

Internship Report
On
Building Resilience through Business Automation:
MAX Group's Journey to Automation with ERP



submitted to
Islamic University of Technology
in partial fulfillment of the requirements for the degree of
BBA in Business and Technology Management (BTM)

Submitted by:

I understand that my final report will become part of the permanent collection of the Islamic University of Technology BBA in Business and Technology Management Program. My signature below authorizes release of my final report to any reader upon request.

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Approved by:

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LETTER OF TRANSMITTAL

Date: 04 May, 2023

Dr. Md. Abul Kalam Azad
Professor and Head of the Department
Department of Business and Technology Management
Islamic University of Technology

Subject: Submission of Internship Report.

Respected Sir,

I hereby submit the Internship report titled “Building Resilience through Business Automation: MAX Group's Journey to Automation with ERP” which is a part of the internship program. Working under your direct supervision was a significant personal accomplishment for me. The following report is my best effort to portray the current state of our firm and to reflect on my own personal observation while working for the organization. The chance to work at MAX Group, a leading conglomerate in Bangladesh has provided a door to a world of possibilities for learning about the company's field operations and personal development. It was an honor to work there and to meet the deadlines under your direction. I will be ready for any clarification if necessary. I will be highly obliged if you kindly accept this report any provide me with any kind of expert judgement or feedback you may have. If you consider this study helpful or beneficial in any way, it would be a big success for me.

Sincerely Yours,

Sadia Binte Shafiq
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ACKNOWLEDGEMENT

I would like to express my sincere gratitude to all those who have helped and supported me during my academic journey. First and foremost, I would like to thank my academic supervisor, Dr. Md. Abul Kalam Azad, Professor and Head of the Department, Department of Business and Technology Management, Islamic University of Technology, for his invaluable guidance, feedback, and encouragement throughout my internship. His knowledge and expertise in the field have been instrumental in shaping my work and helping me to achieve my goals.

I would also like to extend my thanks to MAX Group and my company supervisor Mushfique Salaheen (DGM, Project Control and MIS) for providing me with the opportunity to undertake my internship experience. His support, mentorship, and willingness to share their knowledge and expertise have been integral to my personal and professional growth. I would want to offer my heartfelt thanks to Javed Tazbeed Choudhury (Deputy Manager, MIS) for his cooperation, consistent practical learning and guidance, and support during the duration of my internship. Throughout my internship program, he provided me with knowledge and resources at every level.

I would like to thank my colleagues and peers for their support, encouragement, and collaboration throughout my academic and professional endeavors. Their camaraderie and teamwork have been a source of motivation and inspiration, and I am grateful for the friendships that have developed as a result.

I would also like to express my heartfelt appreciation to my family and friends for their unwavering support and encouragement. Their love, understanding, and encouragement have been essential to my success, and I am grateful for their unwavering presence in my life.

Executive Summary

This report provides an in-depth overview of my experience working as an intern at MAX Group, a leading conglomerate in Bangladesh. The report delves into various aspects of the organization, including its organizational structure, work culture, and market analysis. With a primary focus on my role as a Management Information Systems (MIS) intern, the report highlights the significance of the internally built ERP system implemented within the company.

The report covers the entire operation of the ERP system and its practical relation with the on-site job of regular activities across MAX Group. It also shows the workflow of each vast module operating in the system. This section of the report also outlines the tasks and importance each of module for the company.

The report underscores the significance of professional communication and networking within the organization, highlighting their role in fostering collaboration and knowledge sharing. By implementing the recommendations outlined in this report, MAX Group can bolster its operations, strengthen its market position, and achieve sustainable growth within the highly competitive business landscape of Bangladesh.

Key challenges faced by MAX Group, such as the limited representation of women in the corporate office and the need to enhance employee satisfaction have also been addressed in the report. To overcome these challenges, the report offers insightful recommendations, including the implementation of women empowerment initiatives and the provision of improved employee benefits. Moreover, the report emphasizes the importance of enhancing ERP training programs for employees to ensure a proficient understanding and utilization of the system.

The final section of this report recommends improvements in the ERP training for employees and emphasizes the importance of professional communication and networking. This report aims to provide valuable insights and practical recommendations that can enhance its overall performance and propel it to new heights of success. By implementing these recommendations, MAX Group can continue to be a market leader and achieve sustainable growth in the competitive business landscape of Bangladesh.

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Chapter 1: Introduction

1.1. Background of the Report

The fusion of knowledge and learning with theory and practice culminates in perfection, as the application of theoretical knowledge results in its enhancement in practical experience. "Internship" is a program that is highly beneficial to both the academic institution and the organization involved, and it is aimed at teaching and equipping students with the necessary skills and knowledge to face the challenges of the corporate world. As a student pursuing a Bachelor of Business Administration in Technology Management, I had the opportunity to participate in an internship program that allowed me to put my theoretical knowledge into practice. Under the guidance and mentorship of my academic supervisor, Prof. Dr. Md. Abul Kalam Azad, I was able to gain hands-on experience in the real world and prepare for the challenges of the corporate world. As a requirement for obtaining my degree, I have prepared this report under the direct guidance of Prof. Dr. Md. Abul Kalam Azad.

1.2. Origin of the Study

To fulfill the requirements of my BBA in TM degree, I am obliged to present this report, which details my internship experience in the Management Information Systems (MIS) Department of MAX Group. During my three-month tenure as an intern, I had access to the most current knowledge and utilized it to the fullest extent. As part of my assigned tasks, I was responsible for collecting data and monitoring activities related to the company's MIS operations. Additionally, I was given the opportunity to observe and document the functionalities of the company's in-house ERP system. Throughout this process, my company supervisor, Mushfique Salaheen (DGM, Project Control and MIS), provided me with valuable guidance and support to help me complete this report.

1.3. Specific Objective

- ✓ To gain additional knowledge about MAX Group
- ✓ To acquire knowledge about the organization's current mission, vision, goals, and objectives.
- ✓ To gain a comprehensive understanding of the MIS process of MAX Group

1.4. Methodology

A systematic approach is implemented throughout the inquiry, starting from data collection to the final delivery of results. In this report, I have described my internship program experience at MAX Group that has culminated in this report. I have conducted a three-month long descriptive study and leveraged my practical experience.

- **Primary Source:** My primary source of information was through discussions with representatives from various departments of MAX Group, and I have also gathered relevant information while performing my assigned tasks.
- **Secondary Source:** I have also utilized secondary sources such as the internet and MAX Group website to gather and derive additional information.

1.5. Limitations

- Gathering primary data can be a daunting task, and verifying its authenticity is even more challenging.
- Managers tend to be reluctant to share confidential information with interns, particularly when it comes to the MIS department, which is a sensitive function.
- Ensuring the highest level of accuracy is always a challenging task.
- Due to the limited time frame, it is difficult to gain a comprehensive understanding of the entire MIS department.

Chapter 2: Company Overview

2.1. Historical Background

MAX GROUP has been an outstanding example of continuous development and persistent progression in the industrial realm of Bangladesh since 1983. Starting off as a small leaf spring manufacturing company, MAX is now one of the largest conglomerates in Bangladesh contributing significantly to the industrial, infrastructural, and development sectors of the country.

MAX has been a reliable and trusted partner of the Government of Bangladesh for 35+ years in the development of infrastructure in key sectors such as Railway, Power Generation, Nuclear Power Plant, Power Transmission, Flyovers, Elevated Expressways, Bridges, Water Control, and Supply Structures, Overhead Water Reservoirs, Embankment, and Shore Protection, Dredging, High-rise Residential, and Commercial Buildings, etc. With a state-of-the-art equipment division of its own having more than 1200+ modern construction equipment, MAX is the largest EPC company in the country. MAX is the most experienced and reliable local turnkey solution provider in the Railway Track Construction segment and presently, MAX is the only Bangladeshi company that is manufacturing most of the railway track fittings (except the rail itself) in its own factory for meeting the demand of its rail projects. MAX has completed many critical and large railway projects and currently implementing both the 1st and 2nd largest single contracts in the history of Bangladesh Railway.

Apart from Railway, MAX has a notable presence in the Flyover and Bridge construction arena of Bangladesh. MAX has constructed the largest flyover of the port city, Chattagram. Furthermore, MAX is also constructing the largest Elevated Expressway in the same city starting from Lalkhan Bazar to Sha-Amanat Airport. Besides, MAX has completed different Bridge Projects across the country. Some of them are: Dhaleswari Bridge 1 & 2 (combined length 923 m), PC Girder Bridge over Bhairab River, Jessore (696.75 m), PC Girder Bridge over Madhumati River, Magura (600.70 m), etc.

MAX owns and operates a 78.5 MW gas-fired power plant in Ghorashal, Narshingdi, and another 163 MW combined cycle power plant in Fenchuganj, Sylhet and thus emerging as a key player in the power sector as well. The EPC (Engineering, Procurement & Construction) work of these power plants has been carried out by the company itself. Meanwhile, MAX has entered into the

country's only ongoing 2400 MW Nuclear Power Plant Construction Project at Rooppur as a specialized sub-contractor of Russian Joint-stock company "Atomstroyexport". To date, MAX has been awarded with six lots of this mega project which includes the Embankment and Shore Protection Works, Construction of Main Turbine Hall Buildings, and Construction of the Cooling Tower as well. MAX is also constructing another 150±10% MW HFO-based Power Plant Project at Sreepur, a 400 kV Double Circuit Transmission Line Project at Aminbazar - Gopalganj Section, and a 400kV Double Circuit Transmission Line Project at Anowara - Ananda Bazar Section.

Production of different stainless-steel products that includes crockery items and pipes of premier quality is also carried out by MAX. The company blends various grades of industrial and automobile lubricants for the domestic market. The company also produces export quality leaf springs in its own factory. In addition to the infrastructure and industrial sector, MAX also plays a key role in the fashion arena of the country through establishment of an exclusive fashion brand named "SCICCOSO", which is one of the most preferred brands among the fashion sensible community in Bangladesh. On a different note, MAX holds the exclusive distributorship of world's three reputed construction equipment manufacturers- SDLG, ICARO, FASSI in Bangladesh.

It is worth mentioning that MAX has a team of 400+ graduate engineers working relentlessly on its different projects and industries. These highly experienced engineers possess all the required skillsets to execute projects of any size and complexity safely and in time. The experience, diversity, and global partnership with the biggest foreign companies in the USA, Russia, Europe, China, and India have enabled MAX to progress continuously commensurate with the major business advancements of the past 35+ years. Strong ethical standards, firm commitment toward compliance, and excellence in execution have established MAX as one of the most preferred business partners for foreign and local companies. MAX is constantly engaged in improving performance, driving industrialization, creating market opportunities, and sustaining growth and value for its stakeholders as well. MAX ensures quality, safety, and reliability to both continuing and future clients and business partners with its determination for efficiency and excellence. (MAX Group, n.d.)

2.2. Journey of MAX Group

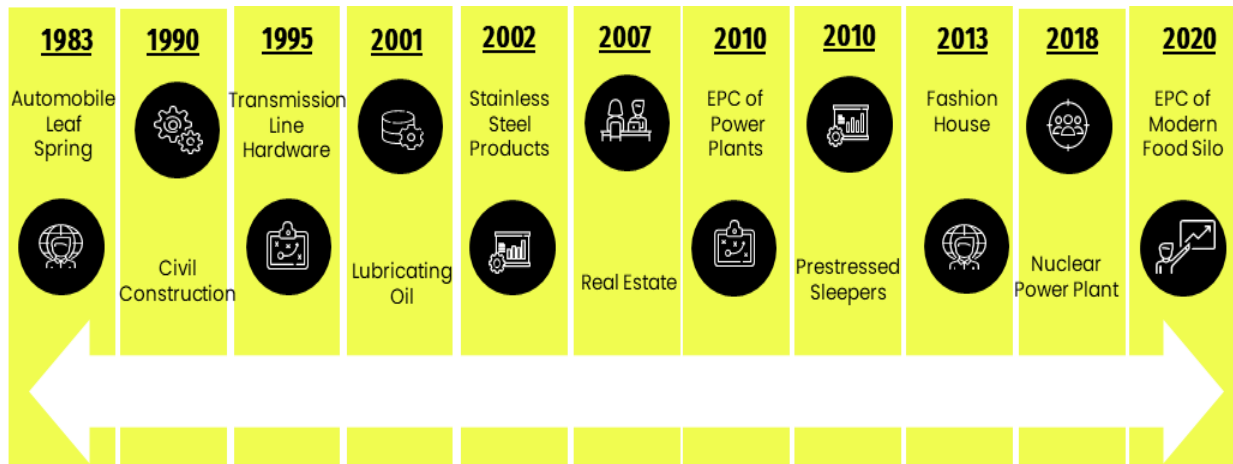


Fig 1: Journey of MAX Group

2.3. Corporate Profile

Name of the Company:	MAX Group
Year of Establishment:	1983
Status of the Company:	Private Limited Company
Country of Registration:	Registered under Registrar of Joint Stock Companies, Dhaka, Bangladesh
Number of Employees	10,000+
Corporate Office	RAOWA Complex, level-11, VIP Road Mohakhali, Dhaka- 1206, Bangladesh
Head Office:	Baitul Hossain Building, 6th floor, 27, Dilkusha C/A, Dhaka - 1000, Bangladesh
Telephone	+88 02 55058345-6, +88 096 14999333
Fax	+88 02 47110176
E-mail	Info@maxgroup-bd.com
Website	www.maxgroup-bd.com

2.4. Vision

Thriving as the advanced business leader in quality Mega-Project Delivery, reinforced by its innovative strategic project management methodologies, MAX intends to become the EPC Service Provider of FIRST choice in the country. MAX targets to attain in-house EPCM capability by 2021, shall generate high value 15,000 direct employment by 2025.

2.5. Mission

MAX is a company that shall not be owned by the owners only, but also to be owned by its employees. MAX values its people as its true stakeholders in achieving its vision, mission, by implementing requisite strategies.

MAX would achieve above visions through establishment of a group strategic project management office (SPMO) which will lead implementing safety as pivotal culture to deliver safe projects to generations and to the country. The SPMO will lead materializing end to end project development processes, early project set up planning procedures, project executions plan models, implementing total governance & control and, help acquiring up-to-date EPC/EPCM capabilities. MAX GROUP will continue to enhance its Power and Energy sector EPC experience along with acquiring operational capabilities as deliberate opportunities to strengthen positive value profile of the group. MAX will thrive vertically in the manufacturing wing growth augmenting the strategic supply chain of the mega-projects and boost project and corporate ROI. Any horizontal expansion of manufacturing division will be driven by R&D push, added market penetration and business development of consumer goods in engineering product – lines both for domestic and export markets and investing in those that elevates company's value factors complementing the vision.

The MAX GROUP will accomplish listing in the DSE (Dhaka Stock Exchange) by October 2020. It will engage in the road show to float IPO (Initial Public Offering) to boost financial leverage sharing corporate profit more with the general public and its underwriters. The MAX will maintain its sincere paymaster status and roles with country's banking communities and international development agencies as ADB, KFW, World Bank, JICA etc.

As a socially responsible company, MAX will achieve business growth through a structured organization that is dedicated to attaining the strategic vision pledging to deliver its sociotechnical obligations. These include “skills and knowledge enhancement initiatives at national level”,

sticking to “sustainable development goals (SDG-2030”) and supporting “vision 2041 of the GOB (Government of Bangladesh)” to put the nation at Developed Country Status.

2.5. Business Concerns of MAX Group



Fig 2: Business Concerns of MAX Group

MAX Infrastructure Limited

MAX Infrastructure Limited is a company that offers a comprehensive engineering solution for railway tracks and is the number one contractor for Bangladesh Railway. Established in 1983 in Bangladesh, MAX has expanded its business over the years and diversified into various fields such as railway construction, manufacturing of track fittings, infrastructure development, power generation, and manufacturing and trading of consumer products. MAX is committed to enhancing performance, playing a crucial role as a strong local partner, driving industrialization, creating opportunities and sustainable growth, and delivering value to all stakeholders while ensuring quality, safety, and timely completion of projects. The MAX Group has gained a reputation as the most reputable, trustworthy, and rapidly growing group in Bangladesh's local market.

