

RADAR

Real-Time Analytics
Dashboard Application for Retail



Overview:

RADAR is a software solution for B2C enterprises built using ITC Infotech's handy tools (NLP and Sentiment Analysis Engine), and by utilizing Hadoop's technologies including HDFS, Apache STORM, Apache SOLR, Oozie and Zookeeper to help enterprises maximize sales through data-based continuous re-pricing.

Using RADAR customized for their environment, B2C businesses such as brick and mortar retailers, online retailers and hospitality service providers can track the following for any number of products/ services in their portfolio:

- Social Sentiment for each product or service they are offering
- Competitive Pricing/promotions being offered through social media and the web

With this solution, retailers can create continuous re-pricing campaigns and implement them real-time in their pricing systems.

RADAR can then further track the impact of re-pricing on sales and continuously compare it with social sentiment.

Retailers can also expose a part of RADAR their customers as a way to show end customers' social sentiment along with comparative reviews for products being sold, thereby helping to close sales faster by providing valuable information to the users.

RADAR uses Apache STORM for real-time data processing and Apache SOLR for indexing and data analysis. This demonstration is built on top of a proprietary text analysis engine developed by ITC Infotech.

In the example below, a dataset of about 1500 TV models was extracted and natural language text in the data associated with each model was analyzed using this engine. Data for each television model was gathered from a very large number of user reviews and web pages. Tweets on the other hand are processed real-time to extract relevant deals about televisions.

The solution architecture is described below. Do contact us to learn more and see how we can help make RADAR work for you.

