Big data: Friend or foe of finance
Variety, Volume, Velocity. Value?

**Variety**
Represented by the diversity of the data. Data sets will vary by type (e.g. social networking, media, text) and they will vary how well they are structured.

**Volume**
Reflects the size of a data set. New information is generated daily and in some cases hourly, creating data sets that are measured in terabytes and petabytes.

**Velocity**
The speed at which data is generated and used. New data is being created every second and in some cases it may need to be analyzed just as quickly.

Big Data is not just about “data” - advances in analytical tools and capabilities drive better, faster, smarter business decisions.

Big Data presents new risks and opportunities associated with issues such as ownership, quality and consistency.

Big Data is not restricted to the four walls of the enterprise – there is huge opportunity in using 3rd party data.

Big Data is not primarily a technology challenge – it is a new way of doing business.

Big Data is spawning entirely new classes of technology, that is challenging to integrate with legacy technology landscape.

Big Data provides vast new flows of information that changes the decision making process.
What the future looks like – Data Lakes

Separating data from the application that created it and making it re-useable;

- Capture and store raw data at scale for a low cost
- Perform transformations on the data
- Perform new types of data processing
- Store many types of data in the same repository
- Define the structure of the data at the time it is used, referred to as schema on read
- To perform single subject analytics based on very specific use cases
Big Data;
Friend or Foe to the CFO?
Definition of Management Accounting:

- Communication & use of Accounting and Management Information
- Sourcing and analysis of Accounting and Management Information
- Steward/Controller
- Influencer/Enabler
- Trusted Reporter
- Commercial Analyst

Create value
Preserve value
Bias in decision making

Source: RWE AG (parent group of Npower)
based on McKinsey framework of five families of bias
Digitisation impacts upon every block of the business model

- **Value propositions for Target Customers**
- **Processes, competences & intangibles**
- **Resources & Relationships**
- **Governance & Structure**
- **Costs & Revenues**
- **Management & Development**
Drivers of value in the digital age

Drivers of value; Rank Top 5, 1st to 5th

- Customer satisfaction (565)
- Business Processes (473)
- Customer relationships (468)
- Human capital (457)
- Brands' reputation (430)
- Strategic Decisions (323)
- Strategy Execution (297)
- Patented products or processes (202)
- Supplier relationships (197)
- Plant & Equipment (109)

50%, 372 of 744 respondents

CIMA / Oracle Global survey September 2015; 744 respondents
Measure and manage what matters:

- Customers’ needs set strategic direction
- Brand, values and intangible assets
- Innovation & Transformation
- Supply chain, produce & package
- Promote, sell & deliver
- Customer satisfaction and retention

Leadership and support functions:
- Project management;
- Competitive position and prospects

Operating efficiency and results;
- Process management

Financial outcomes

Customer satisfaction and retention

Customers’ needs set strategic direction

Measure and manage what matters:
KPIs measured or monitored by finance:

- Data Quality
- Return on Invested Capital
- Employee Productivity
- Employee Engagement and retention
- Customer Experience and Satisfaction
- Competitor Activity
- Customer Pipeline and Retention
- Talent sourcing and Pipeline
- Brand Awareness and Equity

CIMA / Oracle Global survey September 2015; 744 respondents
KPIs measured or monitored by finance:

MATCHING KPIs to VALUE DRIVERS

Data Quality | Return on Invested Capital | Employee Productivity | Employee Engagement and retention | Customer Experience and Satisfaction | Competitor Activity | Customer Pipeline and Retention | Talent sourcing and Pipeline | Brand Awareness and Equity

67% 66% 65% 65% 60% 57% 55% 50% 49%

Customer Satisfaction | Quality of Business Process | Customer Relationship | Quality of People | Reputation of Brand

76% 64% 63% 61% 58%

CIMA / Oracle Global survey September 2015; 744 respondents
Who provides the measures needed?