ACCOLADES & AWARDS

- ISO 9001:2000 Certification International Quality and Excellence Award, USA-1999

- International Star Award for Quality, Madrid, Spain-2001
- SME Industries Fair best Award for Steel Industries-2004
- Arthokantha Best Business Award-2004
- Desher Khabar Business Award for best enterprise of the year-2007
- Corporate Client Golden Award, UCBL -2012
- Best Corporate Client Golden Award, UCBL-2013
- Special Prize for local participant Primer Pavilion DITF-2014

A REWARDING JOURNEY OF:

- 26 Years of Experience
- 262 Qualified Engineers
- 437 Modern Equipment
- 4375 Skilled Employees

MAX Power Limited

Max Power Limited (MPL), a company affiliated with the Max Group, is a prominent producer of rental power in the private sector of Bangladesh, which supplies electricity to the national grid. The company was established and registered under the Companies Act of 1994 on September 17, 2010, and is committed to ensuring timely commercial operation. To achieve this, MPL's workforce has worked 24/7 in conjunction with GE Rental Asset Holding, Inc, the third-largest rental power producer globally among the Forbes Global 2000, to create a natural gas-based power plant situated in Ghorashal, Palash, Narshingdi. MPL's primary objective is to provide uninterrupted power supply to the national grid at the lowest possible cost, earning them a top spot among all rental power plants for their affordable electricity selling rate to BPDB. This fast-growing company has set an ambitious goal to expand its power generation capacity to meet Bangladesh's electricity demands.

Max Power Limited was incorporated in Bangladesh under the Companies Act of 1994 as a private limited company with authorized capital of Tk. 1,000 million, with registration number C-87045/2010 dated September 19, 2010. The company signed a Power Purchase Agreement with the Bangladesh Power Development Board (BPDB) for the rental supply of 78.5 MW electricity for a period of three years, which expired in May 2014. After a successful first phase of operation,

BPDB renewed the contract for a further five years through a contract dated June 19, 2014. Notably, the plant operates on gas-fired simple cycle steam generation technology.

Kushiara Power Company Limited

Project Name: Engineering, Procurement and Construction Works of 163 MW Combined Cycle Power Plant at Fenchuganj Substation, Fenchuganj, Sylhet

Executing Authority: Kushiara Power Company Limited under BPDB

Funding Authority: GOB

Brief Description: Kushiara Power Company Limited established a power plant in the Fenchuganj upazila of Sylhet district in Bangladesh, which has a capacity of one hundred and sixty-three megawatts and operates on natural gas. The plant was built on a ten-acre plot near the Kushiara river and operates under a power purchase agreement with the Bangladesh Power Development Board for a period of twenty-two years. Jalalabad Gas Transmission and Distribution System Limited supplies the required gas under a gas supply agreement that will last for the entire lifespan of the project. The plant began combined cycle operation on April 28, 2018, with a full contracted net capacity of 163 megawatts. The electricity generated is transmitted to the National Grid through a 230 kilovolt Fenchuganj grid substation of the Power Grid Company of Bangladesh, which is connected by a 4.5 kilometer long transmission line. Max Infrastructure Limited is the EPC contractor responsible for constructing the first-ever turbine-based combined-cycle power plant in Bangladesh as a local EPC contractor.

MAX Pre-Stress Limited

Location: Ghatiapara, Banglabandha, Tetulia, Panchagarh.

Specialized Product: Pre-stressed Concrete Sleepers

Brief Description: Max Pre-Stress Limited is the largest supplier of concrete sleepers to the Bangladesh Railway, and the first concrete sleeper manufacturing unit in the country to receive ISO 9001:2008 certification. Over time, the design of the concrete sleepers has evolved to meet the changing needs of the Bangladesh Railways, with the company now producing pre-stressed concrete (PSC) sleepers in a factory spanning 11.11 acres and employing thousands of workers.

The company has an installed capacity of 200,000 sleepers per year, and has implemented the use of special strand wire with higher UTS, reducing the weight of steel per sleeper by 25%.

MAX Industries Limited

Location: Jagir, Manikganj.

Specialized Product: Stainless Steel Crockery Products, Kitchen Utensils and SS Pipes

Brief Description: Max Industries Limited, which is a major manufacturing unit of the MAX GROUP, has become one of the leading and fastest-growing companies in the stainless steel industry of Bangladesh. The company offers a wide range of stainless steel crockery products and pipes, and its modern plant in Manikganj is equipped with the latest production and quality processes, ensuring fast delivery and the ability to handle large orders. Since 2008, Max Industries Limited has earned a reputation for adhering to rigorous quality control practices that begin with the procurement of raw materials and continue through to the final dispatch of products. The company specializes in creating products that have lasting appeal and function, using 100% in-house production facilities, a team of well-qualified designers, engineers, skilled workers, professionals, and advanced techniques with highly mechanized machines. As a result of its unwavering commitment to quality and consistent efforts, Max Industries Ltd. has become a highly respected name in the market for the production and export of various types of stainless steel products and kitchenware utensils.

MAX Building Technologies Limited

Max Building Technologies Limited is an experienced player in both high-end residential and commercial building construction. They have a proven track record of delivering successful projects for clients. The company specializes in developing and selling residential and commercial buildings to customers all over Bangladesh. To achieve their goals, Max Building Technologies Limited employs a team of dedicated and highly skilled designers, architects, engineers, planners, and creative minds. They are all working towards the common goal of creating better homes in Dhaka city. In addition to their ongoing projects, the company has signed an agreement with Swiss International, a hotel chain company from Switzerland, to establish a four-star hotel in Cox's Bazar, Bangladesh.

Inox Industries Limited

Location: Mongla, Bagerhat.

Specialized Product: Export Quality Stainless Steel Crockery Products, Kitchen Utensils and SS Pipes.

Brief Description: Established in 2016, Inox Industries Limited is a subsidiary of the MAX GROUP. The factory, located at Mongla EPZ, Mongla, Bagerhat, Bangladesh, was founded with the aim of exporting locally made premium quality stainless steel pipes, crockeries, and cutleries to overseas markets. The factory covers a total area of 74,354.00 Sq. ft and is equipped with state-of-the-art machinery and technologies. It is an ISO 9001:2015 certified manufacturing unit that adheres to international standards in terms of quality, safety, and timely delivery. The exceptional quality and wide range of stainless steel products have earned Inox Industries Ltd. a well-known reputation in the international market.

AFA Steel Industries Limited

MAX Group's subsidiary 'AFA Steel Industries Limited' is renowned as the foremost manufacturer of leaf spring in Bangladesh. The company markets its top-quality springs under the brand names 'MAX SPRING' and 'AFA Spring' at competitive prices, and caters to a wide range of customers in both heavy and light vehicle segments through its appointed dealers nationwide. The company's focus on high quality, timely delivery, competitive pricing, and dependable after-sales service has established it as a leading player and market leader in the leaf spring industry of Bangladesh and the international market. To ensure the highest level of quality, MAX Spring has introduced robotic technology for leaf spring production, making it the first company in Bangladesh to do so. Additionally, the company adheres to international standards for all types of vehicles, including trucks, buses, pick-up vans, and easy bikes, maintaining its commitment to quality and excellence in the global market. As a result of meeting the country's demand for high-quality leaf springs, MAX SPRING is now being exported to international markets.

LUB House Industries Limited

Location: Narshingdi, Bangladesh.

Specialized Product: Automobile Lubricants

Brief Description: Lub House Industries Limited is certified with ISO 9001:2008 and operates in the field of lubricating oil blending and marketing, offering different types of lubricants under the brand name "NATIONAL LUB". The lubricants adhere to the standards of API/ISO/MIL. The company possesses a modern blending unit, along with a cutting-edge quality control laboratory, to guarantee the appropriate quality of the products.

Heavy Equipment & Motors Limited

Max Group is involved in a variety of industries, including the equipment and motor sectors. As part of our operations, we have become the sole distributor for renowned global brands such as SDLG, ICARO, and FASSI, offering a broad range of construction machines and equipment. Additionally, we provide rental services for various types of equipment, available for both short and long-term periods across the country.

SCICOSSO

SCICCOSO strives to maintain a distinctive presence within the ever-changing world of fashion, with a vision to create a lasting impression in the minds of our fashion-conscious community. Our aim is to cater to the discerning tastes of individuals across generations who value superior designs that exude sophistication and glamour. We are not just any fashion store; we are a fashion house that embodies the epitome of style and allure that everyone desires. The perfect combination of class and creativity can only be achieved by satisfying the craving for an experience that encompasses all facets of an urban lifestyle. Our product lines are meticulously crafted and showcased in our opulent and progressive store.

Maxcrete Limited

Location : Jagir, Manikganj, Bangladesh

Specialized Product : AAC Blocks

Brief Description: Maxcrete Limited is a pioneering company that has brought AAC Blocks to Bangladesh. AAC Blocks are an eco-friendly alternative to traditional clay-based bricks, known for being lightweight and cost-effective. Maxcrete Limited is constructing a cutting-edge AAC Block manufacturing unit on an 8-acre land in Manikganj, which is expected to revolutionize the building material sector in the country. This modern factory is scheduled to commence its commercial production in September 2022.

2.6. Organizational Chart

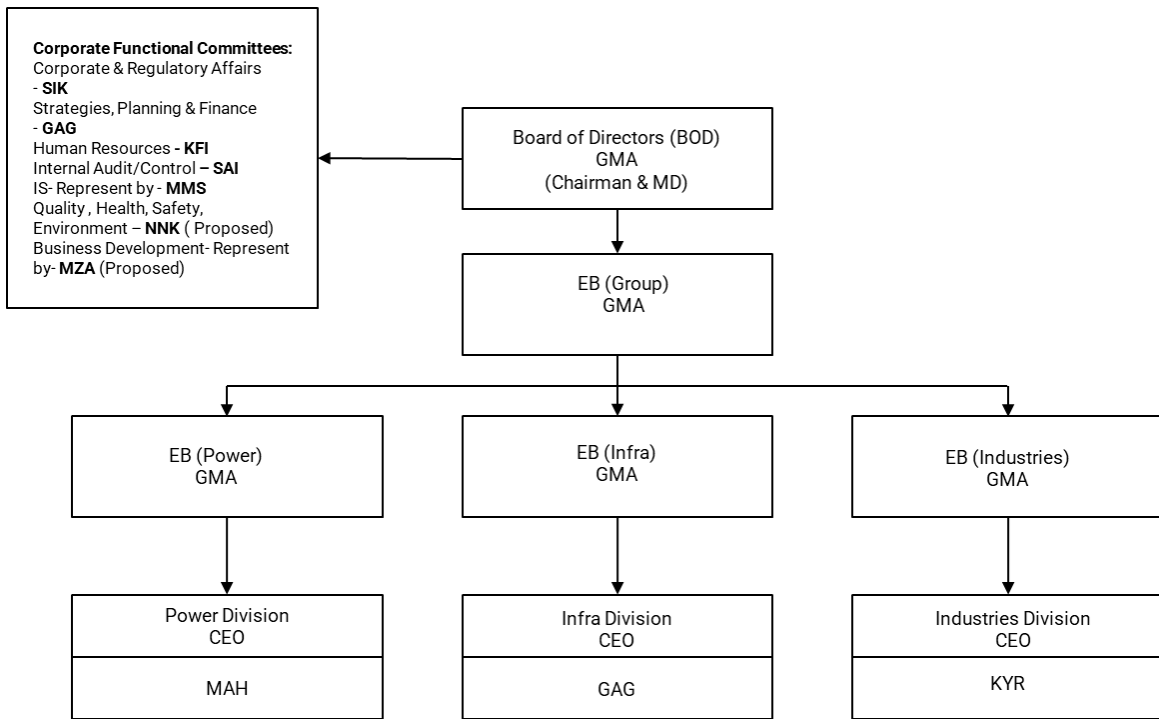


Fig 3: Organogram of MAX Group

2.7. Clients



Fig 4: Clients of MAX Group

MAX Group is a leading infrastructure development company in Bangladesh that primarily serves the needs of various government organizations. The company has established a strong reputation for its exceptional services in railway construction, power generation, and other infrastructure projects. MAX Group's clients are a testament to the company's commitment to delivering exceptional infrastructure services in Bangladesh. Overall, MAX Group is a trusted and reliable partner for infrastructure development projects in Bangladesh, with an unwavering commitment to delivering excellence in all aspects of its operations.

The company's clients are mainly government entities, including

- Bangladesh Power Development Board (BPDB),
- Bangladesh Railway,
- Local Government Engineering Department (LGED),
- Chittagong Development Authority (CDA),
- Bangladesh Army (BD Army),
- Power Grid Company of Bangladesh (PGCB),
- Bangladesh Water Development Board (BWDB),
- Bangladesh Atomic Energy Commission (BAEC),
- Bangladesh Rural Electrification Board (BREB),
- Dhaka Electric Supply Company Limited (DESCO),
- Dhaka Power Distribution Company (DPDC),
- B-R Powergen Ltd.,
- Karnaphuli Water Supply Authority (KWASA),
- Public Works Department (PWD),
- Roads and Highways Department (RHD),
- Rajdhani Unnayan Karttripakkha (RAJUK), and
- Atomstroyexport (ASE JSC).

2.8. The SWOT Analysis

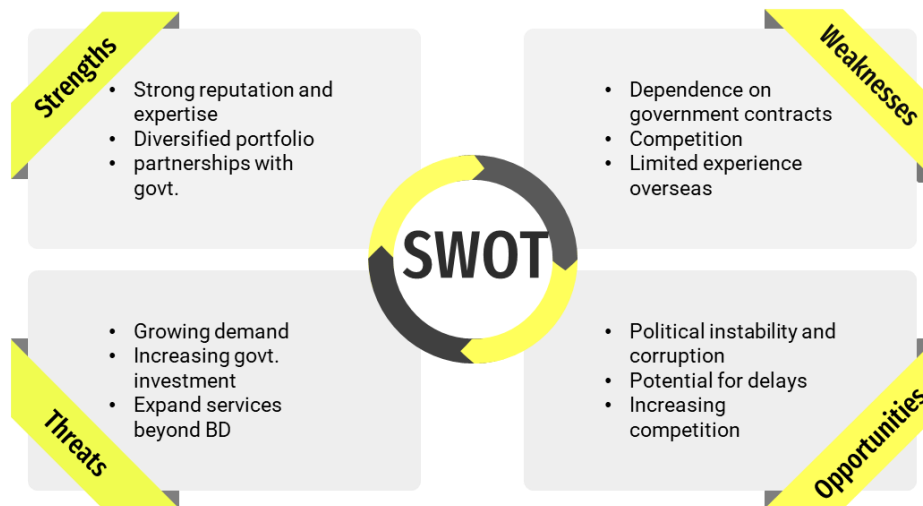


Fig 5: SWOT Analysis of MAX Group

Strengths:

- Strong reputation and expertise in the infrastructure industry in Bangladesh
- Diversified portfolio of services, including railway construction, power generation, and urban development
- Strong partnerships with key government organizations, such as Bangladesh Railway and BPDB
- Experience working on large-scale projects in Bangladesh, such as the Padma Bridge Rail Link and Rooppur Nuclear Power Plant

Weaknesses:

- Dependence on government contracts, which can be subject to delays or changes in funding
- Limited experience working on projects outside of Bangladesh
- Potential for competition from other infrastructure companies in Bangladesh

Opportunities:

- Growing demand for infrastructure development in Bangladesh, driven by population growth and urbanization
- Increasing government investment in infrastructure, such as the Bangladesh Delta Plan 2100 and the Vision 2041 plan

- Opportunities to expand services beyond Bangladesh, such as in neighboring countries in South Asia

Threats:

- Political instability and corruption in Bangladesh, which can impact business operations and contracts
- Potential for delays or disruptions due to natural disasters or climate change impacts, such as flooding or sea level rise
- Increasing competition from both domestic and international infrastructure companies operating in Bangladesh.

