



MonsoonSIM 2019 User & Partner Conference

Teaching data analytics



Speaker:

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Background and expectations

- Long time gamer (board & card games, strategy video games)
- Development of, design and teaching using business simulation games for more than 10 years
- Teaching analytics for past 7 years

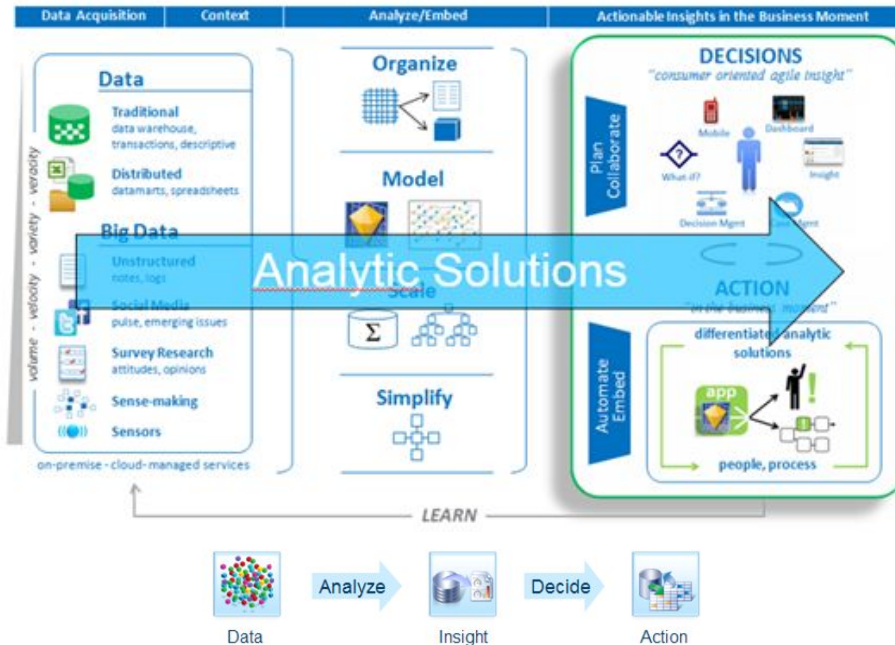
- I'm not going to teach you how to teach analytics
- I'm not going to train you to use Tableau
- I will show you what is possible and hopefully guide you towards the better path to teaching analytics with simulation games.
- The exploration of using MonsoonSim and Tableau for teaching analytics has been going on for just a few weeks.



Why do data analytics?

Gain	Gain insight about what is happening in the world around us
Understand	Understand how we can influence what happens
See	See trends or patterns in activity and behavior
Predict	Predict events and outcomes
Set	Set goals and measure events and outcomes against those goals
Take	Take actions that lead to desired outcomes and achievement of goals

Why do data analytics?

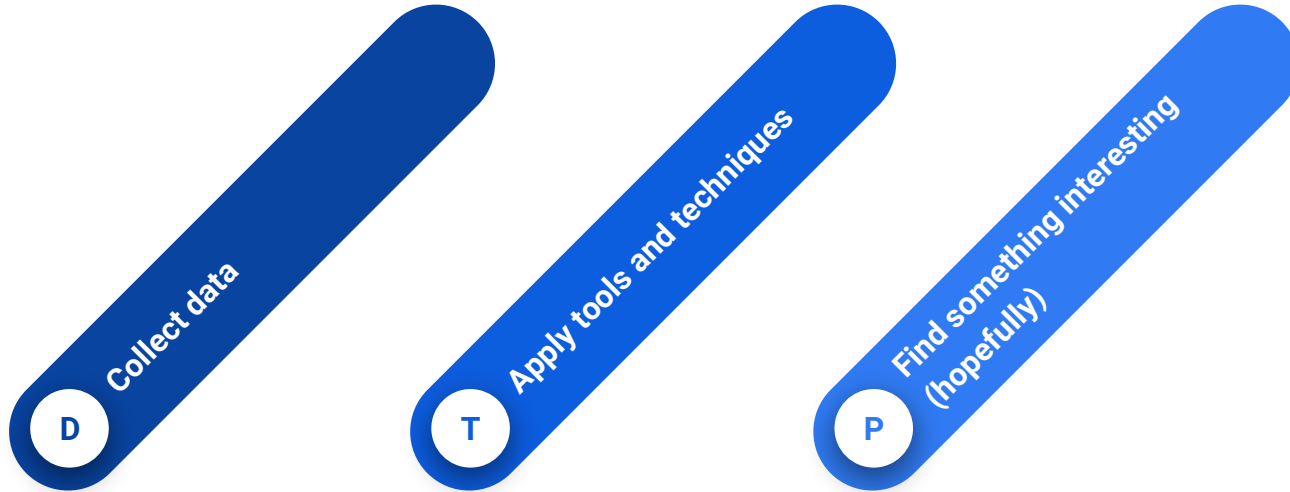


“The purpose of an analytics solution is to enable decisions based on data. It does not necessarily mean that such solutions must compute decisions. It means that whatever their output, they must **support decision making**.”

