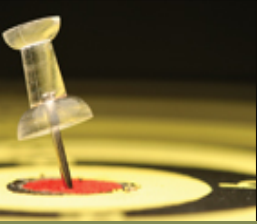




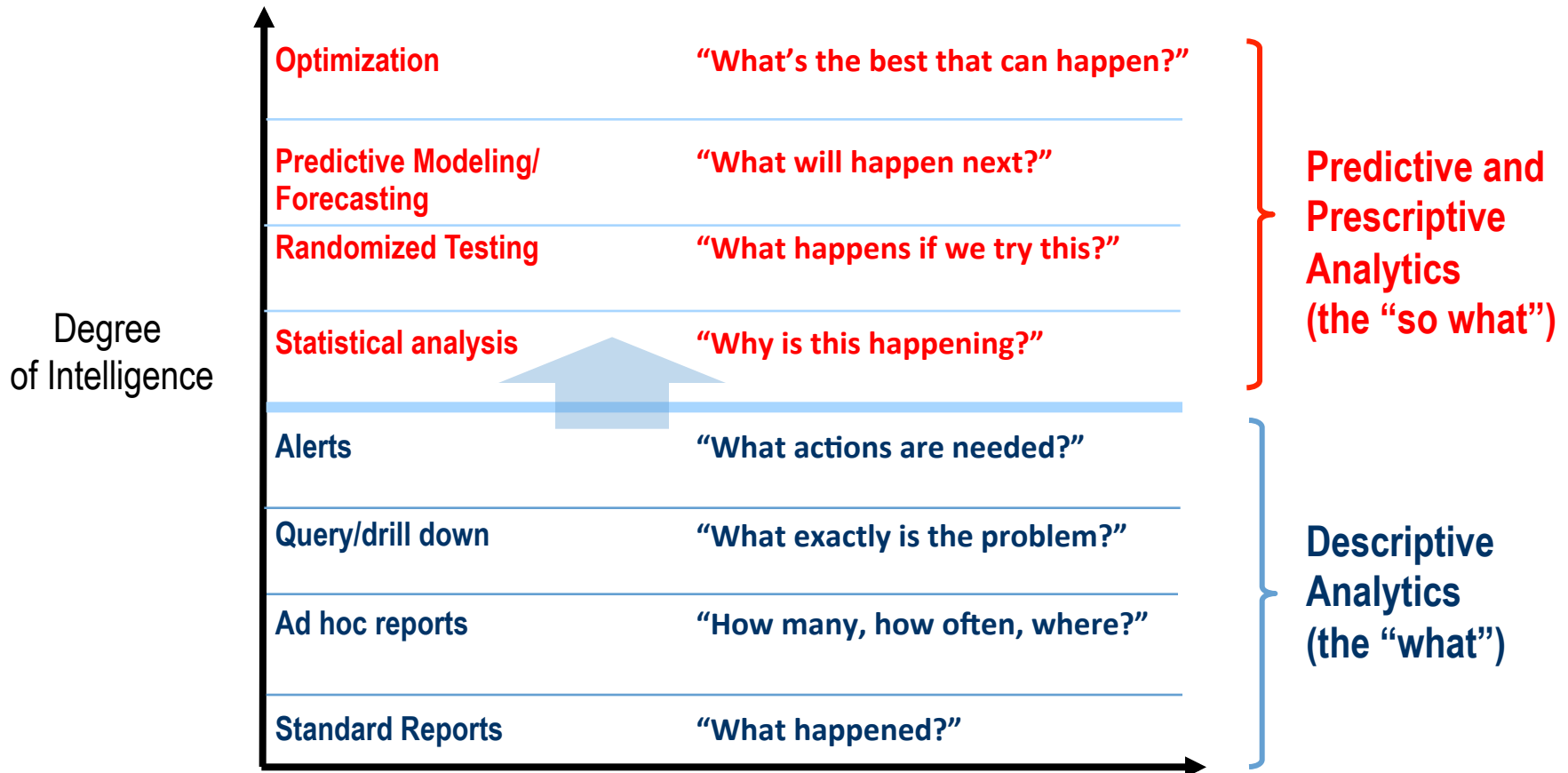
Transforming Government with Analytics

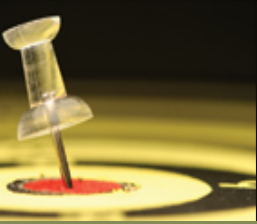
Tom Davenport
Babson College

ICT and Public Policy Workshop
September 30, 2011



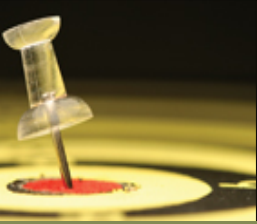
What Are Analytics?





Types of Analytics

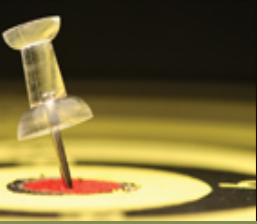
		Timeframe		
