**CHAPTER 1**

**INTRODUCTION**

The Price Change Notification Bot is a Robotic Process Automation (RPA) Project. The Bot is majorly created to check the price change (drop/rise) of the various products available on e-Commerce sites like Flipkart, Amazon, etc. The customer can add the desired product either to his Cart or Wish-list waiting for the price drop. The bot actually works on monitoring the price change whenever the product is added on the cart/wish-list. Once the price increases, the bot sends the notification to the customer with a voice message. Similarly whenever there is a decline in the price, the bot automatically notifies the customer with a voice message and an automated email invitation to purchase the product attached with the purchase link is being sent.

* 1. **PROBLEM DEFINITION**

The existing system does not provide any notification or alert to the customer on the price change be it high or low. Manually the customer has to visit the e-commerce site to check for the price drop each and every time. The customer is not sure of when there will be a drop in the price and may miss the opportunity to buy the product on that period. No notification will be sent to the customer from the e-commerce site on the price change.

* 1. **OBJECTIVE OF THE PROBLEM**

The proposed system consists of 5 modules : Data-Scraping the product on the Cart/Wish-List, Excel Automation, Monitoring the price change, Comparing the price with expected price(approx.), Notification and voice message, E-mail Automation. Automatically the bot monitors on the price change, Sends a notification message along with a voice message to make the customer aware. Similarly with the help of the customer’s expected price, we can monitor the price drop and automate the process accordingly. In case of price drop, it sends an email invitation to purchase the product with that product-purchase link.

* 1. **SIGNIFICANCE OF THE PROJECT**

UiPath is a free, fully-featured and extensible version of our automation tool. This platform delivers the fastest and most reliable RPA that enhances business performance at unlimited scale. It is easy to use, highly responsive, and instantly scalable to allow you to build the process.

RPA tools are defined as non-integrated, stand-alone software for laptops and workstations. UiPath is recognized worldwide for product leadership and technical excellence. RPA is the largest in the industry, the most active in the automation field.

**A UiPath feature has three main products:**

* **UiPath Studio-** It designs automation process using diagrams, which are visually appealing
* **UiPath Robot-** Executes the UiPath Studio Processes
* **UiPath Orchestrator –** It is an application that deploys, manages, and monitors processes/robots

UiPath Robots and Executors interact with huge amounts of data at the same time. We can run a process either on a single, or multiple robots or any specified number of robots and can group them in the environment.

UiPath Studio software automates back-office repetitive tasks. It is one of the tools used in automating business processes. It converts each task into UI automation, thereby making work easier and quicker. Multiple workflow designs are available in Studio. UiPath Studio comes with a debug component that easily locates problems within complex workflows. This easily verifies the execution activity and observes if there are any errors in the output.

**CHAPTER 2**

**LITERATURE REVIEW**

A literature review is a text of a [scholarly paper](https://en.wikipedia.org/wiki/Scholarly_paper), which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are [secondary sources](https://en.wikipedia.org/wiki/Secondary_sources), and do not report new or original experimental work. In Robotic Process Automation (RPA) is the use of software with capabilities to handle high-volume, repeatable tasks that previously required a human to perform. It aims to use a computer to manipulate existing application software in the same way that a person works with those systems and the presentation layer to perform a specific task. This technology increases the productivity for human employees who no longer are tasked with boring work. In proposed system we present Price Change Notification Bot to notify on the products price fall or hike in Online Shopping. Once we add the product to the cart, the bot starts its process of monitoring the price from the day of adding it to the cart. If there is any price hike, it will notify the customer with a message along with a voice message. If case there is price drop, the bot notifies with a message and a voice alert with an automated e-mail invitation to purchase the product.

**Advantages of the Automation process:**

* The Humans are under the era of committing the mathematical and parallax errors while in terms of the RPA the errors are very low
* The work can be done faster and efficient from man-hours and man-years to Minutes and Seconds

**CHAPTER 3**

**SYSTEM SPECIFICATION**

**3.1 HARDWARE REQUIRMENTS**

The requirements analysis includes the hardware and software requirements for the project.

**SYSTEM CONFIGURATION**

Memory : 4 GB RAM

Processor : Intel(R) Core(TM) i3-4005U CPU@ 1.70GHz

System type : 64- bit Operating System, x86-based

processor

**3.2 SOFTWARE REQUIRMENTS**

Operating System : Windows 7/ 8/ 8.1/ 10

Tool : UI Path Community Edition

.NET Framework : minimum-4.5.2

Recommended : 4.6.1