A TECHNICAL REPORT

STUDENT INDUSTRIAL WORKING EXPERIENCE SCHEME

(SIWES)

Held at

VICTORY GLASS ENTERPRISES

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DEDICATION

I dedicate this technical report to the Almighty Allah, the giver of knowledge, wisdom and who is rich in mercy.

ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to the creator of heaven and earth, the one who knows the beginning and the end, the alpha and the omega, the Almighty God and also to my guides (MR & MRS. AJAO), and to all those who has helped me during my SIWES programme. The blessings, help and guidance given by them, time to time has carry me so this far and shall carry on the journey of life on which I am about to embark. I also take this opportunity to express a deep sense of gratitude to compliment my mentors for their cordial support valuable information and guidance which helped me in completing my SIWES through various stages. Lastly my deep regard to the best and most inspiring brother and sister.

A big thanks goes to my friends, May Almighty GOD bless, protect, keep, nourish and guide you through all your life's entire journey. And also my regard to the school board of trustees and the staff a very big thank you to all and sundry.

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CHAPTER ONE

1.1 BACKGROUND OF SIWES

The Student Industrial Work Experience Scheme (SIWES) is a skill development program designed to prepare students of universities, polytechnics, and colleges of education for the industrial work situation they are likely to encounter after graduation. Established by the Industrial Training Fund (ITF) in 1973, SIWES bridges the gap between theory and practice by providing students with the opportunity to gain hands-on experience in their chosen fields. The program is mandatory for students in engineering, technology, science, and other related disciplines, as it equips them with practical skills and exposure to real-world work environments.

Students Industrial Work Experience Scheme (SIWES) is a Skills Training Program designed to prepare and expose Students of Universities, Polytechnics, Colleges of Technology, Colleges of Agriculture and Colleges of Education for the Industrial Work situation they are likely to meet after graduation. The Scheme affords Students the opportunity of familiarizing and exposing themselves handling equipment and machinery that are usually not available in their institutions.

The Student Industrial Work Experience Scheme (SIWES) is a program designed to provide students with practical exposure to their chosen fields of study. It bridges the gap between theoretical knowledge acquired in academic institutions and the practical skills required in the workplace. This report documents my experience during the SIWES program at Chitos supermarket and store, focusing on procurement and supply management in the foodstuff sector.

1.2 HISTORY OF SIWES

The Students' Industrial Work Experience Scheme (SIWES) was initiated in 1973 by the Federal Government of Nigeria under the Industrial Training Fund (ITF) to bridge the gap between theory and practice among products of our tertiary Institutions. It was designed to provide practical training that will expose and prepare students of Universities, Polytechnics, and Colleges of Education for work situation they are likely to meet after graduation. The program was created to address the lack of practical skills among graduates and to ensure that students are adequately prepared for the demands of the labor market. Over the years, SIWES has become a mandatory part of the curriculum for students in professional disciplines.

Before the establishment of the scheme, there was a growing concern among the industrialists that graduates of institutions of higher learning lacked adequate practical background studies preparatory for employment in industries. Thus the employers were of the opinion that the theoretical education going on in higher institutions was not responsive to the needs of the employers of labour.

As a result of the increasing number of students' enrolment in higher institutions of learning, the administration of this function of funding the scheme became enormous, hence ITF withdrew from the scheme in 1978 and was taken over by the Federal Government and handed to National Universities commission (NUC), National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE). In 1984, the Federal Government reverted back to ITF which took over the scheme officially in 1985 with funding provided by the Federal Government

1.3 OBJECTIVES OF SIWES

The primary objectives of SIWES include:

- To expose students to real-world work environments.
- To equip students with practical skills relevant to their fields of study.
- To foster a smooth transition from academic life to professional careers.
- To enhance students' understanding of workplace ethics and responsibilities.

1.4 OBJECTIVES OF THE COMPANY

The establishment of SIWES was driven by the need to:

- Address the gap between academic training and industry requirements.
- Produce graduates who are not only theoretically sound but also practically competent.
- Promote collaboration between educational institutions and industries.
- Enhance the quality of education by integrating practical training into the curriculum.
- Contribute to national development by producing a skilled workforce capable of driving innovation and economic growth.

