

Analytics and the Bottom Line: How Organizations Build Success



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In collaboration with



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Analytics at Work: Smarter Decisions, Better Results

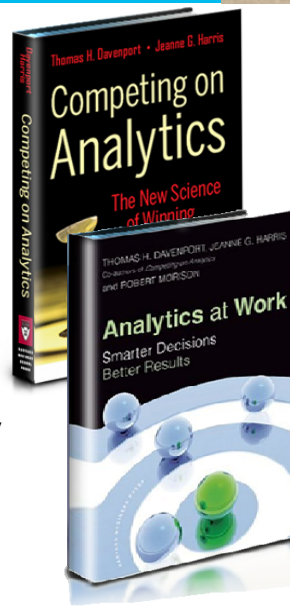
Thomas H. Davenport
Babson College

Jeanne G. Harris
Accenture Institute for High
Performance



Research Background

- 2000 study of 20 companies and how they built analytical capabilities
- 2005 study of 32 companies with business intelligence initiatives; resulted in "Competing on Analytics" article in HBR
- Additional interviews with 100+ companies for books
- Accenture surveys of 217 and 402 companies in 2002 and 2006 to determine frequencies of analytical activity among large companies with enterprise systems
- Two years of research with a research consortium of 27 companies
- Talent Engagement, Attitudes and Motivations Survey of 1367 US respondents, including 799 analysts
- Series of dinner meetings with more than 1000 executives from hundreds of companies in 12 countries

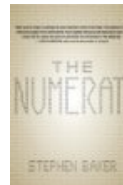
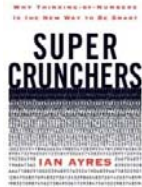
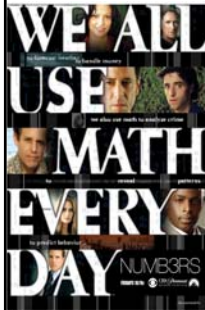


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Dawn of the Golden Age of Analytics?



"Analytics is the new plastics."

-- John Ridding, Financial Times CEO

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So Why Aren't Decisions Getting Better?

- Decision processes and outcomes are often bad!
 - The body of knowledge on what works is often ignored
 - Decisions take too long, get revisited, involve too many or few
- Little measurement/progress/accountability
- Weak ties between data/information /knowledge inputs and decisions
- If we're not getting better at decision-making, much of IT's work is called into question
 - Data warehousing, analytics, reports, ERP, knowledge management, etc.



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The Upside—New Decision Frontiers

- Analytics and algorithms
- Intuition and the subconscious
- “The wisdom of crowds”
- Behavioral economics and “nudges”
- Neurobiology
- Decision automation
- ...Etc.



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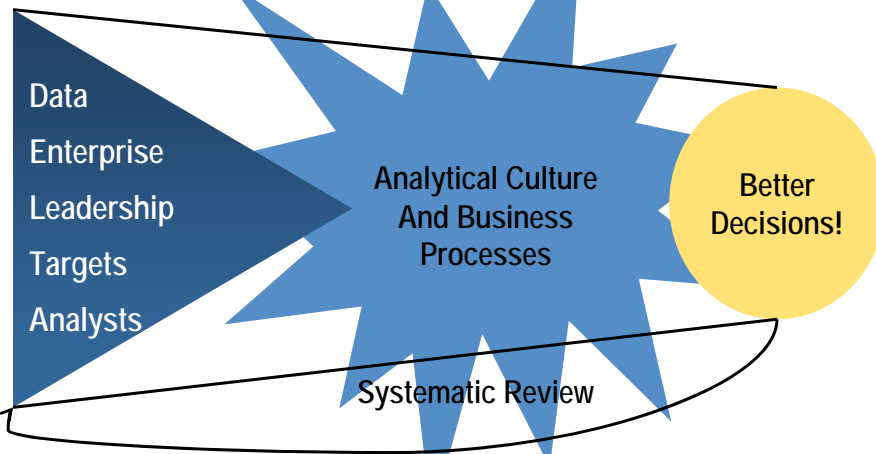
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Analytics at Work—The Big Picture

