



# BIG DATA: WHAT IT IS & WHY WE NEED IT

Actuaries' Club of the Southwest  
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Bill Moore, VP Underwriting and Medical, Munich Re



# “Big Data”

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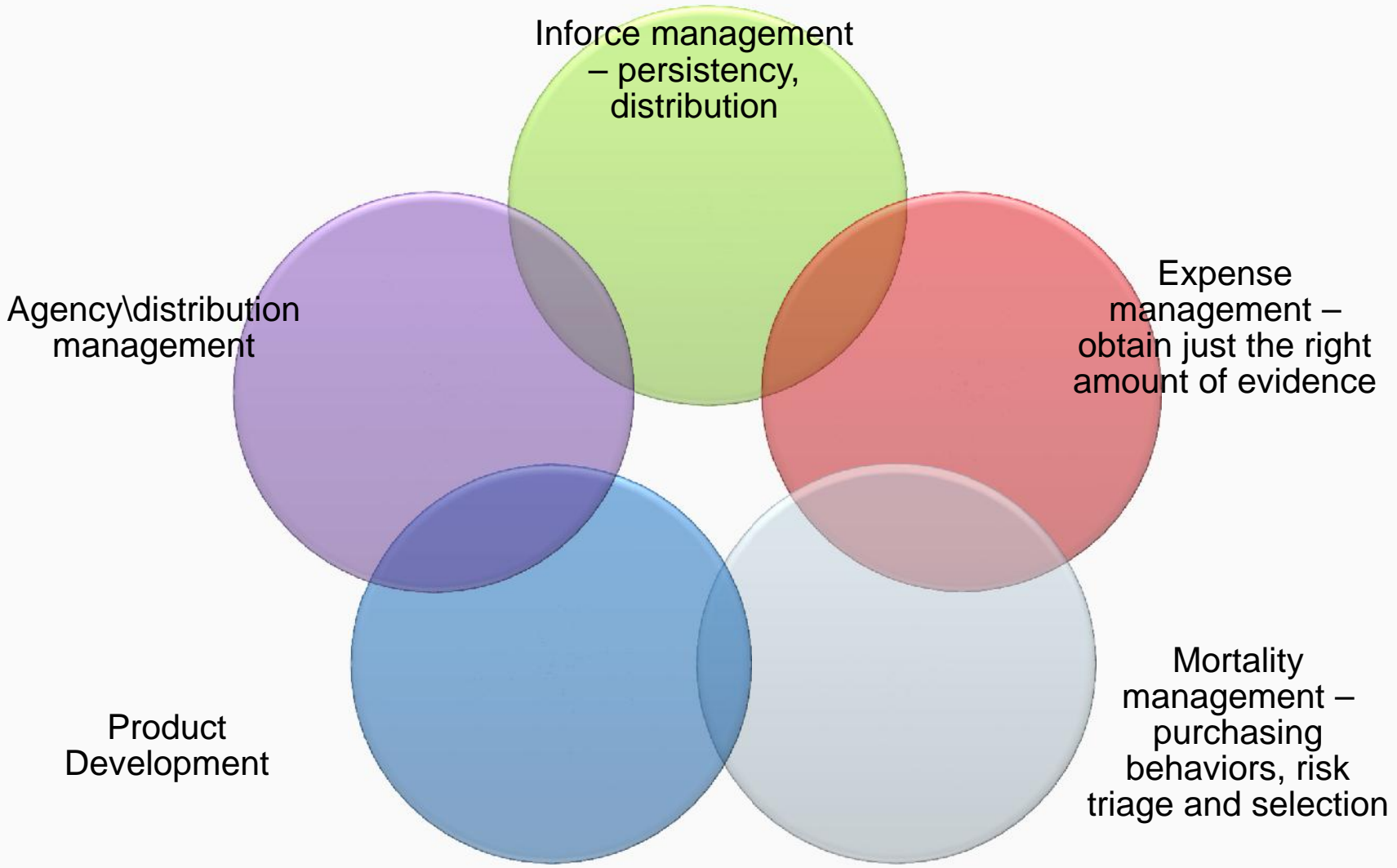
Data-driven discovery and decision making

Utilizes technology, revolutionary measurement and a point of view of how decisions will be made