CHAPTER TWO

2.1. BENEFIT DERIVED FROM SIWES PROGRAMME

The experience, knowledge, skills and exposure acquired during the period of attachment in the industrial exercise cannot be over emphasized. I was exposed to certain areas in my course of study, such as:

1. **Skill Development**: Students acquire practical skills and competencies that are essential for their professional growth.

2. **Industry Exposure**: The program provides students with firsthand experience of industrial operations, processes, and technologies.

3. **Networking Opportunities**: Students interact with professionals in their field, building valuable connections for future career prospects.

4. **Enhanced Employability**: Employers prefer candidates with practical experience, making SIWES participants more competitive in the job market.

5. **Improved Academic Performance**: The application of theoretical knowledge in real-world scenarios enhances students' understanding of their coursework.

6. **Contribution to National Development**: By producing a skilled workforce, SIWES contributes to the economic and technological advancement of the nation.

2.2 OVERVIE OF THE STORE

Victory Glass Enterprises, Olorunsogo is a reputable company located at olorunsogo mushin, Lagos.The company specializes in the cutting, designing, and installation of glass for residential, commercial, and industrial purposes. Their services include the production of tempered glass, laminated glass, and customized glass designs for doors, windows, partitions, and furniture.

2.3 PRECAUTIONARY MEASURES IN THE STORE

Working with glass requires strict adherence to safety protocols to prevent accidents, injuries, and material damage. Below are the key precautionary measures I observed and practiced during my SIWES program at Victory Glass Enterprises, Olorunsogo:

1. Personal Protective Equipment (PPE)

Safety Gloves: Wearing cut-resistant gloves to protect hands from sharp edges and glass shards.

Safety Goggles: Using goggles to shield the eyes from glass particles and dust during cutting or drilling.

Safety Boots: Wearing sturdy boots to protect feet from falling glass or heavy equipment.

Long-Sleeved Clothing: Covering the body to minimize exposure to sharp edges and prevent cuts.

2. Handling Glass Sheets

Proper Lifting Techniques: Using correct lifting methods to avoid strain or injury when moving heavy glass sheets.

Edge Protection: Handling glass edges carefully to prevent cuts and breakage.

Use of Suction Cups: Employing suction cups to grip and move large glass panels safely.

Avoiding Direct Contact: Minimizing bare-hand contact with glass edges to reduce the risk of injury.

3. Safe Use of Tools and Equipment

Regular Maintenance: Ensuring all cutting tools and machinery are in good working condition before use.

Proper Training: Receiving adequate training on how to operate glass cutting machines and hand tools.

Sharp Tools: Keeping cutting tools sharp to ensure clean cuts and reduce the risk of accidents caused by excessive force.

Tool Inspection: Checking tools for defects or damage before use.

4. Workspace Safety

Clean and Organized Workspace: Keeping the work area free of clutter to prevent tripping or accidents.

Proper Storage: Storing glass sheets vertically in designated racks to prevent tipping or breakage.

Adequate Lighting: Ensuring the workspace is well-lit to improve visibility and reduce errors.

Clear Signage: Posting warning signs in areas where glass cutting or installation is taking place.

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5. During Cutting and Installation

Accurate Measurements: Double-checking measurements before cutting to avoid material wastage and errors.

Controlled Force: Applying consistent and controlled pressure when cutting glass to prevent cracks or breaks.

Use of Straightedges: Using straightedges or guides to ensure precise cuts and reduce the risk of mistakes.

Securing Glass: Ensuring glass panels are firmly held in place during cutting or installation to prevent slipping.

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6. Emergency Preparedness

First Aid Kit: Keeping a fully stocked first aid kit on-site to address minor injuries immediately.

Fire Extinguishers: Having fire extinguishers readily available in case of emergencies.

Emergency Exits: Ensuring all emergency exits are clearly marked and unobstructed.

Training on Emergency Procedures: Familiarizing staff and interns with emergency response protocols.

7. Environmental Precautions

Proper Disposal of Waste: Safely disposing of glass scraps and debris to prevent injuries.

Dust Control: Using water or dust extraction systems to minimize airborne glass particles during cutting.

Recycling: Recycling glass waste where possible to reduce environmental impact.