Analytical Capability

Organizational Context

Desired Result

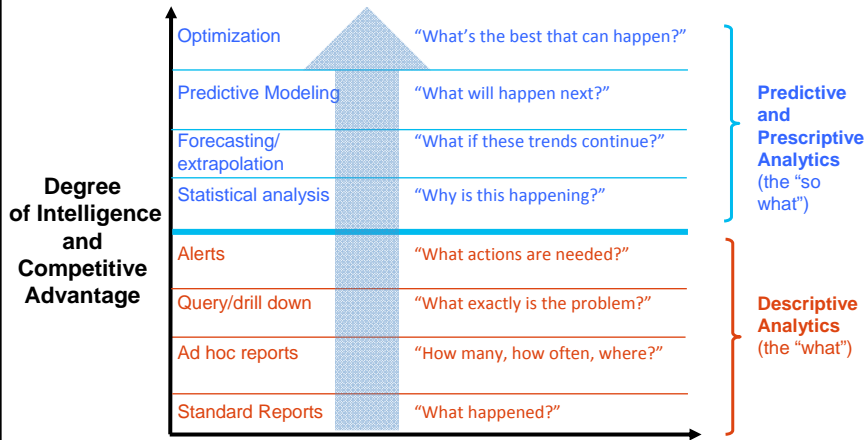


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What Are Analytics?

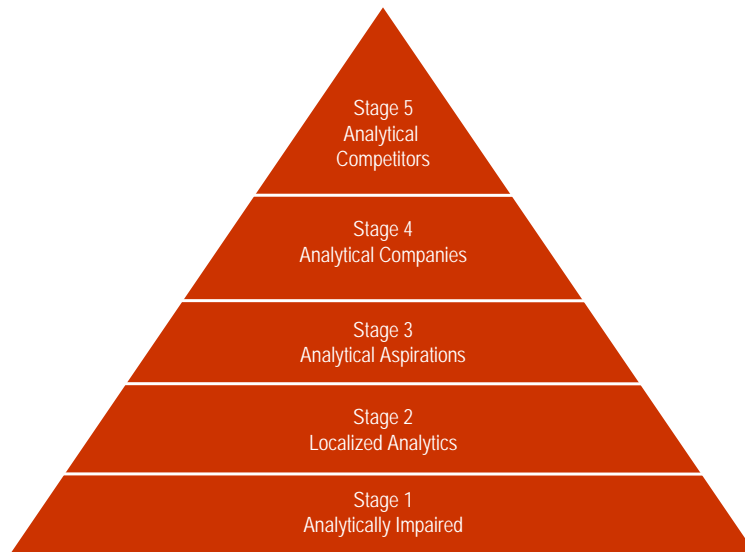


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Levels of Analytical Capability



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Analytical Competitors Old Hands, Turnarounds, Born Analytical



- Marriott — Revenue management
- UPS — Operations and logistics, then customer
- Progressive— risk, pricing



- Harrah's — Loyalty and service
- Tesco — Loyalty and internet groceries
- MCI/Worldcom— Cost identification and reduction



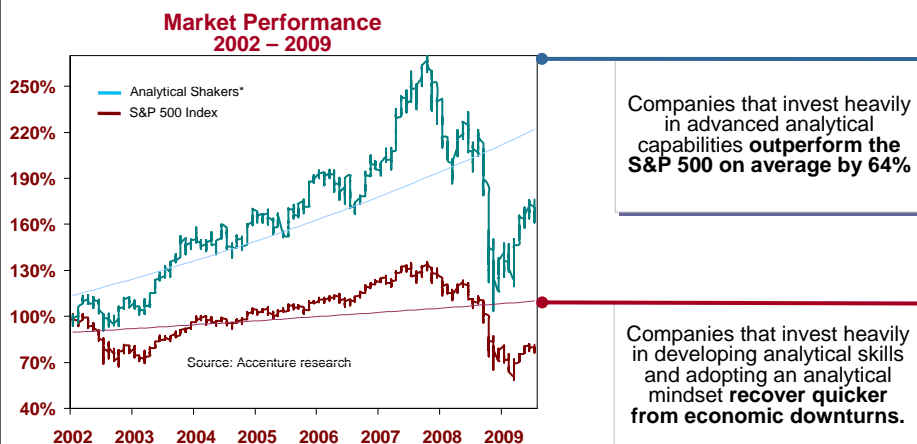
- Capital One— “information-based strategy”
- Google — page rank, advertising, HR
- Netflix— customer preference algorithms

