**SUMMER INTERNSHIP REPORT**

**Kiran Patil 211070904**

BTECH in Computer engineering

Under the supervision of:

**Dr. S. G. Bhirud**



**Company: Modelez international**

**Duration: 1th June, 2023 – 31th July, 2023**



DEPARTMENT OF COMPUTER ENGINEERING AND INFORMATION TECHNOLOGY

**VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE**

(An Autonomous Institute Affiliated to Mumbai University)

**(Central Technological Institute, Maharashtra State) Matunga, MUMBAI – 400019**

**CERTIFICATE**

This is to certify that Kiran Patil (211070904) is a student of B. Tech. Computer Engineering has successfully completed his internship at Mondelez International for a duration of two months to our satisfaction.

|  |  |  |
| --- | --- | --- |
| **Internal Supervisor** | **Industrial Supervisor** | **Head of Department** |
| **Dr. S. G. Bhirud** | **Mr. Manoj Biwalkar** | **Dr. Mahesh Shirole** |
| Department of CE and IT | Mondelez International | Department of CE and IT |
| VJTI, Mumbai | Mondelez International, Mumbai | VJTI, Mumbai |

Place: Empire Complex Lower Parel, Mumbai

Date: 4th August, 2023

**APPROVAL SHEET**

The Final Internship Report by Kiran Patil is satisfactory and approved for Degree of Bachelor of Technology.

|  |  |  |
| --- | --- | --- |
| **Internal Supervisor** | **Industrial Supervisor** | **Head of Department** |
| **Dr. S. G. Bhirud** | **Mr. Manoj Biwalkar** | **Dr. Mahesh Shirole** |
| Department of CE and IT | Mondelez International | Department of CE and IT |
| VJTI, Mumbai | Mondelez International, Mumbai | VJTI, Mumbai |

Place: Empire Complex Lower Parel, Mumbai

Date: 4th August, 2023

**TABLE OF CONTENTS**

1. Acknowledgement 6
2. About Mondelez International 7
3. Abstract 8
4. Chapter 1: Introduction 10
5. Chapter 2: Objective of Work 11
6. Chapter 3: Work details 12
7. Chapter 4: Technology Learned 17
8. Chapter 5: Learning and Experiences 19
9. Conclusion 20
10. References 21

**INTERNSHIP CERTIFICATE**

****

**STATEMENT OF CANDIDATE**

I, Kiran Patil (211070904) state that the work embodied in this Internship Report forms my own contribution to work at Mondelez International as an intern. The report reflects the work done during the period of internship from 1st June 2023 to 31st July 2023. No part of this work has been used by me for the requirement of another degree except where explicitly stated in the body of the text and the attached statement. I assert that statements made, and conclusions drawn are an outcome of my internship work and are true to my knowledge.

I further certify that:

1. The work contained in the report is original and has been done by me under the supervision of my supervisor
2. I have followed the guidelines provided by the college in writing the report.
3. Wherever I have used materials (text, data, theoretical analysis equations, codes, figures, etc.) from other sources, I have given due credit to them in their port by giving their details in the references.

Name: Kiran Patil

Roll No: 211070904

Date: 4th August, 2023

Place: Mumbai

**ACKNOWLEDGMENT**

I would like to express my heartfelt gratitude and appreciation to Mondelez International for providing me with the invaluable opportunity to embark on an enriching internship experience. This summer internship has been an incredible journey of growth, learning, and professional development, and I am truly honored to have been a part of the Mondelez International team.

Firstly, I want to express my appreciation to VJTI TPO head Dr N P Gulhane and the HR department at Mondelez International and all the support staff who have played a pivotal role in ensuring a smooth and productive internship experience.

Secondly, I would like to thank my internship mentor, Dr S. G. Bhirud for her support and guidance throughout the internship period.

I am deeply thankful to all the individuals who have guided and supported me throughout this internship. My sincere gratitude goes to my supervisor and mentors, Mr. Rajesh Kannan Ramasamy and Dr. Sweta Srivastava for their unwavering guidance, mentorship, and encouragement. Their insights and expertise have been instrumental in shaping my understanding of the industry and enhancing my skills. I am also grateful for having the chance to meet so many wonderful people who led me through my internship period.

I would also like to extend my thanks to the entire team at Mondelez International for their warm welcome and collaborative spirit. The camaraderie and teamwork I experienced during my time here have left a lasting impact on me.

I am grateful for the opportunities I had to work on challenging projects and tasks, which not only expanded my skill set but also deepened my understanding of the financial sector. The exposure to real-world scenarios and the chance to contribute to meaningful projects have been truly enriching.