		Past	Present	Future
Content Type	Information	What happened? (Reporting)	What is happening now? (Alerts)	What will happen? (Extrapolation)
	Insight	How and why did It happen? (Modeling, testing)	What's the next best action? (Recommendation)	What's the best that can happen? (Optimization/ simulation)



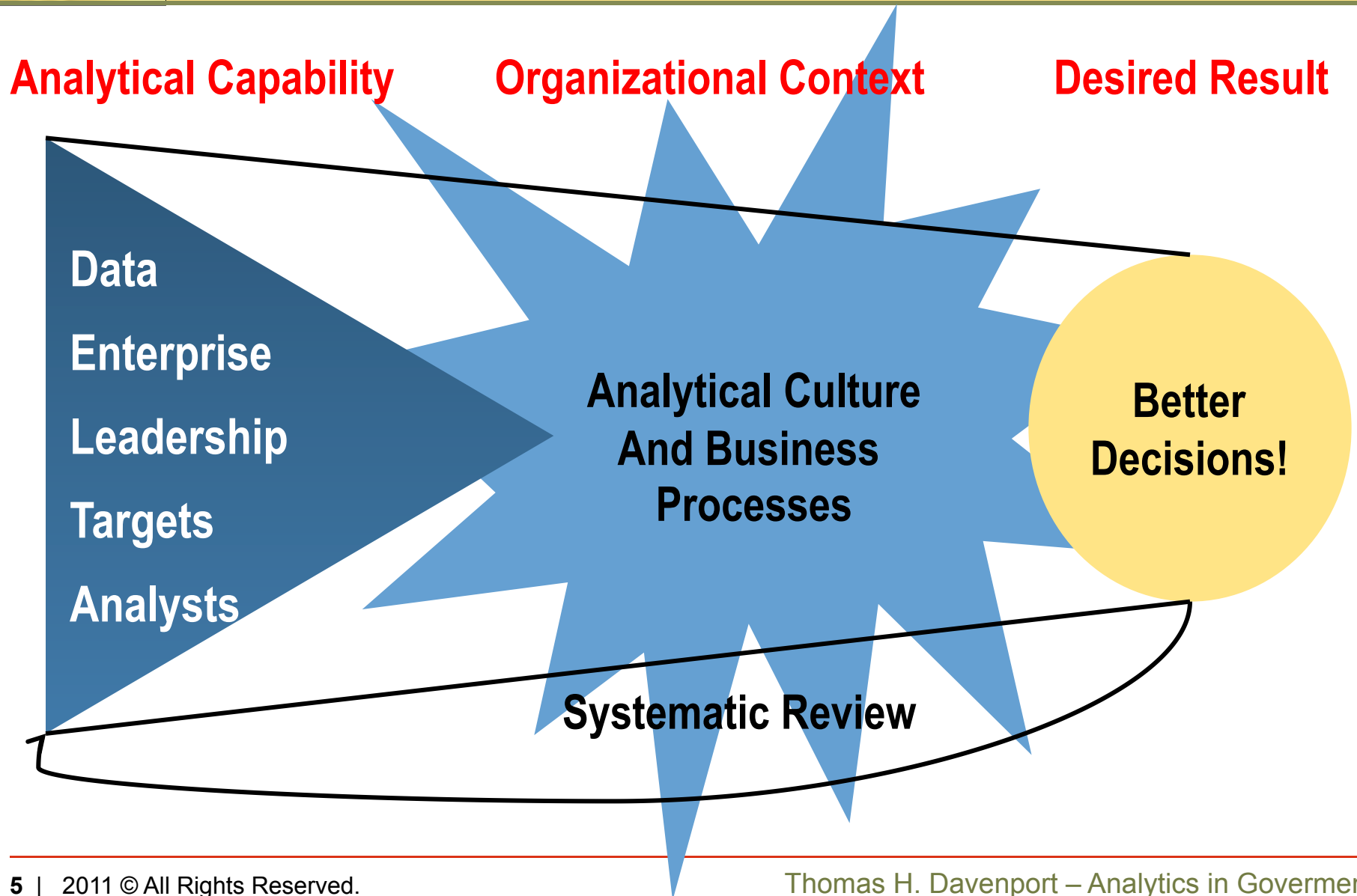
The Planets Are Aligned for Analytics in Government

