

DATA MAINTENANCE REPORT ON 10 DAYS INTERNSHIP IN NAVJYOTI INDIA FOUNDATION

Submitted in partial fulfillment of the requirements for the completion of

PROFESSIONAL TRAINING

By

MAHSAR(Reg. No. 41140049)



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

SCHOOL OF ELECTRICAL AND ELECTRONICS

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited with grade “A++” by NAAC

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI – 600119

OCTOBER 2023



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

BONAFIDE CERTIFICATE

This is to certify that this Internship Report submitted for EPICS is the bonafide work of MAHSAR (41140049) who carried out the Internship during the period May 2023 to June 2023.

A handwritten signature in black ink, appearing to be 'C. Bhuvaneswari'.

INTERNAL GUIDE

Dr. C . Bhuvaneswari, M.E., (Ph.D.)

A handwritten signature in blue ink, appearing to be 'S. Radhika'.

HEAD OF THE DEPARTMENT

Dr. S . Radhika, M.E., (Ph.D.)

Submitted for Professional Training held on 03 October 2023

A handwritten signature in black ink, appearing to be 'S. Anandha'.

Internal Examiner

A handwritten signature in black ink, appearing to be 'C. Bhuvaneswari'.

External Examiner

TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
1	INTRODUCTION ABOUT THE COMPANY	4
	1.1 BRIEF HISTORY OF THE COMPANY	
	1.2 MISSION, VISION AND GOAL OF THE COMPANY	
	1.3 MAIN PRODUCT OF THE COMPANY	
	1.4 END USER OF THE COMPANY	
	1.5 OVERALL ORGANIZATIONAL STRUCTURE	
	1.6 MAIN POWER AND EQUIPMENT DESCRIPTION	
2	NATURE OF WORK DONE	14
	2.1 INTERACTION WITH CLIENTS	
	2.2 INSIGHTS FROM DATA	
3	METHODS AND PROCESSES	17
	3.1 DATA GATHERING	
	3.2 DATA QUALITY	
	3.3 DATA CLEANING	
	3.4 DATA DUPLICATIONS	

	3.5	DATA OPERATIONS	
	3.6	DATA PURGING	
	3.7	DATA MONITORING AND KPI'S	
4		KNOWLEDGE GAIN AND EXPERIENCE	24
	4.1	ANALYTICAL SKILL	
	4.2	DATA UNDERSTANDING	
	4.3	IMPORTANCE OF DATA COLLECTION	
	4.4	DATA VISUALIZATION	
	4.5	DATA PRESENTATION	
5		SUMMARY AND CONCLUSION	27
	5.1	INTERNSHIP COMPLETION CERTIFICATE	
		REFERENCES	28

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
5.1	INTERNSHIP COMPLETION CERTIFICATE	27

CHAPTER 1

INTRODUCTION ABOUT THE COMPANY

1.1 BRIEF HISTORY OF THE COMPANY

Navjyoti India Foundation is a registered non-profit organization that was founded in the year 1988 by Dr. Kiran Bedi (first Indian Woman IPS Officer) and 15 other like-minded officials of Delhi Police, as a result of the inextricable link that existed between crime and drugs. More than 25 years ago few police officers (cops) came together to form a Foundation called Navjyoti India Foundation. It provided primary schooling to the absolutely poor children, who if not persuaded would have been happy being beggars or rag pickers or even pick pockets and small burglars. For they were drug pushing for their mothers whose only source of livelihood was drug peddling.

Using the power of policing for larger good, drug addicts were sent to our own run treatment centers. Besides organizing schooling for children, vocational training for women was set-up to wean them away from a life cycle of crime. All this worked and crime came under check. We analyzed children are more likely to perpetrate violence if they have low education, exposure to domestic violence against their mothers, history of child maltreatment, unequal gender norms including attitudes accepting of violence, a sense of entitlement over women, abuse of alcohol, to name a few. Social development programmes that address social risk like poverty, unemployment, illiteracy, juvenile delinquency, homelessness, and family disintegration among others could stem down the rage of crime. Our Crime Prevention through Social Development (CPSD) Model endeavors to bridge the gap between criminal justice policies &

programmes and social support for individuals, families and communities. It does this by tackling the factors that contribute to crime and victimization and are amenable to changes. We intend to bring in the change intervention by an integrated approach of social development across all our programs. We saw rampant drug abuse impacting millions of lives wherein the most susceptible and marginalized communities are subsumed the greatest. This segment majorly encompasses women, children and youth tormented by drug Abuse.

