

Internship Report On
Operating and Analyzing of Business Data
with Digital Enterprise Division of BanglaCAT

by

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A thesis submitted to the Department of Computer Science and Engineering
in partial fulfillment of the requirements for the degree of
B.Sc. in Computer Science

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Declaration

I, Mithila Mitra, hereby declare that the internship report titled "Operating and Analyzing of Business Data with Digital Enterprise Division of Bangla CAT" is a true and original work undertaken by me during my internship at Bangla CAT. I have completed this report as part of the academic requirements of my internship program.

I affirm that all the information presented in this report is based on my personal experiences, observations, and research conducted during the internship period.

Student's Full Name & Signature:

A handwritten signature in black ink that reads "mithila". The signature is written in a cursive, lowercase style and is centered within a faint, light-colored rectangular box.

Student Name
Student ID

Approval

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Abstract

This internship report provides a comprehensive overview of the experiences, learning, and contributions made during the internship period at Bangla CAT. The report encompasses a tailed description of the objectives, scope, methodology, and outcomes of the internship. It also highlights the key projects and tasks undertaken, along with the skills acquired and professional growth achieved during the internship.

Dedication

I would like to dedicate this internship report to the people who have made my experience possible and meaningful. First and foremost, I would like to express my heartfelt gratitude to the management and staff of Bangla CAT Company for giving me the opportunity to intern with their organization. I am grateful for the knowledge, skills, and experiences that I gained during my time at the company, and for the support and guidance that the team provided throughout my internship.

I would also like to thank my internship supervisor, for valuable insights, mentorship, and encouragement. His guidance and feedback helped me navigate the challenges of the internship and enabled me to develop my skills and knowledge. I am grateful for his patience and willingness to teach me new things.

I am also indebted to my professors and mentors at my university for their support and guidance. Their knowledge, expertise, and encouragement have been instrumental in shaping my career path and helping me develop the skills needed for the workforce.

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Chapter 1

Introduction

1.1 About Internship

Internships are often structured programs that provide hands-on training and mentorship. They can vary in duration, ranging from a few weeks to several months, and can be either full-time or part-time positions. Interns work under the supervision of professionals in their chosen field and may be assigned a variety of tasks and projects related to their area of study or interest. Internship is a good opportunity for students and fresh graduates. By doing internship students can learn, gain experience and improve their work skill. During internship students can also improve their communication skills and ability to interact with people. To prepare an intern's CV which eventually make it enough worth, hence provide great job opportunities in the future [1].

Internships are becoming popular worldwide and student is showing interest in internships day by day. In BRAC university has three option for students which are internship /thesis /project. Most of the students do thesis and some of the student's do internship. After earning 75 credits students are eligible to apply for an internship with a renowned company. Internship must be 6 months long at a reputable company. There are some reason why BRAC University provides the internship opportunity .These are:

- To introduce students to working in the real world.
- Student will be better prepared for their future professional lives by having the chance to apply what they have learned to real world issues.

1.2 About this report

What I have done in internship and how my office environment is should be written well and presented to the university (BRAC) which is a mandatory part of completing my bachelor's degree course. It will give thorough summary of my work as an intern.

1.3 Objective

This report is created after my 6 months of work. The objective of the report can be viewed in two forms.

- Overall goal
- Target goal

1.3.1 Overall goal

This report is primarily prepared to fulfill the bachelor of computer science and Engineering (CSE).

1.3.2 Target goal

More specifically, this study entails the following aspects.

- To give an overview of Bangla Cat
- To discuss the terms and conditions of Bangla Cat
- To see what makes customers to repurchase their services
- To discuss the overall service activities of Bangla Cat.

1.4 Methodology

This report has been generated based on my work experience at Bangla CAT. As intern, I have worked on data analyzing, report generating and equipment data correction. Also some information has been taken from specific websites. The study is based on both primary and secondary data collection methods.

1.4.1 Primary data

- primary data is collected for a specific research project, it is considered to be original and specific to that particular study.
- Examples of primary data include survey responses, interview transcripts, experimental results, field observations, and measurements taken directly from the research subjects or participants.

1.4.2 Secondary Data

- Bangla Cat official website
- Internet.

