

# CURRENCY CONVERTER AUTOMATION

## **INTRODUCTION**

### Overview:

The automatic currency converter is a web-based converter implemented on Blue Prism Software. This function converts the entered value into an effective cash flow.

This function has three inputs: CurrencyFrom, CurrencyTo, Value (the value you want to convert).

### Purpose:

The solution replaces the traditional desk exchange desk with the automatic exchange. There is no need to buy additional equipment, hire a financier or rent more space. All activities are remotely tested. The user can access the converter irrespective of his/her location.

## **LITERATURE SURVEY:**

### Existing problem:

The international currency market is undoubtedly considered a major one as well

The most liquid in all financial markets, with an estimated daily revenue of \$ 4.0 trillion (Bank of International Settlements, 2010) Funds are traded in pairs in transactions between each country's currency. These transactions are not limited to currency exchanges printed by a central bank but include checks, telephone transfers, telephone transfers, and even future sales or purchase contracts (Rugman and Collinson, 2006). These different transactions are facilitated by our various markets, including the local market, futures market, stock market, and derivative market (Levinson, 2006). All of these different markets work separately but are still very cooperative. The local market facilitates the immediate delivery of cash for sale, while futures markets and options allow participants to enter the exchange rate on a specific future date by buying or selling a futures contract or optionally. Excessive trading in the financial markets is now taking place in the market from other sources, including forwarding contracts, foreign exchange exchanges, foreign exchange agreements and blockchain options (Levinson, 2006). These financial markets are still widely distributed geographically and do not have a single location. Most trading takes place in interbank markets between financial institutions around the world. The stock market participants are made up of exporters and exporters, investors, thinkers and governments. The most traded currency is the US dollar, while the most popular currency pair is the EUR / USD (Bank of International Settlements, 2010).

The price of a particular currency is called the exchange rate, which also causes the spread established by participants in the market.

Different countries use different currencies, and there are daily variations in these related currencies.

These fluctuations in the currency rates could be of huge importance for businesses. Those who transfer money from one country to another (one currency to another) should be updated with the latest exchange

rates in the market.

#### Proposed solution:

The economics of supply and demand largely determine the exchange rate fluctuations. In this currency conversion project, users are allowed to choose the type of conversion, which means from "money" to "money". This simple feature allows users to enter the currency to be converted (say currency in Dollars), and display the converted value (say currency in Euro). The proposed solution will be helpful in removing various barriers in the currency conversion process and lead to smoother management of businesses.

