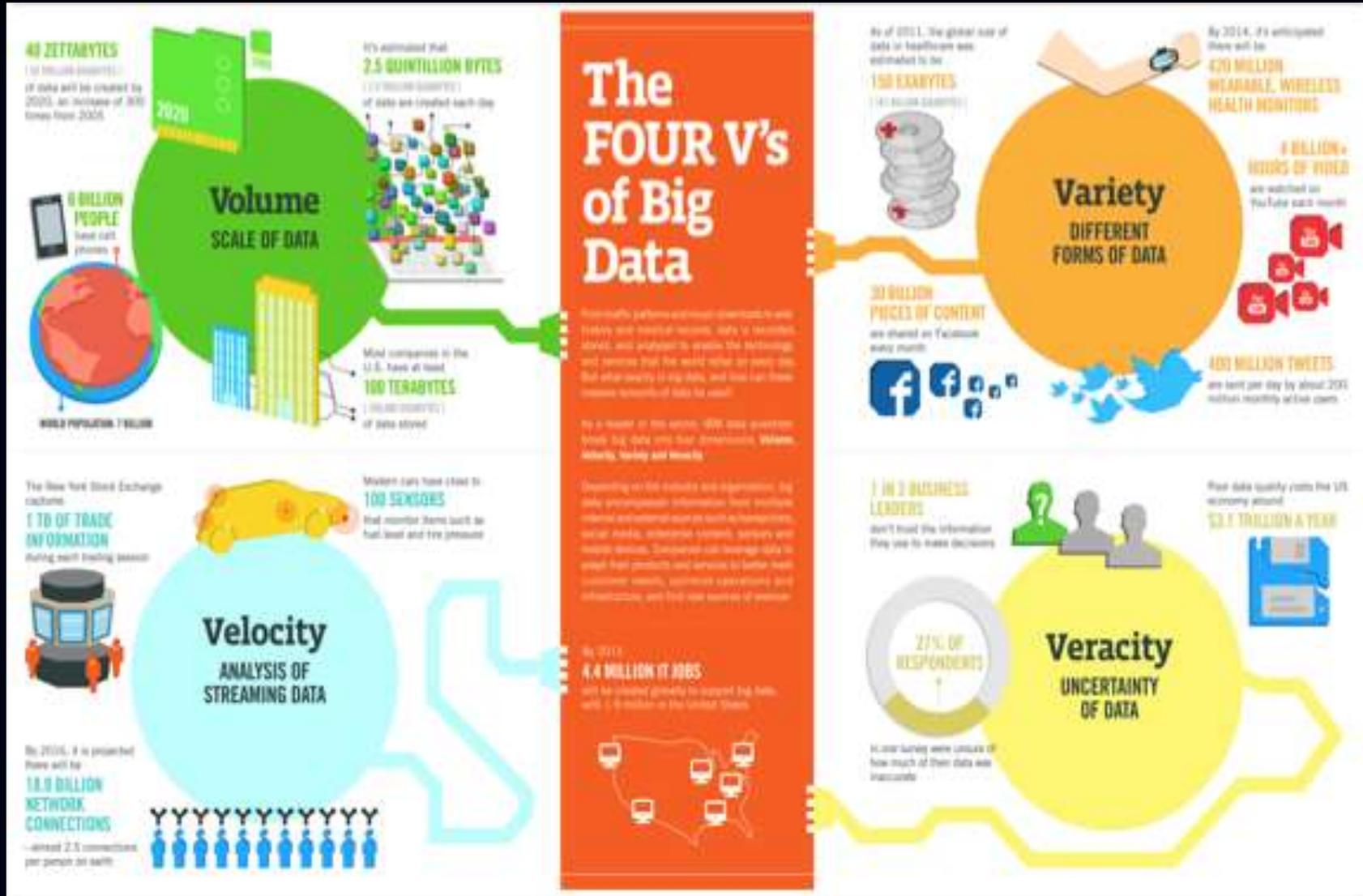


Big Data



What is Big Data ?





