COMSATS University Islamabad

Lahore Campus

Industry Visit Report

Nishat Mills Limited

Course Code: EGG101
Course Title: Engineering Professionalism

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Chapter 1

Acknowledgment

We are sincerely grateful to Dr. Zaid Ahmad, Course Instructor for EGG101, for facilitating and supporting this industry visit opportunity as part of our Engineering Professionalism course. We extend special thanks to Mr. Muhammad Shoaib, General Manager (IT), and the team at Nishat Mills Limited for their hospitality, cooperation, and insightful discussion. This visit has contributed significantly to our understanding of engineering ethics, professionalism, and workplace practices.

Chapter 2

Executive Summary

This report summarizes our industry visit to Nishat Mills Limited, undertaken as part of the Engineering Professionalism (EGG101) course. The purpose of the visit was to observe how ethical standards, teamwork, safety practices, sustainability, and technical documentation are applied in real industrial environments. The report captures our reflections on professional conduct, communication, and risk management. An interactive session with the General Manager (IT) provided meaningful insights into engineering leadership and the expectations of IT professionals in a corporate setting.

In addition to the IT department, we also visited the Dyeing and Packaging Units, where we observed large-scale industrial processes, quality control mechanisms, and automation practices aligned with sustainability and operational efficiency.

Chapter 3

Company Profile

Nishat Mills Limited is a leading textile and manufacturing company in Pakistan, renowned for its high operational standards, robust compliance framework, and innovation-driven culture. The company leverages a robust IT infrastructure to support large-scale operations, including enterprise databases (e.g., Oracle 11g for legacy systems[1]), ERP systems, and automation tools. Its core values emphasize ethical business practices, environmental responsibility, employee welfare, and sustainable growth.

[1] Oracle 11g is a legacy system; newer versions like Oracle 19c offer enhanced features and performance.

Chapter 4

Objectives of the Visit

- To examine the application of engineering professionalism principles in a corporate environment.
- To understand how engineering teams uphold ethical standards, effective communication, and leadership.
- To observe workplace practices in safety, sustainability, documentation, and collaborative teamwork.
- To gain insights into the professional responsibilities and roles of IT engineers.

Chapter 5

Visit Activities and Observations

5.1 Entry and Security Check

Upon arrival, we were greeted with strict security protocols. Our identities were verified, and relevant personal and academic information was collected before we were allowed entry. This highlighted the company's strong emphasis on safety, data security, and regulatory compliance.

5.2 Departmental Tour

We visited the IT department, where we observed employees engaged in data management, software development, system monitoring, and support operations. The working environment was structured and professional, with noticeable focus on:

- Documentation discipline and database handling (Oracle 11g).
- Defined workflows, hierarchy, and teamwork.
- Energy-efficient digital operations (paperless systems).

In addition to the IT department, we also toured the * Dyeing* and ** Packing** units of the mill. The **Dyeing Unit** showcased automated machines used for fabric coloring and treatment, with strict adherence to temperature control, chemical handling, and safety measures. Quality control checkpoints were also integrated into the workflow to ensure consistency in dye output.

The **Packaging Unit** was responsible for the final product presentation and shipment preparation. We observed the use of barcode-based tracking, quality inspection before packing, and sustainable packaging practices. The processes were streamlined to minimize delays and ensure accurate dispatching of finished goods.

5.3 Interactive Q&A Session with GM IT

The most insightful part of the visit was a one-hour session with Mr. Muhammad Shoaib, General Manager (IT). We asked questions relevant to our course, and his answers helped connect academic theory with practical experience:

Q1: What behavior best reflects professionalism in an IT workplace?
A: "Professionalism is not just about technical skills—it's about punctuality, reli-

ability, communication, and ethical behavior."

Q2: What kind of culture do you aim to build in your department?
A: "We aim for a collaborative and inclusive culture. Team members are encouraged to communicate openly, share feedback, and support each other."

