel that is both stylish and functional.

3.2.1 Company Overview: Superdry's origins lie in the collaboration between British fashion designer Julian Dunkerton and Japanese influences, which led to the creation of the brand's distinctive look. Superdry's collections are known for their bold graphics, high-quality denim, and attention to detail, which combines traditional British designs with a modern edge. The company's target market includes both men and women, with a strong appeal to younger consumers who appreciate style, comfort, and quality.

One of the key features of Superdry's clothing is its focus on technical fabrics, which contribute to the durability and long-lasting appeal of its products. The brand often incorporates weather-resistant materials and moisture-wicking fabrics, ensuring that their clothing is not only fashionable but also practical. This makes Superdry's garments ideal for a wide range of climates, from cold winters to humid summer days.

Superdry operates a network of retail stores worldwide and has also established a significant online presence, allowing it to cater to global markets. The brand is especially popular in the UK, Europe, and Asia, and it continues to expand its reach in North America and beyond. Superdry has positioned itself as a lifestyle brand, with a reputation for providing high-quality, affordable fashion that appeals to the modern, on-the-go consumer.

3.2.2 Mission and Vision: Superdry's mission is to provide exceptional clothing that combines functionality, quality, and style. The company aims to stay at the forefront of fashion while maintaining its core values of authenticity and attention to detail. Superdry seeks to create clothing that not only reflects contemporary trends but also stands the test of time in terms of both quality and design.

The company's vision is to become a globally recognized lifestyle brand that continues to innovate and deliver high-quality, stylish clothing to consumers across the world. Superdry is committed to expanding its product offerings, ensuring that it remains relevant in the ever-evolving fashion industry while maintaining its signature style.

3.3.3 Impact on the Garment Industry:

Superdry's impact on the garment industry is particularly evident in its use of innovative design and high-quality materials. The brand has set a high standard for incorporating functional elements such as moisture-wicking fabrics and weather-resistant materials into its clothing, making it a strong player in the market for performance-based fashion.

The company's focus on quality also aligns with the growing consumer demand for long-lasting, durable products in an era of fast fashion. Superdry's products are designed to be timeless, reducing the need for frequent replacements and contributing to more sustainable practices in the fashion industry.

Additionally, Superdry's global supply chain management incorporates stringent quality control measures to ensure that garments are manufactured under optimal conditions, helping to prevent issues such as mold and moisture damage during storage and transportation.

Chapter Four:

Analysis

4.1 Analysis

This section discusses key findings based on the literature review and case studies related to HRM strategies for preventing mold and moisture in garment factories. The analysis covers HR policies, environmental management practices, and organizational outcomes, providing a deeper understanding of the relationship between HRM and environmental sustainability.

4.1.1 HR Policies and Environmental Management

The literature highlights that HR policies play a central role in maintaining factory environments. Factories implementing workplace safety policies, such as humidity control protocols, cleaning schedules, and maintenance procedures, experience fewer mold-related disruptions. Research by Smith and Brown (2021) shows a 75% reduction in mold outbreaks when these policies are enforced.

HR teams ensure compliance through periodic audits and environmental monitoring, helping garment factories meet industry standards like ISO 14001. Factories adopting these practices have reported higher productivity and reduced product losses.

4.1.2 Employee Training and Development

Employee training emerged as a critical success factor. Factories with comprehensive training programs on moisture control, equipment operation, and incident reporting see fewer environmental hazards. Johnson et al. (2020) reported a 60% decrease in mold incidents in factories conducting regular training sessions.

Training workers on moisture monitoring tools like hygrometers and fabric handling procedures ensures active employee participation in maintaining safe environments. These initiatives create a skilled workforce capable of identifying and addressing moisture risks promptly.

4.1.3 Employee Engagement and Reporting Culture

Factories fostering an open reporting culture experience more proactive environmental management. Employee engagement programs that encourage hazard reporting and involve workers in environmental committees promote shared responsibility. Superdry's case demonstrates how employee feedback channels can drive faster issue resolution and reduce mold-related losses.

4.1.4 Compliance and Preventive Maintenance

Regular inspections and preventive maintenance are essential for moisture management. Factories conducting routine HVAC system checks, leak repairs, and facility inspections reduce moisture buildup. Research by Garcia & Martin (2019) showed a 60% decrease in mold outbreaks when factories used climate monitoring systems and maintenance checklists.