The Four V's of Big Data

- Volume – Yottabyte, Zettabyte, Petabyte, Terabyte, Gigabyte, Megabyte
- Velocity – Real Time, Near Real Time, Periodic, Batch
- Veracity – Anomaly, Biased, Incomplete, Noise
- Variety – Unstructured, Social, Sensor, Mobile, Video, Photo, Audio, Database, Table

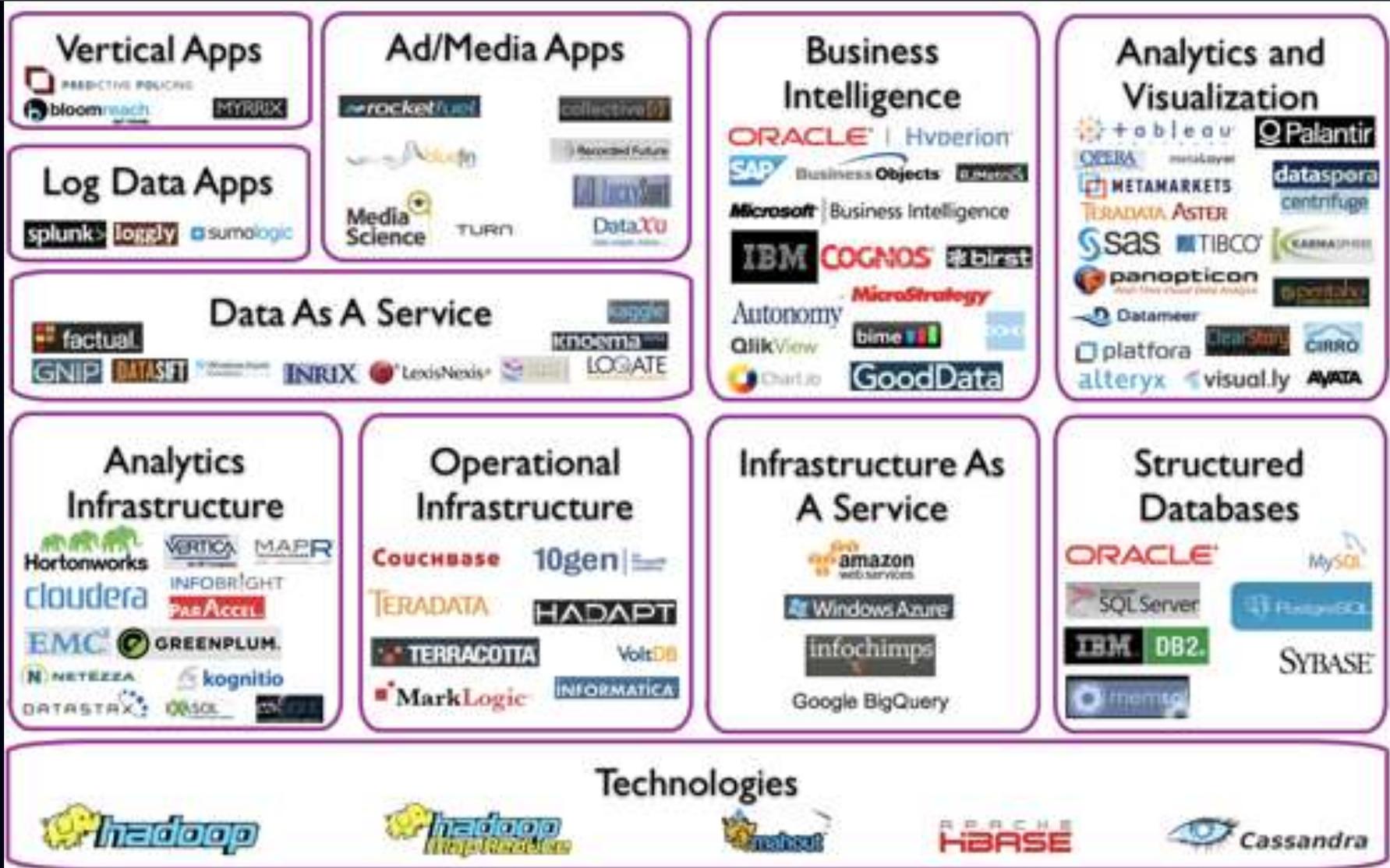


Use Cases of Big Data

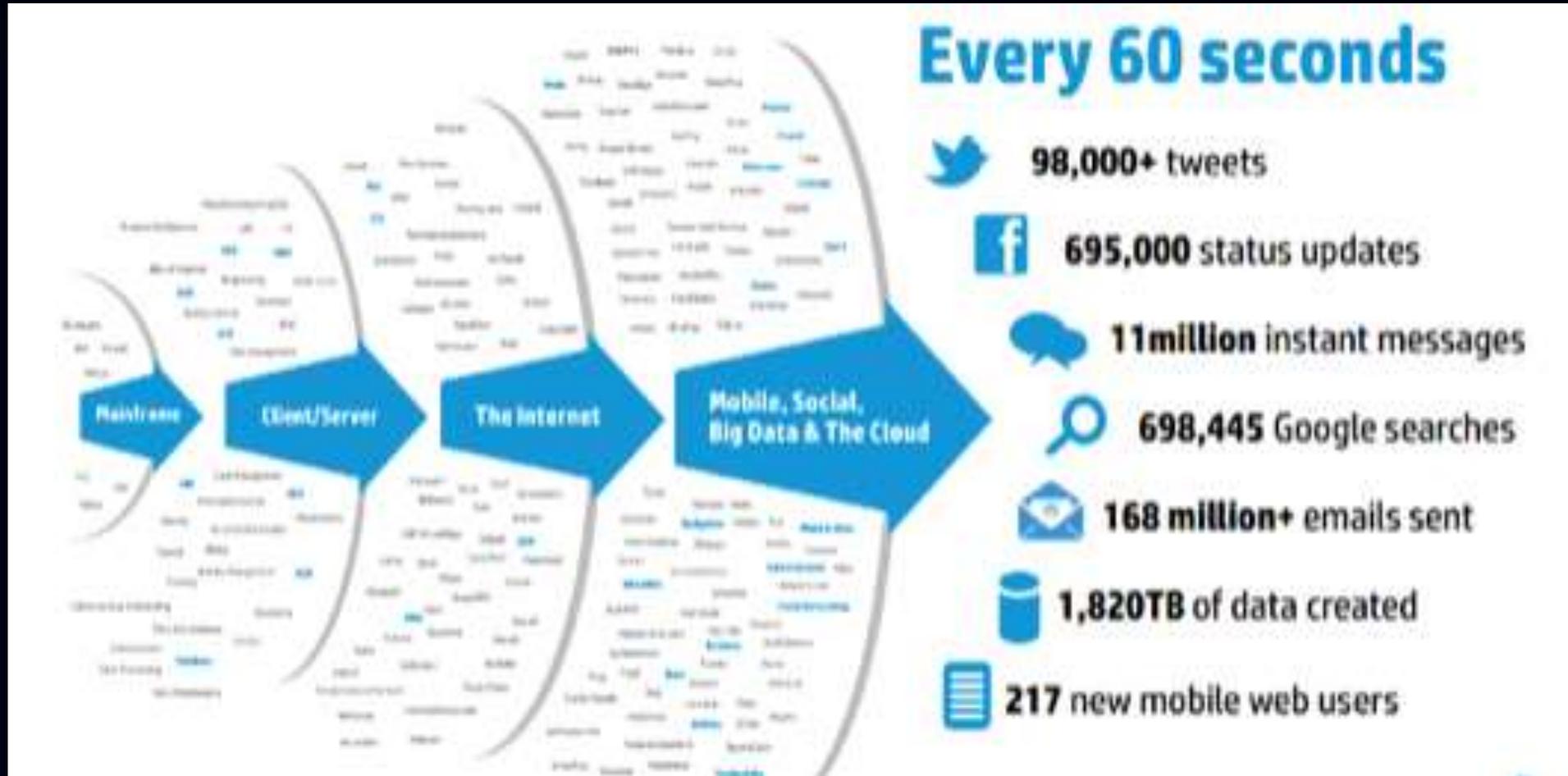




Big Data Landscape



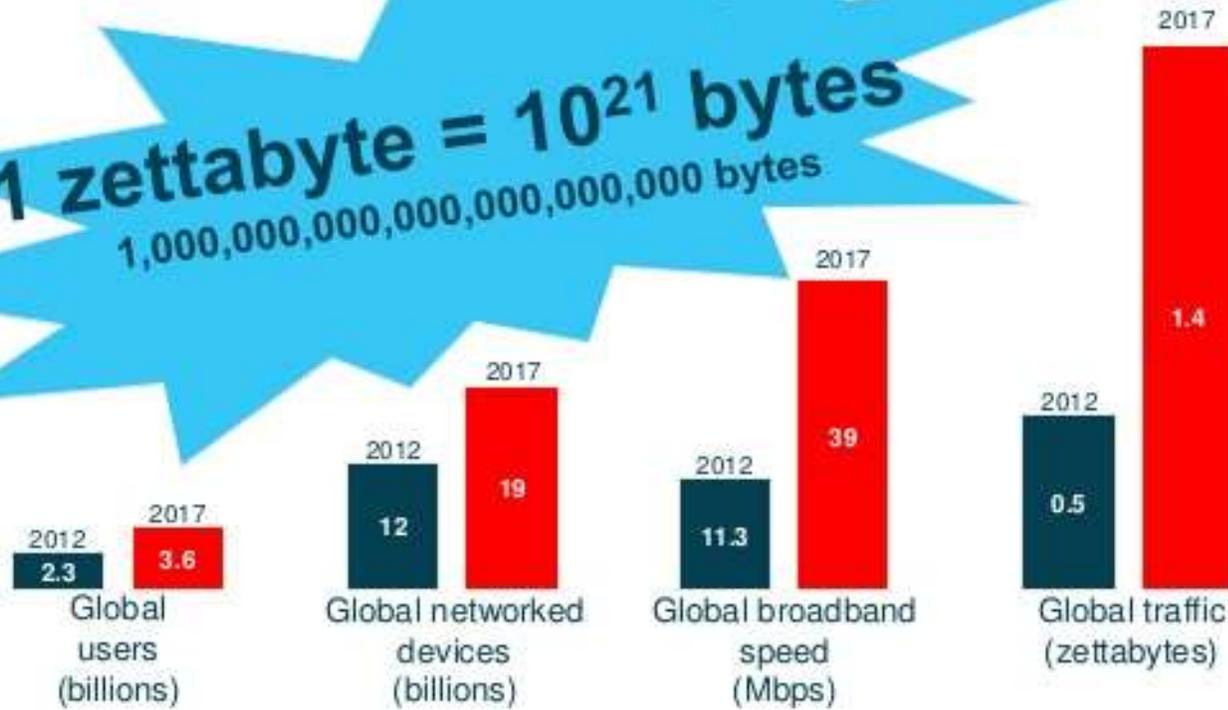
How fast is data growing ?



How fast is data growing ?

Data growing forecast

1 zettabyte = 10^{21} bytes
1,000,000,000,000,000,000,000 bytes



http://www.cisco.com/en/US/netsol/ns827/networking_solutions_sub_solution.html#-forecast



Top Big Data Use Cases