Chapter 2

Company Profile

2.1 Overview

Bangla Trac Limited (BanglaCAT) is the approved vendor of Caterpillar Inc. USA in Bangladesh and it is quite possibly of the biggest supporter in the Power Age and Framework Advancement of the country. A fortune 100 organization, for more than 90 years, caterpillar Inc. has been making estimable interaction, as the world's driving maker of development and mining hardware, diesel and flammable gas motors, modern gas turbines and diesel electric trains. BanglaCAT began its activity in Bangladesh from eleventh of October,2004 and since then, at that point, has been effectively offering unrivaled cross country assistance to thousands of clients associations on a Nations premise. The significant level of client support Also, genuineness has made BanglaCAT the biggest supplier of autonomous power age arrangements in the modern area of Bangladesh. BanglaCAT is likewise the Biggest Electric Power Age (EPG) Vendor for Caterpillar in Asia Pacific and is among the Best 5 Caterpillar EPG Vendors and is quite possibly one of the biggest Ga Motor sellers universally. BanglaCAT was established on the commitment of meeting clients' needs with the most extreme significance, adequacy and genuineness. The Organization the board continuously focuses on the significance of laying out and supporting solid, long haul proficient connections which clients can rely upon. This organization has 100 of representatives and administration and individuals working energetically nonstop, to give their partners great administrations and creative business/specialized answers for their endeavors [4].

2.2 Vision

A Unique Worldwide Organization Driving Partners' Prosperity Through Greatness, Honesty, Lowliness and Individuals Administration.[4].

2.3 Values

BanglaCat promotes the following values [4] :

1. Individuals First
2. Client's Prosperity

3. Greatness Through Modesty
4. Trustworthiness
5. Advancement

2.4 Product

CAT generators in Bangladesh has a combined(installed) limit of all the more then, at that point, 3500MW,which is identical to 35 percent of the public braces power creation. Furthermore , CAT items have been utilized to assemble the framework of the country through machines gave to the Bangladesh Armed force, driving Government What's more, confidential associations[4].

2.4.1 CAT Generators

BanglaCAT gives first rate Gas ,Diesel, HFO and Double Feline Generators inside the scope of 6.75kVA. These generators are planned with predominant quality, amazing dependability and more noteworthy solidness that take into consideration their simplicity of workableness, reparability; this unmatched quality is combined with our exceptional all day, everyday item backing and administration. We have designed our items for high proficiency, deadbeat cycle costs and to meet most worldwide discharge particular. we likewise have the skill of giving designing and after-deals support for such blended fuel application What's more, transformation for power generators and consolidated heat and Power(CHP)[4].

Assuming you really want motors that have a noteworthy power range and can decidedly affect on your business, you will need the group of motors in your corner. Caterpillar is setting new norms in emanation control, eco-friendliness and execution without any penance in sturdiness or dependability. Generators are driving some strong new changes in the manner we see our reality; all details - other than being exceptionally effective, having miscreant cycle expenses and meeting most worldwide emanations details - offer fuel adaptability to consume energizes from the low energy landfill gas or biogas to pipeline petroleum gas to handle gasses and if there should arise an occurrence of fluid fuel. Gensets are, truth be told able to run from raw petroleum to vegetable oil range up to even 700 cSt of thickness [4].

2.4.2 Disiel

From 5.4 to 14,800 ekW (6.75kVA to 18,500kVA) of force potential, our diesel energized generator sets are worked to top notch principles, for high productivity, low fuel utilization and worldwide discharges consistency. Generator sets arrive in a choice to match your power needs, making choosing and introducing straightforward. The exceptionally productive diesel generators have dependable .rough and strong plan and have been Field-demonstrated in capacities around the world. Their industry driving mechanical and electrical plan and engine turning over abilities assist them with staying matched to the execution and result. A portion of the particular qualities of CAT® Diesel Generators are as per the following. Right off the bat, every one of the principal parts of the generator are made and collected at a solitary source.

Furthermore, Caterpillar has presented 4 years or 2000 running hours guarantee interestingly all around the world, just for the retail range. Also, the CAT® diesel generators keep up with ISO 8528-5 transient reaction necessities and acknowledge 100magnificent mileage with least weight. Additionally, the Caterpillar incorporated control framework, including CAT® UPS, ATS and switchgear guarantees a steady power supply and association with your armada through on location and remote observing choices. Then, Caterpillar EMCP 4 control board gives expandable regulator choices, with the executives and analytic apparatuses, Furthermore, an easy to understand interface. The CAT® Diesel generators additionally meet Global Standard Particulars like: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, UL142, UL489, UL601, UL869, UL2200, NFPA 37, NFPA 70, 72/23/EEC, 98/37/EC, 2004/108/EC. Above all, many models of CAT® diesel generators offer discharges decreased by up to 90 percent, that is innovation with benefits past today. Caterpillar Diesel Generators are Climate Well disposed and are reasonable for Green Ventures because of its low discharge of NOx, COx, HC, PM [4].