2.4 APPARATUS USED IN THE COMAPNY

During my SIWES program at Victory Glass Enterprises, Olorunsogo, I was exposed to a variety of tools and equipment used in the cutting, designing, and installation of glass. Below is a detailed list of the apparatus and tools commonly used in the company:

1. Cutting Tools

Glass Cutter: A handheld tool with a small, hardened wheel used to score glass sheets for cutting.

Straightedge or T-Square: Used as a guide to ensure straight and accurate cuts.

Glass Pliers: Used to break off excess glass along the scored line.

Circle Cutter: A specialized tool for cutting circular shapes in glass.

Diamond-Tipped Cutter: For cutting thicker or tempered glass.

2. Measuring and Marking Tools

Measuring Tape: For taking accurate measurements of glass sheets and installation areas.

Marker or Grease Pencil: Used to mark cutting lines on the glass surface.

Angle Finder: For measuring and marking angles during cutting or installation.

Spirit Level: To ensure glass panels are installed evenly and horizontally.

3. Drilling and Shaping Tools

Glass Drill Bits: Specialized drill bits designed to create holes in glass without cracking it.

Rotary Tool (Dremel): For shaping, engraving, or polishing glass edges.

Grinding Wheel: Used to smooth rough edges after cutting.

4. Installation Tools

Suction Cups: For lifting and positioning large glass panels safely.

Glass Clamps: To hold glass panels in place during installation.

Sealant Gun: For applying adhesives or sealants to secure glass panels.

Rubber Mallet: Used to gently tap glass into place without causing damage.

Silicone and Adhesives: For sealing and bonding glass to frames or surfaces.





5. Safety Equipment

Safety Gloves: Cut-resistant gloves to protect hands from sharp edges.

Safety Goggles: To shield eyes from glass particles and dust.

Safety Boots: To protect feet from falling glass or heavy equipment.

Dust Mask: To prevent inhalation of glass dust during cutting or drilling.




6. Automated Machinery

Glass Cutting Machine: A computer-controlled machine for precise and efficient cutting of glass sheets.

Tempering Furnace: Used to strengthen glass by heating and cooling it rapidly.

Laminating Machine: For bonding multiple layers of glass with interlayers to create laminated glass.

Edge Polishing Machine: For smoothing and polishing the edges of cut glass.

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7. Cleaning and Maintenance Tools

Glass Cleaner and Squeegee: For cleaning glass surfaces after installation.

Microfiber Cloth: To wipe off fingerprints, dust, or residue from glass.

Scraper: For removing excess sealant or adhesive from glass surfaces.



