ClickAstra
Clickstream Data Transformation and Analytics Solution

Organizations that are Omni Channel and having a strong presence on web, mobile, social, kiosk channels, have access to lot of vital insights on their customers’ behavior as they leave behind a digital footprint. Clickstream logs composed of thousands, millions or even billions of hits tell the story of views, add to carts, checkouts, likes and even bounces at every point in the shopping journey. The challenge lies however, in ingesting and transforming the clickstream data in an optimal time-frame to extract key metrics/ KPIs and leverage the metrics for further analysis.

Clickstream data files are massive, ranging from 10s of GB to 100s of GB in size per day. The data is typically in semi structured format, with complex schema, that must be parsed, structured, cleansed and loaded on a regular basis before it can provide value. This process often introduces additional cost, complexity and delay into the process. So the ability to process the raw clickstream data files in a rapid, cost-effective and scalable manner is very critical. Hadoop and its eco-system tools provide the right platform for processing and analyzing clickstream data efficiently.

ClickAstra developed by Happiest Minds is a unique solution which does ETL on clickstream data. The highlight of this solution is that it drastically reduces the development cycle for ETL on clickstream data from few months to few weeks. It also computes KPIs at Session level, Customer Level and Item Level which give insights into customer browse and buying behavior. And auto-generates KPIs and metrics that provide a head-start for further analytics.

ClickAstra is the smartest and fastest way for building several big data applications including recommendation engine, visitor segmentation & lifetime value, cart abandonment analytics, path to purchase analysis, fraud and weblog analytics etc.

What business challenges are solved?

Own your web analytics data
The way vendor tools process and interpret the clickstream data (by grouping and aggregating) reduces the analysis value it can provide. So own your clickstream data, transform it without losing any record and feed to different analytics, modeling and other applications to get more valuable insights.

Better Performance, Scalability & Storage Optimization
Organizations can process more data in less time using the same, or fewer, resources and care is taken for better data storage optimization by using relevant file formats and compression formats.

Faster Deployments & Lower Costs
Reduces the development cycle effort to few weeks from few months. Organizations reduce capital and operational expenses by eliminating the need for additional compute nodes on the cluster, due to more efficient hardware utilization, and best practices considered in the solution.
### Happiest Minds ClickAstra in the Modern Data Architecture

**Features & Benefits of Combined Solution**

ClickAstra provides a smart approach to transform clickstream data and do analytics with Hortonworks Data Platform and Hadoop and its eco-system tools.

- Handles broken records
- Handles schema changes automatically
- Generate generic and ad hoc metrics
- Efficient data preparation
- End-to-end Automation
- Reduces the development effort to few weeks from few months

**Sample Metrics that are auto-generated:**

**Session Level metrics**
- Number of clicks in each session
- Difference in time between successive sessions
- Average time spent on Page

**Customer Level metrics**
- Number of visits at different time periods
- Average duration of visit
- Average purchase on the visit
- Difference in time between successive visits

**Item Level Metrics**
- Number of customers viewed the item
- Conversion rate of the item
- Number of customers compared the item before purchase

**Customer and Item Level Co-relations**
- Number of times customer viewed that item
- Number of times customer compared that item with other items
- Number of times customer purchased that item

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**About Happiest Minds Technologies:**

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, AI & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, blockchain, etc.

Positioned as “Born Digital. Born Agile”, our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East.

To know more about our offerings. Please write to us at business@happiestminds.com

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For more: www.happiestminds.com