Top rated Diesel Engines

C15: Delivering solid power from 500 kVA/400ekW at 50Hz, our C15 ACERT® diesel generator sets are worked for backup and prime applications and are worked to your power principles. Each is designed to ISO 8528-5 transient reaction prerequisites and intended to acknowledge 100generator sets range from low fuel utilization frameworks to EPA Level 4 Break certificate. We plan for the erratic, which is the reason all models are made to meet seismic affirmation. Our incorporated control framework, including Cat® UPS, ATS and switchgear, which keeps your power consistent and keeps you associated with your armada with on location and remote observing capacities. Access the executives and diagnostics apparatuses with our simple to utilize EMCP 4 control boards give expandable usefulness from fundamental generator set checking, control, and insurance to full multi gen resembling. We offer adornments and bolt-on framework development connections to assist you with meeting explicit power needs [4].

C18: Delivering dependable power from 635 kVA/508 ekW at 50Hz, our C18 ACERT® diesel generator sets are made to meet your reserve and prime applications. Each is intended to ISO 8528-5 transient reaction prerequisites and constructed acknowledge 100 percent evaluated load in one stage. Our C18 generator sets range from low fuel utilization frameworks to EPA Fixed Crisis (Level 2) affirmed. Seismic affirmation is likewise accessible for select models, so you can convey power in spite of aggravations. Our coordinated control framework, including Cat® UPS, ATS and switchgear guarantee a predictable power supply and association with your armada through on location and remote observing choices. We offer an extensive variety of EMCP 4 control board choices, with a straightforward screen show, uniting all your administration and diagnostics devices. The EMCP 4.4 regulator gives on bundle resembling ability, permitting you to utilize numerous generator sets to drive your office, giving added limit and overt repetitiveness. We've made our generator sets versatile to your requests with an expansive scope of extras and bolt-on framework development connections.[4].

2.4.3 Gas

As an approved vendor of Caterpillar items, we give first rate Gas Generators inside the scope of 80 KW to 10000 KW and have reliably been giving Savvy Energy Arrangements. These generators are planned with unrivaled quality, unsurpassed unwavering quality and more prominent toughness that take into account their simplicity of workability reparability; this unparalleled quality is combined with our exceptional 365x24/7 item backing and administration. Our generator sets are made to burn your accessible gasoline sources with fuel adaptable choices. Going from 80 KW to 10000 RW, with adaptable choices to match your power needs, our generator sets are not difficult to choose, grant and introduce. We've designed the gensets for high proficiency, lower cycle costs and to meet most worldwide emanations particulars. We additionally have the ability of giving designing and after-deals support. Our new motor innovations convey power, intensity, or cogeneration with top notch electrical and warm effectiveness, Our Gas motors are enhanced for activity in equal or detached from an essential electric utility and are combined with Industrial facility obtained compartments, heat recuperation modules and control frameworks. A portion of Our Top of the line Gas Generators [4].

Some of Our Best Selling Gas Generators

CG260-16: The CG260 series incorporates 12-and 16-chamber designs. These 60 Hz-appraised generators convey electrical results from 3000 to 4000 kW, while the 50 Hz-appraised generators convey electrical yields from 3300 to 4300 kW. It was created for a powerful result with an ability-to-weight proportion that really depends on how well in little motor rooms or measured power plants. A multivariable regulator coordinates all basic control capabilities on the motor, working on the unique burden reaction and expanding the electrical effectiveness. It consumes 40liters (1,056 gallons) of oil each year on a CG260-16 motor. This model can run at low gas pressure contrast with different brands of this reach [4].

G 3516: Caterpillar presents new exceptionally prepared G3516 Gas Genset Model. The new motor model G 3516 has a rating of 1030 KW with exceptionally prepared 1287 KVA. It has 400V line voltage and likewise incorporates 0.8 power factor with long-lasting magnet excitation type, 50 Hz recurrence. It presented series star association, which gives successful obligation. G 3516 has an exceptional 697-generator outline that guarantees ideal execution in any event, when fuel quality is not exactly premium. G 3516 is the most famous model in Bangladesh as it is running around 2000 units here. The activity and support cost of this model is less expensive in contrast with some other brand of this reach [4].