Big Data and Horse Racing

Volume – Velocity – Veracity – Variety

- Tote companies
- Equibase
- TrackMaster
- Jockey Club
- Daily Racing Form
- Brisnet
- InCompass

- Equineline
 - CHRIMS \ PGSI
 - Regulators
 - RCN
 - Video
- Universities and Colleges



Data Touch Points

- Past Performances – Coupled with wagering data
- Weather – Track conditions and speed related to weather conditions
- Track conditions – Temperature and moisture throughout day
- Morning workouts – Real time results from tracks and training centers
- Scratches – Analysis of scratches per horse
- Equipment changes – Analysis of equipment changes
- Jockey changes – Analysis of Jockey changes



Data Touch Points

- Advanced Deposit Wagering – Segment where and how wagers are being placed
- Morning Line odds – Overlay over MLO to Opening and Current
- Stop betting times – Histories and analysis of wagering cycles by horse and pool
- Race times by horse - Comparing race times by horse, track, conditions, etc.
- Odds changes – Timing intervals of odds changes by race, horse, pool, conditions etc.
- Over Lays - That novices can understand



Data Touch Points

- Percentage odds – Graphics that show both
- Analysis of betting patterns – Analysis of wagering patterns
- Horse imaging – Workout, Paddock, Post Parade, Race
- Paddock – Temp., Humidity, Horse's Condition
- Horses' Running Analysis - Overlays of horses running styles
- Jockeys' Ridding Analysis - Overlays of Jockeys' ridding styles

