

Statistics-1

(Orientation on introduction to statistics)

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Power of Statistics!

What is/are Statistics

Parts of Statistics

Vocabulary of Statistics

Data Mining

Knowledge Discovery

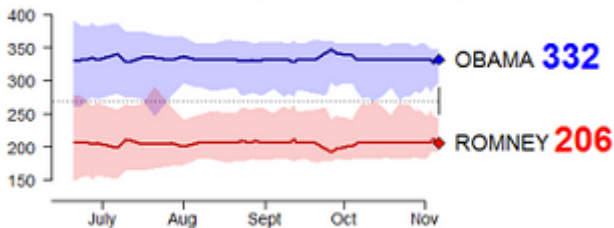
- ▶ Drew Linzer used R Language for US elections campaign and predicted the outcome most accurately than others.
- ▶ Drew used certain methodology (we may discuss little later), and forecasted on June, 23, that the outcome would be Obama 332 votes, Romney 206. Over the time, he used byesian statistics to incorporate real time data, as a result he found it to be 332 : 206 till the election day. Below is one of the answers given by Drew to *LA Times* during the interview:

- ▶ How is it possible?

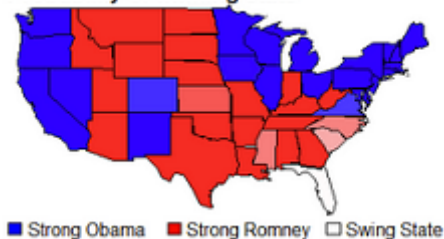
STATISTICS! I did it by systematically combining information from long-term historical factors economic growth, presidential popularity and incumbency status with the results of state-level public opinion polls. The political and economic "fundamentals" of the race indicated at the outset that Obama was on track to win reelection. The polls never contradicted this, even after the drop in support for Obama following the first presidential debate. In fact, state-level voter preferences were remarkably stable this year; varying by no more than 2 or 3 percentage points over the entire campaign (as compared to the 5 percent to 10 percent swings in 2008).

These are main findings from his study:

Electoral vote forecast (simulation median)



Probability of winning state



Everybody of you know Facebook! right!

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There are many such instances that do happens by Statistics, another aspect of statistics is **Indian Astrology**, which is full of statistics. Vedic astrologers use plethora of statistical tools to detect various astrological changes in the Universe. As per the scriptures there are three types of divisions in astrology; they are:

- ▶ Siddhanta: Indian astrology
- ▶ Samhita: Mundane astrology, and
- ▶ Hora: **Predictive** astrology.
- ▶ The term **Prediction** is very native to the language of **Statistics**. For instance, Eclipse detection is acme of Indian astrological stamina.

A noted astrologer [PV Narasimha Rao](#), did same sort of predictions as Mr. Drew in our previous example. Few of them are that; he has predicted:

- ▶ about *Kargil War* on May, 19, 1999 though *Express Star Teller Magazine* and war was happened exactly after 6 days, i.e. May, 25, 1999.
- ▶ He also predicted certain issues like: (1) Vajpayee fall and rise in 1999, (2) Fall of Gujarat government, (3) George W. Bush second term, (4) Rise of India as powerful world's economy during 2002-2011, and etc. including his prediction about Barrack Obamas re-election during 2012 elections in US.

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- ▶ Statistic Vs. Statistics

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DECISION MAKING

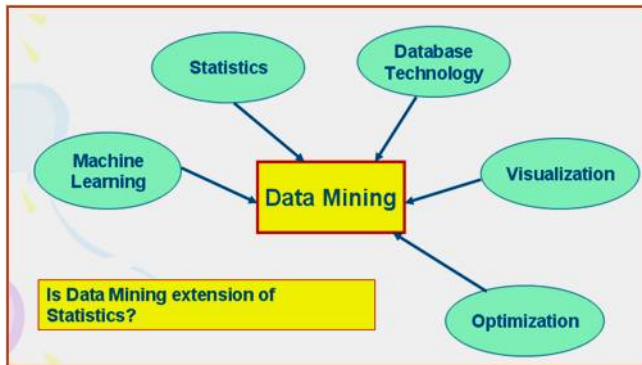
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- ▶ What is this data science?

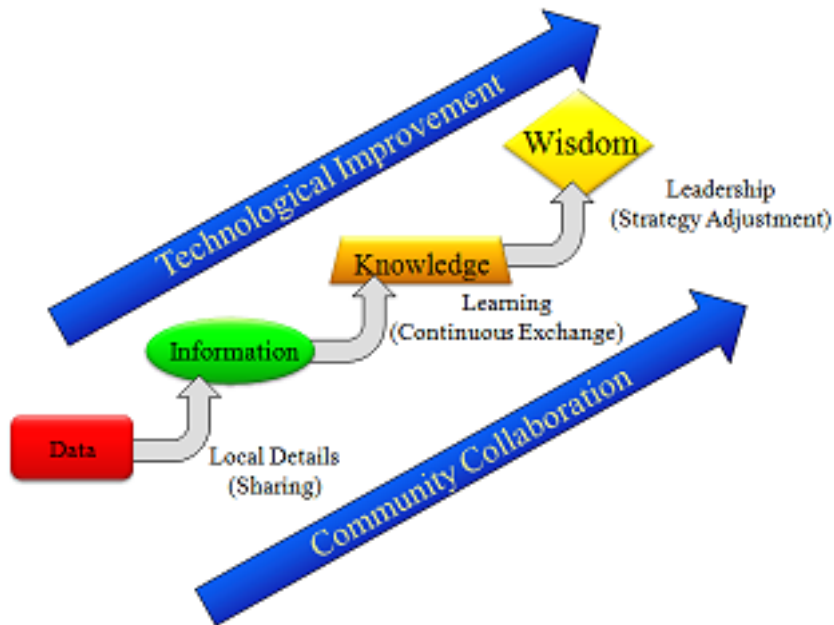


The *data mining* is the new phrase coined due to the changes in *information sciences*.

- ▶ Data mining is known as **Knowledge Discovery in Databases**.
- ▶ Some of the important parts of data mining are:



What is this *Knowledge Discovery*?



Knowledge management can be practiced in both

- ▶ personal
- ▶ organizational

One simple definition for KM is:

- ▶ a range of strategies and practices used in an organisation to identify, create, represent, distribute, and enable adoption of insights and experiences.

Thanks You!