Future of Analytics

The Lure, Promise and Pitfall of Data

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We all walk past solvable problems and leave opportunities untapped every day™
WHAT’S CHANGED IN THE WORLD TODAY?

A world awash with data

The re-invention of the world in code

The advent of cognitive computing

Yet only 15% of organizations have the capability to leverage data and advanced analytics across their organization.

HBR Insight Economy Study
OUR POINT OF VIEW

Data is the new basis of competitive advantage

Front runners will:

**Drive business outcomes**
by applying more sophisticated analytics across more disparate data sources in more parts of their organization.

**Capture the time value of data**
by developing “speed of insight” and “speed of action” as core differentiators.

**Change the game**
in their industry and profession by infusing analytics into everything.
DATA IS BECOMING THE WORLD’S NEW NATURAL RESOURCE FOR CREATING DIGITAL VALUE AND BEATING THE COMPETITION

Yet only 15% of organizations have the capability to leverage data and advanced analytics across their organization.

2015 HBR Insight Economy Study
We surveyed a number of businesses

- Identified 341 respondents based upon their *usage* of big data and analytics tools for innovation
- Conducted cluster analysis with **81 variables**
- Posed questions with the following themes:
  - **Goals** for innovation
  - **Barriers** to innovation
  - **Metrics** to measure innovation returns
  - Treatment and **types** of innovation projects
  - **How** big data and analytics are **used** to innovate
Challenges around data were amongst the top 3 followed by skills and culture

- Data quality: 63%
- Data accessibility: 48%
- Data availability: 48%
- Availability of skills: 35%
- Knowledge of using data to impact change: 31%
- Risk of operational disruption: 23%
- Funding constraints: 21%

n=341
THREE DISTINCT GROUPS EMERGED

Strugglers
Struggle to support innovation with big data and analytics

Strivers
Strive to develop innovation based on big data and analytics

Leaders
Successfully innovate using big data and analytics
Organisations that achieved high revenue growth and profitability Outperformers

Organisations that achieved low revenue growth and profitability Underperformers

And then we looked at what makes those groups different

Outperformers

52%

40%

8%

Leaders

Strivers

Strugglers

n=25

Underperformers

42%

40%

18%

Leaders

Strivers

Strugglers

n=97

25%

18%

42%
OUT-PERFORMERS make better use of data than Under-Performers!

- Users of big data:
  - Outperformers: 23% more
  - Underperformers: 26%

- Users of analytical tools:
  - Outperformers: 79% more
  - Underperformers: 19%
MAKE DATA SIMPLE WITH AN “OPEN FOR DATA” STRATEGY THAT ACCELERATES THE PACE AND AGILITY OF INSIGHT AND INNOVATION

Empower All Data Professionals
with a user-centric, subscription-like, and collaborative approach

Enable More Discoveries
of new and unknown trends with all data and put them into action

Build Better Engagement
using a range of managed data services that seamlessly scale

With Open Data Examination and Trust
provide governance, security, trust, and curation across the entire data lifecycle

And an Open Source and Hybrid Cloud Platform Approach
faster innovation, greater flexibility, and a better user experience
Key Considerations

- Self-service, on-demand access
- Start small and grow
- Subscribe to the multiple tools you want, include open source-based
- Ability to seamlessly collaborate
- Ensure control, security, and governance

IBM

EMPOWER ALL USERS THAT USE DATA WITH THE TOOLS THEY WANT – DELIVERED VIA CONSUMER SUBSCRIPTION-LIKE MODEL
Some organizations are using analytics to seize opportunities and solve problems, transforming industries, organizations and professions.

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<td>Complying with mandates, understanding clients</td>
<td>Exploring data for competitive advantage</td>
<td>Understanding risk, accelerating decisions</td>
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| Penalty risk reduced to <1%  
Savings: ~ €300,000 | 9.5M+ consumers identified for business opportunity signals | Queries of 2.5 billion transactions  
50%+ faster, reports 70% faster |
| Understanding customer behavior | Identifying traffic risk factors | Real-Time Fraud Analysis |
| 100% increase in subscribers | 80% reduction in serious accidents | Millions of Euros of illegally shipped goods seized |
Cognitive business

The next evolution of human and systems capabilities, where technology enhances, scales and accelerates human expertise
**Data and Analytics are the Necessary Foundation for a Cognitive Business**

**Make sense of industry business needs and take action**

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<thead>
<tr>
<th>DESCRIPTIVE</th>
<th>+</th>
<th>PREDICTIVE</th>
<th>+</th>
<th>COGNITIVE</th>
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<tbody>
<tr>
<td>Discover</td>
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<td>Predict</td>
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<td>Report</td>
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<td>Decide</td>
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<td>Reason</td>
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<tr>
<td>Analyze</td>
<td></td>
<td>Act</td>
<td></td>
<td>Learn</td>
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**Gain unique insight into people, things and businesses**

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<tr>
<th>DATA YOU POSSESS</th>
<th>+</th>
<th>DATA THAT HELPS YOU COMPETE</th>
<th>+</th>
<th>DATA THAT’S IN MOTION</th>
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<td>Customer records</td>
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<td>News</td>
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<td>Internet of Things</td>
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<td>Transactional systems</td>
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<td>Events</td>
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<td>Sensory data</td>
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<td>Institutional expertise</td>
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<td>Image data</td>
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<td>Geo-spatial</td>
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<td>Operational systems</td>
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<td>Social media</td>
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<td>Weather</td>
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Integrating **Cognitive Computing**, a data driven **Digital Network** and a secure and scalable **Infrastructure** to drive value from **business “ecosystems”**
We all walk past solvable problems and leave opportunities untapped every day

*It’s time to seize this moment*
COGNITIVE BUSINESS IS A THINKING BUSINESS