**Vending Machine of Beverages with Online Monitoring and Payment thru Beep card**

**By**

**Abegael Joy B. Estillero**

**Taguig City University**

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*Abstract*

*Introduction*

Vending machine of beverages is an automated machine ready to be consumed by the buyers thru money inserted to the machine. Usually can be found in office, factory, restaurant, kiosk, public building, school, university, shopping mall, sports center, railway station, airport, street and areas where there is a various of people.

It is in demand nowadays busy lifestyles. The first entity of people goes to when they on a rush of time or to keep a schedule that they don’t have time to stop somewhere to find the drink they need. And has a great opportunity in business industry because of no overhead costs as it’s eliminated the need of employees to sell the product and extra workspace.

The technology evolving so fast these days that lead the consumer and businesses to elevate necessity and productivity. So vending machine of beverages should embrace the improvement to synchronize

in latest trends and survive in industry.

There are some challenges in vending machine of beverages to be attended like

when you select a drink after inserted the money and it was tagged as successful but then when you checked the drink or taste it there was a lack of ingredient like no sugar, no ice, no creamer, etc. or not the quality you expected, no one to talk to the problem encountered and have action immediately, some money did not accepted by the machine, there is a machine down time or not accessible to use that the only solution is to contact the vending company to inform them, shortage for in demand type of drinks that will be check only when the machine is scheduled for refilling of vending company. And by our innovation of technology we can all addresses all the challenges in vending machine beverages.

We can have improved sensors, additional controls, data monitoring, accessible communication and easy payments.

The IoT (Internet of Things) technology enabled devices to be connected to and access information using a network can support the machine improvement in constant monitoring of inventory, track sales trends, stock alert and machine down time alert. Modernize sensor with the help of IoT in any error encounter in the process of the machine. The beep car or also called smart card is a reloadable contactless card in paying transportation nowadays and other businesses that can be applied also in paying in the Vending Machine for cashless payment.

*Methods*

*Results*

*Discussion*

*Summary and Conclusions*

*Acknowledgements*