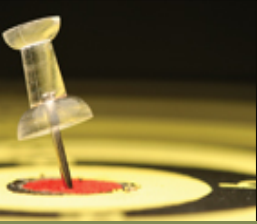


- Supply factors
 - Powerful information technology
 - Massive amounts of—but siloed—data
 - Critical mass of quantitative skills
- Demand factors
 - An administration that cares about fact-based decision-making
 - The need to reduce fraud, waste and abuse
 - A general climate of doing more with less

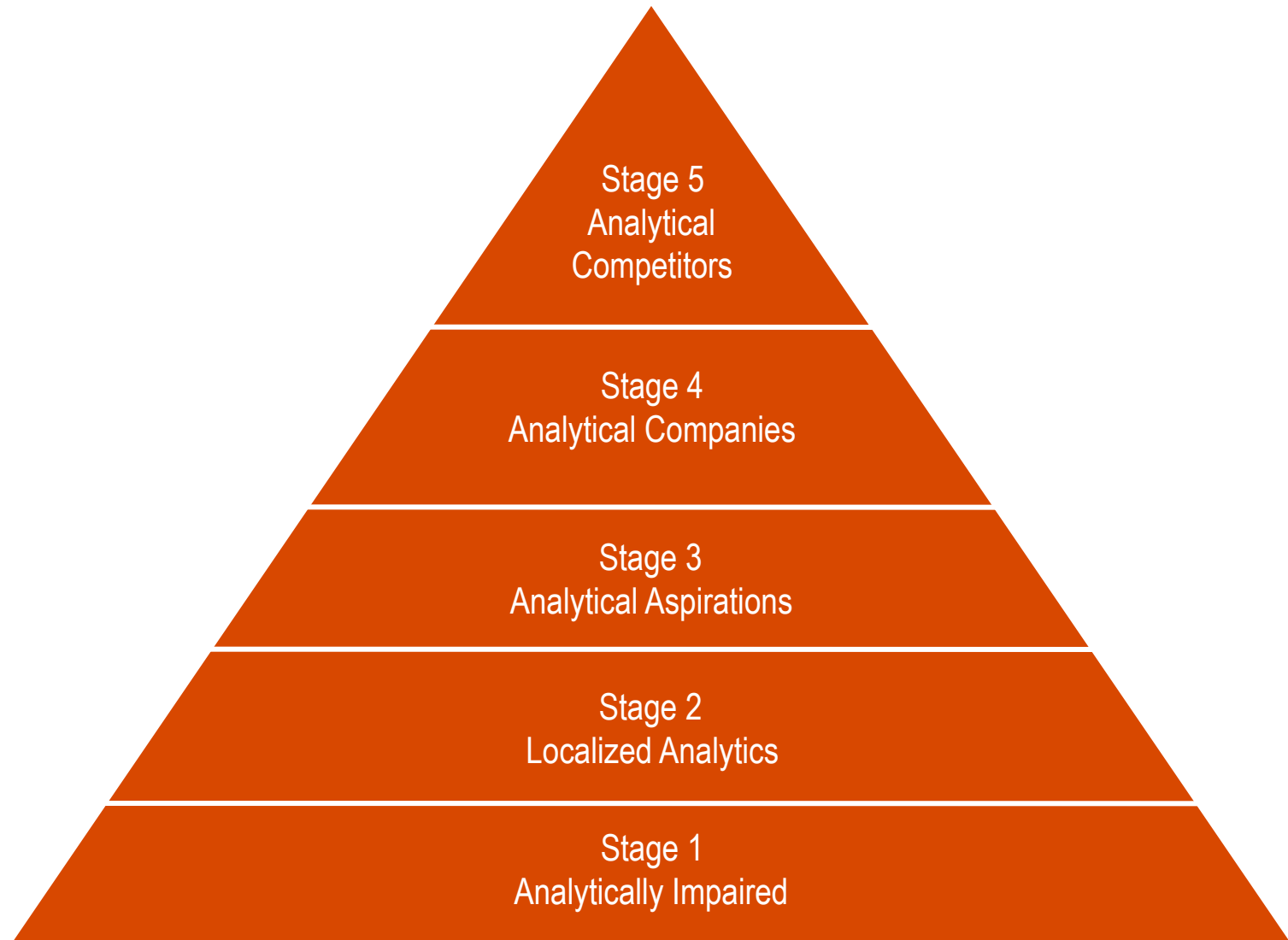


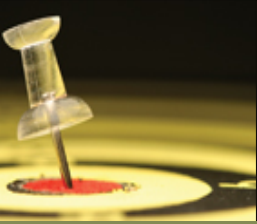
Analytics at Work—The Big Picture





Levels of Analytical Capability





Analytical Competitors

Old Hands, Turnarounds, Born Analytical



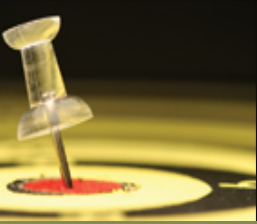
- **Marriott — Revenue management**
- **Progressive— risk, pricing**



- **Harrah's — Loyalty and service**
- **MCI/Worldcom— Cost identification and reduction**



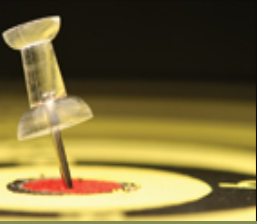
- **Capital One— “information-based strategy”**
- **Google — page rank, advertising, HR**




Analytical Applications in Government

- **USPS—vehicle routing, assigning mail to airlines**
- **SSA—processing disability applications**
- **IRS—predicting noncompliance**
- **World Bank—randomized testing**
- **VA—disease management**
- **FBI/ATF/NYC—CompStat and “intelligence-led policing”**
- **Sweden National Tax Authority—confidence and compliance**
- **Canadian Forest Service—fire prediction**