2.9. The PESTEL Analysis

Political:

- Bangladesh is a parliamentary democracy with a stable government and favorable policies towards foreign investment. This creates a positive political environment for MAX Group to operate in.
- However, the infrastructure sector in Bangladesh is heavily regulated by the government, which can create bureaucratic delays in obtaining permits and licenses.

Economic:

- Bangladesh is one of the fastest-growing economies in the world, with a GDP growth rate of 5.2% in 2020 despite the pandemic. This presents a significant growth opportunity for MAX Group.
- The infrastructure sector is a major contributor to the country's economic growth, with the government investing heavily in infrastructure development.
- However, inflation and currency fluctuations can impact the cost of construction materials and equipment, affecting the profitability of the company.

Sociocultural:

- Bangladesh has a large and growing population, which creates a significant demand for infrastructure development such as housing, transportation, and energy.
- The country's workforce is relatively young and increasingly skilled, providing a potential pool of labor for MAX Group's operations.

- However, cultural factors such as a preference for traditional building materials and construction methods can impact the adoption of new technologies.

Technological:

- MAX Group uses the latest technologies in its operations, such as Building Information Modelling (BIM) and Computer-Aided Design (CAD) systems, which can improve efficiency and accuracy.
- However, the infrastructure sector in Bangladesh is still relatively underdeveloped technologically, which can limit the availability and adoption of new technologies.

Environmental:

- Bangladesh is vulnerable to natural disasters such as floods, cyclones, and earthquakes, which can cause significant damage to infrastructure. MAX Group has to consider these risks in its operations and planning.
- The company also has a focus on sustainability and green building practices, which can enhance its reputation and appeal to environmentally conscious clients.

Legal:

- MAX Group has to comply with various laws and regulations in Bangladesh, such as environmental and labor laws, which can impact its operations and costs.
- The infrastructure sector is also subject to legal risks such as contract disputes and regulatory changes. MAX Group has to ensure compliance and manage these risks effectively.

2.10. Competitive Analysis (Porter's 5 Forces Model):

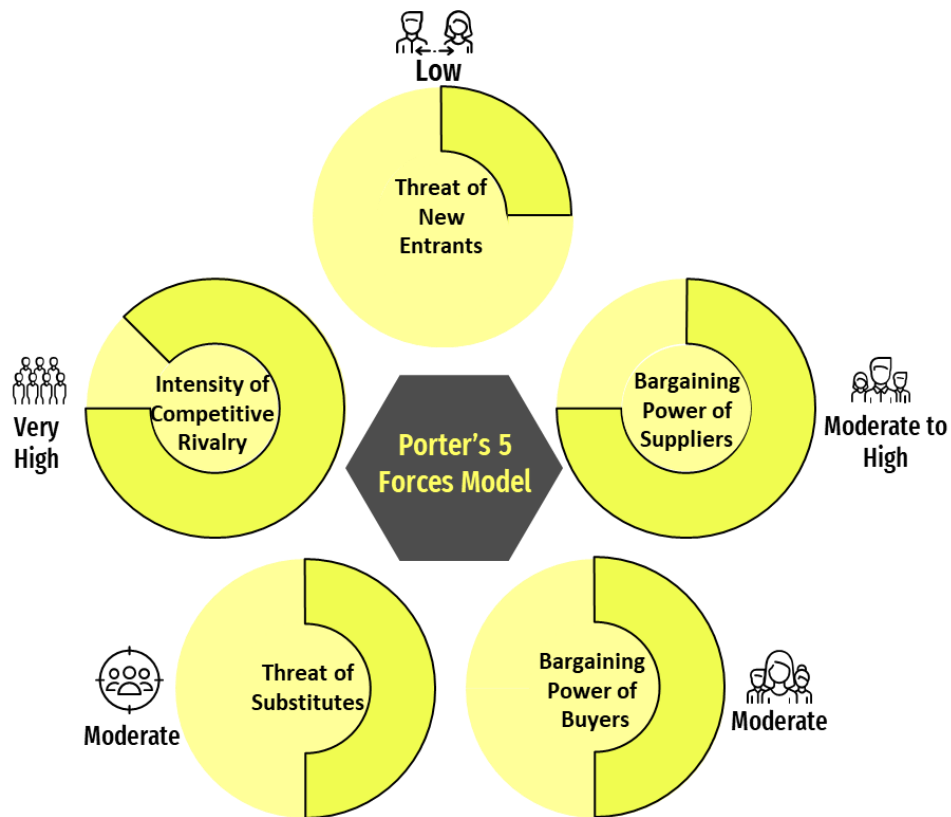


Fig 6: Porter's 5 Forces Model

1. **Threat of New Entrants:** According to a report by the Asian Development Bank, the infrastructure industry in Bangladesh requires significant capital investment, technical expertise, and strong relationships with government agencies, which creates a high barrier to entry for new players. MAX Group, with its established reputation and experience, has an advantage in this regard over new entrants.
2. **Bargaining Power of Suppliers:** The construction materials and equipment markets in Bangladesh are highly competitive, with numerous suppliers competing for business. However, MAX Group may have an advantage in this area due to its size and scale, which may enable it to negotiate favorable terms with suppliers.

3. **Bargaining Power of Buyers:** As noted earlier, the primary buyers in the infrastructure industry in Bangladesh are government agencies and state-owned enterprises. MAX Group may face challenges in maintaining good relationships with these entities, but its established reputation and experience may help it to win repeat business.
4. **Threat of Substitutes:** Infrastructure projects in Bangladesh are often highly customized to the specific needs of the client, making it difficult for substitutes to enter the market. MAX Group may be able to differentiate itself from competitors by offering innovative solutions and incorporating new technologies.
5. **Intensity of Competitive Rivalry:** The infrastructure industry in Bangladesh is highly competitive, with several large domestic and international players vying for contracts. MAX Group competes with both domestic and foreign players, and needs to continue to improve its service quality and innovation to remain competitive.

Chapter 3: Industry Analysis

The purpose of this chapter is to provide an overview of the trend growth drivers any market restriction and other metrics and offer brief viewpoint of important segments. The chapter will also provide an overview of market growth areas and the growth forecast of the industry.

3.1. Industry Size and Growth Trends

The infrastructure sector in Bangladesh is a crucial driver of the country's economic growth. The sector includes various industries such as transportation, energy, water, and telecommunications, among others. According to the Bangladesh Economic Review 2021, the infrastructure sector contributed 11.07% to the country's GDP in the fiscal year 2019-20, showing a steady growth trend from the previous year.

The Bangladesh government has been actively investing in infrastructure development projects in recent years to improve the country's infrastructure and support economic growth. The government's 8th Five-Year Plan (2021-2025) aims to increase infrastructure investments to 9.9% of GDP, up from 7.8% in the previous plan.

The energy sector is a vital component of the infrastructure sector in Bangladesh, with the Bangladesh Power Development Board (BPDB) playing a significant role in power generation. The BPDB has set an ambitious target to generate 24,000 megawatts of electricity by 2021, up from the current capacity of around 22,000 megawatts.

The transportation sector is also a key part of the infrastructure sector in Bangladesh, with the Bangladesh Railway investing heavily in modernizing its railway network. The government has also been investing in road infrastructure, with the Roads and Highways Department (RHD) constructing new highways and bridges across the country.

The telecommunications sector is another rapidly growing segment of the infrastructure sector in Bangladesh, with increasing mobile phone and internet usage driving demand for improved telecom infrastructure.

There are several key factors driving the market growth of the infrastructure industry in Bangladesh:

- Government investment

- Economic growth
- Urbanization
- Energy demand
- Private sector investment
- Digitalization

3.2. Yearly Growth Trend of the Industry

The infrastructure industry in Bangladesh has been experiencing steady growth over the past few years, driven by government investment, private sector participation, and strong economic growth. According to data from the Bangladesh Economic Review 2021, the infrastructure sector in Bangladesh grew by 12.7% in the fiscal year 2019-2020, up from 11.1% the previous year. The sector's contribution to the country's GDP increased from 9.2% in FY 2018-2019 to 9.6% in FY 2019-2020.

Some of the key areas driving growth in the infrastructure industry in Bangladesh include:

1. **Power generation:** Bangladesh has made significant investments in power generation, with a focus on increasing the country's energy capacity and reducing its reliance on fossil fuels. The power sector grew by 14.4% in FY 2019-2020, up from 12.5% the previous year.
2. **Transportation:** The transportation sector, including roads, railways, and airports, is also experiencing growth in Bangladesh. The sector grew by 9.8% in FY 2019-2020, up from 7.8% the previous year.
3. **Urban development:** With rapid urbanization, the demand for infrastructure in urban areas is increasing. The urban development sector grew by 11.7% in FY 2019-2020, up from 10.7% the previous year.
4. **Water supply and sanitation:** The government has been investing in improving access to safe drinking water and sanitation, with the sector growing by 13.6% in FY 2019-2020, up from 12.6% the previous year.

3.3. External Economic Factors and their Impact on Business

1. **Economic Growth:** The overall growth of the Bangladeshi economy can have a significant impact on the demand for infrastructure services. If the economy is growing, there may be

more funding available for infrastructure projects, which could increase demand for the sector.

2. **Inflation:** Inflation can impact the cost of raw materials and labor, which could raise the overall cost of infrastructure projects. This could lead to a decrease in demand for the services as clients may seek to reduce costs.
3. **Interest Rates:** Interest rates can impact the cost of borrowing for infrastructure projects. If interest rates are low, it may be more affordable for clients to finance infrastructure projects, which could increase demand for the sector.
4. **Foreign Direct Investment (FDI):** The level of foreign investment in Bangladesh can impact the demand for infrastructure services. If there is high foreign investment in the country, this could lead to an increase in infrastructure development projects.
5. **Government Policies:** Government policies related to infrastructure development can have a significant impact on the demand for services. If the government is prioritizing infrastructure development and investing heavily in the sector, this could lead to an increase in demand for infrastructural services.
6. **Political Stability:** Political stability is important for attracting foreign investment and maintaining a favorable business environment. Any political instability or unrest can negatively impact the business of the industry.
7. **Environmental Regulations:** The infrastructure industry is often subject to environmental regulations, which could impact the cost and feasibility of projects. These regulations could increase the cost of infrastructure projects, which could reduce demand for infrastructural services.
8. **Technological Advancements:** Technological advancements can impact the way infrastructure projects are designed, built, and maintained. infrastructural needs to stay up-to-date with the latest technology trends in order to remain competitive in the industry.

9. **International Trade:** International trade agreements can impact the demand for infrastructure services in Bangladesh. If trade agreements lead to an increase in foreign investment, this could increase demand for infrastructural services.
10. **Labor Laws:** Labor laws in Bangladesh can impact the cost and availability of labor for infrastructure projects. Any changes in labor laws could impact the cost of projects and the demand for infrastructural services.

3.4. Seasonality

There is some seasonality in the infrastructure industry in Bangladesh, which can vary by sector. For example, in the transportation sector, road construction and maintenance tend to occur during the dry season (October to March) when weather conditions are favorable. Similarly, in the power sector, demand for electricity tends to be higher during the hot summer months (May to August) due to increased use of air conditioning.

In the urban development sector, construction activity may be affected by monsoon season (June to September), which can cause delays and difficulties in completing projects on time. Additionally, in the water supply and sanitation sector, water scarcity can be a significant issue during the dry season, which can impact the availability and quality of water for construction and other purposes.

3.5. Technological Factors

Technological factors play a crucial role in the infrastructure business of Bangladesh. Some of the key technological factors that impact the company's operations and performance include:

1. **Advancements in construction technology:** The use of new technologies such as Building Information Modelling (BIM) and 3D printing can improve the efficiency and accuracy of construction projects, which can help MAX Infrastructure BD to complete projects faster and at a lower cost.
2. **Automation and robotics:** The use of automation and robotics in construction can help to reduce labor costs and improve productivity, which can be a significant advantage for MAX Group in terms of completing projects on time and within budget.

3. **Digitalization and data analytics:** The use of digital technologies such as Internet of Things (IoT) and data analytics can help MAX Group to collect and analyze data from construction sites, which can help to improve project management and decision-making.
4. **Renewable energy technologies:** MAX Group is involved in power generation projects, and the adoption of renewable energy technologies such as solar and wind can help the company to reduce its carbon footprint and improve the sustainability of its operations.
5. **Cybersecurity:** As the company increasingly relies on digital technologies and online systems, ensuring the cybersecurity of its operations and data becomes critical. Any cyber-attack or data breach can disrupt the company's operations and damage its reputation.
6. **Use of drones:** The use of drones in construction can help to conduct site inspections, survey land, and monitor project progress, which can improve the accuracy of construction projects and reduce the risk of delays or cost overruns.
7. **Virtual and augmented reality:** Virtual and augmented reality technologies can help to create realistic simulations of construction projects, which can help MAX Group to identify potential issues and make changes before construction begins.
8. **Cloud computing:** Cloud computing technologies can help MAX Group to store and access project data from anywhere, which can improve collaboration and communication among team members and stakeholders.
9. **Mobile technologies:** The use of mobile technologies such as smartphones and tablets can help MAX Group to provide real-time updates on project progress, communicate with team members, and access project data from anywhere.
10. **Artificial intelligence:** The use of artificial intelligence technologies can help MAX Group to analyze data from construction sites and predict potential issues before they occur, which can improve project management and reduce the risk of delays or cost overruns.

3.6. Regulatory, Political, and Legal Concerns

1. **Government regulations:** Bangladesh is known for having complex regulations and bureaucratic hurdles that can make it challenging for companies to do business. For

example, according to the World Bank's Ease of Doing Business report in 2021, Bangladesh ranked 168th out of 190 countries for "Starting a Business." However, the government has recently taken steps to improve the business climate, such as introducing online systems to streamline the process of obtaining permits and licenses.

2. **Political instability:** Bangladesh has experienced political instability and violence in the past, including protests, strikes, and violent clashes. For example, in 2019, Bangladesh saw widespread protests and violence after a controversial election. However, the situation has since stabilized, and the government has taken measures to improve the security situation.
3. **Corruption:** Bangladesh has a high level of corruption, and companies operating in the country may face pressure to pay bribes or engage in other unethical practices to secure contracts or permits. According to the Corruption Perceptions Index 2021 by Transparency International, Bangladesh ranked 146th out of 180 countries, indicating a high level of perceived corruption.
4. **Environmental regulations:** Bangladesh has strict environmental regulations, and companies operating in the infrastructure sector must obtain necessary permits and comply with environmental standards. For example, companies must conduct environmental impact assessments before starting construction. However, enforcement of these regulations can be weak, and environmental concerns are often overshadowed by the need for economic development.
5. **Labor laws:** Bangladesh has laws and regulations protecting workers' rights, including minimum wage requirements, health and safety standards, and fair working conditions. However, enforcement of these laws can be weak, and workers often face poor working conditions and low pay.
6. **Contract disputes:** Contract disputes are common in Bangladesh, and legal disputes can be slow and costly. The country's legal system is also known for being slow and unpredictable, which can make it difficult to resolve disputes through legal means.

3.7. Competitive Environment and Changes in the Competitive Environment

MAX Infrastructure faces competition from several domestic companies operating in the infrastructure sector in Bangladesh. Some of the key domestic competitors of MAX Group in Bangladesh include:

- Toma Group
- Bashundhara Group
- Confidence Group
- Rangs Group
- Abdul Monem Limited
- United Group
- Jamuna Group
- Akij Group
- Orion Group
- Navana Group
- Aman Group

These companies are involved in various infrastructure projects, including road and highway construction, real estate development, power and energy projects, and water and sanitation projects. MAX Group competes with these companies to secure contracts from government organizations and other clients in Bangladesh. To remain competitive, MAX Group needs to continue to develop innovative solutions and maintain strong relationships with its clients and stakeholders.

