

NATMEC 2016 Summary

Texas has better laser pointers than Washington



Working Towards the Future

- Much of NATMEC is about looking towards the future. We are both trying to improve what we do now, and look to set ourselves up for the future
- Is it really a sign of the apocalypse, or is it the dawn of utopia?

Changes!

- The one given is the the world of data collection and use is changing
- We are now routinely collecting data that was unimaginable even 10 years ago
 - Travel time and speed
 - Origin / destination (GPS, video object tracking)
 - Other video image process (Tarek Sayed)
 - Pedestrians, bikes, conflicts, helmet use, gender

I want to change the world

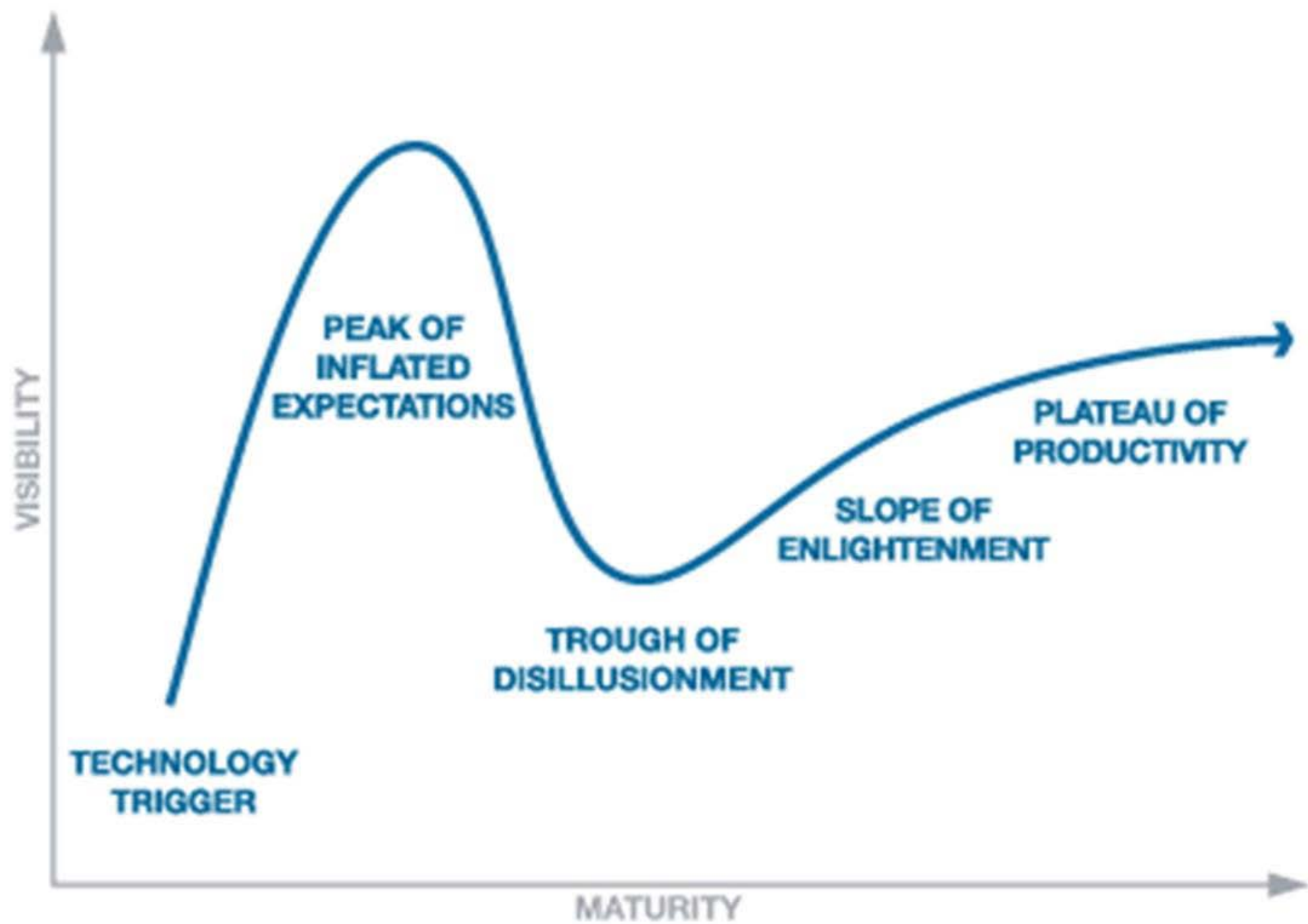
- New data WILL change the data collection and analytics world
- To be successful, we need
 - Creativity in use
 - Creativity in contracts
 - Creativity in funding
- Don't necessarily use the same analytics with new data. New data often are more effectively used with different approaches or analytics. Though it may seem counterintuitive at first, treating data as something imperfect and precise lets us make superior forecasts and thus understand our world better.
- Data managers and IT departments need to get familiar with terms and concepts like: Hadoop, Apache Storm (spouts and bolts), YARN, Spark (the Hadoop killer), MapReduce, Clojure, salting data to compress

To Everything a Season

- Not just traffic engineers and planners anymore
- Involve both planners and operations people early in the process. But help them be forward looking. What do they really need? Not just what have they historically used?
 - Multiple skills – and they have to work together
 - Domain expertise
 - Computer science
 - Graphic Design / Human factors

Watch the Hype

- Trust but verify
- Understand the data
 - Need to learn better how to work with the private sector
- Often requires that the data be used differently



Let It (the Data) Flow

- We have resistance.
- It will happen
- Let the data flow

Come Together - Right Now!

- Open source
- Sharing resources
 - Data
 - Computer code and analytics
 - NPMRDS –
 - CATT Lab – NPMRDS based MAP-21 software
- New ways to deliver results
 - Ram – from VDOT