8. Miscellaneous Tools

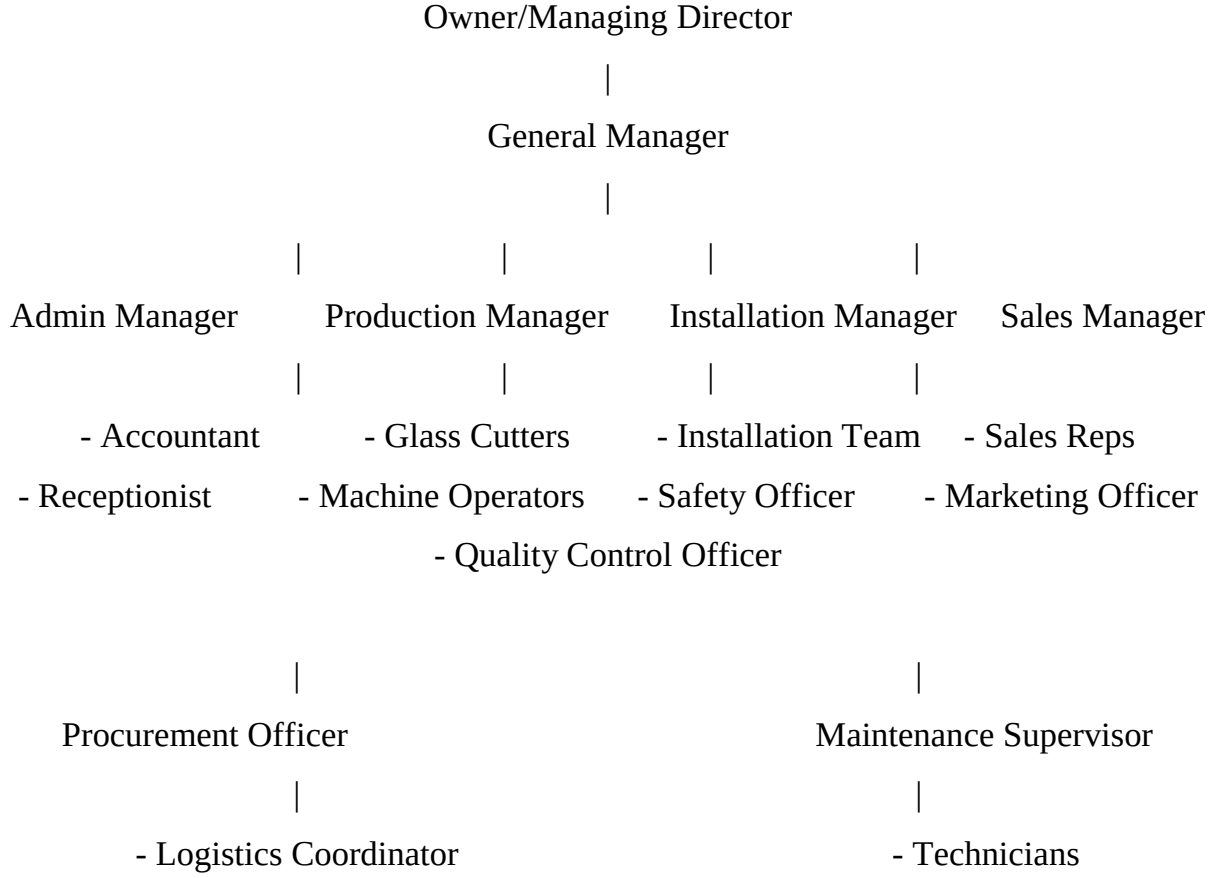
Workbench: A sturdy surface for cutting and handling glass.

Glass Storage Racks: For safely storing glass sheets vertically.

Clamps and Vices: To hold glass securely during cutting or shaping.

The tools and equipment used at Victory Glass Enterprises, Olorunsogo are essential for ensuring precision, efficiency, and safety in glass cutting and installation. During my SIWES program, I gained hands-on experience with many of these tools, which enhanced my technical skills and understanding of the glass industry. Proper use and maintenance of these tools are critical to achieving high-quality results and minimizing risks in the workplace.

2.5 ORGANIZATIONAL CHART OF GEO FREEDOM BOOKS AND STATIONERIES STORE



An organizational chart provides a visual representation of the structure of an organization, showing the hierarchy of roles and the relationships between different positions. Below is a typical organizational chart for a company like Victory Glass Enterprises, Olorunsogo, which specializes in glass cutting and installation:

1. Top Management

Owner/Managing Director: Oversees the overall operations, strategic planning, and decision-making for the company.

General Manager: Responsible for day-to-day operations, ensuring efficiency, and managing departmental heads.

2. Administrative Department

Admin Manager: Handles administrative tasks, including HR, payroll, and office management.

Receptionist/Secretary: Manages front desk operations, customer inquiries, and appointments.

Accountant: Manages financial records, budgeting, and tax compliance.

3. Production Department

Production Manager: Oversees the cutting, shaping, and tempering of glass.

Glass Cutters: Skilled workers responsible for cutting glass sheets to specified sizes and shapes.

Machine Operators: Operate automated glass cutting and tempering machines.

Quality Control Officer: Ensures that all glass products meet quality standards before delivery.

4. Installation Department

Installation Manager: Coordinates and supervises on-site glass installation projects.

Installation Team: Skilled technicians responsible for installing glass panels, doors, windows, and partitions.

Safety Officer: Ensures compliance with safety protocols during installation.

5. Sales and Marketing Department

Sales Manager: Develops sales strategies and manages client relationships.

Sales Representatives: Engage with customers, provide quotes, and close deals.

Marketing Officer: Handles advertising, promotions, and brand management.

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6. Procurement and Logistics Department

Procurement Officer: Sources and purchases raw materials (glass sheets, adhesives, tools, etc.).

Logistics Coordinator: Manages the transportation and delivery of glass products to clients.

7. Maintenance Department

Maintenance Supervisor: Oversees the maintenance and repair of tools, machinery, and equipment.