My time at Mondelez International has been an invaluable chapter in my professional journey, and I am excited to carry the lessons, experiences, and relationships I have gained forward with me. Thank you once again for this incredible opportunity.

Sincerely, Kiran Patil

**ABOUT MONDELEZ INTERNATIONAL**

Mondelez International, a global powerhouse in the food and beverage industry, has established itself as a prominent player with a rich heritage dating back to its inception. Founded as part of Kraft Foods in 2012, Mondelez carries forward a legacy of culinary excellence and innovation that spans decades.

Mondelez's extensive portfolio includes iconic brands such as Oreo, Cadbury, Milka, and Toblerone, catering to the cravings and preferences of people of all ages and tastes. Through continuous product development and a deep understanding of consumer desires, the company remains at the forefront of culinary innovation.

In an era marked by changing consumer behaviors and evolving market dynamics, Mondelez International embraces technological advancements to stay connected with its customers. The company leverages digital platforms and e-commerce solutions to ensure its products are easily accessible to consumers wherever they may be.

Mondelez's core values of quality, integrity, and sustainability underpin its operations. The company places great emphasis on responsible sourcing and environmentally friendly practices, ensuring that its products are not only delicious but also produced with the utmost care for the planet.

Recognizing the importance of giving back to society, Mondelez actively engages in corporate social responsibility initiatives. The company's commitment to sustainability extends to its efforts to reduce its environmental footprint and promote community well-being. Through initiatives like Cocoa Life, Mondelez invests in the livelihoods of cocoa farmers and the communities in which they operate, fostering economic empowerment and environmental stewardship.

Mondelēz International, operating in 150+ countries, leads snacking globally with brands like Oreo, Cadbury, and Ritz. As a top snack company, our 2022 revenues reached $31.5 billion. We hold #1 in biscuits and #2 in chocolate, expanding into baked snacks. We also offer gum, candy, cheese, grocery, and beverages. With 91,000 employees worldwide, we innovate, produce, and distribute in 80+ countries.

In conclusion, Mondelez International's rich history, dedication to culinary excellence, ethical principles, and commitment to sustainability position it as a leader in the global food and beverage industry. Through its innovative products and responsible practices, the company continues to delight consumers while making a positive impact on the world.

**ABSTRACT**

This report encapsulates my enriching summer internship at Mondelez, where I had the privilege to engage in five impactful projects.

In the first project, I partnered with the HR department to create a Capability Skills Matrix. This tool comprehensively assessed employee skills across departments. Using Quickbase, I crafted an interactive dashboard, empowering managers to assess their team members' skills dynamically. This initiative aimed to enhance talent management and support informed decisions on employee development.

The third project involved the development of a Benefits Tracking Application. It enabled project managers to monitor planned and realized benefits in real-time. This transparency empowered managers to make data-driven decisions, elevating project management practices and accountability.

In the fourth project, I designed a Total Cost of Ownership (TCO) Application. This centralized the tracking of applications, services, and associated costs, including purchase orders. The TCO Application, complemented by an interactive dashboard, optimized cost control and resource allocation. It also facilitated informed decisions about IT investments.

The final project focused on a Project Reporting App, featuring fortnight trackers and an interactive dashboard. It provided stakeholders with real-time insights into project progress, fostering improved communication and collaboration among teams.

These projects reflect my contributions during my Mondelez internship, showcasing my adeptness with various tools and technologies to address business challenges. These experiences honed my technical and project management skills while significantly contributing to the company's efficiency and success. This transformative internship experience will undoubtedly shape my future career endeavors.

**CHAPTER 1: INTRODUCTION**

This report offers a comprehensive overview of my enriching summer internship experience at Mondelez, a global leader in the food industry. Mondelez's commitment to innovation, excellence, and sustainability has made it a prominent player in the market, and I had the unique opportunity to contribute to its success during my internship.

Throughout this internship, I had the privilege of working on five distinct and impactful projects. These projects provided me with invaluable insights into Mondelez's operations and allowed me to apply a diverse range of tools and technologies to address real-world business challenges. This report not only outlines the details of each project but also reflects on the broader context of my internship and the skills I gained.

As we delve into the specifics of these projects, you'll see how Mondelez's dedication to continuous improvement and cutting-edge solutions aligns with its status as an industry leader. My experiences during this internship have not only contributed to the company's efficiency but have also furthered my own professional growth.

In the pages that follow, I will provide a detailed account of each project, including their objectives, methodologies, and the tangible outcomes achieved. Additionally, I will reflect on the knowledge and skills I acquired during my time at Mondelez and how these experiences have shaped my career aspirations. This report serves as a testament to the value of hands-on learning in a dynamic and forward-thinking company like Mondelez.

