Don’t call me Jack Ma
Call me... “Data Ma!”

Alibaba, 10 Jan 2014
Andreas Weigend

Big Data = Mindset to turn Mess into Decisions and Actions

• External (customer facing)
• Internal (within the company)
Imagine...

...you had your geolocation from the last decade readily available at your fingertips

- What question would you ask?
- How would knowing that it is recorded 24/7 change your behavior?
**Data and Decisions**

**Rule #1:**
Start with a question, not with the data

- E.g., Which route do I take?
- E.g., Who do I work with?
What data would you pay for most?

1. Geolocation: Where did a customer go?
2. Search history: What did she search for?
3. Purchase history: What did she buy?
4. Social graph: Who are her friends?
5. Demographics and similar attributes

The Journey of Amazon

What changed?
The Journey of Amazon

What changed?

- Algorithms → Data
- AI
- BI
- CI
- DI

What changed, what didn’t?

<table>
<thead>
<tr>
<th>Changed</th>
<th>Same</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithms → Data</td>
<td>Ask for forgiveness, not for permission</td>
</tr>
<tr>
<td>AI</td>
<td>Customer-centricity</td>
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<tr>
<td>BI</td>
<td>Delight the customer</td>
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<tr>
<td>CI</td>
<td>Recommendations</td>
</tr>
<tr>
<td>DI</td>
<td>Discovery</td>
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</tbody>
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Amazon = Data Refinery

Goal: Help people make better decisions

Strategy: Make it trivially easy to

- Contribute
- Connect
- Collaborate

Equation of Business

- Expresses business strategy, values etc.
- Needed for evaluation of experiments

Rule #2:

Base the equation of your business on metrics that matter to your customers
Equation of Business

Rule #3: Focus on decisions and actions, and design for feedback

Amazon = Discovery through Data

1. Manual (Experts)
2. Implicit (Clicks, Searches)
3. Explicit (Reviews, Lists)
4. Situation (Local, Mobile)
5. Social graph (Connections)
Social Commerce

Amazon’s Share the Love

The 4 C’s of Commerce

• Content
• Context
• Connection
• Conversation
Shift in Marketing

Non-Social: Audience

Social: Connected Individual

E, me, we!

1. **Digitize**: E-commerce
   - Focus on company and products

2. **Share**: Me-commerce
   - Focus on consumer and attributes

3. **Connect**: We-commerce
   - Focus on connection between consumers
Connected Individuals

Rule #4:

Embrace transparency: Make it trivially easy for people to connect, contribute, and collaborate.

The 4 Data Rules

1. Start with a question, not with the data
2. Base the equation of your business on metrics that matter to your customers
3. Focus on decisions and actions, design for feedback
4. Embrace transparency: Make it trivially easy for people to connect, contribute, and collaborate
Some Data Beliefs

1. Let people do what people are good at, and computers do what computers are good at
2. Build stuff that enables a future you want to live in
3. Give data to get data

Questions

1. Do your customers understand the value they get when they give you data?
2. Does your product or service get better over time and with data, or worse?
Thank you

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## Data Science vs Business Intelligence

### Typical Techniques & Data Types

- Optimization, predictive modeling, forecasting, statistical analysis
- Structured/unstructured data, many types of sources, very large data sets

### Common Questions

- What if.....?
- What’s the optimal scenario for our business?
- What will happen next? What if these trends continue? Why is this happening?

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## Data Science vs Business Intelligence

### Typical Techniques & Data Types

- Standard and ad hoc reporting, dashboards, alerts, queries, details on demand
- Structured data, traditional sources, manageable data sets

### Common Questions

- What happened last quarter?
- How many did we sell?
- Where is the problem? In which situations?
Data Science Touches Everybody (1)

- CMO (Marketing)
  - Life events, cycle
  - Influencing
  - Segmentation
  - Situationalization

- Campaign analysis
  - Media mix
  - SEM
  - Attribution

- Churn prediction

Data Science Touches Everybody (2)

- CMO

- CFO
  - Metrics
  - Risk models
  - Compliance

- COO
  - Reliability
  - Fraud detection
  - Call center metrics
  - Complaints analysis
Data Science Touches Everybody (3)

- CMO
- CFO
- COO
- Security
  - Authentication

- CIO
  - Network
  - Errors
  - Data integrity
  - ...

Data Science Skills

- Data literate
- Communication interest
- Domain knowledge
- Modeling and statistics
- Curious, asks questions
- Able to handle large data sets
- Collaborative
- Skeptical

... plus CAN-DO Attitude