1.2 MISSION, VISION AND GOAL OF THE COMPANY

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. Sustainable Development Goals (SDGs) are based on the principles of social, economic and environmental factors and embracing these three fundamental principles, is our founding philosophy towards the Crime Prevention through Social Development (CPSD).

Our programs aim to bring in change interventions by working towards eradicating poverty, hunger, discrimination against women and girl child. We identify that ending poverty and other deprivations must collaborate with strategies that advances health and education, reduce inequality and spur economic growth. Working on a

comprehensive action plan for sustainable development to improve human lives and protect the environment and ecology, reducing poverty, tackling climate change is the goal we strive to achieve each day. The organization envisions to challenge the socio-economic inequalities and enable the vulnerable sections of the society towards the goal of selfreliance.

1.3 MAIN PRODUCT OF THE COMPANY

It all began when Dr. Kiran Bedi, first woman police officer in India and her able team found a local thief's hideout and confiscated the dilapidated shack way back in 1987. Dr. Kiran Bedi decided to bring the shack to some use for the benefit of the people living in the slums of Yamuna Pushta, Delhi. The team raised funds for 15 basic sewing machines and converted the shack into a sewing center for the local women called 'Apradh Sudhar Silai Kendra', as a measure for crime prevention in an alarmingly high crime rate zone. From then the sewing and tailoring project got a kick start and has been a life-altering journey of growth and discovery. Today, the organization runs skill development initiatives in Delhi called Navjyoti Community College as well as rural areas of Sohna Block, District Gurugram in the state of Haryana.

Aim of vocational training The focus is on enhancing the capabilities of women and adolescent girls that empower them to tackle social issues and increased self esteem. The learning also

aims to enhance the employability, either wage employment or self-employment.

Building progression pathways The journey of learning starts from the basic stitching course focusing on savings and enhancing confidence of the learners in the villages. This is followed by encouraging them to upskill and enroll in the advanced courses organized at the campus of Navjyoti India Foundation to increase her mobility. As a progressive pathway, the learners are mentored by designers, both freelancers and Schools of Fashion and Design of reputed Universities to give further exposure on quality management and industrial machines. This builds on their learning from basic to advanced courses to enterprising skills.

Expansive education/apprenticeship One of the critical aspects of this principle is to train the learners beyond the four walls of the campus with flexible curriculum and timings aligning with the needs of the learners as well as the requirement of the market. Expansive education is provided in a practical manner providing exposure to the market, digital literacy, life skills, experts and financial literacy. This approach also helps to improve the problem-situation and managing the complex realities that have been variably described by systems thinkers in resolving “messy” societal problems in a social constructivist manner.

Identification and enrolment of learners The learners are identified as per the needs of the communities. Need assessment is done through door-to-door visits by the community mobilizer for basic stitching courses. Over the years, the approach has shifted to

demand-driven. Once the demand is received from the community or key persons or Panchayat, the mobilizer conducts focus group meetings with the potential learners to understand their willingness and interests. The admission forms of interested students are filled along with the collection of learner's photo and identity proof. Post-covid, the forms are being filled online directly rather than in hard copies which has enabled the usage of less paper hence making the process environmentally friendly and low cost. Simultaneously, individual surveys are conducted to assess their social and economic status. For advanced courses and specialized courses, the demand is again received from the learners who have already learned basic stitching courses whether through the organization or anywhere else but wish to upskill them. The skill sets of learners in basic stitching are assessed in case they have not been part of project Unnati before enrolling them in the advanced or specialized courses. After assessing the skills, they are enrolled in advanced or specialized courses and in case they do not achieve the desired skill sets, they are guided to enroll themselves in basic stitching courses.

Teaching, Learning and Mentoring Identification of venue: Basic courses are conducted in the villages itself. The venue is identified with the help of key persons or Sarpanch. The venue is decided in consultation with the potential learners for ease of access for all. Preference is given to the community spaces such as Chaupals (place for social gathering in the village) or space is offered by the community in gratis without any rent to enhance community contribution in the project implementation. The advanced and specialized courses are either conducted at the campus of Navjyoti

India Foundation or infrastructure of the Universities in the vicinity are utilized. The bus services are provided to the women in the villages.