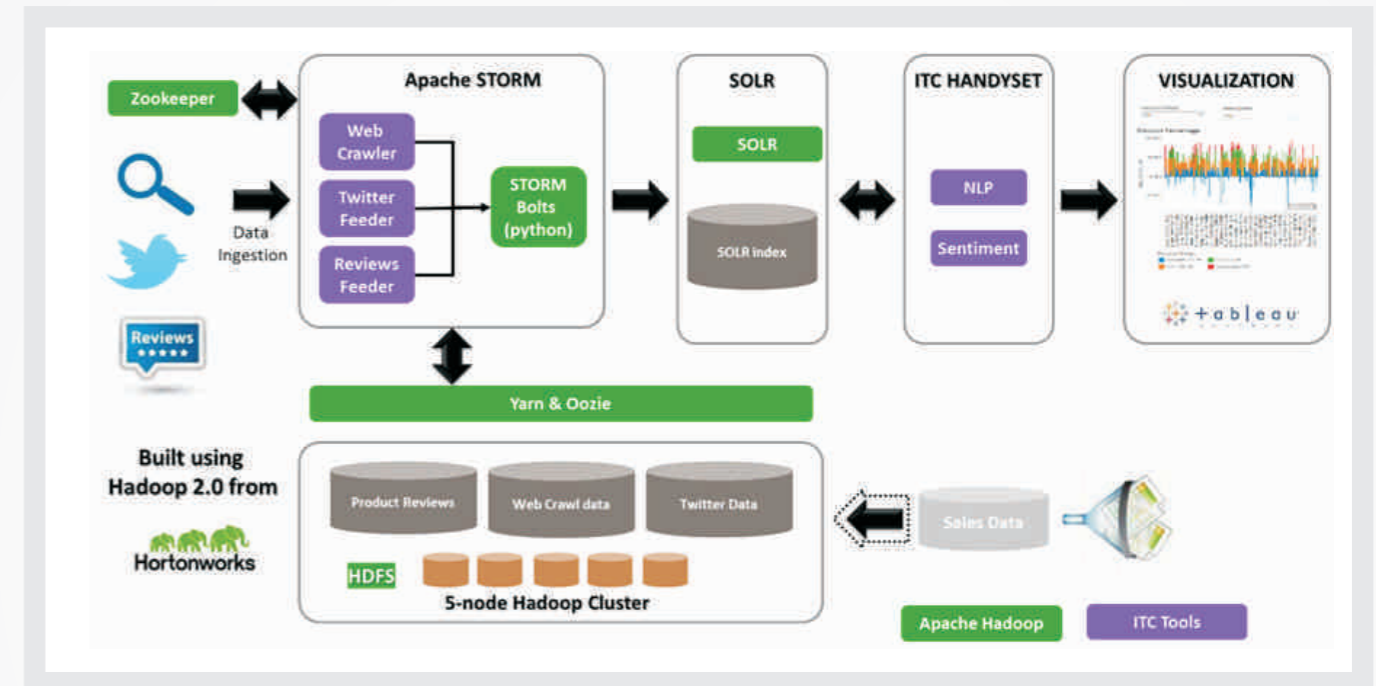


Figure 1. RADAR - Solution Architecture

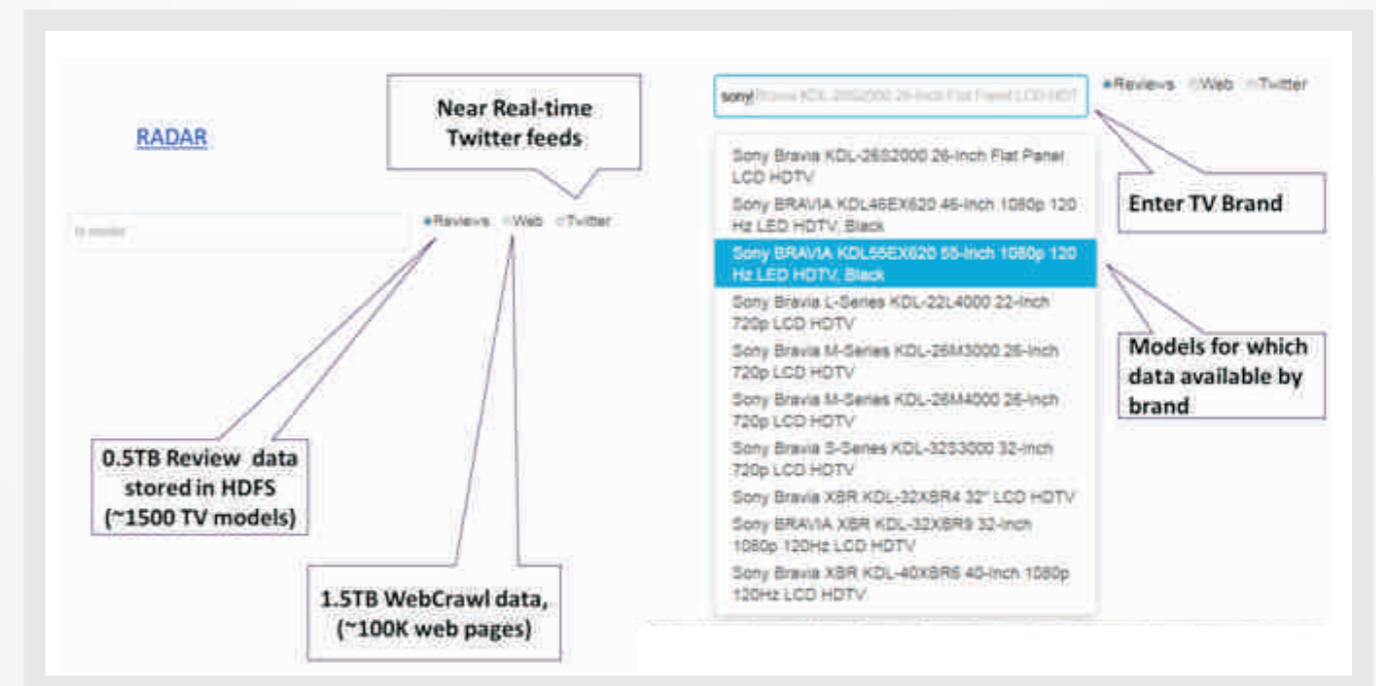


Figure 2. RADAR - Input Screen