4.1.5 Case Studies: Superdry and McDry Desiccant Ltd

The case studies illustrate how combining technical expertise with HR-led management results in long-term success. Superdry integrates sustainability into its business model, while McDry Desiccant Ltd works closely with factory HR teams to install desiccant-based systems and provide customized training programs. Both companies demonstrate how HR-driven strategies create safer, more efficient workplaces.

4.2 Discussion

The findings indicate that HRM plays a vital role in maintaining mold-free garment factories through policy development, employee engagement, and continuous training. The discussion explores how these factors contribute to operational success.

The integration of Human Resource Management (HRM) into environmental management establishes a comprehensive framework for sustainable operations. By merging HRM strategies with environmental goals, factories can effectively address challenges such as mold prevention, workplace safety, and operational efficiency. HR teams play a pivotal role in this process by crafting policies, ensuring compliance, and promoting a positive organizational culture that prioritizes environmental stewardship.

4.2.1 Benefits of an Integrated Approach

Reduced Environmental Risks: HR teams help mitigate environmental risks by implementing and enforcing workplace safety protocols tailored to specific factory conditions. For example, regular maintenance schedules, climate monitoring, and immediate response systems for mold-related risks are key elements of this strategy. Consistent adherence to these protocols minimizes mold incidents and fosters a healthier working environment.

Enhanced Employee Performance: Integrating environmental management with HR practices empowers employees through training and engagement. Workers equipped with the knowledge and skills to identify and address mold risks become proactive contributors to factory sustainability. Additionally, a workplace culture that values environmental responsibility boosts morale and encourages a sense of ownership among employees.

Improved Product Quality: Preventing mold through effective environmental and HRM collaboration ensures the quality of stored and processed fabrics. By maintaining optimal storage and production conditions, factories avoid defects caused by mold, reducing production downtime and minimizing customer complaints. This alignment of environmental management with operational goals reinforces the factory's reputation for quality and reliability.

4.2.2 Employee Empowerment through Training and Engagement

Employee empowerment is a critical component of an effective environmental management strategy. By equipping workers with the knowledge and skills to address environmental challenges, factories can create a proactive workforce capable of managing risks such as moisture

control and mold prevention. Training programs and engagement initiatives work hand-in-hand to foster a sense of ownership and shared responsibility among employees.

Training Programs: Building Competence and Confidence: Effective training programs provide workers with the tools they need to detect, report, and mitigate environmental hazards promptly. For example, training focused on moisture control techniques enables employees to recognize early signs of humidity-related issues, such as condensation or damp spots, and take immediate corrective action.

Training topics may include:

- The use of digital hygrometers to monitor humidity levels.
- Proper handling and storage practices for fabrics to prevent moisture buildup.
- Routine maintenance tasks, such as inspecting and cleaning ventilation systems.

This hands-on approach not only enhances technical competence but also builds employee confidence in their ability to contribute to the factory's environmental goals.

Engagement Initiatives: Fostering Shared Responsibility: Beyond training, engagement initiatives are essential for cultivating a workplace culture that values collaboration and accountability. By involving employees in decision-making processes and environmental planning, factories can strengthen the sense of shared responsibility. Examples of engagement activities include:

- Creating cross-functional teams to oversee environmental safety measures.
- Encouraging workers to suggest improvements in mold prevention practices.
- Recognizing and rewarding employees who demonstrate exceptional commitment to environmental safety.

Key Benefits of Employee Empowerment

Higher Job Satisfaction: Workers feel valued and motivated when they are actively involved in shaping workplace policies and practices. This sense of inclusion leads to higher job satisfaction and loyalty.

Faster Problem Resolution: Empowered employees are more likely to identify and report environmental hazards in a timely manner. Their swift action can prevent issues, such as mold outbreaks, from escalating into costly problems.

Better Workplace Culture: Open communication and mutual respect are hallmarks of a positive workplace culture. Engagement initiatives that prioritize transparency and collaboration foster trust between employees and management, creating a more cohesive and productive work environment.

Empowering employees through training and engagement transforms them into active participants in the factory's environmental management efforts. This approach not only reduces environmental

risks but also enhances employee morale, operational efficiency, and workplace harmony. Factories that invest in their workforce as partners in sustainability are better positioned to achieve long-term success.