Identification of trainers Trainers for basic courses are identified from the villages who have the desired skills. Interview and skill test is conducted for the trainers. Minimum educational criteria of Grade 8 is defined so that the trainers can understand the written curriculum and maintain attendance records. Emphasis however, is given to the skills than the educational qualification. For advanced and specialized courses, trainers are the experts with qualification in the required course or who have attained minimum experience of 2 years in the same field.

Course curriculum The curriculum of basic stitching course is designed by the expert trainer keeping in mind the needs of the community and the aim of the programme. It enables the learner to sew their own clothes and that of their family members so that they can save their money, whilst would have spent outside on stitching. The course was modified over the years from six months to three months and at present it is for two months duration. It was realized that the learners did not want to spend six months on basic course and were dropping out after they learnt basic suits and frocks. Hence the course was reduced to three months. Later it was found that the learners were able to possess the required skills in two months as well. But did not acquire the required learning in less than two months. The advanced and specialized courses on the other hand are decided based on the market needs which can generate livelihood for women such as products of home décor, corporate uniform, school uniform for children, accessories, bags and many

more. The designers or experts share the samples first to decide on the course or co-create the products with learners hence a flexible approach is adopted considering the end objective of livelihood generation. The specification sheets however are maintained by the Master trainer or expert.

1.4 END USER OF THE COMPANY

India, which is home to a large working population and an informal sector, has often been in dire need of skilled labor to address questions of want, deprivation and empowerment. The current government has to this end emphasized on skill development to achieve its goal of a Skilled India. To assist in the realization of this goal, the Government seeks assistance from different organizations, namely, Directorate General of Training, National Skill Development Agency, National Council for Vocational Education and Training, National Skill Development Corporation, Industrial Training Institutes and National Skill Training Institutes, to name a few. Non-governmental organizations (NGOs) too have been and are an integral part of this support system to evaluate the implementation and impact of skill development. It is within this context i.e. of skill development and civil society that the role of one NGO- Navjyoti India Foundation - can be discussed. The brainchild of Dr. Kiran Bedi and her team in the 1980s that introduced sewing and tailoring as a means of economic empowerment and societal reform, the initiative has now transformed into Navjyoti India Foundation. While the NGO is involved in multiple community development projects, this Impact Assessment Report focuses on one particular programme named Unnati, run by NGO Navjyoti India Foundation.

1.5 OVERALL ORGANIZATIONAL STRUCTURE

During the study, trainees highlighted a few challenges they faced at the beginning of the project. However, with strategic planning these challenges were overcome. Some of the roadblocks in the journey were: Cooperation of family members/husband In major of the cases where the women were excited to learn and develop, there was a lack of cooperation from either the husband or the family member of the women. While most did not even want the women to learn and grow, many were not ready to send the women out of the house. Their traditional thoughts stopped them from taking this decision. This was overcome by conducting counseling of the family members with the help of a community development team. The team visited door to door and had detailed sessions with every family. This one-to-one approach helped us to get the cooperation from all the family members. Lack of mobility by the women Women in the villages lack exposure to mobilization. Traditionally, it was the men who used to perform all the work that demanded going out of the home or village. Indian women felt insecure many times too. While they were ready to learn basic stitching, they were reluctant to move out of the village for the same.

To overcome this, the basic course was given in the village itself. The courses were given using satellite centers opened in the village by Navjyoti India Foundation. However, the women were provided an exposure trip to enhance their opportunities. Once the women realize the significance of it, they are enrolled in the advanced courses given in the campus of the NGO. Poor quality of production Though the women had completed the basic and the advanced course on