**CHAPTER 2: OBJECTIVE OF WORK**

The comprehensive objectives of my work during the summer internship at Mondelez encompassed the following key aspects:

1. **Project Contribution**: To actively contribute to the successful execution of five distinct projects undertaken during the internship. These projects spanned various domains, including HR, quality analysis, benefits tracking, cost management, and project reporting.
2. **Business Challenge Resolution:** To address specific business challenges and opportunities identified by Mondelez, working collaboratively with cross-functional teams to develop innovative and effective solutions.
3. **Operational Enhancement**: To enhance operational efficiency within the organization by streamlining processes, automating manual tasks, and implementing tools and technologies that drive productivity.
4. **Skill Development**: To leverage this internship as a learning opportunity, acquiring and refining technical, project management, and interpersonal skills essential for a successful career in the corporate world.
5. **Contribution to Mondelez's Success:** To make tangible and measurable contributions to Mondelez's overall success, whether by improving talent management, automating quality analysis, optimizing cost control, or enhancing project management practices.
6. **Knowledge Transfer**: To actively engage with mentors, colleagues, and stakeholders, not only for project success but also for knowledge sharing, fostering a collaborative and learning-driven work environment.
7. **Personal Growth**: To reflect on and assess my own professional growth, learning from both successes and challenges encountered during the internship, with the intention of carrying these experiences forward in my future career endeavors.

These objectives were pursued with a dedication to Mondelez's values and goals, aligning my work with the company's mission to create moments of joy by leading the future of snacking.

**CHAPTER 3: WORK DETAILS**

|  |  |  |  |
| --- | --- | --- | --- |
| **WEEK** | **PERIOD** | **TASKS** | |
| 1 | 1-6-2023  To  7-6-2023 | 1. Onboarding process 2. Connecting with the team 3. Workspace and tools. 4. Setting up VDI and raising tickets for software 5. Company Policies and Practices to be followed 6. Introduction about the entire project and walkthrough 7. Mandatory compliance and behavior Training | |
|  | | | |
| 2 | 8-6-2023  To  14-6-2023 | 1. Introduction to the problem statement. 2. Detailed overview of the project and outcome expected. 3. Brainstorming about different ways to approach the problem statement. 4. Requirement gathering. 5. Grilled on the tools that we were going to use 6. Weekly reporting | |
|  | | | |
| 3 | 15-6-2023  To  21-6-2023 | 1. Deciding the tech stack that will be required for building the solution. 2. Drawing the initial workflow diagram of the solution decided by the team members. Making changes based on the review by the managers and mentors. 3. Parallelly started working on other project with innovations team as my bandwidth 4. Dividing the tech stack between the team members on the basis of proficiency and interests. 5. Gathering the requirement for second project. 6. Weekly reporting with both the teams | |
|  | | | |
| 4 | 22-6-2023  To  28-6-2023 | 1. Developed the application Skelton with dummy data 2. Implemented team lead-based filtering for resource skills. 3. Made the changes stated in previous review. 4. Enabled interactive charts for SAP, OTB, and BTC skills 5. Started developing the frontend for the AutoCOA project 6. Learning powerapps for app development and powerautomate for backend flows | |
|  | | | |
| 5 | 29-6-2023  To  5-7-2023 | 1. Setting up the first project . 2. Getting access to the confidential data on which the problem statement is given. 3. Made the 1st skills capability matrix application live with production data 4. Started working on banked of the AutoCOA project 5. Created the flow for it 6. Completed the frontend part of the application 7. Weekly review | |
|  | | | |
| 6 | 06-07-2023  To  12 -7-2023 | | 1. Got a bravo for the first project and asked to implement it for PM’s too 2. Adding final touches to the application 3. Collaborated with different team members for the challenges faced during the developing the backed for autoCOA 4. Finally completed the working backed for the sample document . 5. Mid-term review with senior managers, getting their feedback on the progress and inputs for the next steps of the project. 6. 3. Adding charts and visualizations to the portal. 7. 4. Working on the backend and creating the API routes. | |
|  | | | | |
| 7 | 13-7-2023  To  19-7-2023 | | 1. Working on the points mentioned in the mid-review. 2. Completed the backend for the AutoCOA project with API as well. 3. Linked the backed with frontend 4. Examined the entire workflow 5. Assigned with Four new projects 6. Weekly reporting | |
|  | | | | |
| 8 | 20-7-2023  To  26-7-2023 | | 1. TCO App - Automated Graphs and Issue summary generation from Weekly tatus table 2. Project Reporting App - Create a dashboard and adjust size of graphs to look cleaner in a single PPT slide 3. Automated tabular summary to show current and previous fortnight status of all In Flight and Live projects | |
|  | | | | |
| 9 | 27-7-2023  To  1-8-2023 | | 1. Build an app to store and track all Purchase Orders, Vendors, Applications and other relevant details 2. Pipeline creation to check missing projects in Demand Portal vs Reporting app and vice versa along with status 3. Capture expected project benefits   Fill in realized benefits - monthly/quarterly, etc.  Report benefits via graphs, tables, etc.   1. Updating documentation 2. Knowledge transfer to the team. 3. Demo to reporting and hiring manager 4. One-on-one meeting with the managers 5. Access permissions handover and exit process formalities 6. Farewell. | |