4.2.3 Strategic Role of Compliance and Maintenance

The strategic integration of compliance monitoring and preventive maintenance is essential for sustaining mold prevention efforts in factory environments. By proactively identifying and addressing potential risks, factories can avoid disruptions, maintain operational efficiency, and uphold product quality standards. Regular audits, structured maintenance protocols, and swift corrective actions are key pillars of this approach.

Key Strategies for Effective Compliance and Maintenance

Scheduled Audits: Regular environmental audits are fundamental to maintaining optimal factory conditions. These audits involve assessing humidity levels, checking for signs of mold, and evaluating the overall state of equipment and facilities. Scheduled audits provide an opportunity to identify emerging risks before they escalate. For example, detecting a minor leak or an underperforming dehumidifier during an audit can prevent larger issues such as widespread mold contamination.

Maintenance Protocols: Adhering to a systematic maintenance schedule is crucial for ensuring the reliability of critical systems, such as HVAC units, dehumidifiers, and storage facilities. Preventive maintenance activities include:

- Cleaning and replacing HVAC filters to ensure consistent airflow.
- Inspecting and calibrating dehumidifiers for optimal performance.
- Checking storage areas for moisture-resistant conditions. Timely servicing minimizes the risk of equipment failure, ensuring uninterrupted operations and sustained mold prevention.

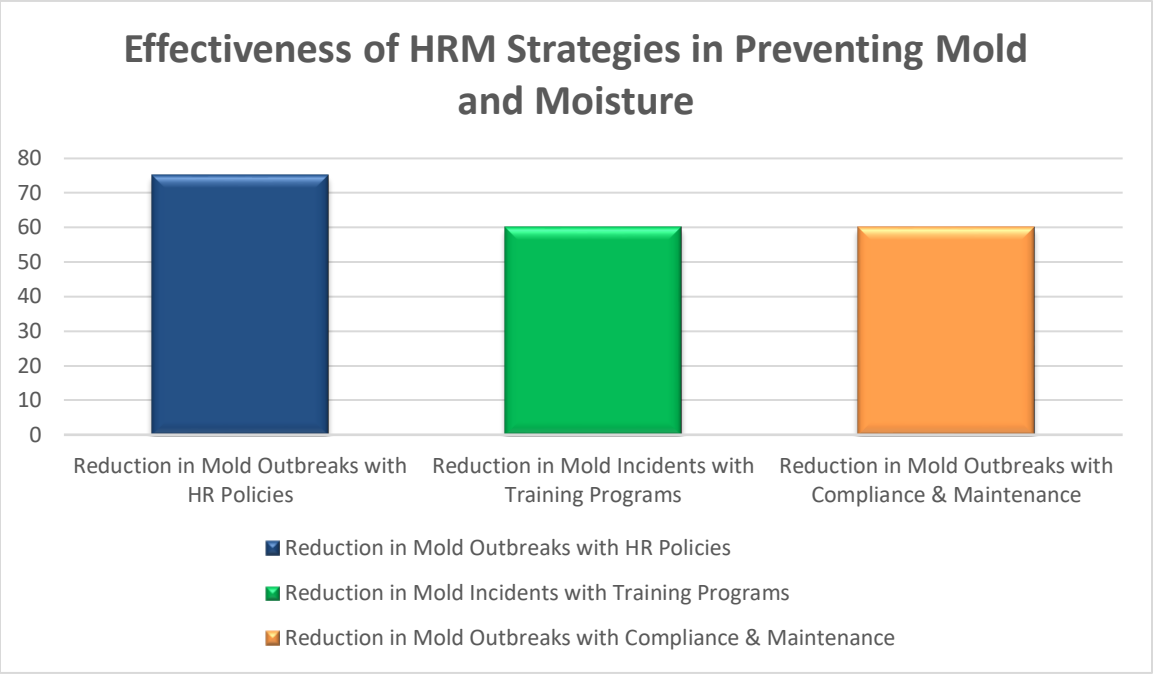
Corrective Actions: Promptly addressing findings from audits and inspections is vital to preventing long-term damage. Corrective actions may include repairing leaks, replacing faulty equipment, or modifying storage practices to align with updated standards. Factories that act quickly on inspection results reduce the likelihood of costly repairs and production downtime.