stitching, they still lacked proficiency. The cloth stitched by them was not meeting the quality standard. Due to lack of experience, it lacked perfection, proper finishing, and most of all it lacked uniformity. It was resolved by continuous training and mentoring sessions by experts and doing quality check and control. The mentors had a timely inspection of the work done by all the members and made sure it met quality checks. Most respondents stated that they did not face any resistance from family members when wanting to undergo training at Navjyoti India Foundation. This point was reiterated in the focus group discussion where the women said that besides expressing curiosity regarding the programme, none of their family members stopped them from participating in Unnati. While resistance from family members was negligent, it is interesting to note that unmarried women faced greater struggles (40%) than married women (16%) to join the programme. While women from both nuclear and joint families faced this problem, a much larger section belonged to the General category. Amongst the objections raised by family members, the foremost was the belief that a woman's role should be confined to the household and her labor should be limited to the domestic sphere. A close second were questions regarding the purpose of the programme. Here too, the objections came from the families of the general category, while resistance from families belonging to the OBC was the least. The majority of the women who weren't working post Unnati was because the in-laws/spouse did not want them to continue suggesting the patriarchal society dominance and the need to raise awareness among the families about the Unnati programme.

1.6 MAIN POWER AND EQUIPMENT DESCRIPTION

Nirmala, started her life in a conservative household in village Sehjawas of Haryana, where women were not supposed to work or step out of the house. Her husband was a telephone operator in the army and kept her on a tight leash. She always had a desire to learn some skills. Nirmala's mother-in-law was surprisingly supportive of her desire to work. They both decided to go ahead with Nirmala's plan of learning a stitching course without letting the husband know. They say, where there is will, there is a way. Nirmala heard about Navjyoti India Foundation, which helped under or less privileged women become self-reliant. She inquired about it and conferred with her mother-in-law, who encouraged her to join the course in the Foundation. Over there she got to know about how women through the Foundation can form a Self Help Group of 10-15, contribute some money, deposit in the bank and then take some loan to start something of their own. Nirmala discussed this with her husband but he denied it. This upset Nirmala who didn't know that life is going to strike her with irreparable damage. She lost her husband and was left with three mouths to feed, her two kids and a mother-in-law, with no male member in the family. The loss of her life partner and harsh reality of survival left Nirmala almost traumatized. It felt dark around her and she didn't know how to get out. But, after six months, she decided to take control of her life. Nirmala started stitching clothes for neighbors. And today, she owns a shop which helped her to put her kids in a good college, where both of them are performing very well. Her revenue from the shop is INR1,00,000 – INR 1,25,000 per month. And pays Rs. 3000 to another lady on monthly basis for hemming work. Besides this, she also participates in movements with social messages,

cleanliness, discourage the usage of polybags etc. She now helps other women and accompanies them to government offices for helping them avail government schemes. Nirmala encourages all other women also around her to drop the fear and work

CHAPTER 2

NATURE OF WORK DONE

2.1 INTERACTION WITH CLIENTS

My experience with Data Maintenance primarily relates to companies. While I've worked in a variety of Data's, my current position allows me to work solely at our Data collection. I enjoy my job because I get to help clients with a variety of problems, and I'm empowered to be the person who transforms their experience from a negative one into a positive one.

I recently assisted a frustrated client who was unhappy with discrepancies between our actual inventory and what our mobile application reflected. While the app said we had plenty in stock, we were completely out of the item they wanted. I offered to contact nearby stores to locate the item for them, but they were in a hurry, so instead, I recommended a similar product that I personally own. They thanked me for my time and effort, and they actually came back a week later to tell me how much they love the product.

2.2 INSIGHTS FROM DATA

Data Collection The first step in gaining insights from data is collecting relevant and accurate data. This data can come from various sources, including surveys, sensors, databases, social media, and more.

Data Cleaning and Preparation Raw data often needs to be cleaned and prepared for analysis. This involves removing errors, duplicates, and inconsistencies to ensure the quality of the data.

Exploratory Data Analysis (EDA) EDA is the process of visually and statistically exploring data to understand its characteristics, distribution, and potential patterns or outliers. Data Analysis Techniques: Different data analysis techniques, such as statistical analysis, machine learning, and data visualization, are used to extract insights from data.

Identifying Patterns and Trends Data analysis helps in identifying patterns, trends, and relationships within the data. This can include seasonality, correlations, or anomalies.

Predictive Insights Data analysis can also be used for predictive modeling, where historical data is used to make forecasts or predictions about future events or trends.

Segmentation and Targeting Businesses often use data insights to segment their customers or audiences based on behavior and demographics, allowing for more targeted marketing and product development.