More science and less gut feel

# “Big Data”





# Data types

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- Purchasing behaviors
  - Clinical
  - Laboratory
  - Pharmacy
  - Driving
  - Fraud
  - MIB
  - Financial





# How to choose?

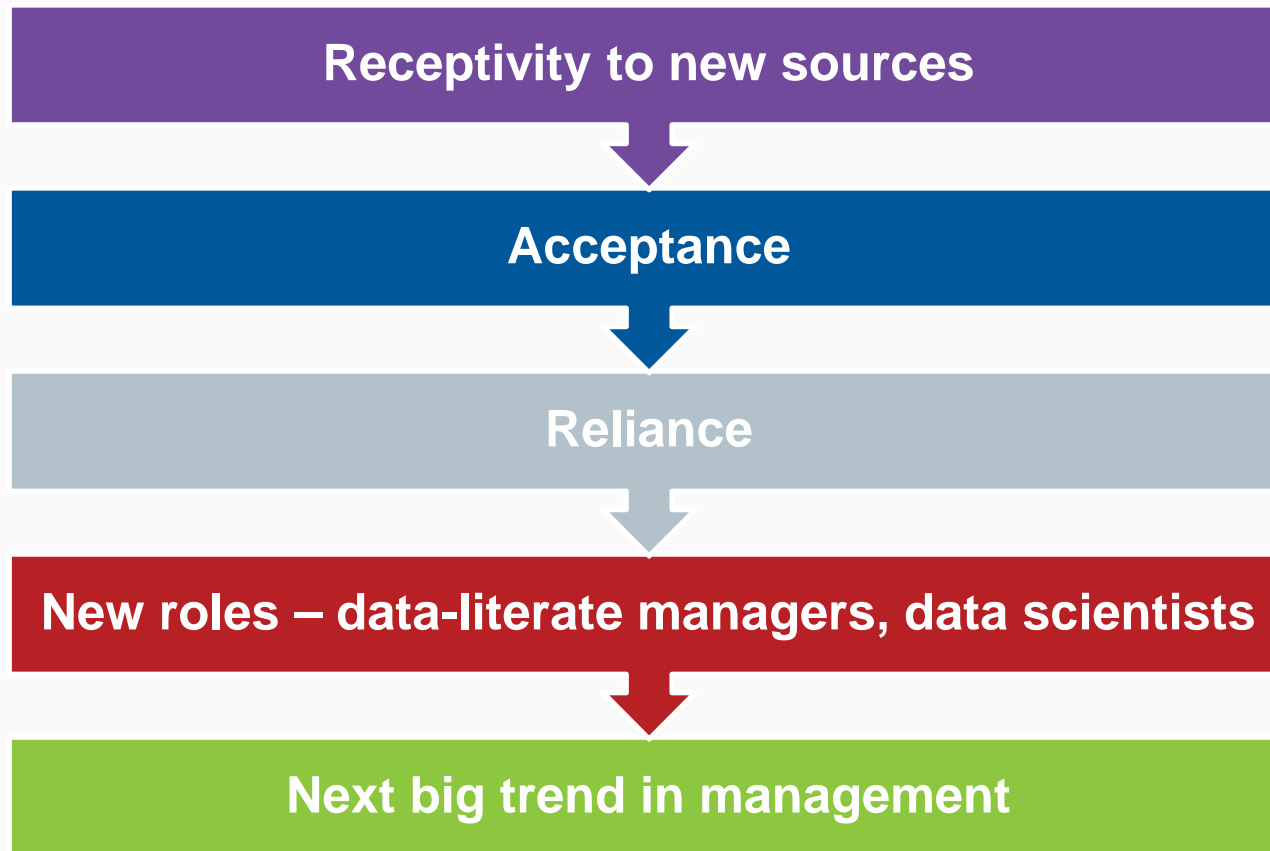
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- Due diligence of vendor
  - Relevance
  - Cost
  - Timeliness
  - Integration
  - Regulatory\Legal\Privacy
  - Consumer Impact
  - Expertise

# Optimizing value

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- Clearly defined outcomes
  - Measure success and failures
  - Determine cause
  - Remediation or Refinement
  - Business Analytics plays huge role