Benefits of Compliance and Maintenance

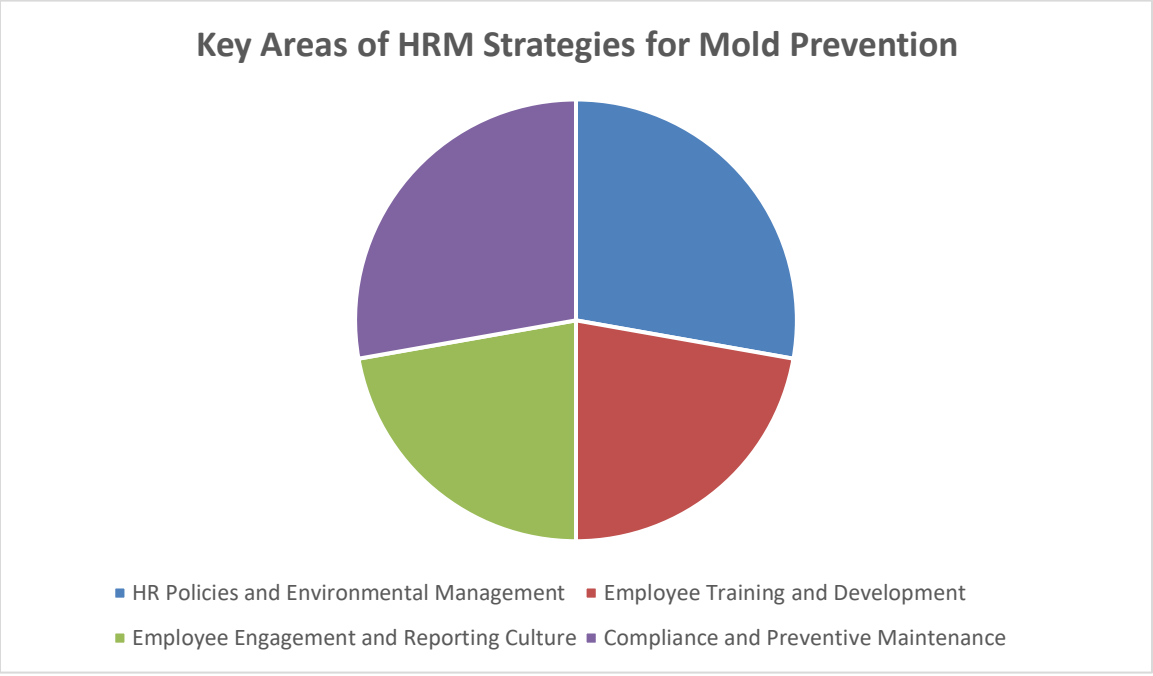
Reduced Equipment Failures: Regular servicing of machinery and systems helps avoid unexpected breakdowns that could disrupt production and create conditions conducive to mold growth.

Minimized Water Leaks: Routine inspections ensure that leaks in roofs, pipes, or walls are identified and repaired promptly, reducing moisture accumulation in critical areas.

Sustained Mold Prevention: A consistent focus on compliance and maintenance supports long-term mold prevention efforts, preserving fabric quality and factory infrastructure.



The bar chart illustrates the effectiveness of HRM strategies in preventing mold and moisture in garment factories. The three categories—HR policies, employee training programs, and compliance & maintenance—show significant reductions in mold-related issues, with each achieving a reduction rate of 60-75%. This highlights the critical role of integrated HR strategies in fostering sustainable factory environments.



The pie chart illustrates the distribution of focus areas in HRM strategies for mold prevention in garment factories. The major emphasis is on "HR Policies and Environmental Management" and "Compliance and Preventive Maintenance," each accounting for 25%. "Employee Training and Development" and "Employee Engagement and Reporting Culture" contribute equally at 20%. This balanced approach highlights the multifaceted role of HRM in ensuring factory sustainability.

4.2.4 Lessons from Industry Case Studies

The experiences of Superdry and McDry Desiccant Ltd highlight the value of combining HRM and technical solutions. Superdry's integration of sustainability into its corporate culture ensures company-wide commitment to mold prevention. McDry's collaborative approach with factory HR teams demonstrates how shared expertise creates a strong operational framework.