Optimization Insights can be used to optimize processes, operations, and strategies. For example, supply chain optimization, pricing strategies, and resource allocation.

Risk Assessment Data analysis can identify potential risks and vulnerabilities, enabling organizations to take proactive measures to mitigate them.

Continuous Improvement Insights from data are not a one-time effort. It's an ongoing process where organizations continually analyze data to adapt to changing circumstances and improve decision-making.

Ethical Considerations When working with data, it's crucial to consider ethical and privacy concerns, ensuring that data is used responsibly and in compliance with regulations.

Communication of Insights Presenting insights effectively is essential. Data visualization, reports, dashboards, and storytelling are common methods for conveying insights to stakeholders.

Actionable Insights The ultimate goal of data analysis is to provide actionable insights—information that can be used to make decisions and take concrete actions.

Feedback Loop After implementing actions based on insights, it's essential to monitor the outcomes and adjust strategies as necessary, creating a feedback loop for continuous improvement.

Value Creation Insights from data can lead to value creation, such as increased efficiency, revenue growth, cost savings, and enhanced customer satisfaction. In summary, insights from data are a valuable resource that can inform decision-making, drive innovation, and lead to improved outcomes across various domains, including business, healthcare, finance, and more. It's a dynamic and iterative process that requires expertise in data analysis, domain knowledge, and a commitment to using data responsibly and effectively.

CHAPTER 3

METHODS AND PROCESSES

3.1 DATA GATHERING

The data gathering procedure, also known as data collection, is the process of systematically collecting information or data from various sources in a structured and organized manner. It is a crucial step in research, analysis, and decision-making in various fields, including business, science, healthcare, and social sciences. Here's an explanation of the key steps and considerations involved in the data gathering procedure

Define Objectives and Research Questions Clearly define the objectives of your data collection effort. Formulate specific research questions or hypotheses that you want to address with the data.

Choose Data Source Identify the sources from which you will collect data. Sources can be primary (data collected firsthand) or secondary

(existing data collected by others). Consider various sources such as surveys, interviews, observations, experiments, databases, documents, or online sources.

Design Data Collection Instruments Create data collection instruments or tools, such as surveys, questionnaires, interview guides, or data forms. Ensure that these instruments are structured, unbiased, and aligned with your research objectives.

Sampling Strategy If applicable, determine your sampling strategy. Sampling involves selecting a subset of the population or data source from which you will collect data. Decide on the sampling method (e.g., random sampling, stratified sampling) based on your research goals and available resources.

Data Collection Methods Implement the chosen data collection methods. This may involve administering surveys, conducting interviews, making observations, or extracting data from existing sources. Ensure data collection is consistent and standardized to minimize errors.

Data Recording: Record the collected data accurately and consistently. This can involve manual data entry, using data collection software, or automated data capture methods.

Data Validation and Quality Assurance Implement validation checks to ensure data accuracy and reliability. Perform data quality assurance by checking for outliers, missing values, or inconsistencies and taking corrective measures.

Ethical Considerations Adhere to ethical guidelines when collecting data, especially when dealing with sensitive or personally identifiable

information. Obtain informed consent from participants, ensure data privacy, and follow ethical research protocols.

Data Documentation Maintain detailed documentation of the data collection process, including dates, locations, and any issues or challenges encountered. Document the data source, collection methods, and any modifications made during the process.

Data Storage and Security Store collected data securely to prevent loss, theft, or unauthorized access. Backup data regularly to prevent data loss.

Data Analysis Plan Develop a plan for analyzing the collected data, specifying the statistical or analytical methods you will use to address your research questions.

Data Transcription and Transformation If needed, transcribe audio or handwritten data, and transform it into a suitable digital format for analysis.

Data Cleaning and Preprocessing Clean and preprocess the data by addressing missing values, outliers, and any inconsistencies. This ensures the data is ready for analysis.

Data Verification Verify the accuracy of the data before commencing analysis to minimize errors in the results.

Data Analysis Finally, analyze the collected data using appropriate tools and techniques to derive insights, answer research questions, and draw conclusions. The data gathering procedure is a systematic and methodical process that requires careful planning, attention to detail, and adherence to ethical and quality standards. Properly collected and well-maintained data is essential for making informed decisions and drawing meaningful conclusions in research and various applications.