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Analytics and Business Performance



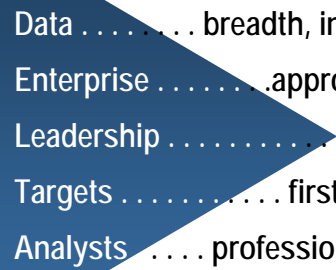
Source: Accenture analysis

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The Analytical DELTA



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

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Enterprise Analytics



- If you're serious about analytics, it doesn't make sense to manage them locally
 - No fiefdoms of data, software, or people
 - Not by spreadsheets alone
 - Avoid multiple versions of the truth
- Firms may also need to upgrade hardware and infrastructure
- An enterprise perspective is required to address core issues of business performance and organizational competitiveness such as:
 - Which performance factors have the greatest impact on future growth and profitability?
 - How should we optimize investments across our products, geographies and marketing channels?
 - Are decisions aligned with company strategy, or just promoting someone's self interest?

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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”
- Barry Beracha at Sara Lee
 - “In God we trust, all others bring data”
- Jeff Bezos at Amazon
 - “We never throw away data”

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The Great Divide

Is your senior management team committed?

Full steam ahead!

- Hire the people
- Build the systems
- Create the processes

Prove the value!

- Run a pilot
- Measure the benefit
- Try to spread it

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Targets Across Industries

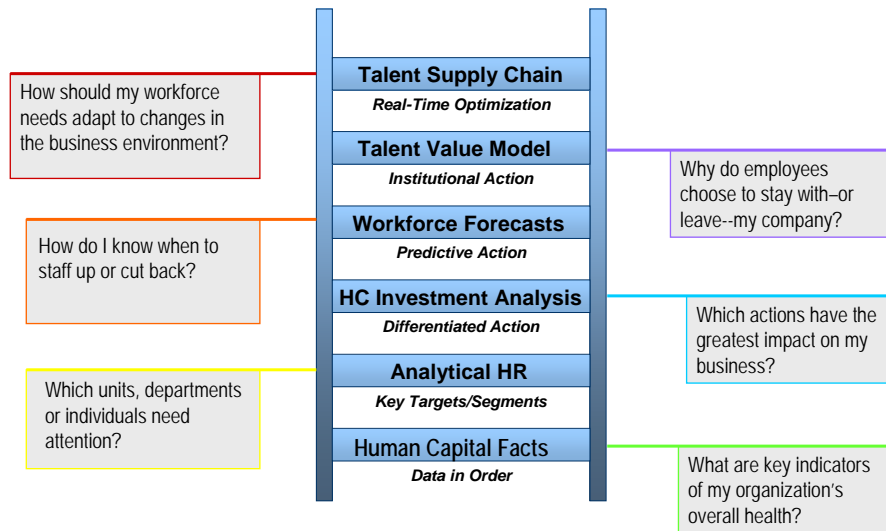
- **Financial services:** credit scoring, fraud detection, pricing, program trading, claims analysis, underwriting
- **Retail:** promotions, replenishment, shelf management, price and merchandising optimization
- **Manufacturing:** supply chain, product customization
- **Transportation:** scheduling, routing, yield management
- **Health care:** drug interaction, preliminary diagnosis, disease management
- **Hospitality:** pricing, customer loyalty
- **Energy:** trading, supply, compliance
- **Services:** call center staffing, service/profit chain
- **Government:** fraud detection, case management, crime prevention, revenue optimization
- **Agriculture:** crop management
- **Online:** web metrics, site design, recommendations
- **Every business:** performance management