Q3: What are some common professionalism mistakes made by fresh graduates?
A: "Newcomers often neglect documentation, fail to follow up on tasks, or hesitate to ask questions. Taking initiative and showing responsibility matters a lot."

Q4: How important is communication and teamwork in large-scale IT projects?
A: "They are critical. No system is built in isolation. Without proper coordination, even great ideas fail."

Q5: What advice would you give to students who want to grow professionally?
A: "Be adaptable and never stop learning. Also, don't just wait for instructions—show initiative."

Q6: How do you ensure ethical standards and data confidentiality?
A: "Access control is key. We assign roles carefully, audit systems regularly, and train staff on confidentiality agreements."

Q7: How does your department manage safety and risk in IT systems?
A: "We use disaster recovery systems, regular backups, restricted access to servers, and monitoring tools."

Q8: What sustainable or green practices does your department follow?
A: "We've minimized paper use and shifted to digital documentation. We also ensure eco-friendly hardware disposal."

Chapter 6

Reflections on Engineering Professionalism

- **Ethical Practices**: High standards in data handling and conduct.
- **Safety Protocols**: Emphasis on physical and digital safety.
- **Teamwork**: Collaboration and clear communication were key.
- **Sustainability**: Paperless, energy-efficient practices observed.
- **Leadership & Communication**: Mentorship and transparency promoted success.

Chapter 7

Lessons Learned

- Professionalism includes ethics, punctuality, communication, and accountability.
- Safety and sustainability are integral to daily operations and decision-making.
- Leadership enables others and builds trust through teamwork.
- Documentation, responsibility, and initiative are key engineering traits.
- Communication enhances clarity, reduces errors, and improves coordination.
- Lifelong learning and adaptability define modern engineering success.
- Ethical behavior builds long-term credibility and organizational trust.

Chapter 8

Suggestions

- Incorporate short interactive demonstrations during future visits to help students better visualize industrial tools, workflows, and IT systems in action.
- Provide a brief pre-visit orientation or handout summarizing the company's departments, technologies, and visit objectives so students can engage more meaningfully.
- Allocate a portion of the visit for brief discussions with younger staff or recent graduates, allowing students to relate academic learning with early career experiences.
- Consider implementing a water reuse system in the Silk Bank area, where a significant amount of water appears to be discharged directly. Recycling water would promote sustainability and reduce waste.
- Introduce more automation in areas involving repetitive manual tasks to boost operational efficiency and reduce the margin for error.
- Bridge the generational gap between senior staff (largely Millennials) and visiting students (mainly Gen Z) by designing short engagement activities or a moderated discussion that fosters mutual understanding and exchange of ideas.

Chapter 9

Conclusion

Our visit to Nishat Mills Limited provided valuable exposure to real-world engineering professionalism. We observed the seamless integration of ethics, teamwork, safety, and sustainability into daily operations. The Q&A session with Mr. Muhammad Shoaib offered clarity on what is expected of future engineers in a corporate setting. This experience has helped us connect our academic learning with practical industry demands.

Chapter 10

Annexures

- **Annexure I**: Group photo (Figure 10.1)
- **Annexure II**: Q&A session snapshot (Figure 10.2)
- **Annexure III**:Main Entrance (Figure 10.3)
- **Annexure IV**:Packaging Unit (Figure 10.4)
- **Annexure V**:IT Department (Figure 10.5)
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Figure 10.1: Group photo at Nishat Mills Limited