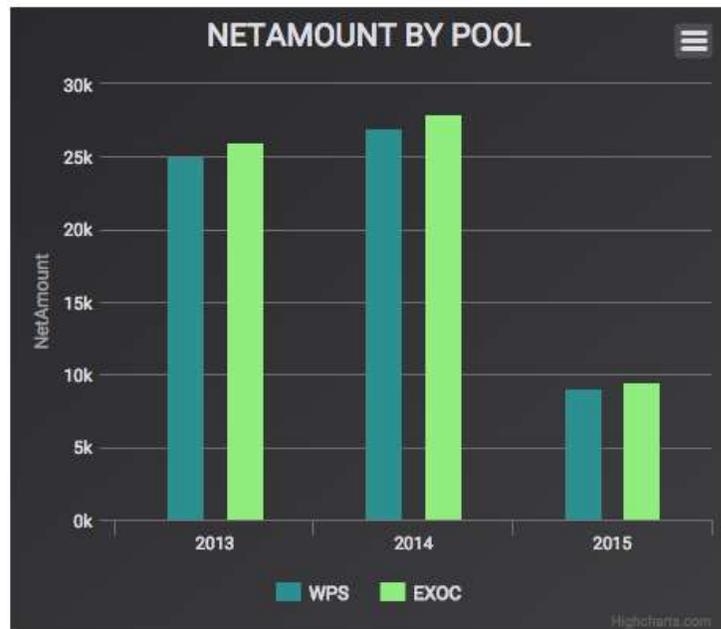


BIGDATA - LIVE REPORTING

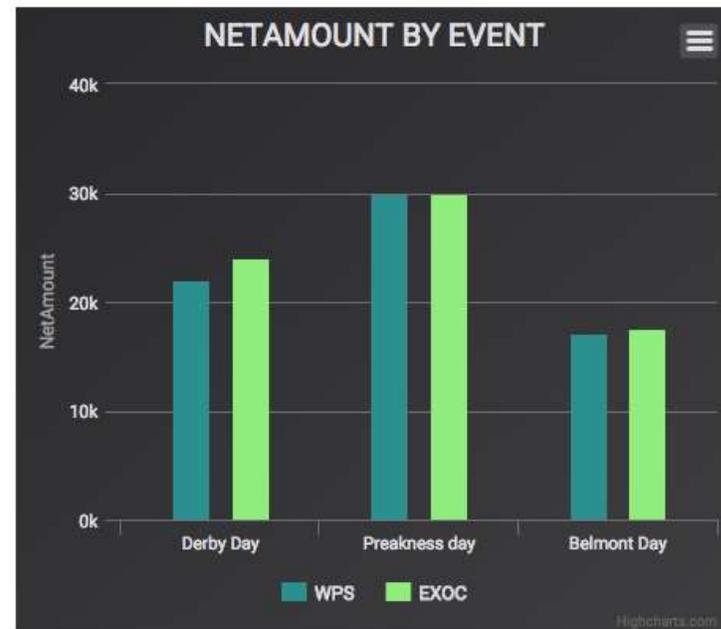
RACE 1 STOP

Total Handle \$ 1,167,432,027

NETAMOUNT BY POOL



NETAMOUNT BY EVENT



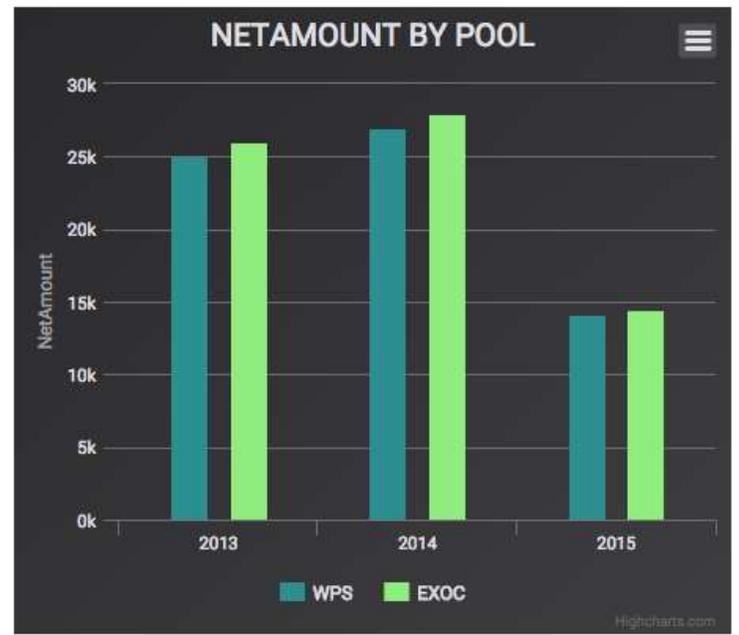


BIGDATA - LIVE REPORTING

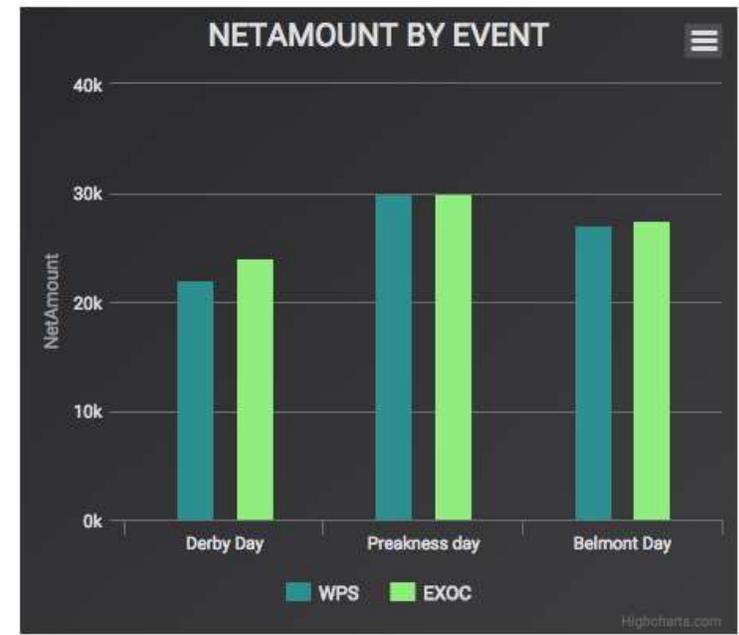
