Original Research Paper

Data Visualization Based On Sentiment Analysis to Identify the Quality of Internet Service Providers in Malaysia

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Abstract: Nowadays, most of the people have subscribed to their own internet service providers. However, due to slow of speed, connectivity, quality, and customer satisfaction need a proper evaluation. In addition, the rate of internet adoption is still slow. This project aims to develop a webbased system of data visualization based on sentiment analysis of internet service providers in Malaysia. For the project methodology is conducted in three phases, which include studying the existing problem of the internet service providers in Malaysia, developing a web-based system of data visualization based on sentiment analysis, and the evaluation of the usability of the system. The System Development Life Cycle (SDLC) has been used in this project which are analysis, design, implementation, testing, maintenance, and usability. The quality of internet services is a crucial factor in determining the satisfaction of customers in the telecommunications industry. The data visualization system based on sentiment analysis can assist customers in making informed decisions when choosing the right Internet Service Provider (ISP) by providing a better understanding of the quality of internet services offered by different ISPs. The sentiment analysis approach also done by using the corpus-based approach. The evaluation of the usability result was done by 3 experts through questionnaires using the linear scale indicator to evaluate the usability of the system. The visualization of data is important which can help the user understand the information in detail.

Keywords: Internet Service Providers, System Development Life Cycle, Data Visualization.