Figure 10.2: Q/A session with General Manager IT Department

Figure 10.3: Main entrance

Figure 10.4: Packaging Unit

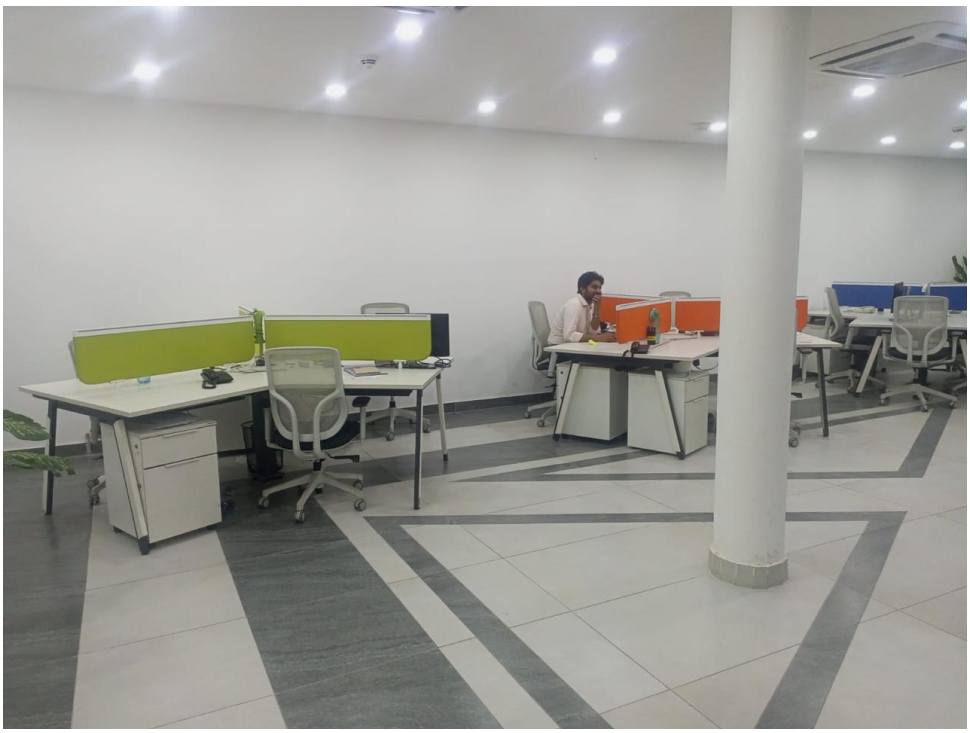

Figure 10.5: IT Department

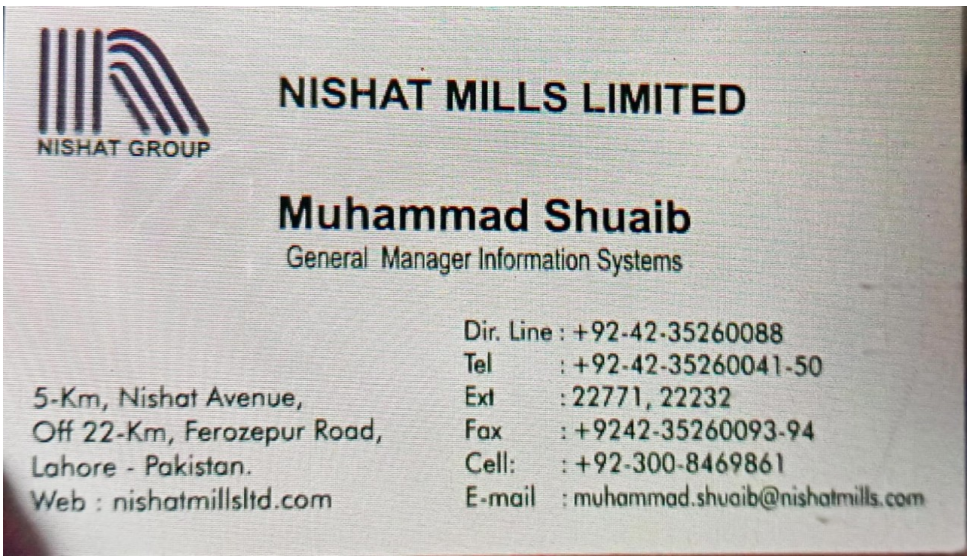

Figure 10.6: Visiting Card of GM IT Department