How to Do It: The Analytical DELTA

DELTA  **= change**

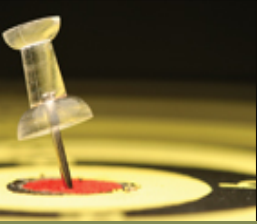
Data **breadth, integration, quality**

Enterprise **approach to managing analytics**

Leadership **passion and commitment**

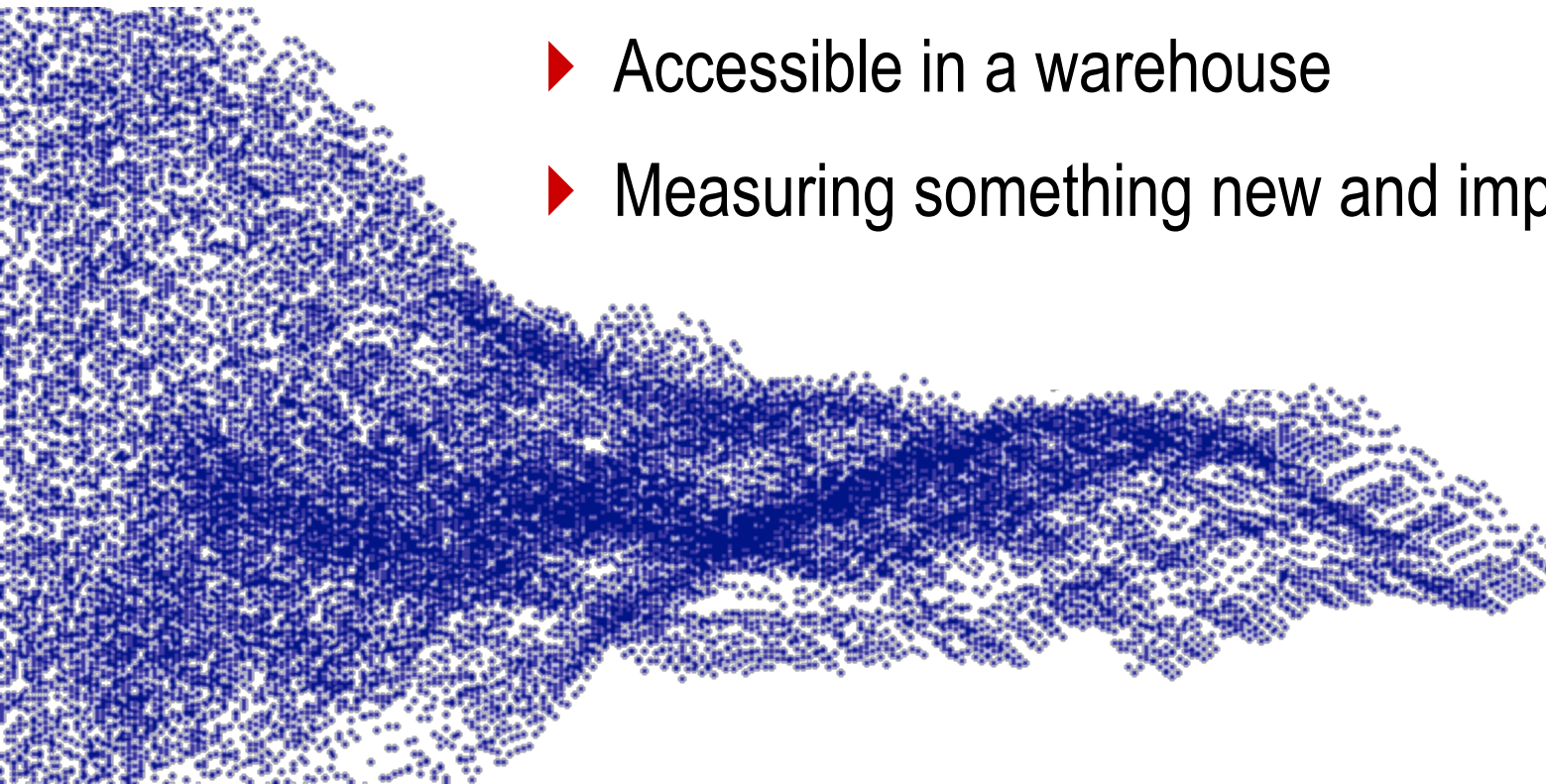
Targets **first deep, then broad**

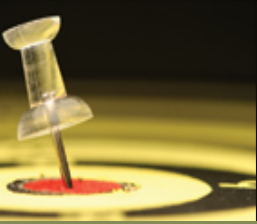
Analysts **professionals and amateurs**



Data

- ▶ The prerequisite for everything analytical
- ▶ Clean, common, integrated
- ▶ Accessible in a warehouse
- ▶ Measuring something new and important