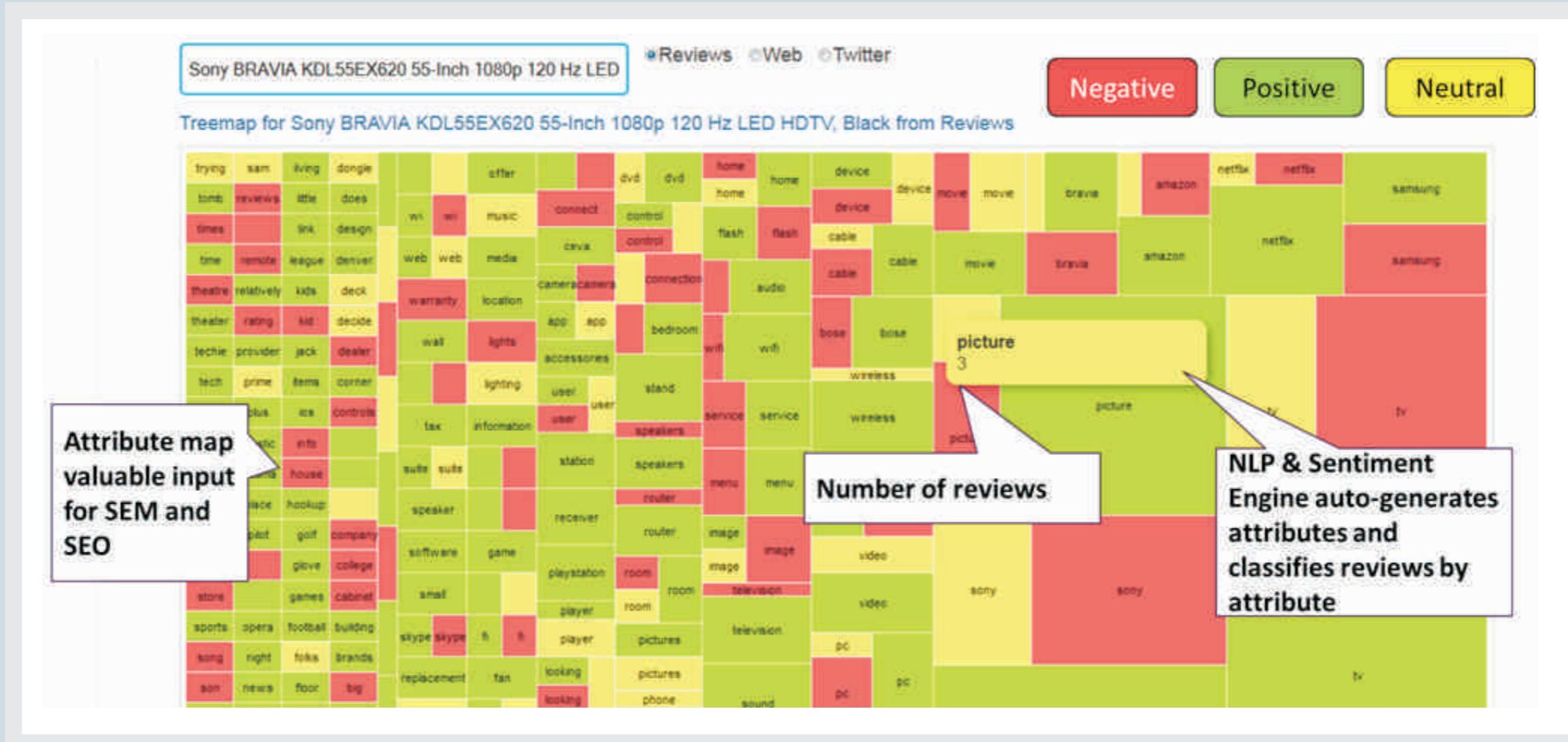


Figure 3. Sentiment analysis of reviews for the chosen product – Reviewed attributes are auto-generated – Treemap shown using D3