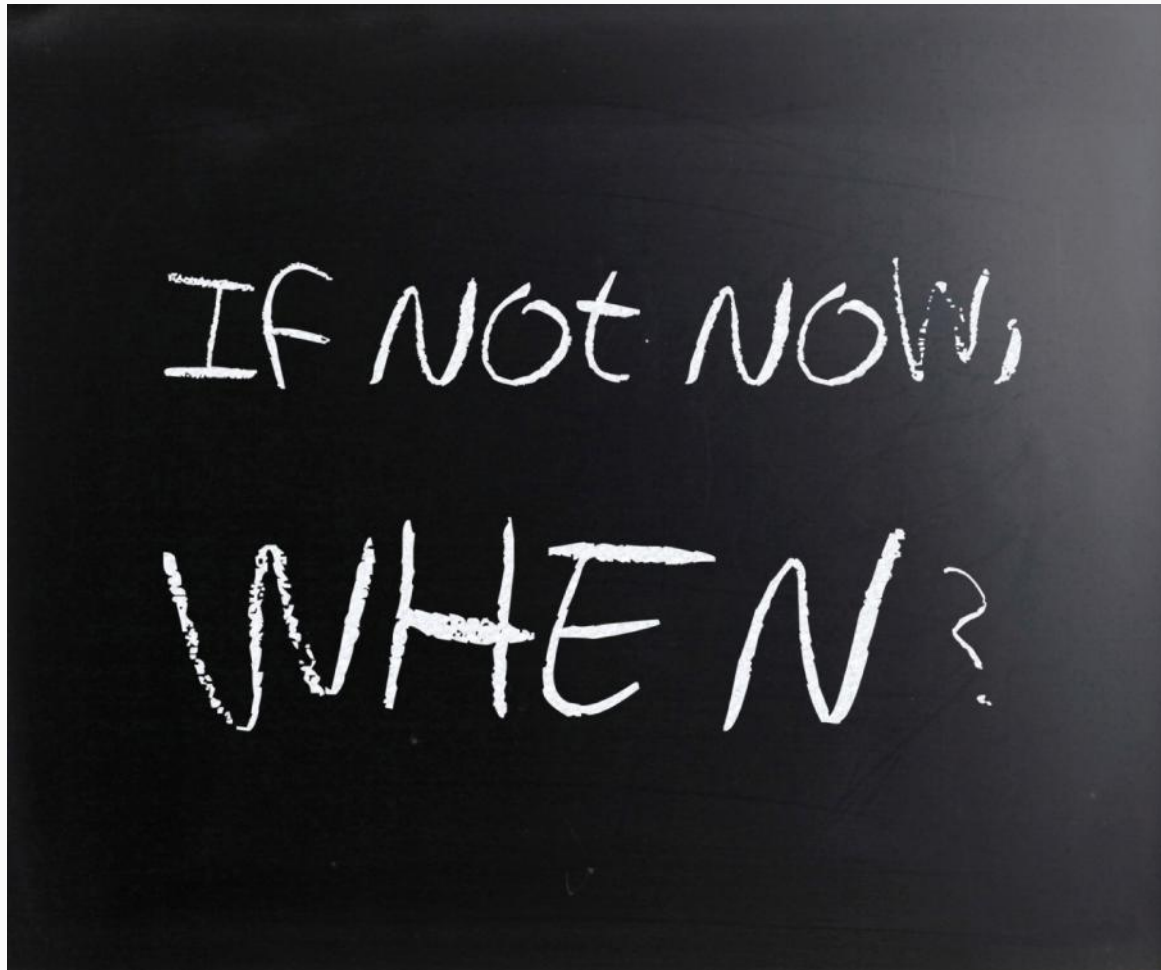
# “Cultural Revolution”



**Mount Sinai Hospital researchers:** *“We’re trying to move medicine in the direction of climatology and physics; disciplines that are far more advanced and mature quantitatively”*

# What is your plan?

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- One source predicts that in 10 years, the only type of insurance that will be sold in the U.S. is simplified issue.
  - Convenience, price and speed will be the predominant factors influencing premium growth.
  - By 2020, the U.S. will need 190,000 more workers with deep analytical expertise and 1.5 million more data-literate managers.
  - Supplying technology is a fast-growing market, increasing at more than 30 percent per year and likely to reach \$24 billion by 2016.



- Embrace the new paradigm
- Gain confidence in relying on predictions instead of actual experience