3.8. Foreign Competitors

The infrastructure sector in Bangladesh is highly competitive, and MAX Infrastructure faces competition from a range of local and international companies. Some of the key competitors of MAX Infrastructure in Bangladesh include:

- China Harbour Engineering Company (CHEC)
- Hyundai Engineering and Construction Co. Ltd.
- Sinopec International Petroleum Service Corporation (SIPS)
- Sinohydro Corporation Limited
- China State Construction Engineering Corporation Limited (CSCEC)
- Mitsubishi Corporation
- Sumitomo Mitsui Construction Co. Ltd.
- Marubeni Corporation

Changes in the competitive environment for MAX Infrastructure may be driven by a range of factors, including changes in government policies and regulations, the emergence of new competitors, and changes in market demand. For example, the government of Bangladesh may introduce policies or regulations that favor local companies over international competitors, which could impact the competitive environment for MAX Infrastructure. Similarly, the emergence of new companies or the entry of international companies into the Bangladesh infrastructure market could create additional competition for MAX Infrastructure.

To remain competitive, MAX Infrastructure must continue to adapt to changes in the competitive environment and develop strategies to differentiate itself from its competitors. This may include investing in new technologies, developing more efficient and cost-effective infrastructure solutions, and maintaining strong relationships with clients and stakeholder.

Chapter 4: Breakdown of Main Duties

This section concentrates on the primary tasks and responsibilities that I had while working as an intern at MAX Group. The goal is to reflect a clear picture of my role and duties as an intern in the company. This will make reference to my service to the organization as a whole.

Departmental designation: Intern (Commercial), Management Information Systems (MIS)

4.1. Work Environment and Tasks

At MAX Group a typical week starts on Saturday and ends on Thursday. The typical working day may vary based on the location of the office. During my internship at MAX Group, I was assigned duty at both the corporate office and the software office which is registered under the name Destreza.

- **Corporate Office:**

Address: RAOWA Complex, level-11, VIP Road Mohakhali, Dhaka- 1206, Bangladesh

Time: 10:00 am to 6:00 pm

- **Destreza:**

Address: House- B/186, Flat -2E, Road-20, New DOHS, Mohakhali, Dhaka-1205, Bangladesh

Time: 8:00 am to 4:00 pm

At the company headquarters, there is a two-hour lunch break that begins at 1:00 pm, and the refreshments time is integrated into the working hours. On a normal working day, I begin by outlining a checklist of my activities, cooperate with my team to complete those responsibilities as quickly and efficiently as possible, as well as reporting to my supervisor as required.

4.2. Work Environment and Tasks

On February 1, 2023, I began working as an intern at MAX Group since it was a requirement for my undergraduate program. I was hired as an intern in the department of Management Information Systems. I was assigned to work under the supervision of The Deputy General Manager (DGM)

of MIS department for the whole internship period at MAX Group. Initially just after joining the team I received a comprehensive training by the DGM on ‘Agile’ for completing tasks efficiently at workplace. I was assigned to do R&D for LUB House, a sister concern of MAX Group and collect data for its business development. Originally, I was tasked with learning the internally built ERP system of MAX Group. Starting with procurement module and its operation workflow, I received in-depth training on the whole ERP process run throughout the company. Additionally, I had exposure to the access to the ERP system and got to gain hands on experience of how to use it step by step. that are directly and indirectly tied to the import process. I will go through some of the recurring activities for which I've had the opportunity to assist that are pertinent to the subject of my paper.

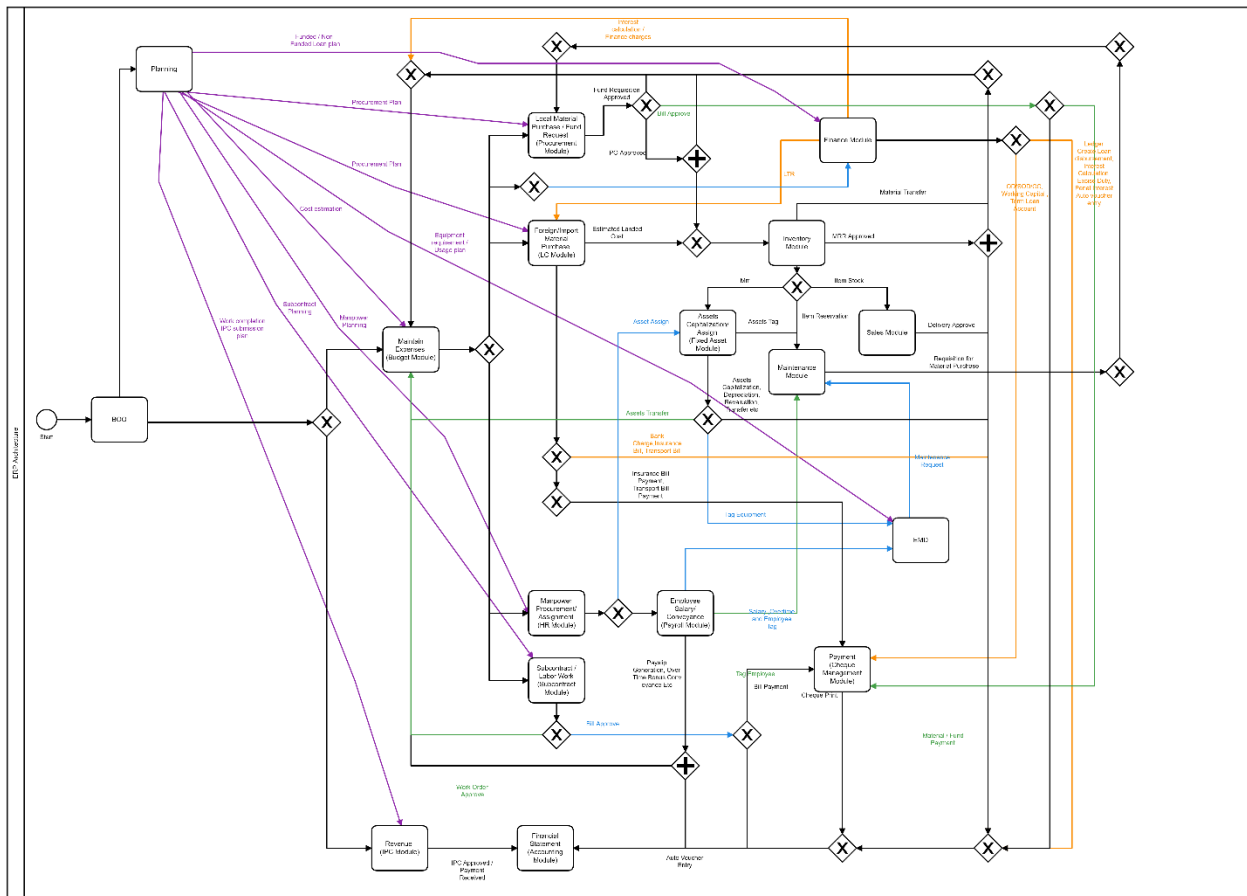


Fig 7: Overall Operations of the ERP at MAX

4.3. Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP) tools are used by corporations to plan their regular business operations. An enterprise resource planning system's primary purpose is to assist the consolidation of business operations onto a single network for improved organization. It thereby creates a holistic connection between several areas.

MAX Group employs its own in-house ERP solution for its entire business operation made by Destreza, MAX's own software-based sister concern. It emphasizes making sure that companies can adapt to change by embracing new technologies and staying up to date with market trends in order to enable continual innovation. Among other things, it integrates ground-breaking features and functionality in planning, forecasting, and getting coverage update with stock receiving summary and current stock inventory, logistics, and maintenance, as well as getting purchase requisition list, requesting quotation, entering quotation, creating purchase order, and order management.

The Management Information System (MIS) team is accountable for MAX's in-house ERP system's implementation and maintenance. The company prefers to keep the system in-house because the MIS team is exclusively recruited and trained to manage it. Additionally, the team can address any issues with the system promptly, and changes or

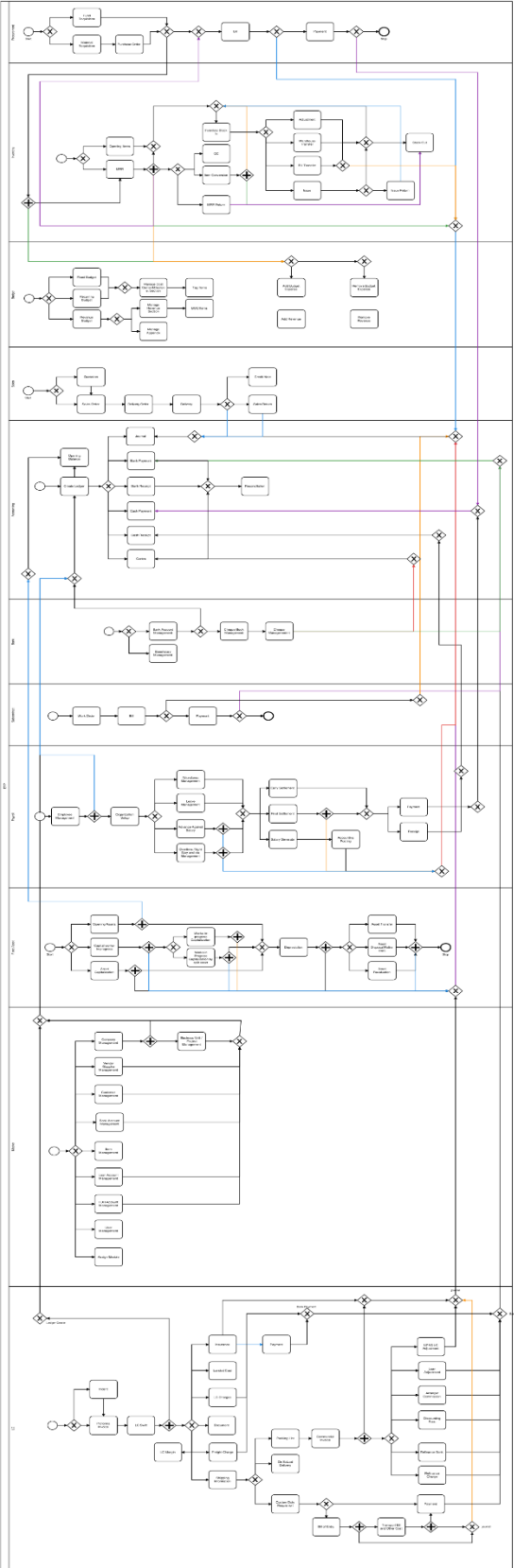


Fig 8: Workflow of the ERP

modifications are quickly made by communicating with the team about necessary features or options to enhance functionality.

4.4. Key Responsibilities

During my internship at the company, my key responsibility was to learn and implement automation in the organization. To achieve this, I was tasked with acquiring comprehensive knowledge about the company's ERP system. The company had developed its own home-built ERP system, which was implemented throughout the organization. To gain in-depth training on the ERP system, I was transferred to the company's software farm named Destreza. During the training period, I was provided with a practice server of the ERP system which is called 'Jomakhata' and it was an exact duplicate of the main server. The practice server contained all the modules and activities of the main ERP system, which was used throughout the company. The ERP system had a total of 18 modules, covering most of the critical operations of the company, ranging from procurement to vehicle management. I received training on all of the modules and their workflows, and also had hands-on experience in operating those modules, such as creating requisitions and orders. Later on, I also learnt how to generate reports out of the data created in the ERP system by different departments of the organization. These reports play an important role in the decision making process taken by the management. However, although I had training on all of the modules, I was only given access to 12 of the modules in the practice server due to confidential reasons. These 12 modules provided me with an extensive learning experience on how to operate the ERP system, and I successfully completed my internship with a sound understanding of the automation process and the company's ERP system. The modules of the ERP system are-

1. Procurement
2. Inventory
3. Sales
4. Accounting
5. Finance
6. Fixed Asset
7. Bank
8. LC
9. Budget
10. Portal
11. Dashboard
12. Master
13. Payroll
14. EMD (Equipment Management Dept.)
15. VMS (Vehicle Management System)
16. HRIS
17. Subcon
18. IPC – Foreign Currency Module

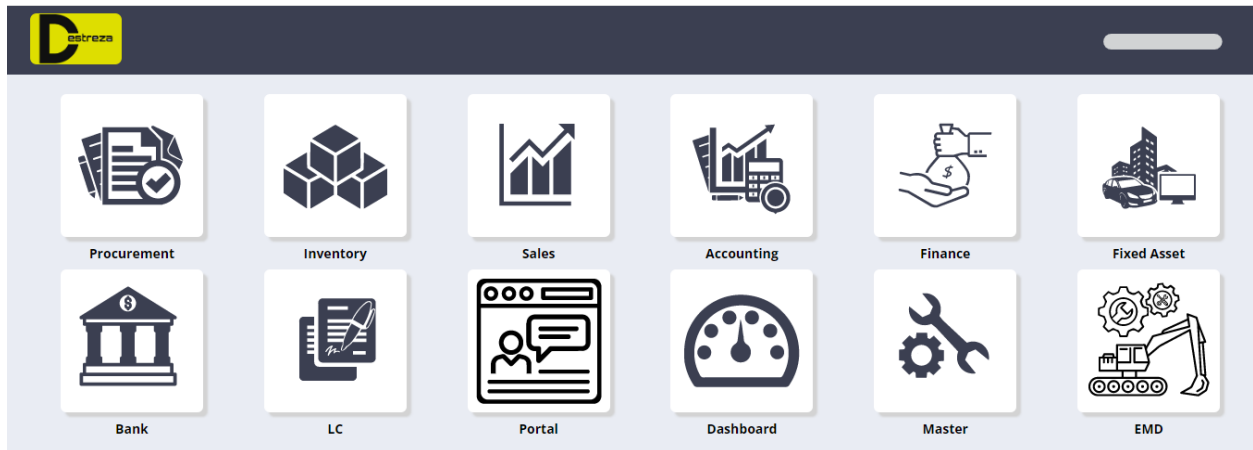


Fig 9: Modules of the ERP

4.5. Procurement Module

A procurement module in MAX Group’s ERP system is designed to manage the procurement process, from identifying requirements to purchasing goods or services. It includes features such as supplier management, purchase order management, and inventory management. The procurement module enables businesses to streamline their procurement processes, improve supplier relationships, and reduce costs by optimizing procurement decisions. It also provides real-time visibility into procurement activities, enabling businesses of MAX to track supplier performance and manage inventory levels more effectively. Additionally, the procurement module in the ERP system integrates with other modules such as finance, inventory, and production, to provide a complete view of the procurement process and enable effective decision-making.

In the ERP procurement has a total solution to purchase products or goods one need for the businesses. To procurement goods or products, one need to raise a requisition first then a PO (Purchase order) will be created on the basis of the requisition.

Requisition process: There are two types of requisition:

1. Material requisition. 2. Fund requisition.

Material Requisition

To create a material requisition, we have to fill up two sections of information. 1. Primary Information. 2. Item details. In primary information one has to select the approvers of the requisition and fill up requester details as well. In item details we have to fill the details of the products that we are going to purchase. An approver will approve the requisition, to see the unapproved requisition lists. Before approving the requisition by the approver, he will click the details to check and verify the details status of the requisition. There are five parts in a requisition:

1. **Material Items** – Product details of the requisition items.
2. **Basic info** – Serial No., Title of the requisition given, deadline of getting the products, original requester & receiver, approver details, SCM & Accounts person details etc.
3. **Timeline** – To see the ongoing status of the requisition. (From raise to approval)
4. **Files** – We can add files here. (like a hardcopy of the requisition)
5. **Comments** – We can add additional comments here in whole requisition process.

After checking and verifying the information of the requisition, now approver will give the decision like which SCM will be generating PO and who will be doing the accounting parts from the accounts site by clicking the approved button. Then he will approve the requisition. The approver also can deny or redirect (sent back to the requester) the requisition as well.

