SVKM's NMIMS
Mukesh Patel School of Technology Management and Engineering
B. Tech Integrated Program

A Report on

INPLANT TRAINING

AT

KAPRIGIANI
VENDING

Malad (West), MUMBAI – 400064.

Submitted By

Parth Parikh

SAP ID: 70331017003

Under The Guidance Of

Prof. Vinayak Gaikwad

Shri Vile Parle Kelvani Mandal's

Mukesh Patel School of Technology & Management Engineering

Department of EXTC

Vile Parle (w), Mumbai- 400056

Inplant Training Period

04/07/2022 to 06/11/2022

NO OBJECTION CERTIFICATE

This is to certify that **Parth Parikh** (SAP ID. **70331017003**) student of Mukesh Patel School of Technology Management & Engineering, has successfully completed his Semester (**XII**) Inplant Training from **04/07/2022 to 06/11/2022**, at **Kaprigiani Vending,** and has completed the tasks given to him during the Inplant Training. The Report is submitted in partial fulfillment of the requirement for B.Tech Integrated **EXTC** Engineering. He has been allowed to includethe relevant information from the Company for which we have no objection.

_____
Signature & Stamp of The Industry

CERTIFICATE OF SUBMISSION

This is to certify that the report entitled 'Inplant Training at **'Kaprigiani Vending'** is a bonafide work of **Parth Parikh** (SAP ID. **70331017003**) and submitted in semester (**XII**) for the partial fulfillment of B.Tech Integrated in **EXTC** Engineering at , Mukesh Patel School of Technology Management & Engineering Mumbai during the academic year 2022-2023.

Signature:

_____   _____   _____

Faculty Mentor   B Tech. Integrated Incharge   B Tech. Integrated Director

DECLARATION

I, **Parth Parikh**, SAP ID. **70331017003** a student of Semester (**XII**) of B.Tech Integrated Program in <u>EXTC</u> engineering humbly submit that I have completed from time to time the Inplant Training work as described in this report by my own skills and studied **from 04/07/2022 to 06/11/2022.** I have not copied the report or it's from any appreciable part from any other literature in contravention of academics ethics. I declare that this written submission represents my ideas in my own words. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented of fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be the cause of disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

<u>Date: 30/10/2022</u>

Place: <u>Mumbai</u>   Name & Signature of the Student

- **Cover Page**

- **No Objection Certificate**

- **Certificate of Submission**

- **Declaration**

Chapter – 1
Introduction

1.1 Introduction to the company

Kaprigiani Vending is a proprietor firm that deals in the manufacturing of instant tea and coffee beverage vending machines.

- They are in business since 1999
- They are a pioneer in the field of hot beverage vending machine
- Sold 75,000 + machines across the Indian market and exported to more than 12 countries worldwide

1.2 About the Department

I worked in various departments including Production , Testing , R&D and the purpose of this was to get as much exposure as possible to all aspects and processes that go on in a manufacturing company .

Chapter – 2
Problem Statement

2.1   Brief about the technology used

Tea coffee premix vending machine is the most hygienic way of making hot beverages. These automatic vending machines store premixes in an instant form in an air-tight container to prevent exposure to the outer atmosphere. They operate using a microcontroller to dispense the right amount of premix and hot water and eventually deliver hot beverages in less than 10 seconds.

As this automatic coffee tea maker machine works with a press of a button, it is highly convenient and easy to use. Its design ensures required hygiene and guarantees refreshing beverages without any intricate automation. Maintaining this type of machine is also not a chore as they usually feature an auto cleaning facility that takes about 5 minutes to execute. Due to these advantages of vending machines, the premix version is widely used in small and big enterprises, canteens, hotels, malls, hospitals, bars, restaurants, and so on.

2.2   Software used

The microcontroller of the control card used to run the machine is programmed in the C language and a hex file is generated eventually which can be fed into the control card to load the required software onto the machine.

Chapter – 3
Brief about the Projects undertaken

I started off at the production department going through the process of the assembly of vending machines. During my time here, I also understood the functioning of vending machines. Later as I got more knowledge, I started learning and becoming a part of the testing process of these machines before dispatch.

I then moved on to the repairing section where I learnt to analyze different issues faced with the machine (mainly the electronics component – the controller card). I observed the repairing process and then started helping out with the same.

Later I helped out with some RFID Reader based project going on in the company which ended up getting delayed. I also gave my inputs and became a part of the testing for a new electronics card that is to be launched in a low end budget model of the vending machine .

Chapter – 4
Learning in the inplant training

Things I learned in the implant training while being a part of different departments in a vending machine manufacturing company

1. Assembly Process
2. Closely observed components part of the vending machine like gear motor, whipper motor, solenoid valves, SMPS, electronic circuit board, peristaltic pump etc.
3. How to test and repair issues with the control card of a vending machine
4. Basic logic behind the code and the software of the vending machine
5. Was a part of an RFID Reader development
6. Parameters to look out for while testing a control card
7. A brief overview of inventory management

Chapter – 5
Conclusion

I am thankful to Kaprigiani Vending for letting me intern at their organization. I have not just learnt alot about electronics related concepts but also about how the different departments in a manufacturing firm come together to run a business and generate the desired output .

CERTIFICATE OF INPLANT TRAINING

This is to certify that Mr. Parth Parikh

SAP ID. 70331017003 of **XI Semester** of B.Tech Integrated Program Computer

/EXTC/Civil/Mechanical has attended the Inplant Training for 94 days out of 104

at Kaprigiani Vending during the Period: from 04/07/2022 to 06/11/2022.

Signature of the Student   **Signature of the Industry Mentor**

Forwarded with compliments to the HoD for necessary action.

The details of working at organization:

Present: 94 Days

Leave: 7 Days

Absent: 3 Days

Total: 104 Days