3.2 DATA QUALITY

Data quality is a measure of the condition of data based on factors such as accuracy, completeness, consistency, reliability and whether it's up to date. Measuring data quality levels can help organizations identify data errors that need to be resolved and assess whether the data in their IT systems is fit to serve its intended purpose.

The emphasis on data quality in enterprise systems has increased as data processing has become more intricately linked with business operations and organizations increasingly use data analytics to help drive business decisions. Data quality management is a core component of the overall data management process, and data quality improvement efforts are often closely tied to data governance programs that aim to ensure data is formatted and used consistently throughout an organization.

Benefits of good data quality

From a financial standpoint, maintaining high data quality levels enables organizations to reduce the cost of identifying and fixing bad data in their systems. Companies are also able to avoid operational errors and business process breakdowns that can increase operating expenses and reduce revenues.

In addition, good data quality increases the accuracy of analytics applications, which can lead to better business decision-making that boosts sales, improves internal processes and gives organizations a competitive edge over rivals. High-quality data can help expand the use of

BI dashboards and analytics tools, as well -- if analytics data is seen as trustworthy, business users are more likely to rely on it instead of basing decisions on gut feelings or their own spreadsheets.

Effective data quality management also frees up data management teams to focus on more productive tasks than cleaning up data sets. For example, they can spend more time helping business users and data analysts take advantage of the available data in systems and promoting data quality best practices in business operations to minimize data errors.

3.3 DATA CLEANING

Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabeled. If data is incorrect, outcomes and algorithms are unreliable, even though they may look correct. There is no one absolute way to prescribe the exact steps in the data cleaning process because the processes will vary from dataset to dataset. But it is crucial to establish a template for your data cleaning process so you know you are doing it the right way every time.

Data cleaning is the process that removes data that does not belong in your dataset. Data transformation is the process of converting data from one format or structure into another. Transformation processes can also be referred to as data wrangling, or data munging, transforming and mapping data from one "raw" data form into another format for

warehousing and analyzing. This article focuses on the processes of cleaning that data.

3.4 DATA DUPLICATION

Data duplications refer to identical or highly similar data records in a dataset. They result from errors, glitches, or inconsistent data management. Duplicates can compromise data quality, increase storage costs, and disrupt analysis. Detecting and managing duplicates involves tools, algorithms, and manual review. Preventing them requires strict data entry procedures and ongoing maintenance. Data governance and careful deduplication are essential, especially for accurate data analysis.

3.5 DATA OPERATION

Data operations, in short, involve the various actions taken on data, including collection, storage, processing, analysis, and reporting, to derive meaningful insights, make informed decisions, and support various business or research objectives. These operations are essential in managing and leveraging data effectively across different domains.

3.6 DATA PURGING

Data purging is the systematic and permanent deletion of data that is no longer needed or relevant. It serves to free up storage resources, reduce security risks, and ensure compliance with data retention regulations. By eliminating obsolete or sensitive data, organizations can optimize data storage, enhance data security, and minimize legal and privacy liabilities. Effective data purging is a crucial component of sound data management

practices, enabling businesses to maintain data integrity, improve operational efficiency, and adhere to legal and ethical data handling standards.

3.7 DATA MONITORING AND KPI'S

Data monitoring and Key Performance Indicators (KPIs) are integral components of effective data management and business performance assessment. Data monitoring involves the continuous observation and tracking of data to ensure its accuracy, consistency, and relevance. This process includes real-time or periodic data checks, data quality assessments, and anomaly detection. Data monitoring helps organizations identify issues early, such as data discrepancies or errors, ensuring data integrity and reliability. KPIs, on the other hand, are specific metrics or measurable values that organizations use to evaluate their performance against strategic goals and objectives. KPIs are tailored to a company's unique priorities and can include financial metrics, customer satisfaction scores, sales figures, and more. By defining and tracking KPIs, businesses gain insights into their progress, make informed decisions, and adjust strategies as needed. Incorporating KPIs into data monitoring allows organizations to assess their performance in real-time or over specific periods, enabling proactive responses to emerging trends or challenges. Together, data monitoring and KPIs empower organizations to make data-driven decisions, optimize processes, and achieve their objectives effectively.