The screenshot displays the 'CREATE MATERIAL REQUISITION' interface. The top navigation bar includes the 'MAX' logo and 'PROCUREMENT' text, with a user profile indicator for 'Requester at KWASA'. A left sidebar lists navigation options: 'User To Do', 'Requisitions', 'Service Order', and 'Invoice Register'. The main content area is titled 'CREATE MATERIAL REQUISITION' and features two tabs: 'Primary Information' (active) and 'Item Details'. The 'Primary Information' tab contains the following fields: 'Requisition Title' (with a search icon), 'Select Approver' (with a dropdown arrow), 'Receiver' (with a dropdown arrow), 'Original Requester Name' (with a search icon), and 'Remarks' (a text area). The 'Item Details' tab is currently empty. At the bottom of the form, there are two buttons: 'Submit' and 'Reset'. In the top right corner of the form area, there are two buttons: 'Save Draft' and 'Load/Delete Draft'.

Fig 10: Material Requisition

Fund Requisition

There are four types of Fund requisition and they are:

1. **Regular** – Payment to a vendor for regular expense e.g – House rent.
2. **Advance Payment for Vendor** – An advance payment to a vendor with regular expenses.
3. **Non-Vendor Requisition** – Regular expense within the organization. E.g – salary.
4. **Transportation Expenses** – The idea is recording transport expense against a PO. If Seller is not giving the cost.

To create a fund requisition, one has to fill up two sections of information.

1. Primary Information.
2. Item details.

In primary information one has to select the approvers of the requisition and fill up requisition title, vendor name and other details as well. Hence, non-vendor Requisition is little different from others Vendor name will be changed as General/Control ledger. In item details we have to fill the details for the payment to vendor and non-vendor. An approver will approve this fund requisition and mention an accountant when approves. Almost similar process as material requisition. After approval is done an account will give the payment against this fund requisition. Then a tab has to be selected for payment process:

- **Payable Amount:** Put amount in payable amount how much one wants to pay.
- **Payment Type:** In payment type the payment can be made in cash or through Bank.
- **Cash at Head:** Select a cash book from here. Where one wants to give the money.

In payment history this will be shown that there were previous payments made against this fund requisition.

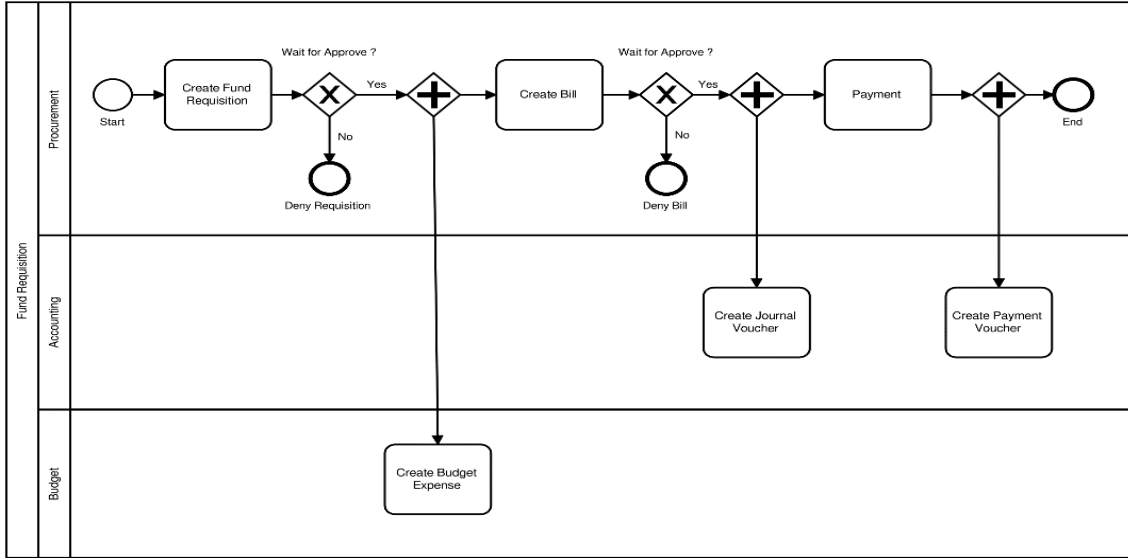


Fig 11: Fund Requisition Workflow

The service order work flow follows the following steps-

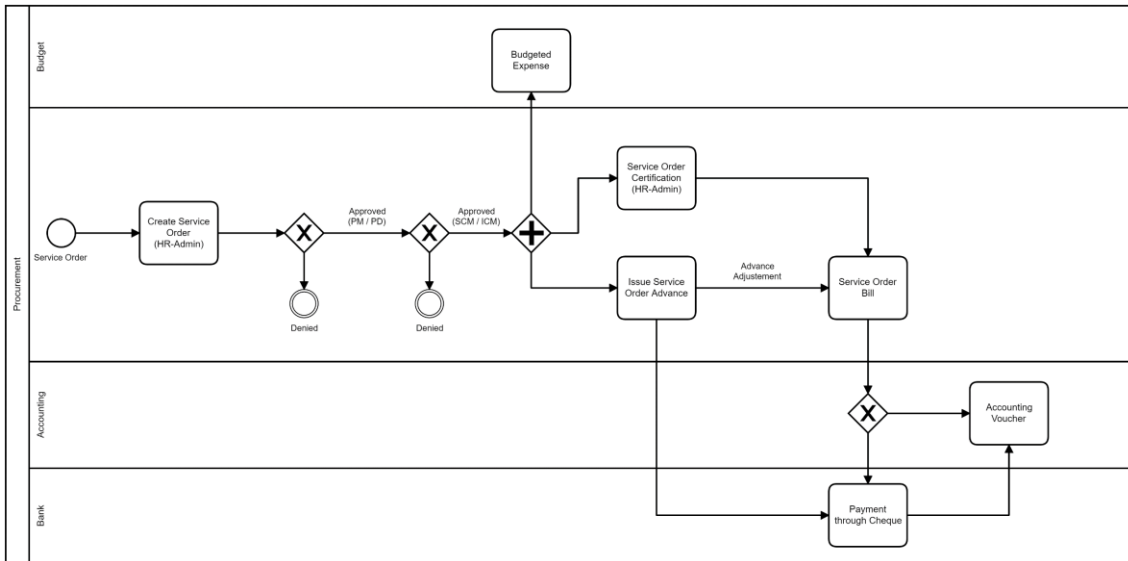


Fig 12: Service Order Workflow

4.6. Bank Module

A bank module in the ERP system for MAX Group is responsible for managing financial transactions related to banking activities. It provides businesses of MAX with a centralized platform to manage their banking activities, including bank account management, transaction monitoring, and bank statement reconciliation. The bank module enables businesses to track bank transactions, reconcile bank statements, and manage cash flow more efficiently. Additionally, it can integrate with other modules such as finance and procurement, to provide a complete view of the company's financial activities and enable effective decision-making. By using a bank module in the ERP system, MAX Group can optimize their financial management, ensure compliance with banking regulations, and make informed financial decisions.

Bank module in the ERP system of MAX is introduced for Cheque Management and Payment management for supplier bills, internal bills, Internal bank transfers etc. The main theme is to manage all bank payments.

There are 5 steps to make a payment in bank module. These are:

1. Bank Name Creation
2. Checkbook Creation
3. Bank Account Creation
4. Beneficiary Creation
5. Cheque Printing

There are 3 users to manage the bank payment procedures.

1. Creator – Who will create Bank accounts, Cheques etc. Will be forwarded to an Auditor.
2. Auditor – An Auditor will review the payment process. Will be forwarded to an Approver.
3. Approver – Approver will approve finally.

A payment or any kind of transaction at the company can be executed by cash in hand operation or with the help of bank module. The bank module follows two different kind of transaction method which are-

1. Check issue
2. BEFTN

For issuing a check the creator of the check has to first add a new checkbook in the ERP system with basic information, bank account information and check leaf. the following steps include reviewing of the check and approval of the check. With the help of the ERP system all the checks that has been made before can also be searched. Management can generate reports out of the report option within the module in order to make appropriate decisions. The interface of check issuance looks as the following-

The screenshot shows the 'BANK MANAGEMENT' interface in the MFX system. The left sidebar contains navigation options: Dashboard, Company, Projects, Chequebooks (selected), Beneficiaries, Cheques, BEFTN, Banks, and Reports. The main content area is titled 'Create Chequebook' and includes the following fields and sections:

- Approver ***: A dropdown menu with the option 'Select Approver' and the instruction 'Select An approver for this chequebook'.
- Signatory Authorities ***: A list of users including 'ERP Admin', 'Md mohiuddin Akon', 'Ashfaqur Rahman', and 'Pritom Dutta'. Below the list is the instruction 'Select all the signatory authorities for this chequebook'.
- Chequebook Issued On ***: A date input field with the format 'mm/dd/yyyy' and the instruction 'Original Issue date of this Chequebook'.
- Bank Account Info**:
 - Bank Name ***: A dropdown menu with 'Select Bank' and 'Associated Bank name'.
 - Bank Account ***: A dropdown menu with 'Select Bank' and 'Associated Bank Account'.
- Cheque Leaf Info**:
 - Chequebook Number ***: A text input field with the instruction 'Identification Number of the Chequebook'.
 - Starting Leaf Number ***: A text input field with the instruction 'Starting leaf number'.
 - Cheque Leaf Count ***: A text input field with the instruction 'Number of leaf in the chequebook'.

At the bottom, there is a table with columns: 'Cheque Leaf No.', 'Disabled', and 'Reason'.

Fig 13: Check issuance process

Other than check issuance there is another way of payment within the bank module which is BEFTN issuance. Just like check reports there is also an option for finding BEFTN list report in the system for better execution of decisions and supervision.

BEFTN follows the following steps in the system-

1. Application create
2. Reviewed
3. Printed
4. Ready for delivery
5. Fund disbursed
6. Delivered
7. Print

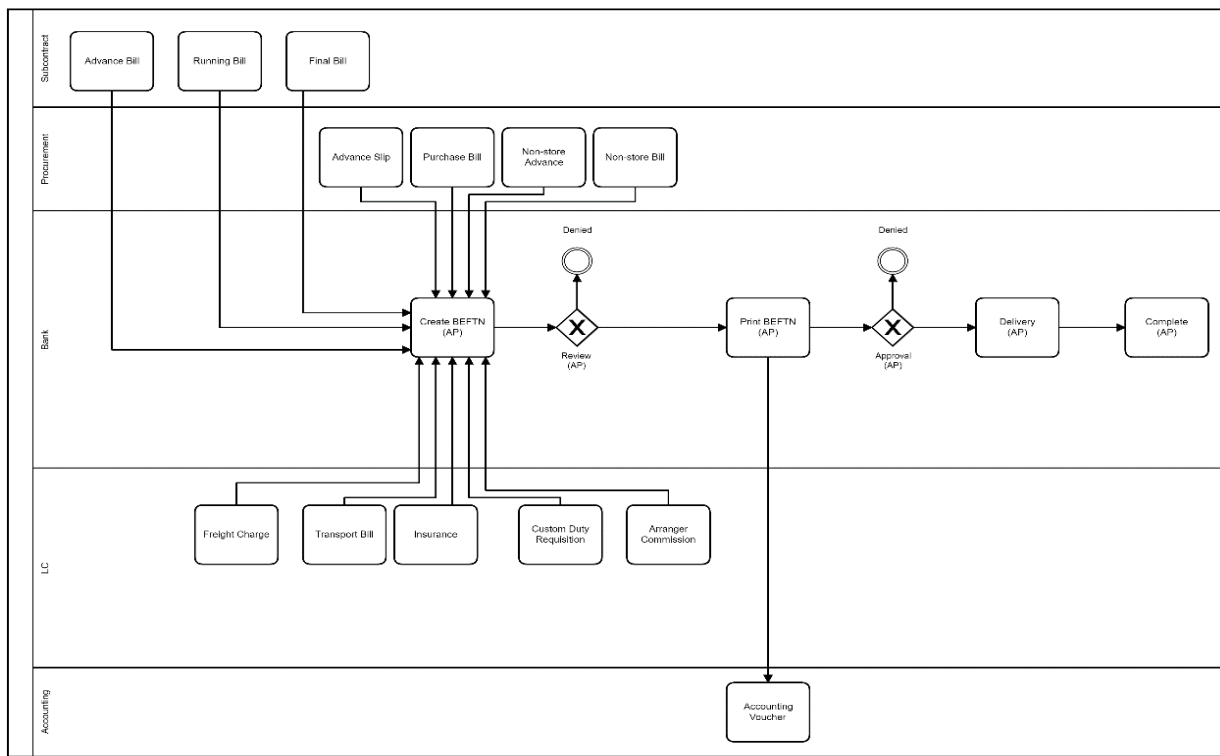


Fig 14: BEFTN workflow

4.7. Accounting Module

An accounting module in an ERP system is designed to manage MAX's financial accounting processes. It includes features such as accounts payable and receivable, general ledger, bank reconciliation, and financial reporting. The module allows the businesses of the company to track financial transactions, generate financial statements, and comply with accounting standards and regulations. It provides a centralized platform for managing accounting processes, improves

accuracy and efficiency, and reduces the risk of errors or fraud. Additionally, an accounting module in the ERP system enables businesses to automate accounting tasks, such as invoicing, payment processing, and financial reporting, thereby streamlining their accounting operations and improving overall financial management.

Accounting Process

There are four types of user needed in Accounting Process. These are:

1. Creator.
2. Approver.
3. Auditor.
4. Admin.

Chart of Accounts (COA)

There are several options in Chart of Accounts (COA). These are -

1. Manage COA
2. Setting COA
3. Permission of COA
4. Import/Export at COA
5. Chart of Accounts
6. Cost Center Permission.

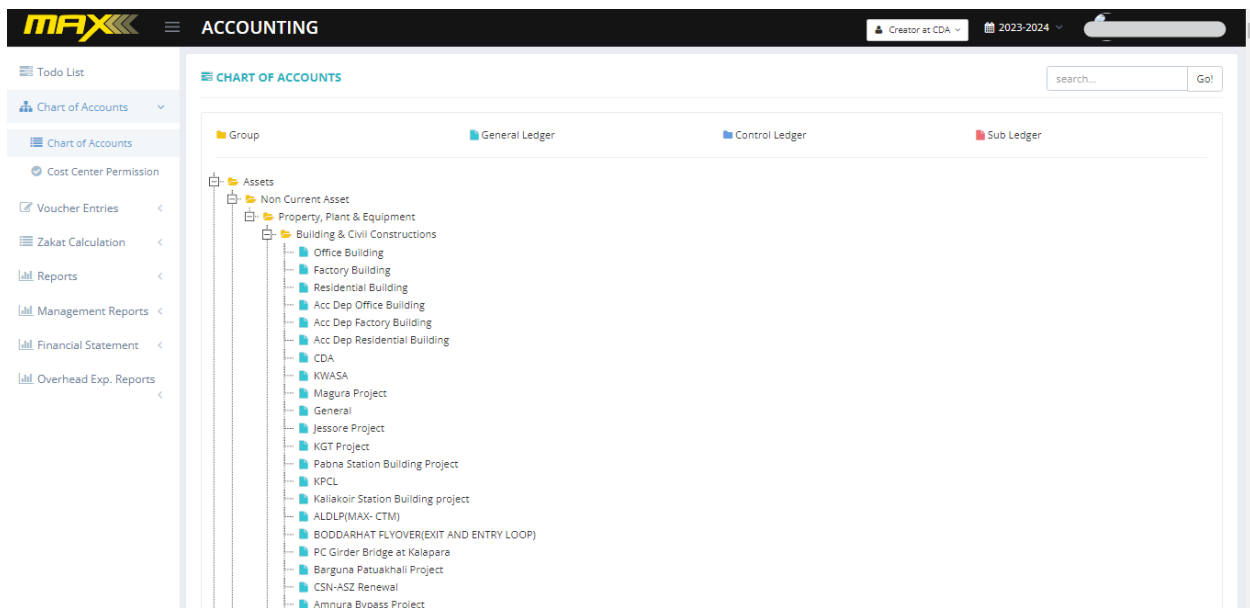


Fig 15: Chart of Accounts (COA)