## **THEORETICAL ANALYSIS**

Block diagram

## **EXPERIMENTAL INVESTIGATIONS**

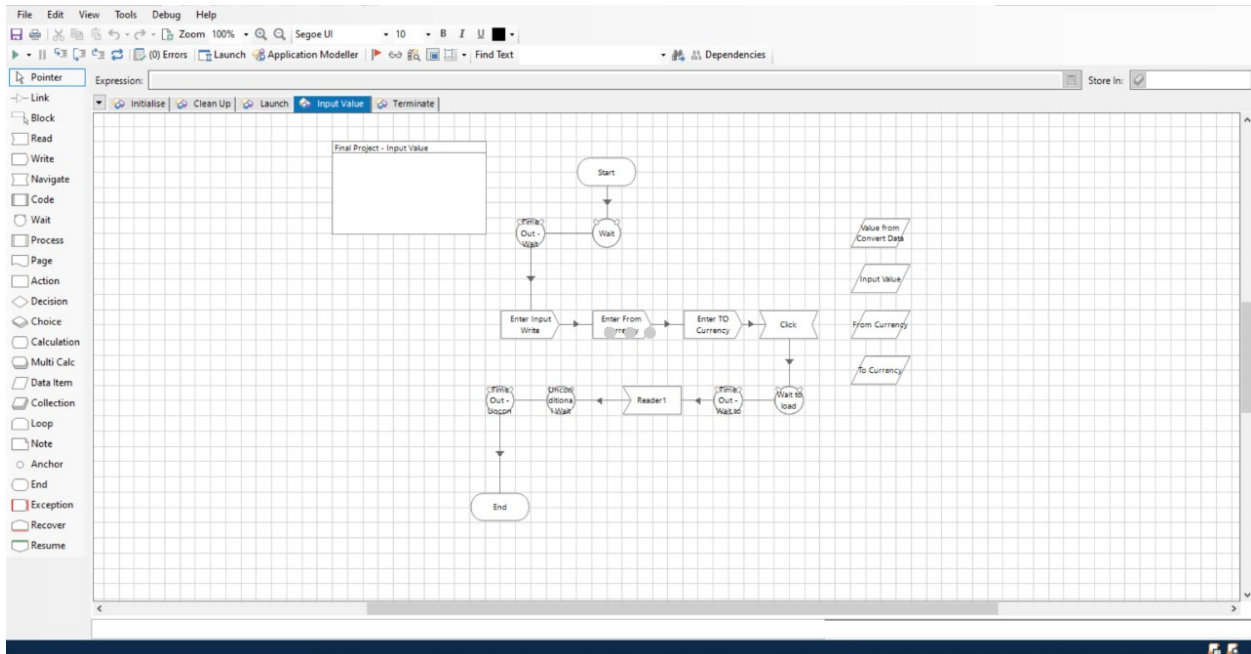
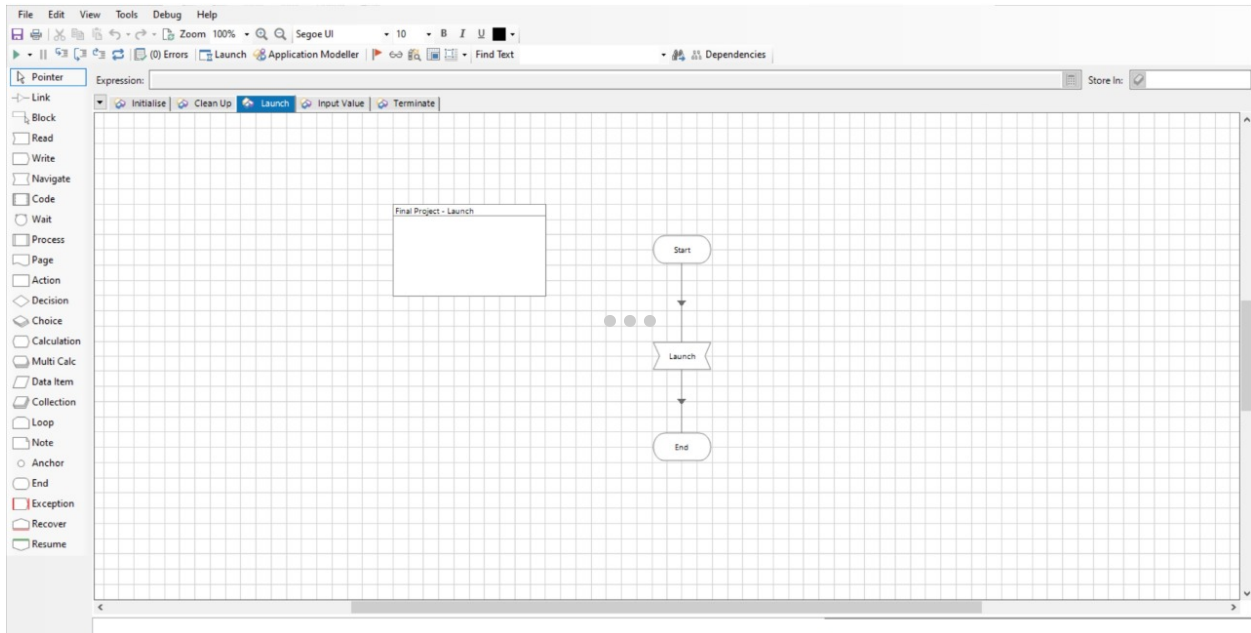
Blue Prism RPA provides a working environment with expandable, multi-skilled and multi-faceted digital staff, who support automated businesses and business processes on scales through machine learning, AI, emotional analysis and intelligent automation. Blue Prism offers browser, window, Java default settings and more. The business base is embedded in an object called Object. This means that all app communications are made within the object object. The item contains an item called Application Modeler (AM). This item helps to model the app and display the DOM items displayed by the application in question.

By using Application Modeller you can determine the type of application, in this case a browser-based application. This takes you through a series of set-up screens that help you model your app. When the configuration is complete, an automated object called Element1 is created. Element1 has two buttons: point and highlight. Clicking Identifies the available test methods. Depending on the program, you may see HTML mode, Active Accessibility (AA) mode, regional mode, Win32 or UIA. It is worth noting, UIA is available for new versions of Blue Prism (version 5 and above). With the extension of Blue Prism Chrome, Blue Prism V6.4 provides native support for automated web pages and applications in Chrome. As it works with web applications and pages displayed in Chrome, business processes based on these applications can be easily constructed. This RPA platform updates the Blue Prism Application Modeller wizard with an additional browser-based application mode (Chrome) to test Chrome objects and use them within Business Items.