RACE 1 STOP

Total Handle \$ 1,315,587,302

NETAMOUNT BY POOL



NETAMOUNT BY EVENT





BIGDATA - LIVE REPORTING

RACE 1

STOP

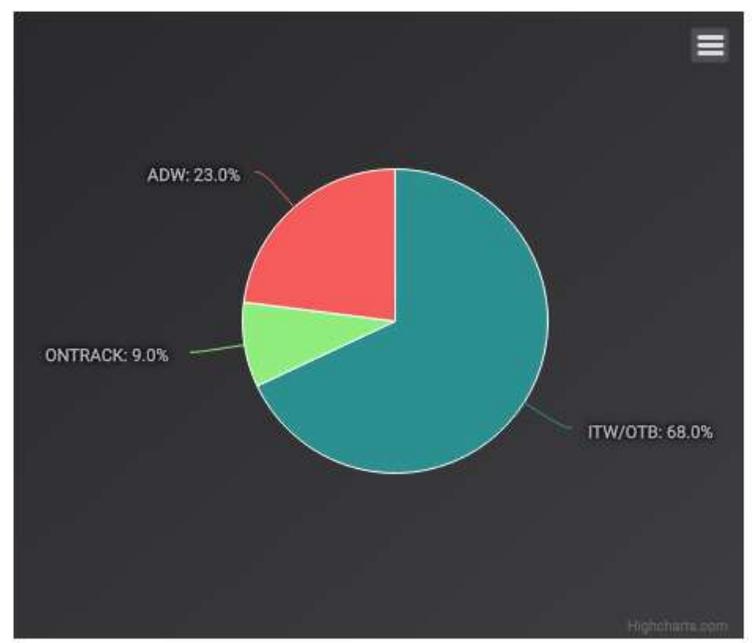
2014

Total Handle \$ 3,812,271,285

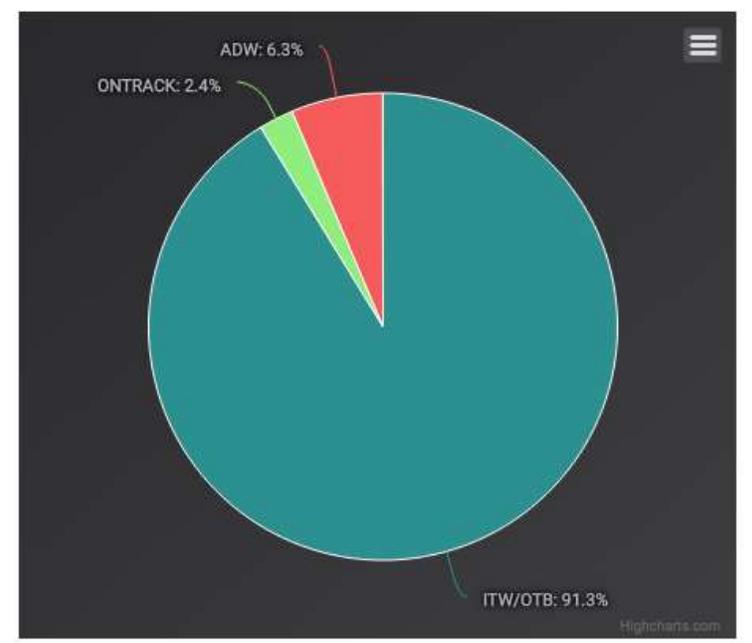
2015 - LIVE

Total Handle \$ 1,027,466,521

HANDLE BY SOURCE SUMMARY