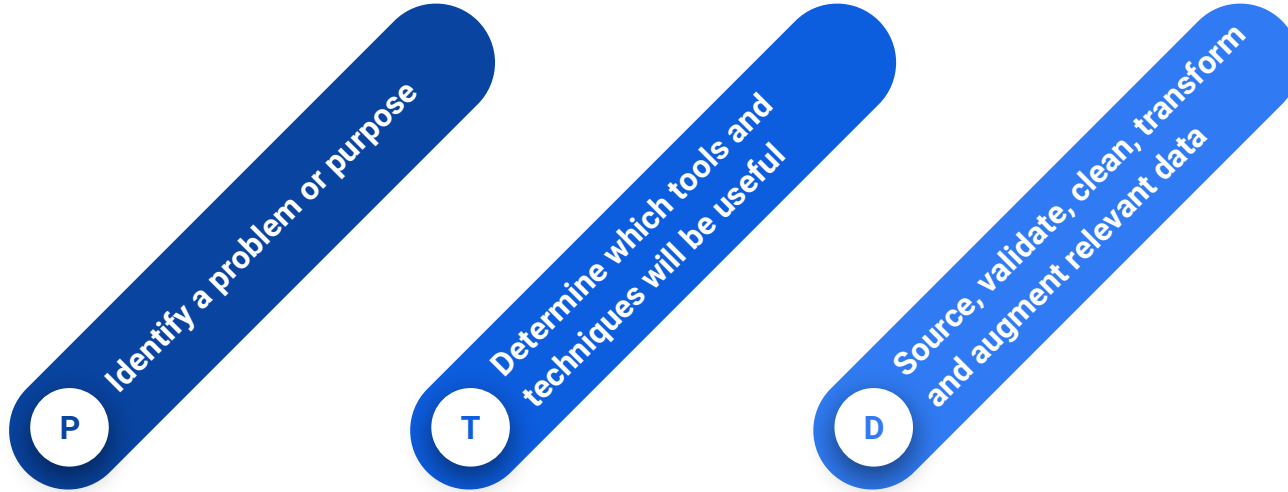
In short, analytics is a journey from data to decisions and actions, via the use of many different techniques and tools.”