There are several voucher entries in the Accounting module like-

1. Cash Receipt,
2. Bank Receipt,
3. Cash Payment,
4. Bank Payment,
5. Contra,
6. Journal
7. Advance Adjustment
8. Voucher list
9. Reconciliation
10. Reconciliation list
11. Inter Business Unit Transaction

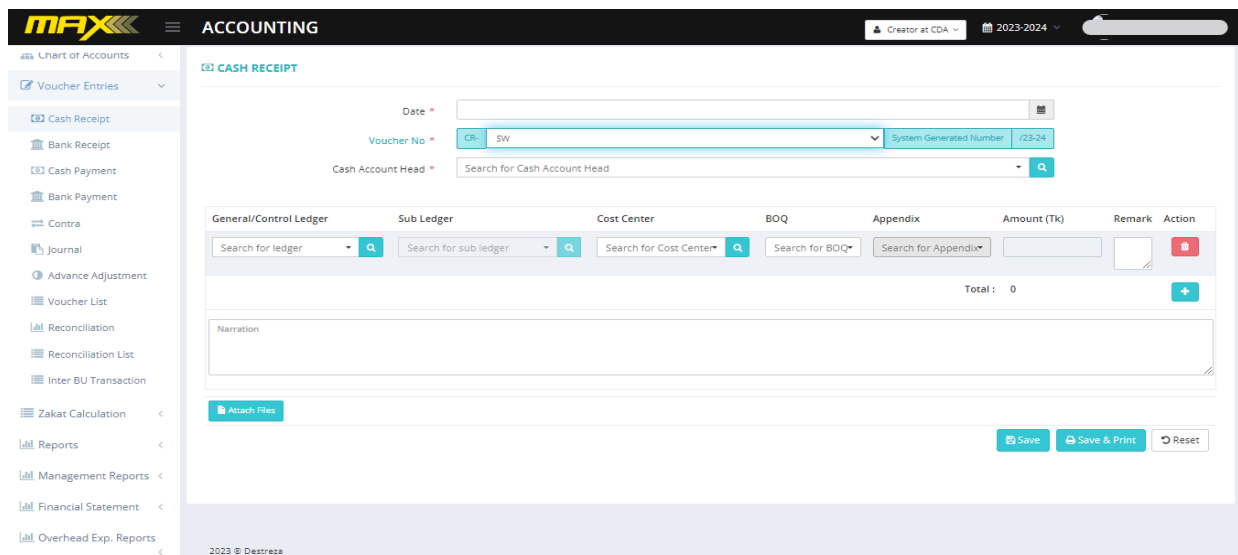


Fig 16: Voucher Entries

If someone is using other modules like, Procurement Management, Bank management, Inventory management then he can use this feature. From here user can create a system generated auto voucher by giving some previous instructions.

With the help of settings tab, user can customize Accounting module. For example-

- **Currency:** A user can set a transaction currency from here.
- **Chart of Account:** User can set a Ledger code from here like user wants to select a system generated ledger code or he wants to give it to a manual code.
- **Cost Center:** User can show an additional cost center form here when voucher is entering.
- **Voucher:** User can select a voucher format from here.

Reports in Accounting Module

A user can see multiple report from here following reports are currently available to see.

- Cash Book
- Bank Book
- General Ledger Statement
- Sub Ledger Statement
- Trial Balance
- Trial Balance Details
- Profit and Loss
- Balance Sheet
- Snapshot
- Bank Reconciliation (Clear)
- Bank Reconciliation (Clear and Unclear)
- Cost Center Statement
- Advance to Supplier
- Statement of Sundry Creditors
- Accounts Payable Report
- Supplier wise details

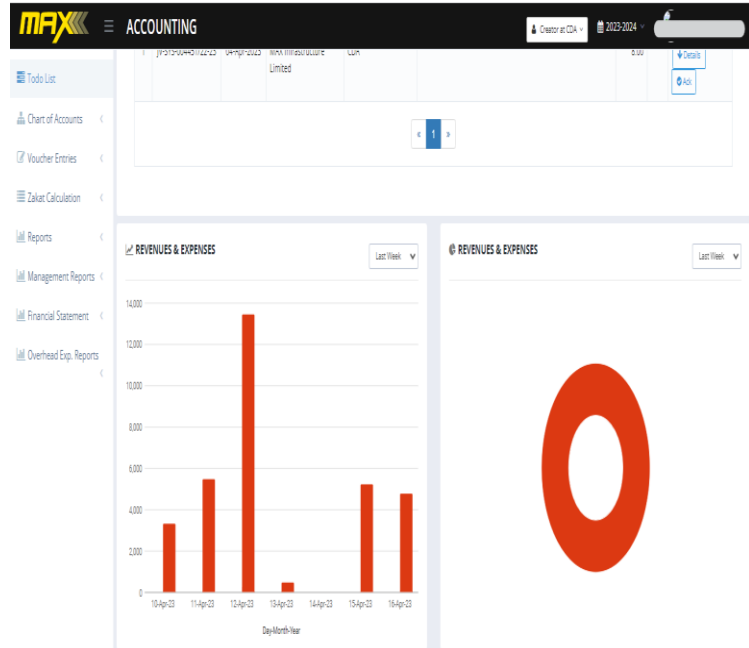


Fig 17: Accounting Report

4.8. LC Module

The LC management module is an essential component of the MAX's business operations, enabling the automation of LC procedures and the creation of orders for products and services. The module also records the budget for imported goods and commodities and tracks their execution. Additionally, it simplifies currency conversion and accurately calculates and distributes expenses related to LC items. Furthermore, the module includes a feature for generating export LC and relevant documents, adding to its overall functionality. It records all the tasks related to making a LC from start to finally closing the LC. This module is designed with some interrelated consecutive processes for facilitation of a LC. These are following-

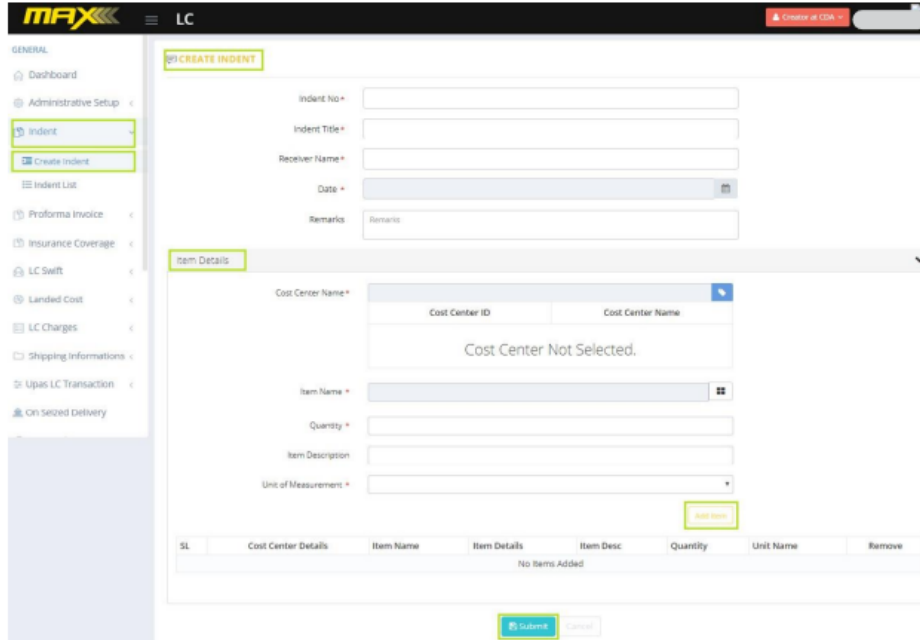


Fig 18: LC Module

4.7.1. Indent Making. This is kind of requisition for which products are needed and a list of them will be submitted be from the sites to create an indent.

4.7.2. Proforma Invoice (PI). For PI making required information are- Exporter/Buyer Info, Notify Buyer, 2nd Notify, Exporter Information, Exporter Name, Address Phone, Beneficiary Bank, Bank Account, Bank Swift, Basic Information, PI No, PI Date, Sys Generated PI No, PI Currency and Remarks

4.7.3. Swift. The first thing of amendment is changing the LC Swift. There are Three types of Information in LC Swift. There are three type of swift.

4.7.4. Landed Cost. To create Landed cost, following information should keep in mind. These are – Select a LC type from the dropdown One is Single LC and another one is Split LC. Single LC means this LC is for a single project. SPLIT LC means products are brought into a LC and split into multiple projects. Give a load percentage to create a landed cost. (Estimated cost) Select a cost center to go further. Finally click submit to create a landed cost. After creating the landed cost, now we will create an Insurance Coverage.

4.7.5. Insurance Coverage. This entity will be completed by filling up company details and insurance premium calculation.

4.7.6. Shipping Information

4.7.7. Packing List

4.7.8. Transportation and Other Cost

4.7.9. Commercial Invoice

4.7.10. Bill of Entry

4.7.11. Amendment

4.7.12. LC Closing Flow

4.9. Finance Module

A finance module in the ERP system is responsible for managing MAX Group's financial operations and transactions. It includes features such as accounts payable and receivable, general ledger, cash management, fixed assets, and financial reporting. The finance module enables the business to manage financial processes more efficiently by automating tasks, such as invoicing, payment processing, and financial reporting. It also provides real-time insights into the company's financial position and helps to ensure compliance with accounting standards and regulations. Overall, this module helps the concerning businesses of MAX to manage their financial resources more effectively and make informed financial decisions. The employees can manage the loan processes and bank information through this module.

ID	Amendment Type	Facility Ref No	Project	Effective Date	Start Date	Expire Date	Bank Name	Non Bank Name	Loan A/C	Actions
349	Amendment	B-12.321	KWASA	2021-05-31	2020-09-05	2020-09-30	NCCBL		665544	[Icon]
350	Amendment	B-12.321	KWASA	2021-05-31	2020-09-05	2020-09-30	NCCBL		66554433	[Icon]
384	Renew	10002	CDA		2020-07-28	2021-03-31	IBBL		222222222222	[Icon]
408	Renew	UCBL/new/ref/2021	CDA		2021-01-31	2022-02-28	UCBL		879564	[Icon]
422	Renew	UCBL/new/ref/2021	CDA		2021-01-31	2022-02-28	UCBL		100-2021	[Icon]
423	Renew	UCBL/new/ref/2021	CDA		2021-01-31	2022-02-28	UCBL		101-2021	[Icon]
426	Renew	UCBL/new/ref/2021	CDA		2021-01-31	2022-02-28	UCBL		500-2021	[Icon]
433	Renew	8945110	CDA		2021-04-12	2021-04-12	IBBL		453-2021	[Icon]
434	Renew	8945110	CDA		2021-04-12	2021-04-12	IBBL		#####	[Icon]

Fig 19: Finance Module

4.10. Budget Module

A budget module in the ERP system is responsible for creating, managing, and monitoring MAX Group's financial plans and budgets. It allows the business to set financial goals, allocate resources, and track actual spending against planned budgets. Key features of a budget module include the ability to create and manage budgets by department, cost center, or project, track expenditures against budgets, generate financial reports, and forecast future expenses. By using a budget module in an ERP system, the business can better control their finances, optimize resource allocation, and make informed financial decisions. Budget module is introduced for tracking budget in the projects or across the companies. There are two types of budget in this module.

1. Fixed Budget
2. Recurring Budget

Fixed Budget

This budget is fixed from previously. Budget included into the system then any expense happened recorded against the budget and calculated the remaining budget in the system. To create any type budget user has to create a new project or business unit in the master module. Then give permission to a particular user to input the budget.

Recurring Budget

The objective of recurring budget is to prepare operational budget for a certain financial period. It can be for a week, or can be a month or for six months as well. Recurring budget also created in Master module like Fixed budget has been created before. Then user will back to the Budget module. Hence, it's an operational budget. The very first thing is to set up a period for the budget.

4.11. Sales Module

A sales module in an ERP system is responsible for managing the entire sales process, from generating quotes and processing orders to tracking sales activities and managing customer relationships. It provides MAX Group with a centralized platform to streamline their sales operations and improve efficiency. Key features of a sales module include quote and order management, sales analytics, customer relationship management, sales forecasting, and integration with other modules. By using a sales module in an ERP system, MAX can optimize their sales processes, increase productivity, and drive revenue growth. Sales process at MAX Group follows the following steps which are-

1. Quotation making
2. Sales order
3. Delivery order
4. Factory delivery

Direct sales are of two types in the ERP system. These are Scrap sales and Sales. With the help of this module sales item can also be returned and processed.

Item	Code	Unit	Stock	Unit Price	Quantity	Discount(%)	VAT(%)	Amount	Allow CC	CC Rate	Cost Center	Action
Search for item*							10		<input type="checkbox"/>		Search for Cost Center*	
Total 1 product(s)								Subtotal:	0			
										Sub Total:	0	

Fig 20: Sales Module

4.12. Inventory Module

An inventory module in an ERP system is designed to manage and track inventory levels, movements, and transactions within an organization. It enables businesses to efficiently manage their inventory, reduce costs, and improve customer satisfaction. The inventory module provides real-time visibility into inventory levels, allowing businesses to track inventory movements from receipt to shipment. This helps to ensure that inventory levels are optimized, and stockouts and overstocks are minimized. In addition, the inventory module allows businesses to manage multiple warehouses and locations, and to track the status of items within each location. This can help businesses to better manage their supply chain and improve order fulfillment times.

After creation of successful Purchase Order ERP requires to manage inventory in a proper manner. To track inventory, we would start by creating a Material Receiving Register (MRR).

Material Receiving Register (MRR). There are three types of MRR. These are: 1. General MRR. 2. Requisition MRR. 3. LC MRR.

SL No~	MRR No.	Date	Vendor Name	Vendor Challan	Mrr Type	Req/Lc ID	Req/Lc No.	Action
2859	MRR-23000052(p)	27-Mar-2023	Gazipur Polish Store	4343333	General Mrr	0		Action -
2819	MRR-23000016(p)	31-Jan-2023	Gazipur Polish Store	6566	General Mrr	0		Action -
2804	MRR-23000002(p)	08-Jan-2023	Gazipur Polish Store	fffggg	General Mrr	0		Action -
2803	MRR-23000001(p)	09-Jan-2023	3 Star AC Servicing Center	565	Requisition Mrr	39118	10100.R7964	Action -
2792	MRR-22000050(p)	23-Nov-2022	3 Star AC Servicing Center	6548	Requisition Mrr	38384	10100.R7636	Action -

Fig 21: Inventory Module

Approver for an MRR. An approver will see the details and verify the submitted MRR by a creator. Then the approver will approve the submitted MRR. Approver will review these things-

1. **Basic Info:** The details of MRR. MRR #, creator of this MRR, creation date, creation against which PO, Vendor name & details, Challan # etc.
2. **Time Line:** Status of the MRR.
3. **Item details:** Details of the product we received.
4. **Actions:** Approve, Edit, Back button.
5. **Upload file attachment:** e.g challan #
6. **Comments:** If needed.

Stock Issue Material is already received through an MRR. Its already in Inventory record. Now issue will be done when necessary.

Warehouse Transfer Inventory needs to transfer from a warehouse to another.

Business Unit Transfer We can transfer inventory from a business unit to another business unit with the ERP.