**CHAPTER 4: TECHNOLOGY LEARNED**

During my internship at Mondelez International, I was exposed to a diverse array of cutting-edge technologies and tools that have significantly enriched my skill set. This invaluable experience not only broadened my understanding of the industry but also equipped me with practical knowledge essential for achieving my career goals. Working with Mondelez International has not only been a professional milestone but has also laid a robust foundation for navigating the ever-evolving landscape of technology in my future endeavors.

1. **QuickBase:**

Quickbase is a cloud-based platform that empowers businesses to create custom applications and databases without coding. It enables users to easily build, modify, and manage applications to streamline processes, manage data, and improve collaboration across teams. Quickbase offers robust features for data collection, automation, reporting, and integration, making it a versatile tool for enhancing efficiency and productivity within organizations.

1. **Powerapps:**

PowerApps is a Microsoft platform that allows users to create custom business applications without the need for extensive coding. It provides a low-code development environment where users can build apps for web and mobile devices by using a visual interface and pre-built templates. PowerApps integrates seamlessly with other Microsoft services like SharePoint, Dynamics 365, and Office 365, enabling users to leverage existing data and workflows. It is designed to streamline app development, accelerate digital transformation, and improve productivity within organizations.

1. **Power automate:**

Power Automate, formerly known as Microsoft Flow, is a cloud-based service by Microsoft that allows users to automate workflows and tasks across various applications and services. It provides a low-code/no-code environment for creating automated processes, known as flows, which can connect to different apps, services, and data sources.

Power Automate enables users to automate repetitive and time-consuming tasks, such as data synchronization, notifications, and approvals, without requiring extensive coding skills. Flows can be triggered by events, such as receiving an email or a change in a data source, and they can perform actions like sending emails, updating databases, or posting to social media platforms.

This tool is valuable for enhancing productivity, improving data accuracy, and reducing manual work by automating routine processes within organizations. It integrates seamlessly with various Microsoft and third-party applications, making it a versatile automation solution for businesses.

1. **Microsoft Azure**

**Azure AI Services**

Azure AI Services is a suite of artificial intelligence (AI) and machine learning (ML) tools and services offered by Microsoft Azure, a cloud computing platform. These services are designed to help organizations build, train, deploy, and manage AI and ML models for various applications.

**Azure Form Recognizer:** An AI service for extracting structured data from forms and documents. It's useful for automating data entry tasks.

**Azure Container**

Azure Container refers to a range of services and tools within Microsoft Azure that facilitate the deployment, management, and scaling of containerized applications. Containers are a lightweight and efficient way to package and run applications, along with all their dependencies, consistently across different environments.

1. **Data Pipelines:**

Pipelines in Quickbase refer to automated workflows that streamline and manage data and processes within the Quickbase platform. These pipelines enable users to automate repetitive tasks, trigger actions based on specific events or conditions, and ensure data consistency and accuracy. Quickbase pipelines are designed to improve productivity, reduce manual effort, and enhance the efficiency of data-driven processes, making it easier for businesses to manage their operations and workflows.

1. **Automation**:

Automation in Quickbase (QB) involves the use of rules, triggers, and workflows to streamline and simplify various business processes. Quickbase's automation capabilities enable users to define actions and conditions that automatically execute tasks, such as sending notifications, updating records, or triggering other events, in response to specific events or changes in data.

1. **Dashboards:**

Dashboards in Quickbase are interactive visual displays that provide at-a-glance insights into your data and processes. They allow users to consolidate and present key information, such as charts, graphs, and reports, in one central location. Quickbase dashboards are highly customizable, enabling users to tailor them to their specific needs. They play a vital role in helping users make informed decisions, monitor progress, and improve data-driven decision-making within the Quickbase platform.

**CHAPTER 5: LEARNING AND EXPERIENCES**

My internship at Mondelez provided me with a rich learning experience and valuable insights into real-world business operations. Through the various projects I worked on, I acquired a range of skills and knowledge that have significantly contributed to my professional development.