– Jean Francois Puget

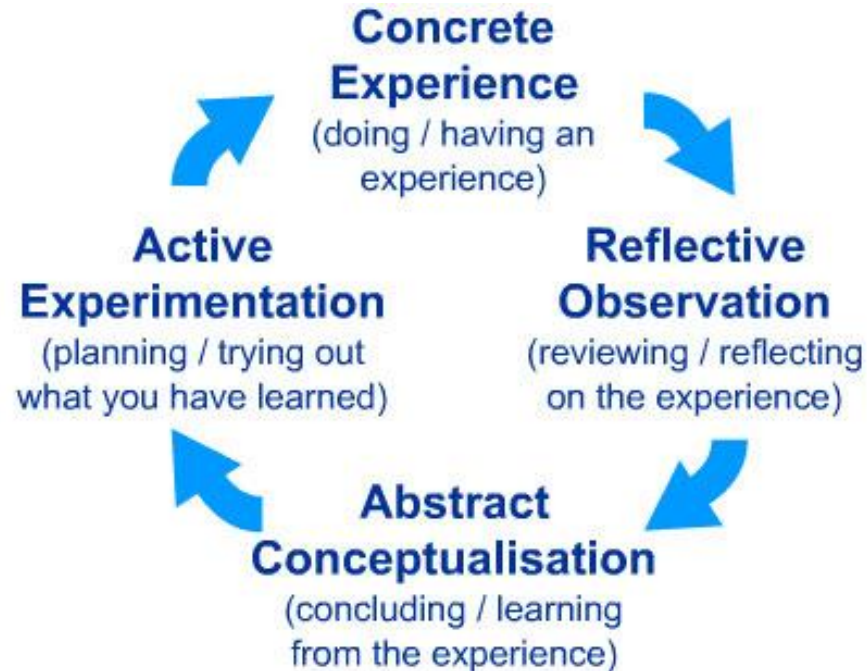
Data-centric process



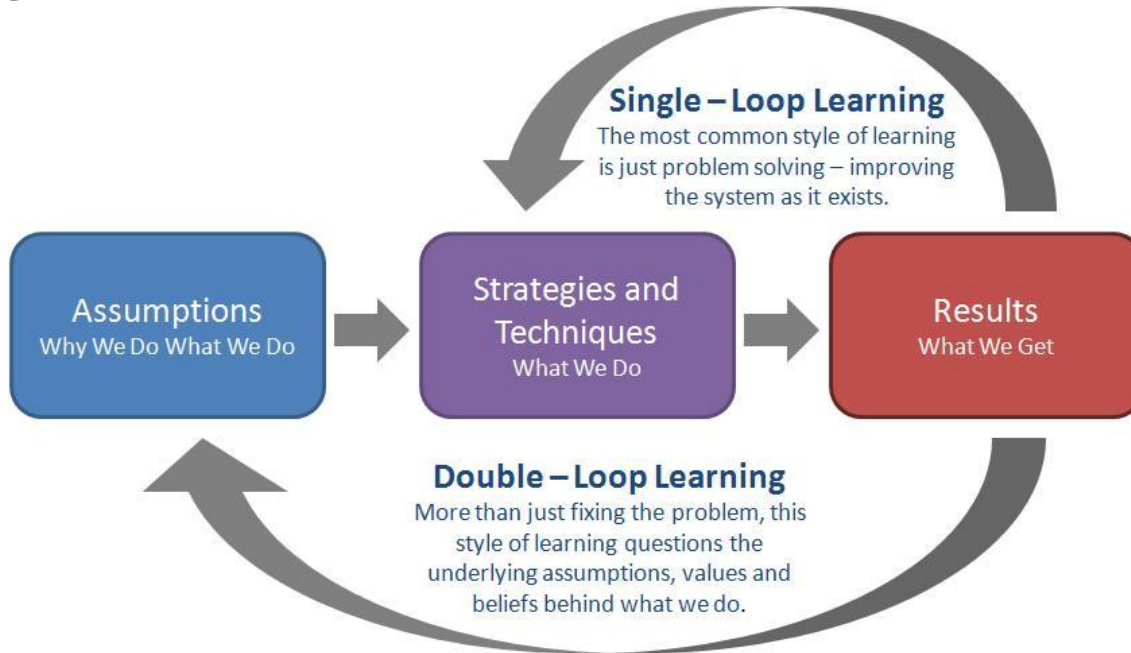
Decision-centric Process



Kolb (1974)



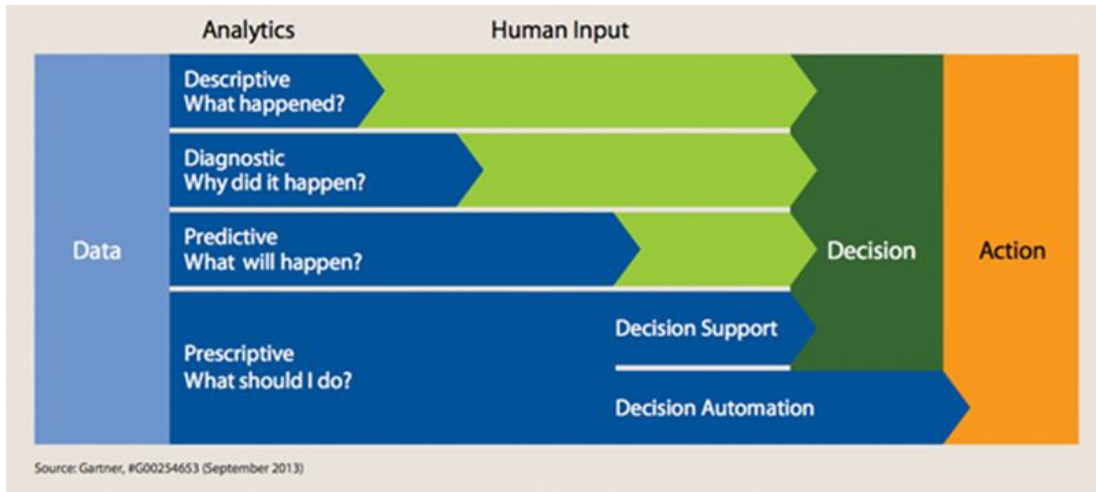
Agyris (1976)



Analytic levels

- **descriptive** - we just provide views on the data as is.
- **diagnostic** - we provide insights (e.g. patterns, or relationships) found in the data.
- **predictive** - we can use these insights to make some predictions, for instance forecasting, or identifying which employee is most likely to leave.
- **prescriptive** - we can compute decisions, e.g. schedule procurement to meet forecast needs.

Analytic Levels



These different levels depend mostly on what is automated and what is left to humans before decisions can be made.

Demonstration



Thanks!

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