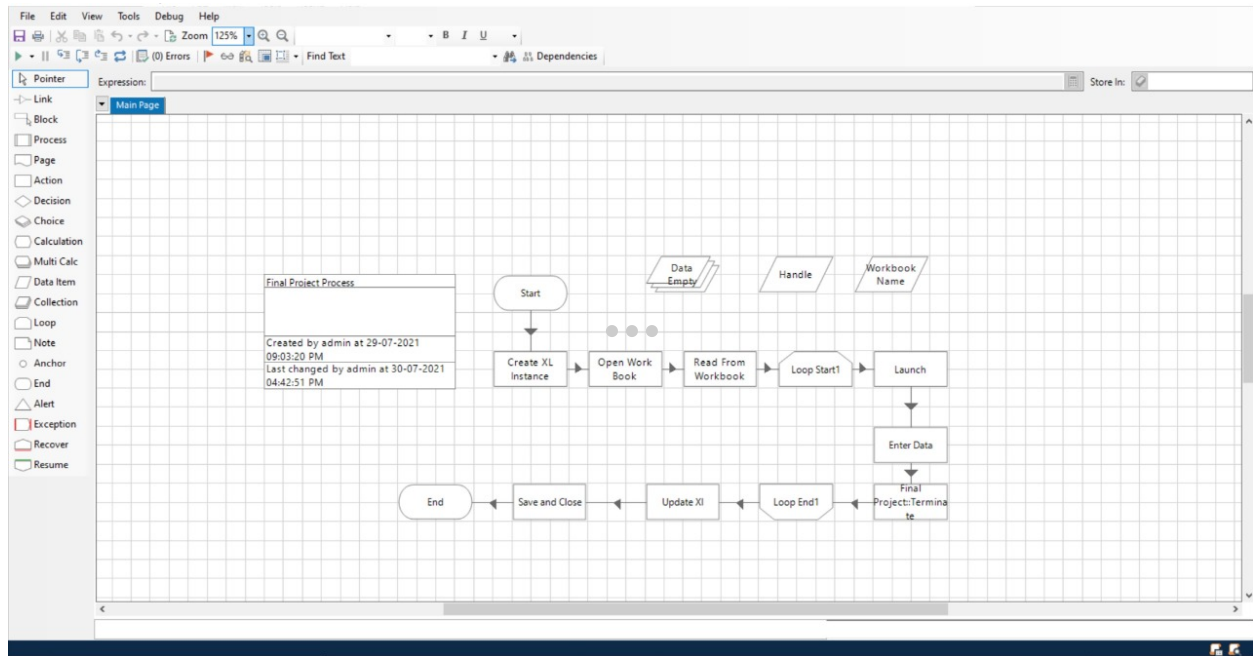
Web automation is very useful in simplifying the process of Currency Conversion.

# FLOW CHART

## Process Studio



## Object Studio



## RESULT

The screenshot shows a Microsoft Excel spreadsheet titled 'RPA Work 5 - Excel'. The data is organized in a table with the following columns: A (From Curre), B (Value), C (To Curre), and D (Rate). The data rows are as follows:

| From Curre | Value | To Curre | Rate       |
|------------|-------|----------|------------|
| USD        | 4     | INR      | 297.638309 |
| USD        | 4     | INR      | 297.624801 |
| USD        | 5     | INR      | 372.031001 |
| EUR        | 6     | INR      | 531.289527 |
| EUR        | 7     | INR      | 619.837782 |
| USD        | 8     | INR      | 595.217951 |

The spreadsheet also shows a status bar at the bottom indicating 'Ready' and 'Sheet1 Sheet2'.

## **ADVANTAGES**

Can be used in Currency exchange shops for easier and faster conversions.

Instant conversion from one currency to another without bringing up any apps/windows or ads.

Can be fully integrated into your own bot.

Exchange rates can be found hourly or by any time if we use the scheduling feature that is available in the Blueprism Software and the bot runs at that scheduled time.

## **DISADVANTAGES**

Can sometimes have error issues in the object studio.

## **APPLICATIONS**

Can be used in Foreign currency exchanges in Airports and other places where it needs to be done quickly.

Banks and Stock market  
are other places where this bot can be used.

## **CONCLUSION**

In this project , we successfully built a process to automate a currency converter web application using blue prism. Where we launched Google Chrome the web application and the amount was taken automatically from the Excel Sheet and the converted values were stored back into the excel in the result column.

## **FUTURE SCOPE**

Can be made a bit more complex where we can have an amount in one currency be converted into a couple of other currencies simultaneously rather than just one. This can be useful if a person wants different times of currency in the same amount.

**DEMO LINK With BPP ,BPO and .xlsx files:**

<https://drive.google.com/drive/folders/1VJlCypV98SnzW42OShjxAwkOuqAE0kLW?usp=sharing>