Use of pSCRIPT for Better Customer Experience in Online Business

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The popularity of online businesses is increasing every day. People are using online businesses more than ever due to the current COVID-19 pandemic. Extensive use of social media is also contributing to the spread of such online businesses where customers share their experiences with others through online reviews. Furthermore, technological advancement such as Cloud computing has made online business opportunities more accessible than ever before. As a result, the size of business-related data has taken a different form. Businesses are generating audio, video, or text data for advertisement, product review, and other purposes. Therefore, we see a considerable volume of data being produced with a significant variety. Also, the business data is changing rapidly over a short period, making the data volatile and having high velocity, making online businesses a great source of "Big Data" where we find the 4 V's of big data. Analyzing big data requires fast and accurate tools and techniques. This research aims to use pTree technology to analyze big data. One method to achieve our goal is to use pTree based SeCuRed Interesting Pattern and Text miner – pSCRIPT. First, it uses pHIDES to secure the data in the cloud. Then it applies pTree-based text mining algorithms to analyze the data to find any interesting pattern in the text corpus. Text mining is a branch of data mining where textual information is analyzed in order to discover patterns and gain perceptions within the corpus of text documents. In e-Commerce, text mining can be used in many areas, such as recommending complementary products to the targeted customer, combating cyber fraud, offering customers personalized discounts, etc. In this research, we are particularly interested in applying text mining to improve these experiences of online business customers. We use pSCRIPT, pTree based text miner, to provide fast and accurate results for a large dataset. This research also uses the pTree based data encryption system known as pHIDES that we proposed in our previous research proposal.