2.4.4 HFO

As an accomplice of Caterpillar Motoren GmbH and Co. KG, additionally known As CM or MaK, Bangla Trac Restricted has state of the art creation offices in Germany's Kiel and Rostock. To address the interest for power and joined intensity and power (CHP) arrangements around the world, CM produces low emanation, high effectiveness fluid fuel (LFO, CRO, and HFO up to 700 cSt) powered gensets going from 2.5 MWe to 14.4 MWe each. For 50HZ and 60Hz, CM gensets come in 500 and 750 rpm models. The versatile genset engineering empowers a wide decision of cooling frameworks, mobility to far off areas, ease of upkeep, and generally benefit. The World Bank's discharge guidelines are met utilizing CM generator sets. As a feature

of a drawn out help understanding, Bangla Trac Restricted and Caterpillar Motoren (CM) offers intensive discussion, designing administrations, and OM support. This assists with guaranteeing that the power projects are reliable and deserving of basic cycle/co-age and reliably outperform the assumptions for our clients. Our experience is worldwide, with establishments on each landmass and 1,500 offices around the world serving in excess of 200 countries while providing power from 2.5 to over 200 MWe per plant. We have near 200 Cat® vendors around the world [4].

2.4.5 Dual Fuel

Later on, CM Double Fuel Terminated motors will actually want to consume normal gas at full burden up to 99 percent volumetric with 1GmbH and Co. KG's Plants in Kiel and Rostock, Germany, produce these gensets. For This kind of ignition variety, the main motors now available are the CM 340mm and 460mm drag Vee motors. In spite of the fact that Caterpillar 3500 series diesel energized genset from Lafayette, USA is restricted to least 30it is likewise able to do being changed over completely to double fuel innovation. These double fuel generators are presented in 50/60 Hz and 500/600/750/1200/1500 rpm. As a reseller's exchange administration choice with change packs, Caterpillar additionally does the double fuel transformation for utilized Feline fluid fuel generator sets. If the reseller's exchange change passes intensive execution and development tests, this organization will give a guarantee. Also, these generator sets comply with World Bank outflow norms. For this sort of blended fuel application and transformation for both power age and Joined Intensity Power, Bangla Trac Restricted is prepared to give the designing and after-deals help (CHP) [4].

2.4.6 Cat Lift Trucks

CAT Lift Trucks provides a comprehensive selection of long-lasting material handling lift trucks. You know, as a business, that you need trucks that are productive, have a high uptime, and complete the job quickly and efficiently. All of the benefits that our customers have come to expect from CAT Lift Trucks in terms of life-cycle cost of ownership are available to you in CAT rugged machines every day. With a committed spotlight on quality, dependability client ser-bad habit, Feline ft trucks offer the material taking care of arrangements you've generally expected, including: Intended to increment efficiency and limit margin time Outfitted with roomy administrator compartments for low-exertion activity Industry-driving elements, for example, fingertip controls, a high level administrator Presence Recognition Framework (PDS) and enlightening presentations Low upkeep with broadened administration spans Guarantee choices Industry driving vendor network offering production line support programs BanglaCAT, being the approved seller of Caterpillar items, is focused on giving industry-driving client care that is conveyed by experienced and dependable specialists and administration staff. BanglaCAT puts its client's requirements first with quite possibly of the most complete client care and care programs in the business today Feline smash hit forklift models, DP30N and DP50N, have been extraordinarily intended to fulfill the needs of ventures and organizations that require substantial, yet great quality-machines. The engineered design of these

pneumatic tire lift trucks delivers top horsepower and performance, resulting in exceptional productivity. Whether it's dealing with modern materials or delivery items on a tight schedule, these inward ignition pneumatic tire lift trucks work long and difficult to take care of business! In point of fact, each and every CAT lift truck model included in this range satisfies or exceeds stringent requirements set by the United States Environmental Protection Agency (EPA) for minimizing emissions of carbon monoxide, hydrocarbons, and nitrogen oxides while still providing the power required for heavy-duty performance. Feline Lift trucks incorporate a sturdy frame, powerful poles with reliable execution and a profoundly effective framework powerful motors that run as expected and discreetly. MCF Ltd. has awarded Bangla Trac Ltd (BanglaCAT) the prestigious "Dealer of Excellence Award" for the "CAT" Lift Truck business 2012-2013." This is Bangla Trac Ltd's first time receiving this prestigious title. Out of 20 dealers in the Asia-Pacific region, Bangla Trac Ltd. and four other dealers won this award[4].