**Learnings:**

1. **Project 1: Capability Skills Matrix and Interactive Dashboard**

One of my key learnings was the importance of data-driven talent management. Developing the Capability Skills Matrix and Interactive Dashboard highlighted how data can be harnessed to make informed decisions about employee development. This project sharpened my skills in data analysis, dashboard creation, and collaboration with HR teams.

1. **Project 2: AUTOCOA - Automated Quality Analysis**

Creating AUTOCOA exposed me to the power of automation and AI in improving quality analysis processes. I gained hands-on experience with Power Apps, Power Automate, and Azure AI services. This project underscored the significance of innovation in streamlining manual tasks.

1. **Project 3: Benefits Tracking Application**

The Benefits Tracking Application project taught me the critical role of tracking and measuring benefits realization in project management. I learned how to design user-friendly applications and provide real-time visibility into complex data, enhancing decision-making processes.

1. **Project 4: TCO Application - Total Cost of Ownership**

Developing the TCO Application honed my skills in cost management and data centralization. I discovered the importance of meticulous record-keeping and how interactive dashboards can provide insights that drive efficient resource allocation.

1. **Project 5: Project Reporting App**

The Project Reporting App project taught me how to create tools that facilitate effective communication and collaboration. By developing trackers and interactive dashboards, I grasped the value of transparency in project progress monitoring.

**Experiences**:

1. **Real-World Application:** My internship provided me with the opportunity to apply theoretical knowledge gained from coursework to real-world scenarios, bridging the gap between academia and practicality. These learnings have not only enriched my technical skill set but have also equipped me with a holistic understanding of the corporate world and the financial sector. They will undoubtedly shape my future career and professional development positively.
2. **Corporate Work Etiquette**: Working in a corporate environment introduced you to professional conduct, workplace etiquette, and the significance of adhering to industry standards. This exposure prepared you for future roles in similar settings.
3. **Documentation Practices:** Engaging in documentation demonstrated the value of well-structured documentation in preserving project knowledge and aiding collaboration. You learned how to create comprehensive documentation for reference and knowledge sharing.
4. **Presentation Mastery:** Crafting and delivering presentations refined your ability to communicate complex technical concepts effectively. This experience prepared you to convey insights and findings to diverse audiences with clarity and impact.
5. **Project Management Exposure:** Collaborating on projects allowed you to witness project management in action. You gained insights into project planning, resource allocation, and timeline management, valuable skills for future project-oriented roles.
6. **Agile Modelling Dynamics:** Engaging with agile modeling practices familiarized you with agile methodologies, adapting to changing requirements, and delivering incremental improvements. This experience equipped you with agility in managing dynamic project landscapes.

Collectively, these experiences expanded my technical abilities, project management skills, and my capacity to leverage tools like Quickbase and Power Apps. I also developed effective collaboration and communication skills while working with multidisciplinary teams.

Furthermore, my internship at Mondelez taught me the significance of innovation, data-driven decision-making, and the power of automation in enhancing productivity and efficiency within an organization. These lessons and experiences have not only enriched my academic knowledge but also shaped my career aspirations, making me eager to apply these skills and insights in future endeavors.

**CONCLUSION**

My internship journey at Mondelez has been nothing short of transformative. Through my engagement in diverse and impactful projects, I have not only acquired a wide spectrum of technical skills but have also gained a deeper understanding of how data and automation can revolutionize business operations.

These projects have instilled in me the significance of data-driven decision-making, a skill I now consider invaluable. The development of the Capability Skills Matrix, AUTOCOA, Benefits Tracking Application, TCO Application, and Project Reporting App showcased the real-world applications of technology in solving complex challenges.

Moreover, the internship experience has honed my project management abilities, fostering my capacity to lead and collaborate effectively within cross-functional teams. I've learned that open communication and collaborative problem-solving are paramount for project success.

As I move forward in my career, I am enthusiastic about applying the knowledge and skills gained during this internship. I am committed to embracing innovation and efficiency in every aspect of my work, much like the transformative approaches I witnessed and contributed to at Mondelez.

I extend my heartfelt gratitude to the entire Mondelez team for their guidance, support, and mentorship throughout this journey. This internship has not only equipped me with technical expertise but has also shaped my professional character, making me eager to make a meaningful impact in the corporate world.

In closing, my summer internship at Mondelez has been an enlightening and enriching experience, one that I will carry with me as I embark on future career endeavors.

**REFERENCES**

<https://www.mondelezinternational.com/>

<https://www.quickbase.com/>

https://vjti.ac.in/