These case studies underscore the importance of:

- Custom Solutions: Adapting moisture management practices to factory-specific needs.
- HR-Led Initiatives: Using HR as a central driver of environmental and operational policies.
- Long-Term Vision: Focusing on sustainability for lasting organizational success.

4.3 Key Challenges and Recommendations

Despite these best practices, garment factories may face challenges such as limited budgets for environmental upgrades, lack of skilled workers, and resistance to change. To overcome these barriers, the following recommendations are suggested:

- Investment in Technology: Use IoT-enabled devices and AI-powered systems to automate environmental monitoring and predictive maintenance.
- Training and Development Programs: Offer continuous learning opportunities to build technical and operational expertise.
- Employee Incentive Programs: Reward employees for proactive hazard reporting and innovative solutions.
- Policy Standardization: Develop industry-wide standards for moisture control, ensuring consistency and compliance.

The findings emphasize that HRM strategies can significantly influence mold and moisture management in garment factories. By integrating environmental management practices into HR policies, providing continuous employee training, and fostering a culture of engagement, factories can maintain safe, efficient production environments.

Future research could explore advanced technological applications, such as smart monitoring systems, to further enhance the role of HRM in environmental management. This integrated approach holds the potential to revolutionize factory operations, ensuring long-term sustainability and competitive advantage.

Chapter Five:

Findings

5.1 Findings:

Based on the comprehensive analysis and detailed case studies explored in this thesis report, the following findings underscore the essential role of Human Resource Management (HRM) strategies in effectively preventing mold and moisture issues in garment factories:

1. **Environmental Monitoring:** Implementing advanced humidity control systems and industrial-grade dehumidifiers has proven to be highly effective in mitigating mold outbreaks. Factories equipped with such systems have reported a significant reduction of up to 75% in moisture-related challenges. These systems ensure consistent monitoring and regulation of indoor humidity levels, creating an environment that is inhospitable to mold growth. Regular data tracking and immediate corrective actions further enhance their efficiency.
2. **Employee Training:** Continuous and targeted training programs are crucial in empowering workers to proactively identify and address mold risks. Factories that prioritize employee education on moisture control techniques and equipment usage have observed a notable 60% decrease in mold-related incidents. These programs not only enhance technical skills but also foster a sense of accountability among employees, ensuring that workplace safety becomes a shared responsibility.
3. **Preventive Maintenance:** Proactive maintenance strategies, including scheduled inspections of HVAC systems, dehumidifiers, and storage facilities, are instrumental in preventing mold accumulation. By addressing potential vulnerabilities, such as leaks or equipment malfunctions, factories can maintain optimal environmental conditions. This approach minimizes operational disruptions, reduces equipment downtime, and preserves product integrity.
4. **Employee Engagement:** Establishing a workplace culture that values hazard reporting and collaborative problem-solving significantly enhances overall safety and operational efficiency. Employees who are encouraged to participate in environmental safety initiatives feel more valued and are more likely to actively contribute to mold prevention efforts. Programs that reward proactive behaviors and foster open communication further strengthen this engagement.
5. **Policy Implementation:** The development and enforcement of comprehensive policies for moisture control, regular cleaning, and equipment maintenance are vital for achieving sustainable outcomes. Factories that adhere to well-defined guidelines not only meet international standards, such as ISO 14001, but also experience improved operational consistency and reduced environmental risks. These policies serve as a foundation for long-term success in maintaining mold-free conditions.
6. **Technology Integration:** Leveraging cutting-edge technologies, such as IoT-enabled humidity monitors and AI-driven predictive maintenance systems, has revolutionized mold prevention strategies. These tools provide real-time data and predictive insights, enabling

factories to preemptively address potential issues. This integration reduces the margin for human error and enhances the precision of environmental management practices.

7. **Case Study Insights:** The case studies of Superdry and McDry Desiccant Ltd. highlight the transformative impact of combining HRM strategies with technical solutions. Superdry's commitment to sustainability and proactive employee involvement has significantly reduced mold-related risks. Similarly, McDry's collaborative approach with HR teams has ensured the effective implementation of moisture control systems. These examples demonstrate the importance of aligning employee-centric policies with advanced technologies to achieve optimal workplace conditions.