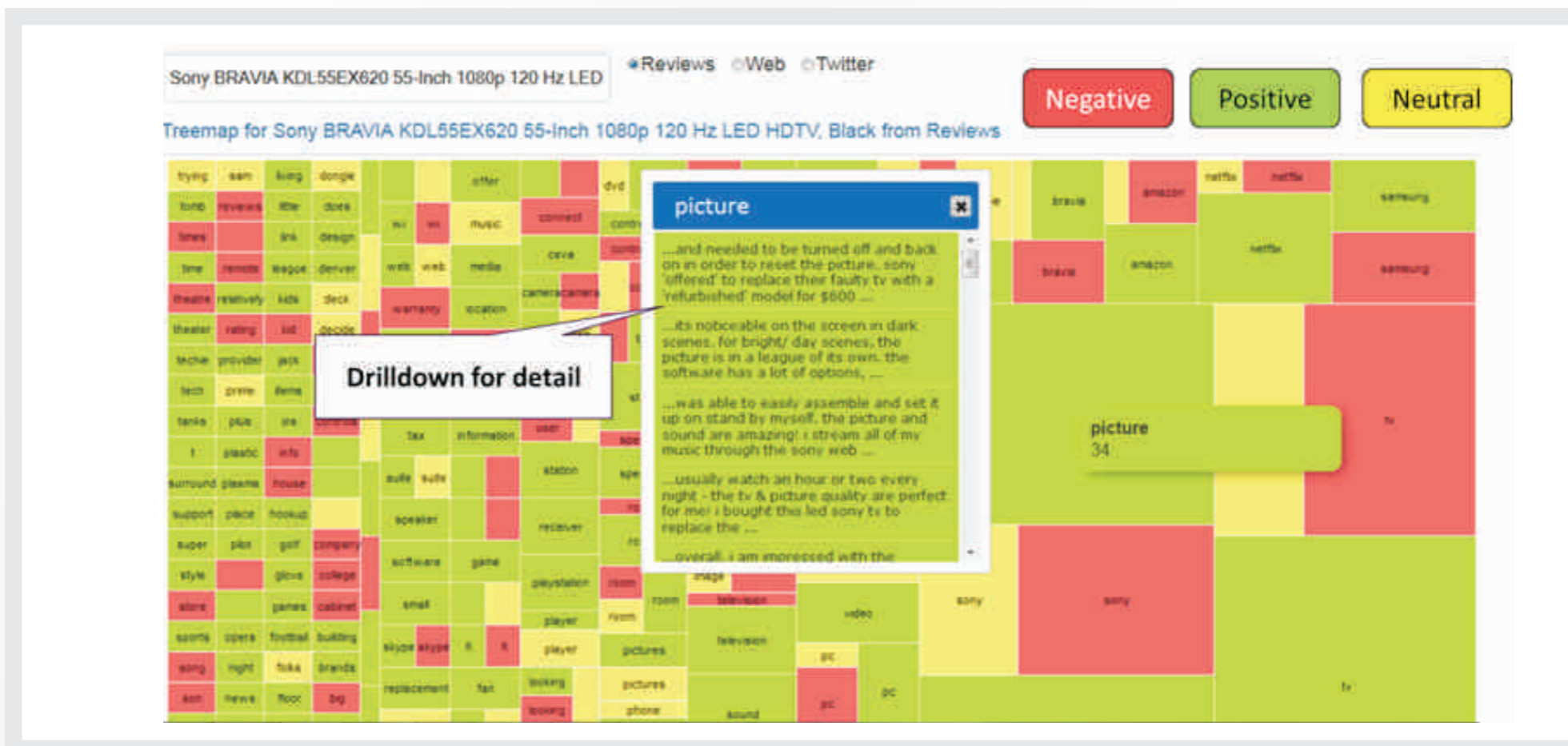


Figure 4. Instantdrill-down available for any attribute

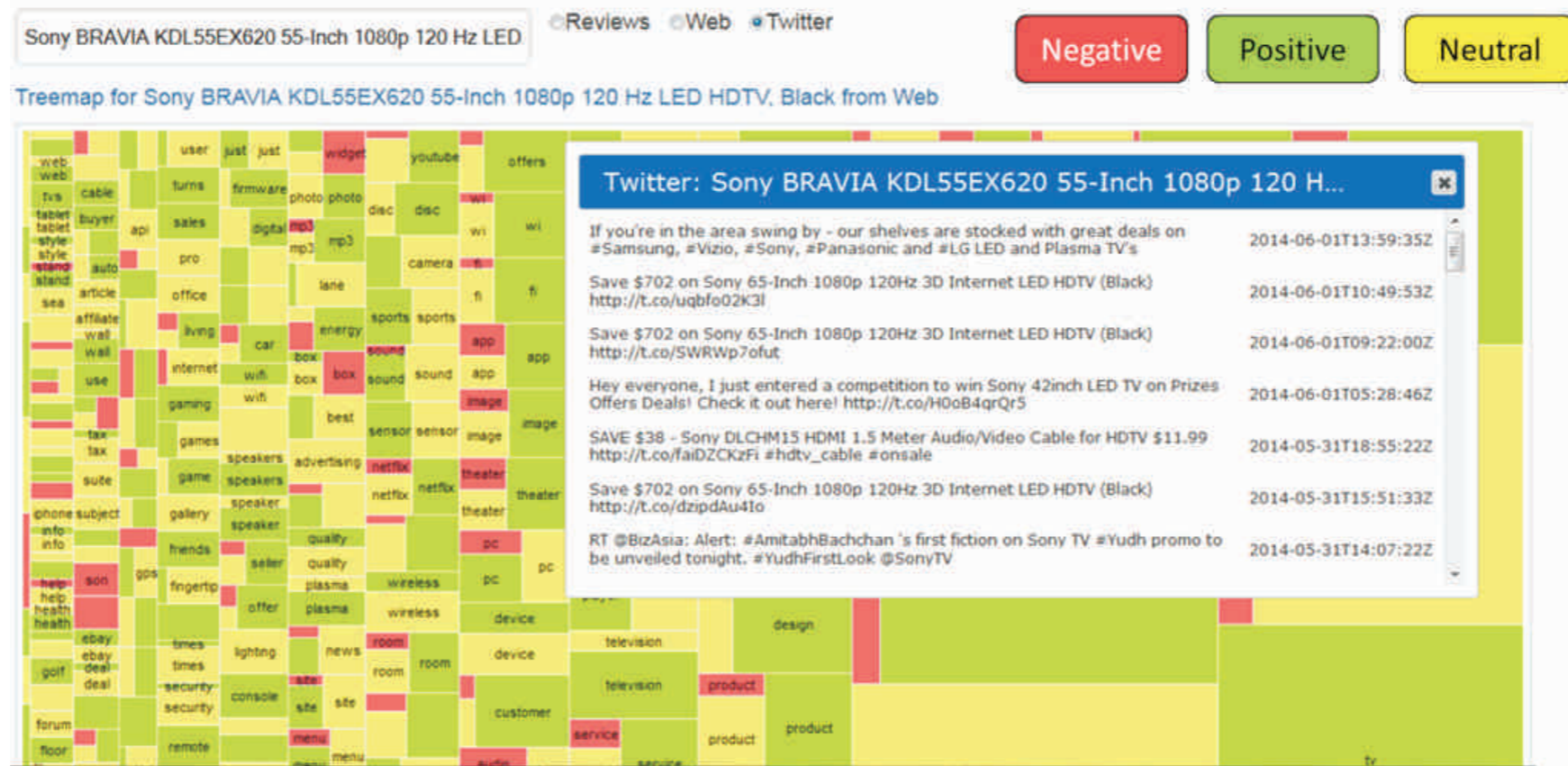