New Metrics / Data



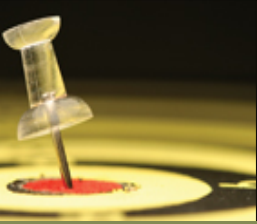
Wine Chemistry



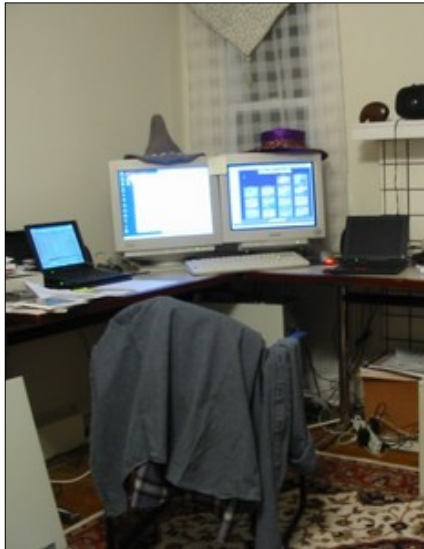
Optimized revenue



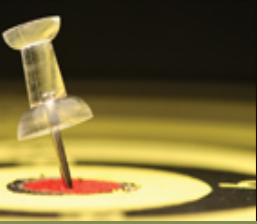
Smile Frequency



Enterprise



- ▶ If you're competing on analytics, it doesn't make sense to manage them locally
 - ❖ No fiefdoms of data
 - ❖ Avoiding “spreadmarts”—analytical duct tape
- ▶ Some level of centralized expertise for hard-core analytics
- ▶ Firms may also need to upgrade hardware and infrastructure



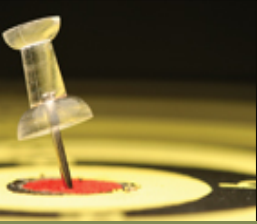
Leadership



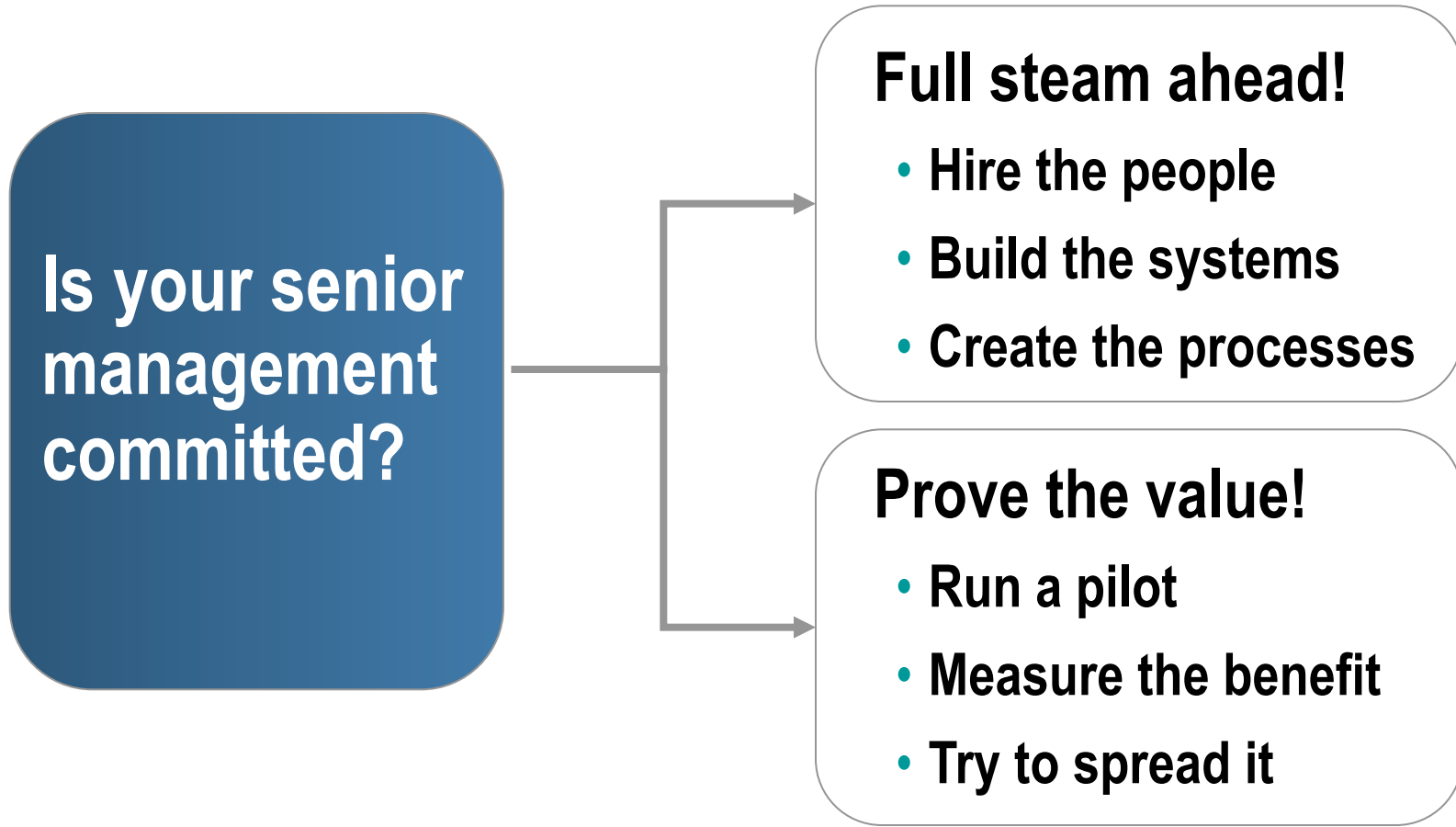
“Our CEO is a real data dog”