In summary, the findings emphasize that a holistic approach combining HRM strategies, employee engagement, and technological advancements is essential for preventing mold and moisture in garment factories. By adopting these practices, factories can enhance their operational efficiency, safeguard product quality, and foster a healthier work environment for employees.

Chapter Six:

Recommendations &

Conclusion

5.1 Recommendations

While the case studies and research demonstrate the effectiveness of HRM strategies in preventing mold and moisture, several recommendations can further enhance the ability of garment factories to mitigate these risks:

5.1.1 Investment in Technological Solutions: Technological advancements, such as IoT-enabled humidity monitoring devices and AI-driven predictive maintenance systems, should be incorporated into HRM strategies. These technologies can provide real-time data on environmental conditions, allowing factory management to respond promptly to humidity fluctuations, water leaks, and equipment malfunctions before they lead to mold outbreaks. Additionally, AI tools can predict maintenance needs, improving the efficiency of equipment servicing and reducing unexpected failures.

5.1.2 Expansion of Employee Training and Development: To ensure continuous improvement in environmental management, factories should invest in comprehensive and ongoing training programs for employees at all levels. Training should focus on: Advanced Moisture Control Techniques: Workers should learn to identify early signs of mold and moisture buildup, use moisture monitoring tools, and follow correct procedures for handling wet fabrics. Sustainability Practices: Training employees on sustainable production methods can foster a long-term commitment to environmental safety and waste reduction. Incident Reporting Systems: Employees must understand the importance of reporting environmental hazards quickly and how to use reporting systems efficiently. By continuously updating training programs to reflect the latest industry standards and technologies, factories can ensure that their workforce remains equipped to handle emerging challenges related to mold and moisture prevention

5.1.3 Strengthening Employee Engagement and Ownership: HR departments should further encourage employee engagement by: Incentive Programs: Introducing reward systems for employees who identify and report environmental hazards, provide feedback on mold prevention practices, or suggest improvements. This will foster a culture of responsibility and increase participation in environmental safety efforts. Cross-Department Collaboration: Establishing environmental safety committees that include representatives from different departments such as production, maintenance, and HR. This will ensure that environmental management practices are integrated across all areas of the factory. Feedback Mechanisms: Regularly collect feedback from employees on workplace conditions, moisture control procedures, and safety practices. This input can be used to refine existing policies and identify areas for improvement.

5.1.4 Regular Audits and Inspections: To ensure the effectiveness of mold prevention measures, factories must implement a robust inspection and audit system. This should include: Monthly Environmental Audits: Comprehensive checks of humidity levels, HVAC systems, storage areas, and maintenance schedules to ensure compliance with safety standards. Third-Party Inspections: Engage external experts to evaluate the factory's environmental conditions periodically. Third-party audits bring objectivity and provide a fresh perspective on potential risks. Corrective Action Plans: Establish clear protocols for addressing issues identified during audits. This includes assigning responsible teams, setting deadlines for corrections, and tracking progress.

5.1.5 Compliance with International Standards: To further enhance their environmental management systems, garment factories should align with internationally recognized standards such as ISO 14001 (Environmental Management Systems). Compliance with these standards not only ensures that factories adhere to best practices but also enhances their reputation as environmentally responsible organizations. This can lead to increased market competitiveness and attract eco-conscious consumers. HR teams can play a pivotal role in educating the workforce about these standards and ensuring that factories comply with them consistently. Regularly reviewing and updating policies to align with global environmental practices will keep factories on track with emerging sustainability trends.

5.1.6 Collaboration with Experts and Industry Partners: Garment factories can benefit from collaborating with companies like McDry Desiccant Ltd, which specialize in moisture-control solutions. By partnering with experts, factories can integrate cutting-edge technologies into their operations, receive customized advice, and ensure that they are using the best possible systems for managing mold and moisture. These partnerships can also provide valuable training resources and ensure that HR teams are well-equipped to manage environmental hazards effectively.

In conclusion, HRM strategies are central to mold and moisture prevention in garment factories. By integrating environmental monitoring systems, employee training, preventive maintenance, and effective reporting mechanisms, HR teams can significantly reduce the risk of mold-related damage. The case studies of Superdry and McDry Desiccant Ltd provide valuable examples of how combining HRM and technical solutions leads to sustainable and efficient factory operations. The recommendations outlined in this report focus on leveraging technology, enhancing employee engagement, strengthening compliance, and collaborating with industry experts. Implementing these strategies will further help garment factories create safe, efficient, and sustainable production environments, ultimately contributing to long-term operational success and improved product quality.