2.4.7 Parts

BanglaCAT offers a comprehensive selection of genuine Caterpillar service kits and spare parts at affordable prices with a one-year warranty. Also, keep a comprehensive parts inventory that has almost every spare part you might need on hand. Because CAT is committed to providing the industry's best over-the-counter availability, they employ a branch-wise stocking strategy that places the parts precisely where you need them. The company not only strives to fulfill the majority of parts orders in the shortest amount of time, but it also maintains over 6,000 line items and 10,000 line items in its local inventory in addition to keeping in stock nearly every essential part you might require; do this by keeping a refreshed stock as well as by traveling great many miles to convey the expected parts. To get the right parts for your equipment as quickly as possible, no other company has the same level of commitment, resources, or customer focus as we do [4].

2.5 Service

The exceptional services BanglaCAT provides to its stakeholders are noteworthy. The quality help provided by our administration work force improves the upper hand of our clients. Over 235 highly skilled engineers, scores of competent technicians, and over 24 managers and support staff make up our service team, which tirelessly works around the clock to increase the productivity of your engine and equipment in every way. In fact, our engineers are available round-the-clock, seven days a week, for emergency and on-site services. Our designers are likewise under steady preparation projects to refresh themselves, approach a thorough library of specialized information, manuals, notices, and are booked for successive in-house instructional meetings. To provide prompt, precise support and solutions for troubleshooting and repair, each of our technical teams is outfitted with computerized diagnostic tools and tools designed specifically for Caterpillar. Laptops are provided to all of our field service professionals so that they can provide service information and speed up diagnostics [4].

2.6 Marine Solutions

CAT's high and medium-speed propulsion engines for commercial, oceangoing, and pleasure craft applications range from 280 to 7577 BHP (209 to 5650 BKW) as part of its Marine solutions line. These marine motors offer prevalent execution while meeting every one of the global prerequisites. In addition, Caterpillar is able to develop the most widely used engine for a wide range of applications due to its industry-leading technology. Additionally, we have power solutions (Genset) with outputs ranging from 10 KVA to 6050 KVA (or 10 KW to 4840 KW) and auxiliary engines with outputs ranging from 292 to 7268 BHP (or 218 to 5420 BKW). They deliver more power, greater efficiency, and enhanced monitoring by combining cutting-edge technology, such as advanced control, with efficient designs and manufacturing methods. Additionally, to meet your needs, we offer a one-stop, all-inclusive propulsion solution that includes Caterpillar propulsion engines, controllable pitch propeller/azimuth thrusters, dredgers, workboats, fishing trawlers, naval vessels, warships, self-propelled barges, floating cranes, and other types of vessels. Besides, BanglaCAT Marine division has likewise been offering serious marine answers for the clients with the IMS Versi-dig MudCat Dig arrangements, Chime Land and water proficient Backhoes Dig arrangements [4].

Chapter 3

Training Phase

3.1 Overview

I have joined Bangla CAT as an intern and I work in Digital Enterprise division . When a new intern join Bangla CAT, they give an intern's Id. Also, they give a letter which is a part of joining paper, needs to be countersigned by the Division head. It will help the intern to get himself/herself included in the interns records of the company and enable the account Division to Process Salary and benefits related formalities. The new intern also has to fill in personal Information form for the records of the Company.

For the newly appointed interns of Bangla CAT, an outline of orientation activities exists which includes the following:

- Company History, Mission, Vision, values, Pro ducts, Services, Division and Responsibilities
- HR Policy Procedure, Performance, Management, Training, compensation and Benefits
- Attitude Behavior and Presentation.

Being able to work as an intern Company is great chance one's academic and professional lives. In Bangla CAT, they put interns directly to work. My supervisor also work with me and when I run into problems while working, he explains to me how to do it. My Supervisor from BanglaCAT helped me very step and made the things easy for me.