<table>
<thead>
<tr>
<th>KPI</th>
<th>Finance</th>
<th>Sales</th>
<th>Marketing</th>
<th>IT</th>
<th>HR</th>
<th>Outsourced</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Invested Capital (ROIC)</td>
<td>78.0%</td>
<td>4.7%</td>
<td>5.3%</td>
<td>4.1%</td>
<td>3.9%</td>
<td>2.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Data quality</td>
<td>38.4%</td>
<td>4.8%</td>
<td>6.8%</td>
<td><strong>39.0%</strong></td>
<td>3.6%</td>
<td>3.2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Employee productivity</td>
<td>29.8%</td>
<td>7.2%</td>
<td>5.6%</td>
<td>7.0%</td>
<td><strong>38.8%</strong></td>
<td>3.7%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Social sentiment</td>
<td>26.5%</td>
<td>14.2%</td>
<td><strong>25.1%</strong></td>
<td>9.1%</td>
<td>17.5%</td>
<td>2.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Competitor activity</td>
<td>21.3%</td>
<td><strong>25.5%</strong></td>
<td>27.9%</td>
<td>8.2%</td>
<td>4.4%</td>
<td>5.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Customer pipeline/retention</td>
<td>13.9%</td>
<td><strong>42.4%</strong></td>
<td>22.9%</td>
<td>6.1%</td>
<td>7.3%</td>
<td>3.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Employee engagement and retention</td>
<td>13.0%</td>
<td>5.6%</td>
<td>5.4%</td>
<td>6.6%</td>
<td><strong>61.6%</strong></td>
<td>3.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Talent sourcing/pipeline</td>
<td>10.3%</td>
<td>4.6%</td>
<td>10.0%</td>
<td>8.4%</td>
<td><strong>58.8%</strong></td>
<td>5.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Social engagement</td>
<td>10.0%</td>
<td>19.3%</td>
<td><strong>28.0%</strong></td>
<td>11.3%</td>
<td>21.5%</td>
<td>1.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Digital marketing effectiveness</td>
<td>9.9%</td>
<td>8.9%</td>
<td><strong>43.9%</strong></td>
<td><strong>25.5%</strong></td>
<td>4.8%</td>
<td>3.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Brand awareness/equity</td>
<td>9.3%</td>
<td>17.0%</td>
<td><strong>54.2%</strong></td>
<td>5.8%</td>
<td>4.1%</td>
<td>5.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Customer experience and satisfaction</td>
<td>7.6%</td>
<td>35.5%</td>
<td><strong>29.9%</strong></td>
<td>9.2%</td>
<td>4.5%</td>
<td>3.6%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

CIMA / Oracle Global survey September 2015; 744 respondents

Key:
- Ranked 1st
- Ranked 2nd
Sources of data to inform decisions and manage performance

- **Enterprise Data**
- **Financial Data**
- **New forms of digital data**

- Expertise needed for analysis
- Scale and complexity of data

- Low to High

- Market
Finance Transformation; the changing role of the management accountant

The business’ level of competence in the assembly and analysis of the data needed to manage these intangibles (scored from 1 = not at all to 5 = fully)

- How well the business executes strategies
- The quality of strategic decision making
- The quality of your business processes
- Employees’ talent or expertise
- The business’ intellectual property
- Supplier relationships
- Customer sentiment
- Alliances and joint venture relationships
- Potential customers’ perception of the...
Finance Transformation; the changing role of the management accountant

Efficiency → Information → Influence

Data → Reports → Analysis → Insight → Influence → Impact

Valued → Overhead
The Segregation of accounting & finance:

- CFO or Finance Director
- Skills & technology enables Globalisation
- Standard reports
- Transaction processing
- Routine Analysis
- Shared service centres (in-house or outsourced)
- Automation
- Business service centres (of expertise)
- Ad hoc analysis
- Finance-business partnering
Finance; brokers of information

Role of Finance

Data – mostly financial

Reports

Analysis

Insight

Impact

Finance help translate to commercial insights

Finance collate, validate and link to bigger picture

Enterprise data

‘Owners’ access, and analyse data for own purposes.

New forms of digital data

‘Data scientists’ explore to derive analytical insights
Management accounting and how it improves decision making

- Governance
- Influence
- Confidence
- Diligence

Communication & use of Accounting and Management Information

Preserve value Create value

Sourcing and analysis of Accounting and Management Information
Big Data; Friend or Foe to the CFO?

**Foe:** Finance side-lined as provider of accounts and reports for compliance purposes.

**Friend:** Finance can become more influential as a broker of information, ensuring the quality of decision making.

Thank you,

Questions / comments?