Technicians: Perform routine maintenance and troubleshoot equipment issues.

Explanation of Roles

1. Top Management: Sets the vision, mission, and strategic goals of the company.
2. Administrative Department: Ensures smooth office operations and financial management.
3. Production Department: Handles the core activities of cutting, shaping, and tempering glass.
4. Installation Department: Responsible for on-site installation and ensuring safety during the process.
5. Sales and Marketing Department: Drives revenue by attracting and retaining customers.
6. Procurement and Logistics Department: Ensures the availability of materials and timely delivery of products.
7. Maintenance Department: Maintains tools and equipment to ensure operational efficiency.

The organizational structure of Victory Glass Enterprises, Olorunsogo is designed to ensure efficient operations, clear communication, and accountability. Each department plays a critical role in delivering high-quality glass products and services to clients. During my SIWES program, I interacted with various departments, which gave me a holistic understanding of how the company operates.

CHAPTER THREE

3.1 OVERVIEW OF PROCUREMENT PROCESSES

Procurement in the enterprise involves sourcing high-quality glasses from reliable suppliers. The process includes:

- Identifying suppliers and negotiating contracts.
- Placing orders and ensuring timely delivery.
- Inspecting goods for quality and compliance with specifications.
- Managing vendor relationships to ensure long-term partnerships.

3.2 SUPPLY CHAIN MANAGEMENT IN THE ENTERPRISE

The supply chain management process ensures that products are delivered to customers efficiently. Key activities include:

- Inventory management to maintain optimal stock levels.
- Logistics and distribution to ensure timely delivery of goods.
- Monitoring and analyzing supply chain performance to identify areas for improvement.

3.3 CHALLENGES IN PROCUREMENT AND SUPPLY MANAGEMENT

Some of the challenges observed during my SIWES program include:

- Delays in delivery from suppliers.
- Fluctuations in product prices due to market conditions.
- Difficulty in maintaining consistent quality across suppliers.

3.4 SOLUTIONS AND RECOMMENDATIONS

To address these challenges, the following solutions are recommended:

- Establishing long-term partnerships with reliable suppliers.
- Implementing advanced inventory management systems to track stock levels in real-time.
- Diversifying the supplier base to reduce dependency on a single source.
- Conducting regular training for staff on procurement and supply chain best practices.

CHAPTER FOUR

4.1 KEY LESSONS LEARNED

- The importance of effective communication in procurement and supply chain management.
- The role of technology in streamlining inventory and supply chain processes.
- The need for adaptability in addressing supply chain challenges.
- The value of teamwork and collaboration in achieving organizational goals.

4.2 PERSONAL REFLECTIONS

My SIWES experience has been both challenging and rewarding. I learned the importance of attention to detail in procurement and the critical role of supply chain management in ensuring customer satisfaction. This experience has deepened my understanding of the retail and food industry and prepared me for future career challenges.

CHAPTER FIVE

5.1 SUMMARY OF EXPERIENCE

My SIWES attachment at Victory Glass Enterprises provided me with a comprehensive understanding of procurement and supply management in a retail environment. I gained practical skills in inventory management, vendor negotiation, and supply chain optimization, which will be invaluable in my future career.

5.2 CONCLUSION

The SIWES program has been a transformative experience, equipping me with the knowledge and skills required to excel in the field of procurement and supply management. The exposure to real-world challenges and solutions has prepared me for the demands of the professional world. The SIWES program provided me with a unique opportunity to gain practical experience in procurement and supply chain management. Through my attachment at Esteem-G mall, I was able to apply the theoretical knowledge gained in the classroom to real-world scenarios.

The program enhanced my understanding of procurement processes, inventory management, supplier relationship management, logistics, and compliance. It also equipped me with essential skills such as problem-solving, communication, and teamwork, which are critical for success in the procurement and supply chain industry.

5.3 RECOMMENDATIONS

To enhance the effectiveness of the SIWES program, the following recommendations are proposed:

- Increase the duration of the program to allow for deeper immersion in the work environment.
- Provide students with more opportunities to participate in decision-making processes.
- Encourage organizations to assign mentors to guide students throughout the program.
- Incorporate regular feedback sessions to assess students' progress and address challenges.

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