3.2 Getting know about ERP system

Enterprise Resource Planning is spelled ERP. ERP frameworks are the sort of programming instruments which are utilized to deal with the information of an endeavor. The ERP system makes it easier for various organizations to manage various business divisions. Receiving, inventory management, customer order management, production planning, shipping, accounting, and other business functions are all departments. It basically entails integrating the planning, manufacturing, sales, and marketing efforts of an organization into a single management system. By combining datasets from various departments, it creates a single database that all company

employees can easily access. It supports the robotization of the errands important to complete corporate cycles Getting to be familiar with standpoint: Microsoft developed Outlook, a personal information manager and email client. It permits clients to deal with their messages, schedules, contacts, undertakings, and notes in a single spot. [2].

3.2.1 Getting know about the Lawson

Lawson Smart Office is an integrated workplace management system (IWMS) designed to streamline and optimize various aspects of office management. Here's a general overview of how Lawson Smart Office works:

Centralized Platform: Lawson Smart Office provides a centralized platform where all relevant office management data and processes are consolidated. This allows users to access and manage information from a single location, improving efficiency and collaboration.[3].

Data Capture and Input: Users input and update data within the Lawson Smart Office system. This may include information about office spaces, assets, maintenance schedules, service requests, and other relevant data. The system may support manual data entry or integration with other systems to automate data capture.[3]. In BanglaCAT create their own panels in Lawson. Lawson is a one kind of ERP system.

3.2.2 Getting know about outlook

Outlook is a personal information manager and email client developed by Microsoft. It allows users to manage their emails, calendars, contacts, tasks, and notes in one place.

Here are some of the main features and how outlook works:

Email: Outlook allows users to send, receive, and manage emails from multiple email accounts. It supports various email protocols such as POP, IMAP, and Microsoft Exchange. Users can organize their emails using folders, tags, and filters.

Calendar: Outlook includes a calendar feature that allows you to schedule appointments, meetings, and events. You can set reminders, specify locations, invite attendees, and track responses. The calendar also offers different views, such as day, week, or month, to help you manage your schedule effectively.

Contacts: Outlook has a contact management feature that enables users to store and organize their contacts. Users can add, edit, and delete contacts, and group them into categories.

3.3 Tutorial and Assistance

I received significant support and education from my supervisor, who generously allocated time to clarify concepts and demonstrate proper techniques. In addition, I utilized the internet to gather information from various websites and consulted a book suggested by my supervisor. Additionally, I watched a few tutorials on Lynda.com to supplement my learning.

3.4 Communication and meetings

Communication and meetings are essential aspects of any organization, and their importance cannot be overstated. Here are some reasons why communication and meetings are crucial:

- i. Sharing information:** Communication and meetings are a primary means of sharing information within an organization. This helps to ensure that everyone is on the same page, and everyone has the information they need to do their jobs effectively.
- ii. Problem-solving:** Communication and meetings are crucial for addressing and solving problems within an organization. By bringing together different perspectives and ideas, problems can be tackled more effectively.

3.5 Work Environment

Our work environment is designed to encourage collaboration and teamwork. Our employees are encouraged to work together to develop new ideas and innovations that will improve our products and services. Our offices are designed to be open and inviting, with comfortable workstations, break rooms, and collaborative spaces.

Chapter 4

My role and responsibilities

4.1 Data analysis

In Bangla Cat I have worked on different kind of data.

1. Customer data update
2. Equipment data input

4.1.1 Customer data update

Here, I have to log in to the Lawson system with my user credentials. Access the module or application(OIS300), I input customer code in my module. After inputting data, then I have to select the “Create” option and I create customer delivery address.

The screenshot displays the 'M3 Customer Connect Addresses' form for OIS002/E. The form is titled 'Bangla Trac Limited BTL (100/100)'. It includes a menu bar with 'Actions', 'Options', 'Related', and 'Tools'. The main form area is divided into several sections: 'Panel Header' with fields for Customer (C01392), Address type (1), and Address no. (DL001); 'Address Details' with fields for Name (TRANSCOM BEVERAGES LTD.), Address (GULSHAN 2, GULSHAN MODEL TOWN, GULSHAN, DHAKA), City (DHAKA), Postal code (1212), State (DHAKA), and Country (Bangladesh); and 'Settings' with fields for Ship-via addr, Place of unload (NA), Unloading zone, Calendar vsn, Dely pattern, Planning node, Run, Supply model, Backorder, and Partial dely. A 'Close' button is located at the bottom left.