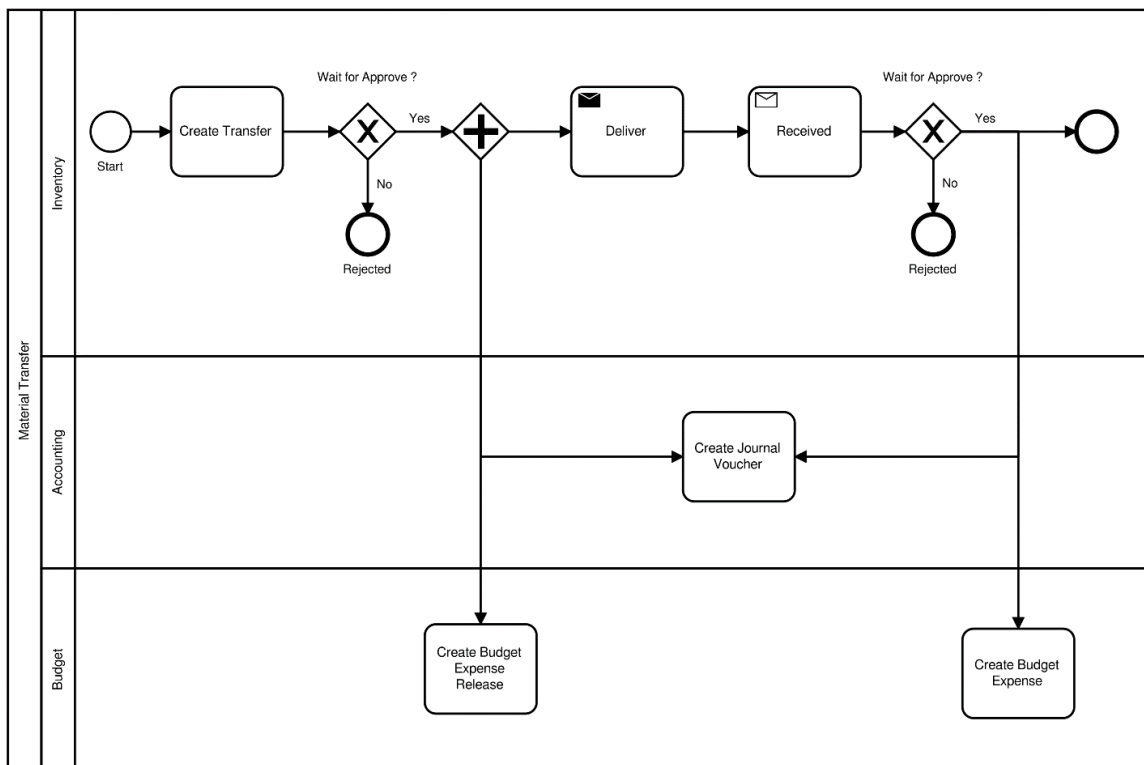


Fig 22: Inter Business Unit Material Transfer

Stock There are four options in stock. These are 1. Opening Stock. 2. Opening Stock List. 3. Item Stock. 4. Item Stock Details.

Return There are four items in Return. These are:

1. Stock Issue Return
2. Return to Vendor
3. Stock Issue Return List
4. Return to Vendor List

Reports in Inventory Module. We can see multiple reports here. There are 21 reports in this section right now. These are-

1. Stock Report Single Date
2. Central Item Stock
3. Central Item Stock Warehouse Wise
4. Idle Item
5. Cost Center Stock in Out
6. Category Stock
7. Stock Summary
8. Stock Report
9. Stock Details Report
10. Monthly Summary
11. Issue Register
12. Item Register
13. Cost Center wise Consumption
14. Life Time Item Transaction
15. Stock in hand
16. Stock Items Value
17. Item Location Wise
18. Cost Center wise MRR
19. Consumption Type Register
20. Central Item Stock
21. Stock Safety Level Report

4.13. Fixed Asset Module

The Fixed Assets Module in ERP systems is a collection of cutting-edge tools and capabilities that can help you manage, track, and make the most of your fixed assets. The module, when integrated with other business departments, would support the monitoring of all asset usage and the scheduling of jobs for all machines, taking into account load and maximum capability. The workflow of asset capitalization process is following-

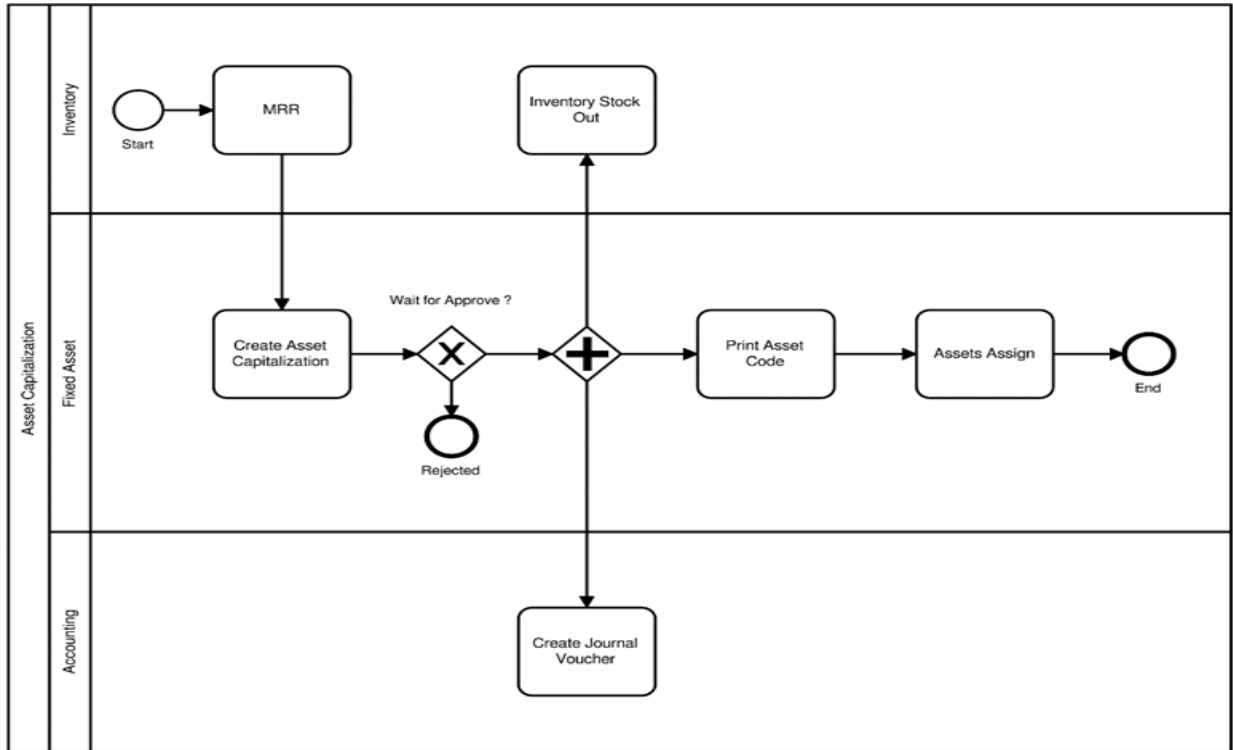


Fig 23: Asset Capitalization Workflow

By implementing the fixed assets module, one would be able to maximize asset performance and dependability, anticipate and prevent equipment failure, adhere to operating requirements, and track all expenditures associated with asset usage. In this module mainly Asset Capitalization, Asset Depreciation Calculation and Asset Transfer process is done.

4.14. Subcon Module

In subcontracting, MAX hire a third party to perform work for your business, particularly in civil sites. Subcontracting is a sort of employment agreement that aims to contract out specific kinds of labor to other businesses. It makes it possible to work on multiple phases of the project at simultaneously, which frequently results in a quicker turnaround. Due to the fact that MAX entails outsourcing specific processes to a third-party Supplier, wherein it provides the raw materials and the third party performs the labor and production, the company keeps track of its subcontracting activities by utilizing the subcontracting feature of the responsive module. There are four types of user needed in Subcontractor Process. These are:

1. Billing Engineer.
2. Site Engineer.
3. Approver.
4. Accountant

The steps of subcontractor modules are following-

1. Work Order Creation
2. WO Approval
3. Progress Reporting & Validation
4. Create Running Bill
5. Running Bill Approval
6. Work Order Amendment
7. Bill Payment and Adjustment

4.15. Portal Module

A portal module in the ERP system of MAX Group provides a web-based platform for employees to access and interact with the ERP system. It offers features like self-service capabilities, real-time information, and secure access to data, enhancing collaboration and communication between different stakeholders. The portal module enables employees to access their HR and payroll data, submit expense reports, and manage their time and attendance. The portal module is customizable to meet specific business requirements and can be integrated with other modules like finance and procurement, to provide a complete view of the company's operations. By using a portal module in the ERP system, the company can improve efficiency, reduce manual processes, and enhance the user experience for their stakeholders. This module is a part of the HRM team. It contains each employee's personal information. These module remains confidential to each of the employee. It preserves each employee's personal details, salary information, leave requisition, available leaves etc. This module helps the employees to keep track of their activities.

4.16. Payroll Module

A payroll module in the ERP system for MAX Group is designed to manage the process of paying employees. It includes features such as employee records management, time and attendance tracking, payroll processing, and tax filing. The payroll module enables the company to automate

payroll processes, reduce errors, and ensure compliance with labor laws and regulations. It also provides employees with self-service access to their pay and benefit information, reducing administrative burden on HR and payroll teams. Additionally, the payroll module can integrate with other modules such as finance and HR, to provide a complete view of employee compensation and enable effective decision-making. By using a payroll module in the ERP system, MAX Group can optimize their payroll processes, improve compliance, and ensure timely and accurate payment of employees.

This module is maintained by the Human Resource Management department. It accumulates all the employee details and their information. Management can oversee any employee info out of this module. As this module has very confidential information of the company, I was not given direct access to it.

4.17. VMS (Vehicle Management System)

VMS module is mainly essential for managing and maintaining the vehicles needed for transportation within the firm. It is designed to manage the entire lifecycle of a fleet of vehicles, from acquisition to disposal. It includes features such as vehicle inventory management, maintenance and repair scheduling, fuel consumption tracking, and driver management. The vehicle management module enables businesses to optimize their vehicle usage, reduce costs, and ensure compliance with regulations. It also provides real-time visibility into vehicle usage, enabling businesses to track vehicle performance and maintenance needs more effectively. It contains the information and details of the drivers and transportation related employees. This module keeps track of the vehicle where it is going and how much fuel it needs, where it is parked in order to avoid extra unnecessary expenses and fraudulent by the drivers. This module also tracks the expenses required for transportation. It keep entries of MAX's own vehicles' expense as regular expense. On the other hand, the third-party vehicle expenditures are met through invoice bills by the procurement module requisitions.

4.18. EMD (Equipment Management Department)

This module is used for maintaining and managing all the equipment operating within the whole company on different projects. This module can calculate equipment depreciation, count idle

equipment and also keep track of equipment in the warehouse. The equipment management module comes with capabilities like inventory management of equipment, scheduling maintenance and repairs, and tracking usage. It helps businesses to enhance the utilization of their equipment, reduce expenses, and ensure compliance with regulations. Moreover, it offers real-time visibility into the utilization of equipment, empowering businesses to track the performance of equipment and maintenance requirements more efficiently. It is also used to transfer equipment from one business unit to another as a borrowed product. This module is specifically designed to

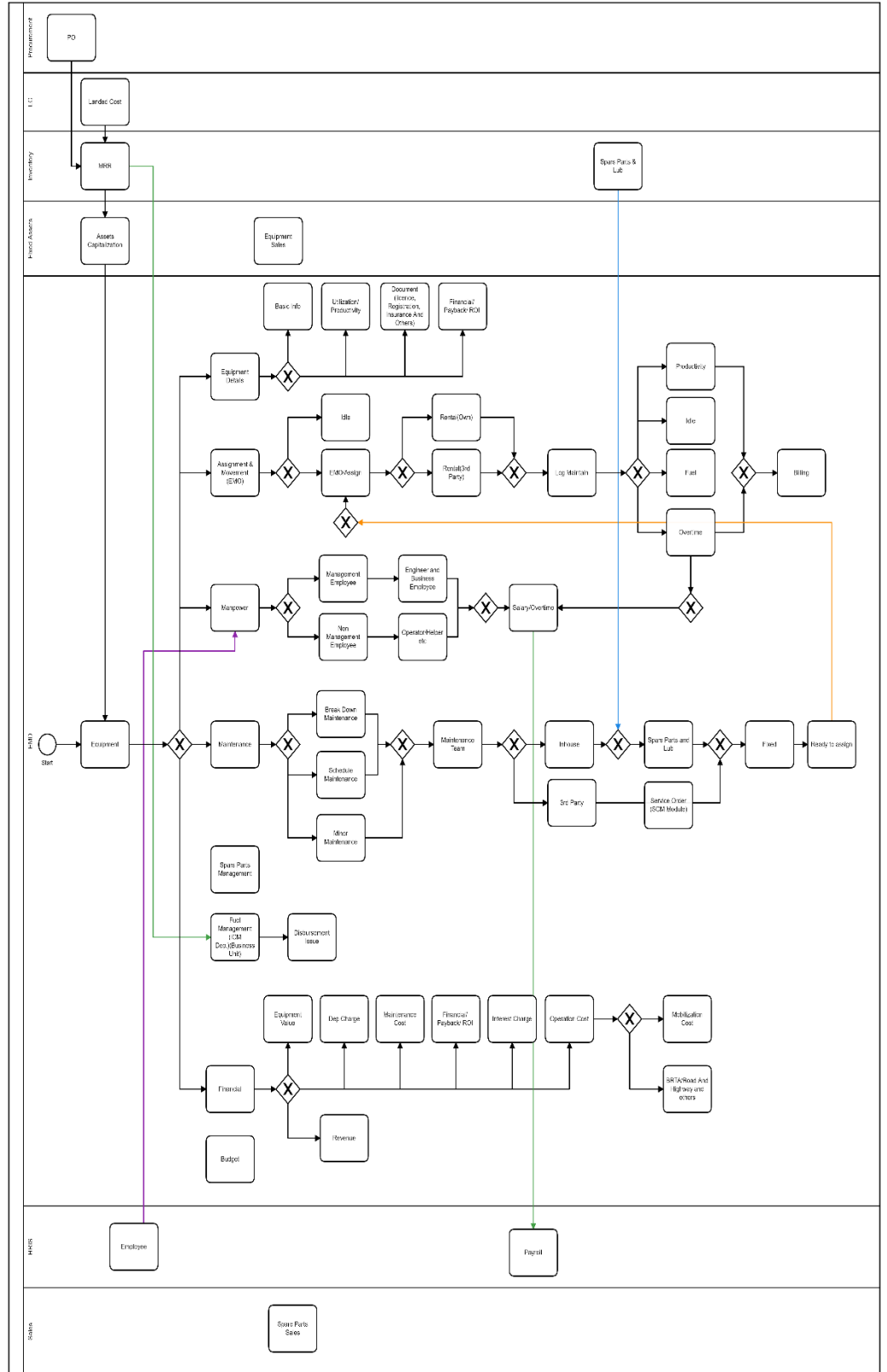


Fig 24: EMD Workflow

efficiently manage the diverse range of equipment required for MAX's infrastructure and industrial work.

4.19. Master Module

The purpose of Master Module is to configure all modules differently. Like users Setup, Company setup, Vendor setup, etc. This module is designed to maintain the whole ERP system. It is mainly a backend module. All the employees do not have the access to it. Only a certain people can use this module including the developers. With these module developers can edit any mistake done by the front-end user. Also, they can add or correct certain things from this module. It is also used to give access to a module to a new user. It is even used to add new vendor new project, new company or items to the system. Overall, this module overlooks the activities of the whole ERP system.

4.20. Workplace Interactions, Communication Style, Frequency

While working as an intern at MAX Group, I had to contact with a variety of individuals, including the Chairman, CPO, Head of MIS department, Deputy Manager of MIS department, Executive of HR team, Finance team, Head of Sales and Marketing department, and other executives and supervisors from the corporate office. During my training at Destreza I had interactions with Assistant Managers and Implementation Engineers for in depth understanding. Throughout the internship period all the officials were very supportive and helpful toward me. The work environment within the office is very much employee friendly. Everyone had a flexible and supportive mindset.

When communicating with my supervisors and members of my team, I had to utilize email, social media platforms such as WhatsApp, as well as face-to-face contact. Meetings are scheduled on a regular basis to keep the team informed and up to date on current events, as well as to share ideas and provide a chance for brainstorming.

4.21. Working Tools

Throughout my internship, the primary working tools I was required to utilize were Microsoft Excel, Microsoft Word, and Microsoft Outlook, as well as the ERP software. Given that I was unfamiliar with MAX's own ERP software prior to this, I received extensive training on how to use it properly.