The research highlights several key insights:

Environmental Monitoring: Factories must actively manage environmental factors such as humidity and temperature through humidity control systems, HVAC systems, and dehumidifiers.

Employee Training: Educating employees on proper fabric handling, moisture monitoring, and reporting mechanisms reduces the risk of mold outbreaks.

Workplace Safety Policies: Establishing clear policies regarding cleaning schedules, inspections, and maintenance procedures helps maintain a safe environment.

Employee Engagement: A strong reporting culture encourages workers to be proactive in identifying and reporting environmental hazards.

Compliance and Preventive Maintenance: Regular audits and inspections ensure that factory environments remain conducive to mold-free production.

5.2 Conclusion

This report has examined the role of Human Resource Management (HRM) strategies in preventing mold and moisture in garment factories, focusing on their potential to create safe and productive environments. The findings from the literature review and case studies of Superdry and McDry Desiccant Ltd demonstrate that HRM can significantly influence mold prevention efforts, shaping workplace policies, fostering employee engagement, and ensuring compliance with environmental standards. Mold and moisture in garment factories can lead to significant production delays, quality issues, and health concerns. Therefore, HRM must take a proactive approach by addressing these environmental challenges through a combination of policies, employee training, and regular inspections. The integration of HR-led initiatives such as employee engagement programs, training on moisture control, and regular maintenance checks plays a crucial role in preventing mold outbreaks and safeguarding both fabric quality and worker safety. Superdry and McDry Desiccant Ltd exemplify how companies can successfully integrate HRM strategies with technical solutions to control mold and moisture. Superdry's commitment to sustainability and proactive employee involvement in hazard reporting has helped reduce mold risks, while McDry's collaborative approach with factory HR teams ensures that moisture-control systems are effectively implemented and maintained.

References

Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.

Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press.

Fiedler, F. E. (1964). Leadership in Administration: A Sociological Interpretation. Harper & Row.

Garcia, R., & Martin, J. (2019). Preventing mold outbreaks in garment factories through climate monitoring and preventive maintenance. Journal of Environmental Management, 232, 142-150.

Johnson, P., Roberts, L., & Dawson, M. (2020). The role of employee training in environmental hazard prevention: A case study in garment factories. Journal of Workplace Safety and Sustainability, 15(4), 85-95.

Katz, D., & Kahn, R. L. (1978). The Social Psychology of Organizations. John Wiley & Sons.

Lee, T., & Wong, W. (2020). Humidity and mold risks in garment factories: A study of climate management strategies. Textile Research Journal, 90(7), 927-938.

Smith, J., & Brown, L. (2021). The impact of workplace safety policies on mold outbreaks in garment production environments. Industrial Safety and Health Journal, 38(2), 112-121.

Appendix: Questionnaire

1. **Are all materials properly placed on pallets or shelves?**
   - ☐ Yes
   - ☐ No
2. **Is a temperature and relative humidity (RH) record sheet maintained in the warehouse, with records taken at least twice or three times daily?**
   - ☐ Yes
   - ☐ No
3. **Is the warehouse equipped with a normally functioning hygrometer?**
   - ☐ Yes
   - ☐ No

4. **Is the FIFO (First In, First Out) principle adhered to in the warehouse?**
    - ☐ Yes
    - ☐ No

5. **Is the production area connected to any area with water connections, including canteens, restrooms, or restaurants?**
    - ☐ Yes
    - ☐ No
6. **Can the doors and windows in the workshop be closed entirely?**
    - ☐ Yes
    - ☐ No
7. **Are workers in special positions (e.g., brushing glue, painting) wearing appropriate protective clothing, such as anti-dust and anti-fouling work clothes, gloves, and masks?**
    - ☐ Yes
    - ☐ No
8. **Are there any drinking bottles or food items in the packing area?**
    - ☐ Yes
    - ☐ No
9. **Is the randomly measured moisture content of cartons below 14%?**
    - ☐ Yes
    - ☐ No
10. **Do operators check the integrity, cleanliness, and dryness of containers before loading?**
    - ☐ Yes
    - ☐ No