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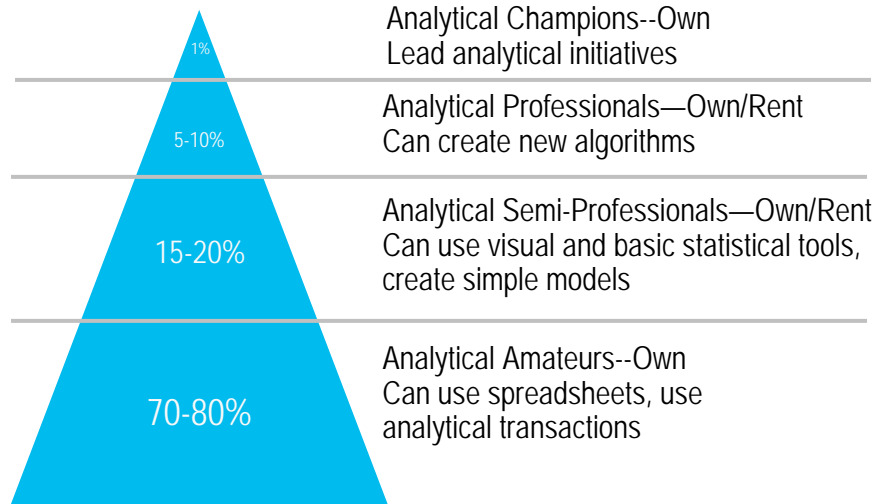


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Targeting Talent Management Applications



Analysts



* percentages will vary based upon industry and strategy

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The Context: Analytical Culture

- Facts, evidence, analysis as the primary way of deciding
- Pervasive “test and learn” emphasis where there aren’t facts
- Free pass for pushbacks—
“Where’s your data?”
- Still room for intuition based on experience
- A focus on action after analysis
- Never resting on your analytical laurels

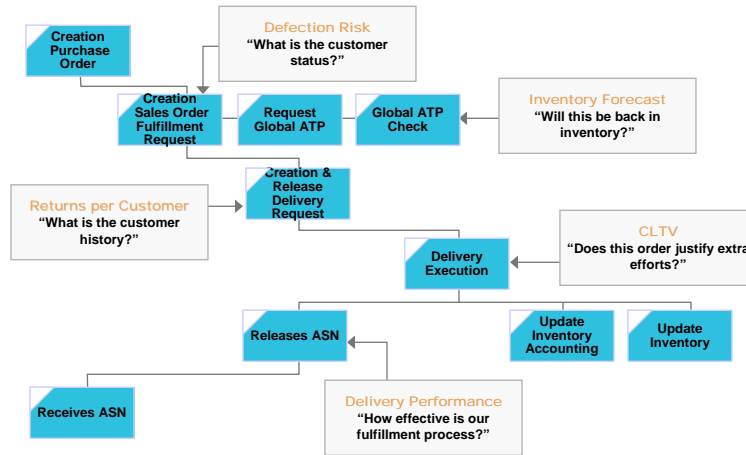


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The Context: Analytical Processes



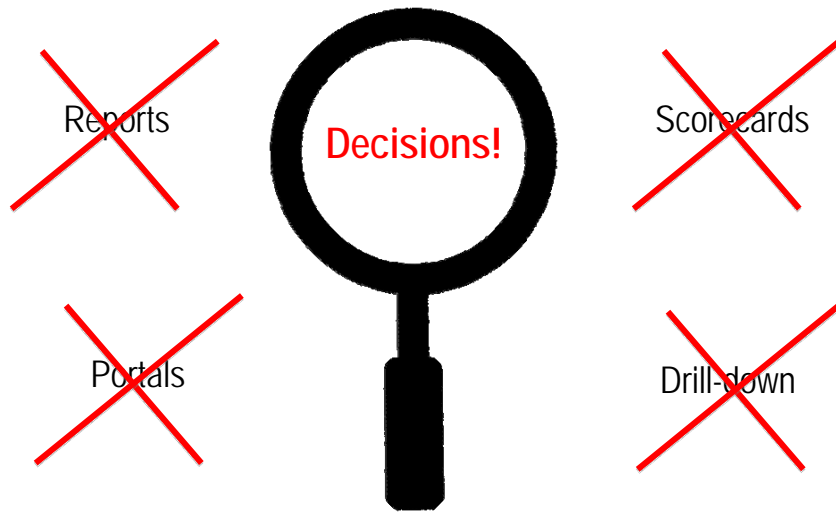
Source: SAP AG 2006

Applying Analytics to the Entire Marketing Process at Best Buy

Who are my target customers, what, where and why do they buy, and who else looks like them? → What do I offer them, through which channels, and how often? → How do I get my consumers/customers to buy more products? → How do we become more relevant beyond the transaction?