YEAR TO DATE HANDLE SUMMARY





BIGDATA - LIVE REPORTING

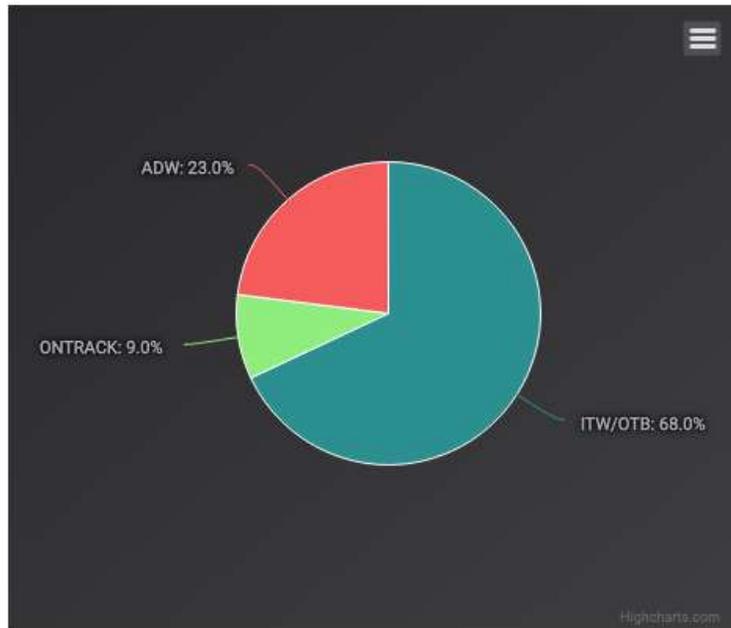
RACE 1

START

2014

Total Handle \$ 3,812,271,285

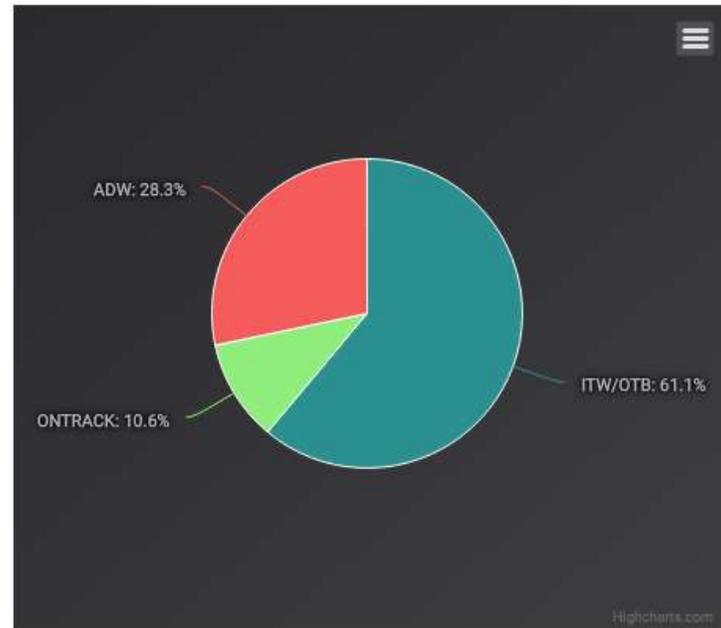
HANDLE BY SOURCE SUMMARY



2015 - LIVE

Total Handle \$ 1,556,883,313

YEAR TO DATE HANDLE SUMMARY





THANK YOU!