Data-Driven Business Models: Powering Startups in the Digital Age

Dr Sergey Filippov

13 November 2014, Brussels
‘Big Data’ and Data Analytics

• Is data the new oil, a new currency, or a new factor of production?

• Data analytics connects the dots – enables transition from descriptive to predictive to prescriptive analysis
Startups

• European companies are embracing data analytics

• Agile and dynamic startups are well placed to experiment with new data-driven business models

• Many new innovative, life-enhancing products available at low cost, beneficial to consumers
Data-Driven Business Models: Powering Startups in the Digital Age
Business Models

• Business models along the data-value chain:
  - data collection
  - data analytics
  - business intelligence

• Consulting services
• Software development
Sources of Data

• Three types of data:
  - open data in the public domain
  - enterprise data
  - personal data

• Maximum value through the merger of various types of data
### Business opportunities along the data value chain

<table>
<thead>
<tr>
<th>Open data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting, filtering, refining open data from the public domain.</td>
</tr>
<tr>
<td>Analysing open data in the public domain, making analysis results useful for companies and public institutions.</td>
</tr>
<tr>
<td>Consulting and helping public bodies move towards e-government, streamlining data management, using open data for business.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enterprise data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping companies make an inventory of their data, forming coherent, user-friendly datasets from piecemeal data sources.</td>
</tr>
<tr>
<td>Conducting data analytics for companies, transforming data into valuable business information and insights.</td>
</tr>
<tr>
<td>Consulting services to companies, identifying new business opportunities and transforming existing business processes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating databases of reliable, verifiable personal data (with individuals’ informed consent).</td>
</tr>
<tr>
<td>Analysing personal data, helping individuals make sense of the data they possess (e.g. household energy consumption data).</td>
</tr>
<tr>
<td>Personal (client) data can be a valuable input in the data-driven decisions adopted by companies or public institutions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data collection</th>
<th>Data analytics</th>
<th>Business intelligence</th>
</tr>
</thead>
</table>

Source: European Digital Forum
Data Skills

- A challenge in recruiting data science talent
- Technical skills (statistical analysis, coding) + business acumen + “soft skills”
- High demand for “data scientists,” a leading profession in the 21st century
Challenges

• From generic (access to finance, bureaucracy) to “digitally-specific” barriers
  - fragmentation of the digital single market
  - confusing data protection regulations

• More to be done to clarify the regulations which surround privacy
Micro-multinationals

• Many data-driven startups are international from day one, working with international clients
• European startups expand globally, including the US
• US-based startups expand in Europe
Startups in Policymaking Process

• Startups tend not to be well represented in the policymaking process

• Legislative proposals directly impacting data-driven startups are being debated in their absence

• Startups need a strong voice in policymaking process at EU and national levels
Policy Actions

• Build trust and confidence in data analytics
• Complete Digital Single Market and adopt a single data protection regime
• Institute “29th regime” for digital companies
• Support the open data movement
• Invest in data skills
• Facilitate a coherent data ecosystem, collaboration between startups and large corporate players
Jean-Claude Juncker

“The Commission needs to play its role in ensuring that promising new developments such as the cloud, the Internet of Things and big data can thrive in Europe and that citizens, innovative web entrepreneurs and other businesses can take full advantage of their potential”

Mission letter to Günther Oettinger, Commissioner-Designate for Digital Economy and Society
Project and Research Team

- Marco Bressan (BBVA)
- Carmen Cuesta Sainz (BBVA)
- Tatiana Issaeva (EIF)
- Juan Mateos-Garcia (Nesta)
- Telmo Pérez Luaces (Orange)
- Thanh Nguyen (Orange)
- Eduardo Salido Cornejo (Telefónica)
- Jonny Shipp (Telefónica)