Better Decisions Are the Goal of Analytics

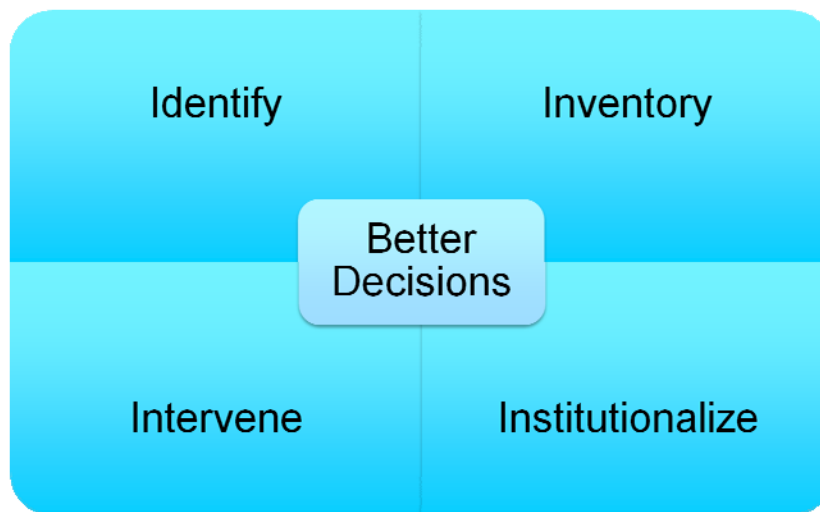


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Systematically Making Decisions Better

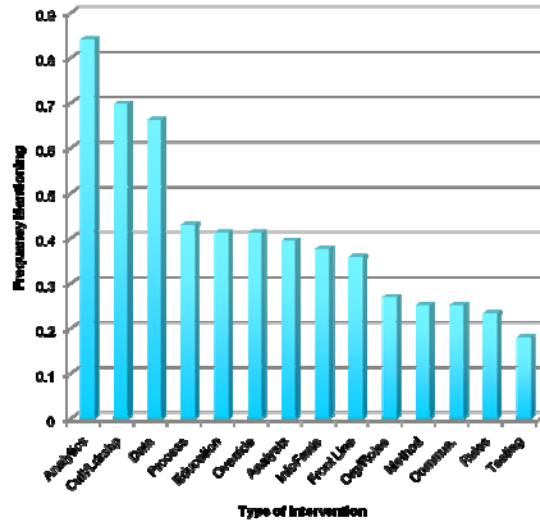


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Most Common Decision Interventions



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Multiple Interventions: Better Pricing Decisions at Stanley

- Pricing identified as one of four key decision domains by CIO
- Pricing Center of Excellence established in 2003
- Adopted several difference pricing methodologies
- Implemented new pricing optimization software
- Regular “Gross Margin Calls” for senior managers
- Offshore capability gathers competitive pricing data
- Some automated pricing systems, e.g., for promotions
- Center spreads innovations across Stanley
- **Result: gross margin from 34% to over 40% in six years**

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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 BI and analytics work to decisions

Never rest!

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To Learn More . . .

- *Competing on Analytics: The New Science of Winning* (HBP, 2007)
- *Analytics at Work: Smarter Decisions, Better Results* (HBP, 2010)
- *What People Want (and How to Predict It)* and *Prediction Lover's Handbook*, Sloan Management Review, Jan 2009
- *Competing on Talent Analytics*, Harvard Business Review, October 2010
- *Make Better Decisions*, Harvard Business Review, Nov. 2010
- More research and insights at www.analyticsatworkbook.com and www.iianalytics.com



THE SAS KNOWLEDGE EXCHANGE



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