Figure 5. Twitter deals analysed real-time and then associated with the product

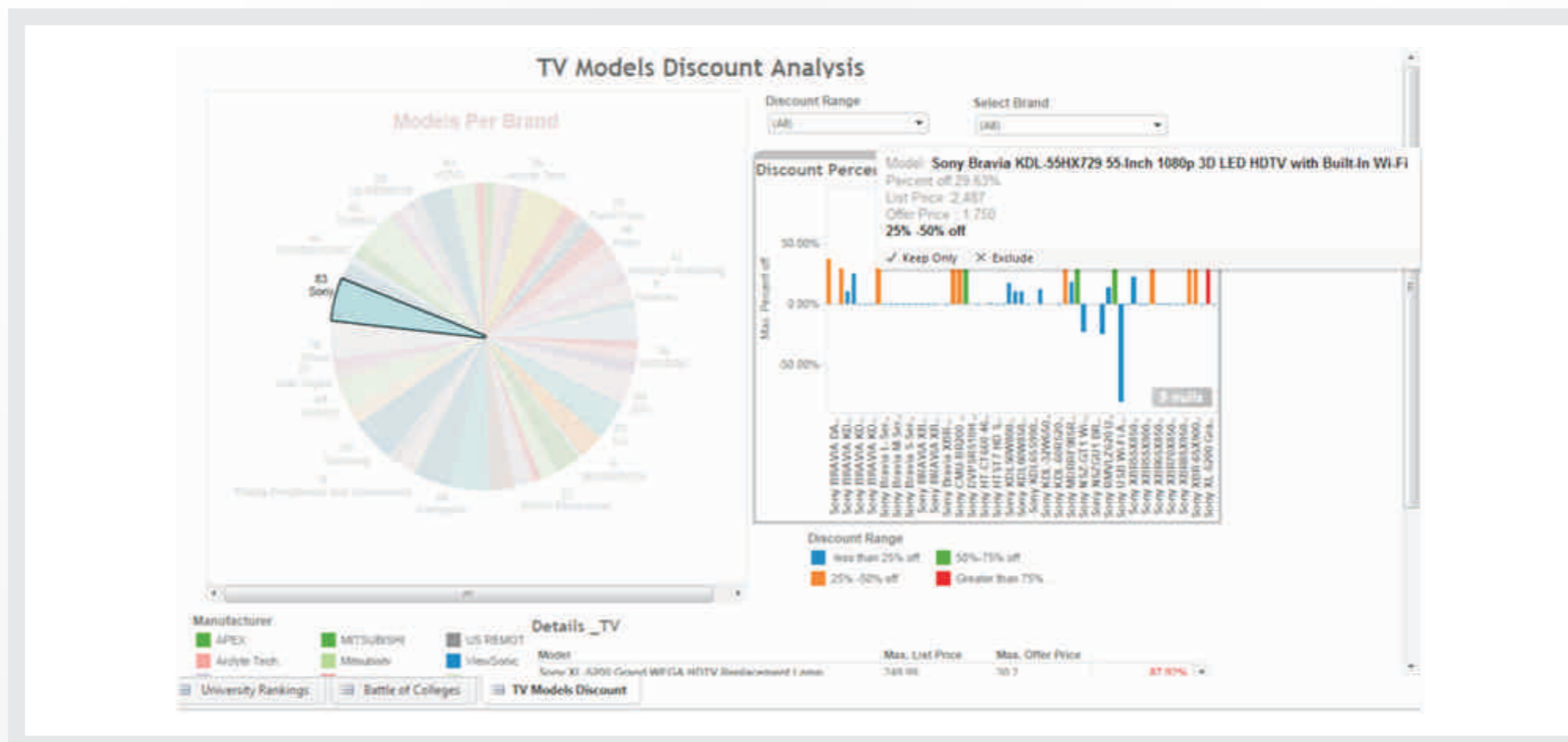


Figure 6. Competitor discounts offered (per product) – interactive analysis using STORM; visualization using Tableau

For more information, please write to: contact.us@itcinfotech.com
www.itcinfotech.com