CHAPTER 4

KNOWLEDGE GAIN AND EXPERIENCE

4.1 ANALYTICAL SKILL

Analytical skills are the ability to collect, process, and evaluate information to understand complex problems and make informed decisions. These skills involve critical thinking, data interpretation, problem-solving, and logical reasoning. Individuals with strong analytical skills can break down complex issues into smaller components, identify patterns or trends within data, and draw meaningful conclusions. Analytical skills are valuable in various fields, including business, science, finance, and research, as they enable professionals to make well-informed choices, solve problems efficiently, and provide data-driven insights. Developing and honing analytical skills is essential for success in today's data-driven and information-rich world, as they empower individuals to navigate complexities and contribute effectively to their respective fields.

4.2 DATA UNDERSTANDING

Data understanding refers to the process of comprehending the nature, context, and characteristics of data within a specific dataset or information system. It involves examining data sources, formats, and content to gain insights into its meaning and relevance. Data understanding encompasses tasks like data profiling, data exploration, and metadata analysis. By thoroughly understanding data, analysts and organizations can make informed decisions about how to utilize it effectively. This includes identifying data quality issues, recognizing patterns, and determining the suitability of data for specific analytical purposes. Data understanding is a critical step in data preparation and plays a pivotal role in ensuring data accuracy, relevance, and reliability for subsequent analysis or decision-making.

4.3 IMPORTANCE OF DATA COLLECTION

Data collection is of paramount importance as it serves as the foundation for informed decision-making and insights across various domains. Firstly, it enables businesses to understand their customers, operations, and market trends, facilitating strategic planning and targeted marketing efforts. Secondly, in scientific research, data collection forms the basis for hypothesis testing, experimentation, and drawing valid conclusions. Thirdly, in healthcare, it aids in patient diagnosis, treatment evaluation, and epidemiological studies, improving patient outcomes and public health. Lastly, in governmental and social contexts, data collection supports policy development, resource allocation, and societal progress tracking. Effective data collection is crucial for businesses, researchers, healthcare professionals, and policymakers to make informed choices, solve problems, and drive innovation in today's data-driven world.

4.4 DATA VISUALIZATION

Data visualization is the graphical representation of data to convey complex information clearly and effectively. It plays a crucial role in data analysis, enabling users to understand patterns, trends, and insights that may be hidden in raw data. Through charts, graphs, maps, and interactive dashboards, data visualization enhances decision-making by making data more accessible and interpretable. It simplifies the communication of findings, allowing individuals and organizations to share information and insights with stakeholders in a compelling and understandable manner. Data visualization is essential in fields such as business intelligence, science, and journalism, as it empowers users to explore data, discover correlations, and derive actionable insights for better-informed decisions.

4.5 DATA PRESENTATION

Data presentation is the art of effectively communicating data findings and insights to an audience in a clear, concise, and meaningful manner. It involves organizing and displaying data through visual elements like charts, graphs, tables, and reports. The primary goal of data presentation is to make complex information easily understandable, enabling viewers to grasp trends, patterns, and conclusions at a glance. Well-designed data presentations enhance decision-making, support persuasive arguments, and facilitate information sharing across various domains, from business reports and academic presentations to scientific publications and marketing campaigns. A compelling data presentation ensures that data-driven messages resonate and have a lasting impact on the audience.

