Quantifying the benefits of geo services to consumers and businesses

Geospatial World Forum

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The Geo services economy
Key concepts
How do we measure economic impact?

Direct effects
• this is the quantum of output supported by a project, including linkages to other parts of the supply chain
• direct and indirect components; i.e. within a firm or among upstream and downstream suppliers

User benefits
• effects on consumers in the market of interest, net of displacement from other alternatives
• defining the appropriate counterfactual is an economic question

Wider economic effects
• effects not captured by direct or indirect channels
• typically wider/longer-term effects
• agglomeration or externality effects
Direct effects

Footprint

<table>
<thead>
<tr>
<th>Activity</th>
<th>Footprint</th>
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</thead>
<tbody>
<tr>
<td>Video games</td>
<td></td>
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<tr>
<td>Geo services</td>
<td>$150 - $270 billion</td>
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<tr>
<td>Airline industry</td>
<td>$594 billion</td>
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</tbody>
</table>

Value added

- Geo services global value added is around $100 billion per year

Consumer benefits

Journey time and fuel savings from more efficient navigation:

• $22 billion per year
• 1.1 billion hours
• 3.5 billion litres of gasoline

Wider economic benefits

• Changing the overall productivity and potential output of the economy

• Efficiency gains
  • $10 billion per year in cost savings for logistics firms
  • Geo services allow variable rate irrigation saving $40-110 per hectare

• Promote competition:
  • Broaden catchment areas to increase competition
  • Lower prices, improved quality