Figure 4.1: Customer Data Input

In this field, I have to fill all the information .Then, click the “Save” button to save the customer delivery address.

In this field, we can see that customer address, city, postal area, state, country.

4.1.2 Equipment data input

In BanglaCat, this organization has own sites where they store the information. My responsibility is to input the engines serial number and update the Mfg year, principle work,(what is the type of engine)and add equipment id in CAT site.

The screenshot shows a web interface for equipment data input. The top section displays product configuration details for a Caterpillar engine. Below this is a 'Service History' table with 7 columns: View Image, Add Image, Group Number, Partcausing Failure, Repairing Dealer, Service Meter Measurement, Repair Date, Sims Ticket Received, and Claim Received. The table contains 7 rows of repair records.

View Image	Add Image	Group Number	Partcausing Failure	Repairing Dealer	Service Meter Measurement	Repair Date	Sims Ticket Received	Claim Received
	Add	6L-4502	3N-3790	W720	111 Hours	19Jan2016	No SIMS Rcvd	Claim Rcvd
	Add	9Y-3082	6F-4868	W670	8 Hours	10Jul2015	No SIMS Rcvd	Claim Rcvd
	Add	303-5176	324-6499	W670	8 Hours	12Jun2015	No SIMS Rcvd	Claim Rcvd
	Add	307-3264	307-3276	W670	8 Hours	12Jun2015	No SIMS Rcvd	Claim Rcvd
	Add	428-7497	180-3748	W670	8 Hours	12Jun2015	No SIMS Rcvd	Claim Rcvd
	Add	8N-6151	313-7770	W670	8 Hours	09Jun2015	No SIMS Rcvd	Claim Rcvd
	Add	7C-6366	7E-0467	W670	8 Hours	09Jun2015	No SIMS Rcvd	Claim Rcvd

Figure 4.2: Equipment Data Input

The fact is where I find the mfg year and principle work? In this case, we have to log into another sites(sims.cat.com). This site is used for recognition of product problems, product reliability analysis, history of repair and to a limited extent, sales and warranty information. In this site we can find out mfg year, principle work.

4.2 Customer visit service

A customer visit service report is a document that provides a summary of a customer’s visit to a service provider or company. It includes details about the purpose of the visit, the services provided, and any feedback or observations made during the visit. The report is typically prepared by the service provider or their representatives to document the interaction with the customer and to track the quality of service provided.

Here are some key elements that are typically included in a customer visit service report:

1. **Customer Information:** The report begins with the customer's basic information, such as their name, contact details, and any relevant identification numbers or account information.
2. **Purpose of Visit:** This section describes the reason the customer visited the service provider. It could be a complaint, a request for assistance, a scheduled maintenance visit, or any other purpose.

In, Bangla CAT provides this facility free of charge. When the customers call for services, the service engineers go to the customer's end. Then they check where the problem lies within engine. They list all the problems and solves them. Bangla cat provides a form to the service engineers for such services, which they get signed from the customers. My duty is to go to Bangla Cat's own site, download this form and create a list.

4.3 Oil Sampling (SOS)

The method followed to check whether the engine oil ratio is correct or not is called SOS. Here all the components of the oil are being checked. If there is any problem with the oil, it will recommend to change the oil first. The main reason for SOS is to reduce TST. Major engine's problems can also be avoided by doing SOS.

In SOS, two types of data have to be input:

1. Customer information
2. Equipment creation

Here customer data has to be input first as customer information has to be given while adding equipment. Now here CAT uses unique ID. If you want to create them, you have to give customer's name, address and details such as customer's name, job site, responsible person must be input to create equipment.

Chapter 5

Conclusion

As an intern, I had the chance to work in a variety of settings. They are very committed to providing their customers with the best products and services. As a result, BanglaCAT is able to expand their marketing efforts and increase their exposure in the media in order to reach a broader customer base and create compelling perspectives. BanglaCAT can help customers choose the best product by offering recommendations, which will help build trust in the company

Bibliography

- [1] “<https://careers.umbc.edu/employers/internships/what-is-an-internship/>,” (visited on 05/22/2023).
- [2] “https://en.wikipedia.org/wiki/enterprise_resource_planning,” (visited on 05/28/2023).
- [3] “<https://smartofficeblog.com/tag/lawson/>,” (visited on 05/02/2023).
- [4] “<https://www.banglacad.com/>,” (visited on 05/14/2023).