4.22. Challenges

Although MAX Group offers a very fascinating work culture there was still one challenge that I had to face at the company. The main challenge at MAX Group was its very poor male to female employee ratio at the office. A major reason behind it may be because its functional areas incorporates with civil and mechanical work, fields that currently have comparatively fewer female graduates in our country. At the corporate office where I had to work, most of the female officials were higher executives. As a result, I had a very few interactions with female employees at the workplace. Other than this fact MAX offered a very good work environment at the office.

Chapter 5: Analysis of Duties

The purpose of this chapter is to evaluate the results of my three-month internship program. The analysis will encompass three primary areas: Company Level, Market Level, and Professional Level. In this chapter, I will be examining these three aspects, with a particular emphasis on comparing what I learned during my undergraduate program with what I observed during my internship.

5.1. Company Level Analysis

Up-to-Date ERP

The ERP software that is being utilized here is highly automated. It creates comprehensive flexibility, elevated productivity and efficiency within the organization. It can streamline business processes, increase efficiency, and reduce manual efforts. By having accurate and real-time information at their disposal, decision-makers can make informed decisions and respond to market changes promptly. MAX's ERP system can improve supply chain management, inventory control, and procurement processes, ensuring timely delivery of materials and reducing waste. It also helps in managing project schedules, resources, and budgets, leading to better project outcomes. Additionally, the ERP system provides insights into financial performance, enabling the company to identify areas of improvement and make strategic investments. By leveraging the capabilities of the ERP system, MAX Group can optimize their operations, reduce costs, and stay competitive in the market.

Technically Unskilled Employees

Though MAX Group is using a very updated ERP technology its employees are not well skilled in this respect. Employees from most of the important projects are found to be not using the ERP well. They are not well trained to accustom to the ERP system. Some of them do not even acknowledge the importance of this technology. While the management is trying there best to implement the ERP system company wide, project level employees are reluctant about that. Some employees do use the ERP but often they make mistakes due to lack of knowledge. It can lead to increased costs due to errors and inefficiencies, resulting in reduced profitability. Also, it can lead

to delays in project completion, which can result in dissatisfied clients and damage the company's reputation. It also creates a burden on other employees who have to compensate for the mistakes made by their colleagues, leading to decreased morale and productivity. Finally, it limits the company's ability to leverage the full potential of the ERP system, resulting in missed opportunities for optimization and growth.

5.2. Market Level Analysis

Financial Performance

In terms of financial performance, MAX Group has been growing steadily over the years. According to the company's financial statements, its revenue for the fiscal year 2020 was BDT 15.78 billion, which is a 25.9% increase from the previous year. The company's net profit after tax for the same period was BDT 1.78 billion, a 44.9% increase from the previous year. These figures indicate that MAX Group is performing well financially and is experiencing significant growth.

Market Share

In terms of market share, MAX Group has a strong presence in the construction and infrastructure industry in Bangladesh. The company has completed numerous large-scale projects in the country, including power plants, roads, and railways. MAX Group is also involved in real estate development through its subsidiary, MAX Infrastructure Limited. The company has developed several commercial and residential projects in prime locations across the country. These factors contribute to MAX Group's strong market position in Bangladesh.

Growth Potential

In terms of growth potential, MAX Group has a positive outlook for the future. The construction and infrastructure industry in Bangladesh are expected to grow in the coming years due to increasing government investment in the sector. The country is also experiencing rapid urbanization, which is driving demand for real estate development. MAX Group is well-positioned to take advantage of these opportunities, given its strong market position and expertise in the industry.

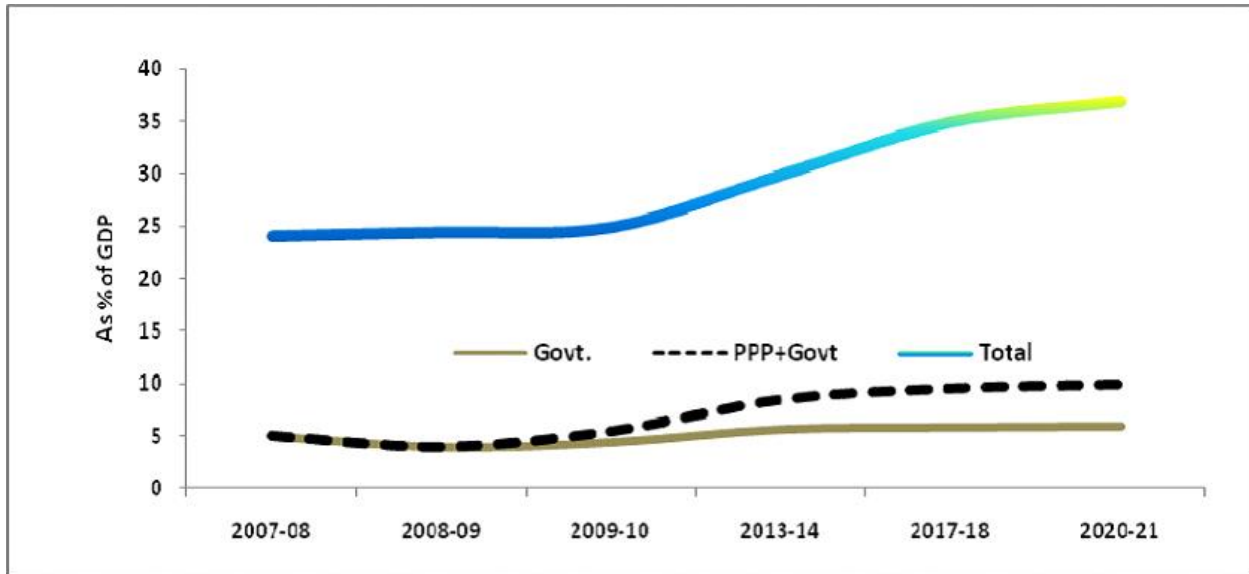


Fig 25: Infrastructure and Total Investment in Bangladesh (FY08-FY21)

Construction Industry

In terms of the construction industry, Bangladesh has experienced significant growth in recent years. The government has prioritized infrastructure development as a means to attract foreign investment and promote economic growth. This has led to an increase in demand for construction and engineering services, creating opportunities for companies like MAX Group to expand their operations and increase their market share.

Railway Sector

One area where MAX Group has a strong presence is in the railway sector. Bangladesh has been investing heavily in expanding and modernizing its railway infrastructure, and MAX Group has been involved in several major railway projects in the country. For example, the company has been working on the Padma Bridge Rail Link Project, which involves building a new railway line to connect the Padma Bridge with the rest of the country's rail network. MAX Group has also been involved in the construction of a new railway bridge over the Jamuna River, which is set to become the longest railway bridge in Bangladesh once completed.

Power Generation

Another area where MAX Group is active is in the power generation sector. Bangladesh has been investing in increasing its power generation capacity in order to meet the growing demand for electricity. MAX Group has been involved in several major power plant projects in the country, including the construction of a 450 MW combined cycle power plant in Bhola. MAX Group has invested in various renewable energy projects such as wind and solar power plants. The company is also involved in the construction of thermal power plants, and has plans to invest further in this sector in the future.

The overall market for infrastructure, power generation, and real estate in Bangladesh is expected to continue growing in the coming years, driven by increasing government investment and private sector participation. This presents significant opportunities for MAX Group to expand its operations and increase its market share.

However, the market also poses several challenges, such as regulatory and legal constraints, political instability, and competition from both domestic and international players. To overcome these challenges, MAX Group will need to continue to innovate and adapt its strategies to stay ahead in the market.

5.3. Professional Level Analysis

The internship turned out to be easier than I had anticipated, particularly in terms of workload and dealing with my supervisor. HR and Admin were supportive in ensuring compliance with regulations, and they were considerate of my academic obligations. This experience taught me the importance of building strong relationships with colleagues, even during short-term internships. I am grateful to my academic supervisors for scheduling the course in a way that allowed us to gain valuable business experience while still in university, which will give us an advantage in the job market. I want to express my appreciation to my professors and institution for providing me with the opportunity to work in a real-world business setting. Through my three-month internship, I gained valuable insights about myself and my career path.

Relevance to Affiliation with Organizations/Companies

MAX Group's affiliation with various organizations and companies plays very significant role in its regular operation. Being a government contractor for various kinds of project MAX needs to affiliate with different type of organizations from government level to international level. During my tenure in MAX Group I have discovered many types of stakeholders at the office. MAX Group deals with them in a great manner. Firstly, it helps to enhance the company's reputation and credibility. Being associated with reputable organizations and companies improves MAX Group's brand image and increase its visibility in the market. This, in turn, can attract more clients and customers, which leads to increased revenue and growth for the company.

Furthermore, affiliating with other organizations and companies provides MAX Group with access to new markets and opportunities. This helps the company to expand its operations and diversify its business portfolio. For example, MAX Group forms a partnership with a large multinational corporation, it gains access to new markets and customers that it would not have been able to reach on its own.

Moreover, affiliating with organizations and companies also provide MAX Group with valuable resources, such as knowledge, expertise, and funding. By partnering with other companies or organizations, MAX Group benefits from the shared knowledge and expertise of its partners, as well as access to their financial resources.

Finally, affiliation with organizations and companies also helps MAX Group to stay up-to-date with the latest industry trends and developments. This can help the company to remain competitive in the market and adapt to changing business environments.

Professional Communication

Professional communication is highly valued at MAX Group. The company emphasizes the importance of clear and effective communication in all aspects of the business, whether it is within the organization or with external stakeholders. As an intern, I was encouraged to communicate clearly and effectively with my supervisor and colleagues. Regular meetings were held where we would discuss our progress and address any issues that arose. Additionally, there were training sessions on effective communication skills that I attended.

In terms of external communication, MAX Group places great importance on maintaining a positive image and building strong relationships with clients, partners, and stakeholders. The company has a dedicated public relations team that manages all external communication, including media relations and stakeholder engagement. I had the opportunity to observe and participate in some of these communication activities, including drafting press releases and preparing presentations for clients.

Networking

As an intern at MAX Group, networking played a crucial role in my professional growth and learning. By building connections and relationships with my colleagues and supervisors, I was able to gain valuable insights into the company's culture, processes, and projects.

One way networking helped me was by providing me with access to information and resources that I wouldn't have had otherwise. Through conversations with colleagues, I was able to learn about new projects and initiatives, as well as best practices for completing tasks and managing my time effectively. This allowed me to work more efficiently and produce higher quality work.

Networking also helped me to develop my professional skills and knowledge. By connecting with more experienced colleagues, I was able to learn from their expertise and gain valuable insights into industry trends and practices. Additionally, networking allowed me to receive feedback on my work and identify areas for improvement, which helped me to grow and develop as a professional.

Finally, networking helped me to build relationships that will benefit me in the future. By establishing strong connections with my colleagues and supervisors, I have built a network of contacts that I can turn to for advice, support, and potential job opportunities in the future.

Reporting and Observation

Reporting and observation played a crucial role in my internship experience at MAX Group. As an intern, I was tasked with various responsibilities and projects, and being able to report and observe effectively allowed me to succeed in those tasks.

Reporting was an important aspect of my internship. Throughout my time at MAX Group, I had to submit progress reports, project reports, and presentations to my supervisor and other senior members of the team. These reports helped me track my progress and receive feedback on my work. By analyzing the feedback, I was able to identify my strengths and weaknesses and improve upon them.

Observation was another key skill that I developed during my internship. I was constantly observing the work environment, the processes, and the people around me. By observing the work culture, I was able to understand the values and ethics that MAX Group followed. This helped me align my work and behavior with the company's expectations.

Observation also helped me understand the work processes at MAX Group. By observing how different departments and teams worked, I was able to understand how they collaborated and coordinated with each other to achieve their goals. This helped me develop a better understanding of how the company operates as a whole and how my work contributed to the company's success.

Chapter 6: Findings

6.1. Recommendations

6.1.1. Women Empowerment

At MAX Group. There are very few women employees at the corporate office. Only a few works as a higher management team. There is almost nobody at the mid or lower management team. Though there are remarkable women workers at the sites.

In order to empower women at MAX Group, the company should take initiatives to increase the number of female employees in mid and lower management positions at the corporate office. This can be done by actively recruiting and promoting qualified women candidates and creating a work culture that is inclusive and supportive of women's career growth. The company can also provide training and development opportunities specifically designed for women to enhance their skills and knowledge. Additionally, MAX Group can partner with external organizations that focus on women's empowerment and participate in events and programs that support gender diversity and inclusion. By taking these steps, MAX Group can create a more diverse and inclusive workplace that supports the professional growth and success of all employees, regardless of gender.

In addition to implementing policies and programs for women's empowerment, MAX Group can also take steps to create a culture of inclusivity and diversity at the corporate office. This can be done by providing training and workshops on unconscious bias, gender sensitivity, and diversity and inclusion to all employees, not just management. The company can also encourage the formation of employee resource groups for women and other underrepresented groups, where employees can come together to support each other and raise awareness on important issues. By promoting a culture of inclusivity and diversity, MAX Group can attract and retain a more diverse workforce, which can ultimately lead to better business outcomes.

6.1.2. ERP Training

By implementing following recommendations, MAX Group can ensure that its employees are trained effectively and efficiently to use the ERP system, which will ultimately help improve the overall productivity and efficiency of the organization.

1. **Develop a comprehensive training program:** MAX Group should develop a comprehensive training program for ERP that includes theoretical and practical aspects of the ERP system. The program should cover all the major modules of the ERP system, such as finance, procurement, inventory management, and HR management.
2. **Provide hands-on training:** The training should include hands-on practice with the ERP system. This will help employees understand the ERP system's functionalities and how to use it in their day-to-day work.
3. **Customize the training program:** The training program should be customized according to the employee's job roles and responsibilities. For instance, the training program for finance employees should focus on finance modules, whereas HR employees should focus on HR modules.
4. **Schedule regular refresher courses:** ERP training is not a one-time event, and regular refresher courses should be scheduled to keep employees updated with the latest changes and functionalities in the ERP system.
5. **Monitor and evaluate the effectiveness of the training:** The effectiveness of the training should be monitored and evaluated regularly. This will help identify any gaps in the training program and make necessary improvements.

6.1.3. Employee satisfaction

Employee satisfaction is a critical aspect of any organization, as it directly impacts the productivity and success of the business. At MAX Group, there are several recommendations that can be implemented to increase employee satisfaction. Following are some recommendations for increasing employee satisfaction at MAX Group:

1. Foster a positive work culture: MAX Group should create a work environment that is inclusive, supportive, and collaborative. This can be done by promoting a culture of openness, transparency, and respect for diversity.
2. Offer professional development opportunities: Employees should be provided with opportunities for professional growth and development, such as training programs, workshops, and mentorship programs. This can help employees feel more engaged and invested in their work.
3. Recognize and reward good performance: MAX Group should develop a system for recognizing and rewarding employees who go above and beyond in their work. This can include monetary rewards, promotions, and other forms of recognition.
4. Increase communication: Communication is key to building trust and fostering collaboration among employees. MAX Group should implement regular meetings, feedback sessions, and other forms of communication to ensure that employees feel heard and valued.
5. Improve work-life balance: Work-life balance is an important factor in employee satisfaction. MAX Group should implement policies and programs that support work-life balance, such as flexible work arrangements, remote work options, and wellness programs.
6. Enhance benefits packages: MAX Group should consider enhancing its benefits packages, such as health insurance, retirement plans, and vacation policies. This can help attract and retain top talent, and demonstrate that the company values its employees.

6.2. Conclusions

In conclusion, my experience as an intern at MAX Group has been both educational and valuable. I gained insights into the company's operations, culture, and work environment. The company's strong market position, diversified business portfolio, and commitment to sustainability are admirable. However, there are areas for improvement, such as increasing employee satisfaction, empowering women in the workplace, and enhancing ERP training.

I hope my recommendations for these areas will help MAX Group to further enhance its operations and work environment, and continue to be a leading player in the market. Overall, my time at MAX Group has been a great learning experience, and I am grateful for the opportunity to work with a company that values employee development and growth.

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