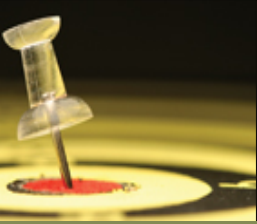
Sara Lee
executive

- ▶ Gary Loveman at Harrah’s
 - ❖ “Do we think, or do we know?”
 - ❖ “Three ways to get fired”
- ▶ Ken Kizer at the VA
 - ❖ “the largest and most successful implementation of an electronic health record ever undertaken”
- ▶ Jeff Bezos at Amazon
 - ❖ “We never throw away data”



The Great Divide

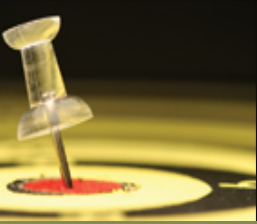




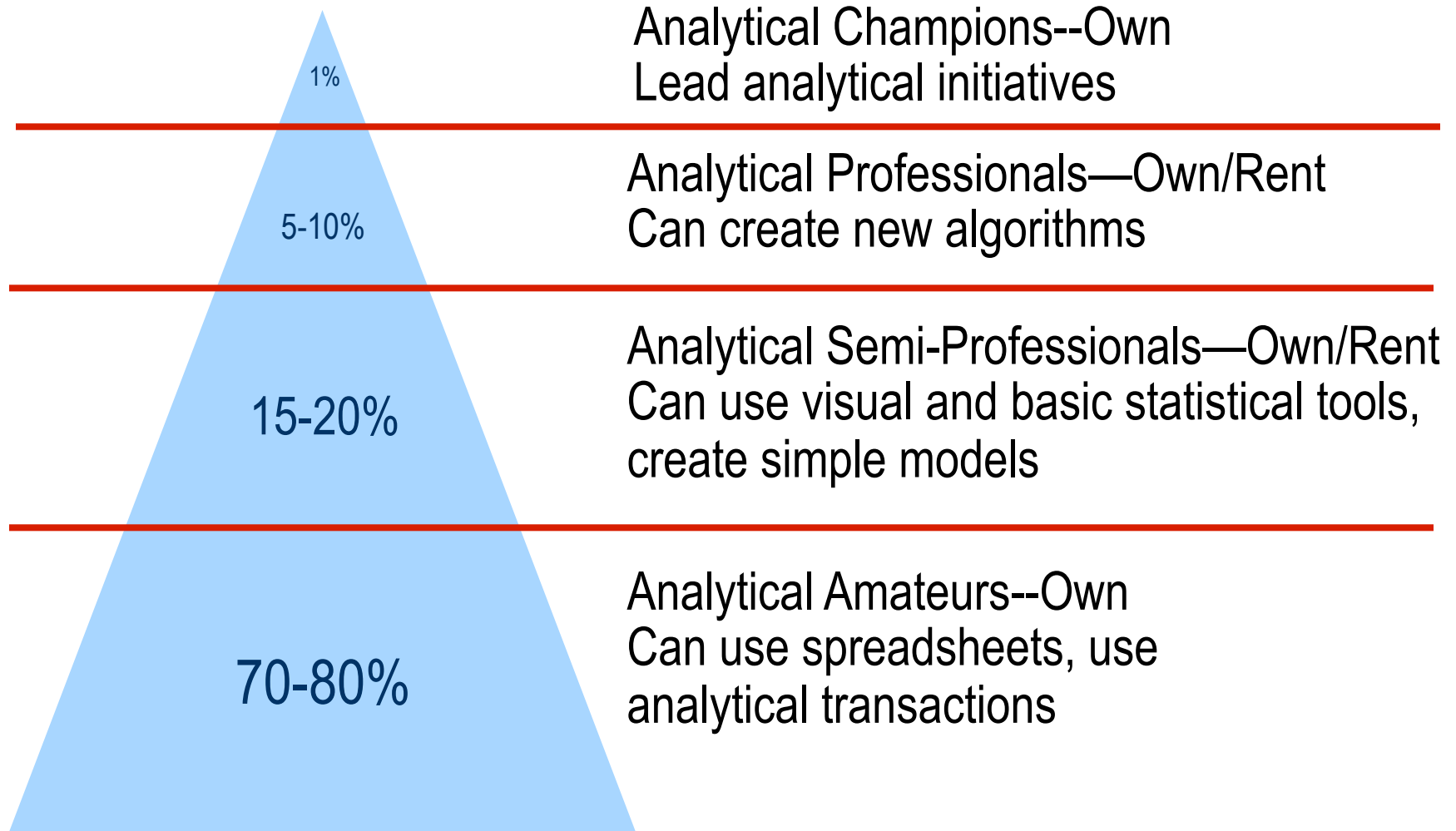
Targets



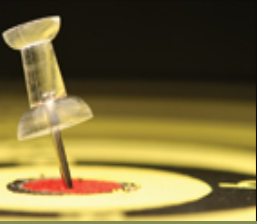
- Pick a major strategic target—deep, then broad
 - **IRS**= Compliance
 - **TD Bank**= Customer service and its impact
 - **Harrah's** = Loyalty
 - **Google** = Page rank/advertising + HR
- Can also have two primary user group targets
 - **Wal-Mart** = Category managers + Suppliers
 - **Owens & Minor** = Supply chain managers + hospitals



Analysts



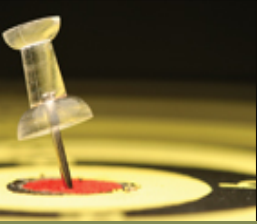
* percentages will vary based upon industry and strategy



Observations on Analytics in the U.S. Federal Government



- Plenty of **data**, but it's often not recognized as a transformational asset
- Most agencies don't act as a single **enterprise** with regard to analytics
- The advocacy of analytics by agency **leadership** is rarely strong
- Many agencies are aware of the most important **targets**
- Agencies may lack great **analysts** and the ability to hire them, but they can rent them



Keep in Mind



- Five levels, five factors for building analytical capability
- Data and leadership are the most important prerequisites
- Make sure your targets are strategic
- Tie all your analytics work to specific decisions
- This is not business as usual—there is a historic opportunity to transform government!