CHAPTER 5

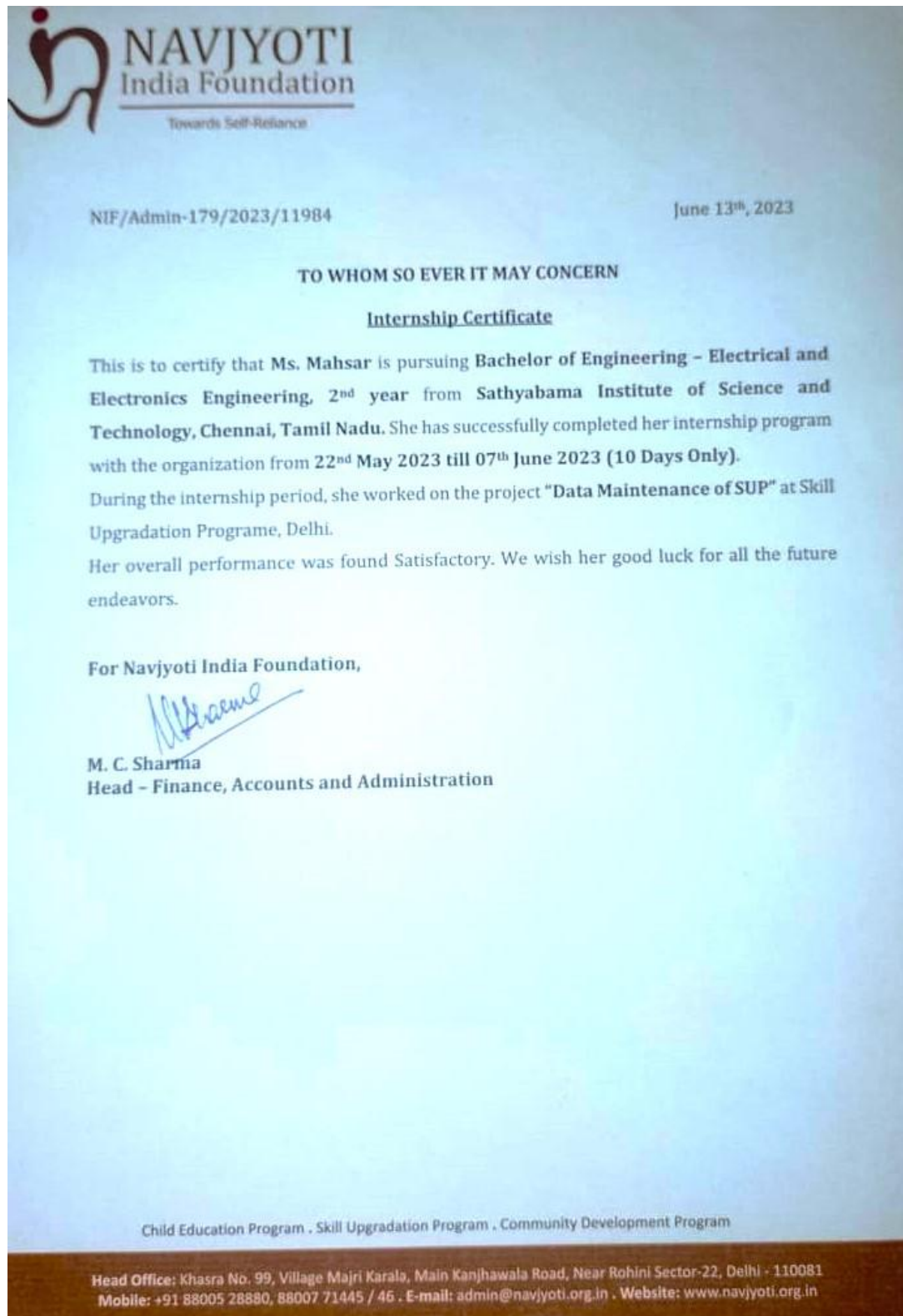
SUMMARY AND CONCLUSION

As an intern in the Data Maintenance department of NIF, I got a list of tasks to complete every day. To get the Insights, I had to meet with clients on almost a daily basis. Sometimes I met around 2 to 5 clients per day and had to persuade them to consider various Insights that Area could undertake for them. Additionally, I worked on Data understanding conceptualisation and made lists of potential clients to contact for Insights.

From my internship at NIF, I was able to get a better understanding of how the Data industry works and how effective it is. I enjoyed working with the NIF Data team to devise and implement different Data gathering strategies. But, I still have a long way to go in understanding the psychological aspects of understanding data , and I need to build up my public speaking skills as well. Overall, I found the Data Maintenance

internship experience to be positive, and I am sure I would be able to use the skills I learned in my career later.

5.1 INTERNSHIP COMPLETION CERTIFICATE



REFERENCES

- <https://www.navjyoti.org.in/our-vision/#:~:text=Our%20mission%20is%20to%20mobilize,and%20inclusive%20socio%2Deconomic%20development.>
- <https://www.netapp.com/data-management/what-is-data-deduplication/>
- https://www.researchgate.net/publication/352357300_Data_Analytics_and_Customer_Experience_in_Industry_An_Option
- <https://www.navjyoti.org.in/wp-content/uploads/2020/07/Balance-Sheet-2018-2019.pdf>