ABSTRACT

Customer Segmentation

A primary goal for any company and business is to understand their targeted customers. How their consumers operate and use their services. Every consumer may use a company's services differently.The business done today runs on the basis of innovative ideas as there are a large number of potential customers who are confused about what to buy and what not to buy. The companies doing the business are also not able to diagnose the target potential customers. The concept of which customer segment to target is done using the customer segmentation process using the clustering technique

Customer Segmentation is the process of division of the customer base into several groups of individuals that share a similarity in different ways that are relevant to marketing such as gender, age, interests, and miscellaneous spending habits.

Companies aim to gain a deeper approach to the customer they are targeting. Therefore, their aim has to be specific and should be tailored to address the requirements of each and every individual customer. Furthermore, through the data collected, companies can gain a deeper understanding of customer preferences as well as the requirements for discovering valuable segments that would reap them maximum profit. This way, they can strategize their marketing techniques more efficiently and minimize the possibility of risk to their investment.

This project is customer segmentation for a food delivery company or Shopping mall.

ABSTRACT

Automated Product Price Comparison

Nowadays before purchasing anything the buyers do some online research of the products on the internet. One of the major factors which lead to purchasing of any product is cost or pricing. The buyers tend to compare prices before purchasing any product.

Many of us look to fall for exciting deals on Flash sale days of eCommerce websites only to realize later that the prices are usually down for that product on no sale days. To grab those exciting and rare deals, one needs to constantly analyze product prices to come across the perfect buying opportunity. Since it is very difficult to visit each & every website for price comparison, there needs to be a solution to automate this process.

We want to build a system that collects the prices of a product from different eCommerce websites and prepares a list of them and then performs some data analysis regarding affordable prices.Then sending the buyer an email as soon as his/her criteria is matched. A buyer can then analyze the list to decide which website they should purchase the product from.This system will show you the product prices from different retailers to show you where to buy the product at an affordable price.

Handwritten Text Recognition

System using TensorFlow

Handwriting recognition (HWR), also known as Handwritten Text Recognition (HTR), is the ability of a computer to receive and interpret intelligible handwritten input from sources such as paper documents, photographs, touchscreens and other devices.

A handwriting recognition system handles formatting, performs correct segmentation into characters, and finds the most plausible words.This handwritten recognition can be offline or online.

Online handwriting recognition involves the automatic conversion of text as it is written on a special digitizer or PDA, where a sensor picks up the pen-tip movements as well as pen-up/pen-down switching. This kind of data is known as digital ink and can be regarded as a digital representation of handwriting. The obtained signal is converted into letter codes that are usable within computer and text-processing applications.

The elements of an online handwriting recognition interface typically include:

- a pen or stylus for the user to write with.
- a touch sensitive surface, which may be integrated with, or adjacent to, an output display.
- a software application which interprets the movements of the stylus across the writing surface, translating the resulting strokes into digital text.

Uses:

1. A large insurance industry receives more than 20 million documents a day and a delay in processing the claim can impact the company terribly. The claims document can contain various different handwriting styles and pure manual automation of processing claims is going to completely slow down the pipeline is around 10%.
2. People write cheques on a regular basis and cheques still play a major role in most non-cashed transactions. In many developing countries, the present cheque processing procedure requires a bank employee to read and manually enter the information present on a cheque and also verify the entries like signature and date. As a large number of cheques have to be processed every day in a bank a handwriting text recognition system can save costs and hours of human work.