12 January 2018

Dear Michael,

Updated calculations for economic impact of YouTube

We provide below an update to figures provided in the Google Economic Impact – Australia 2015 report on the economic value of YouTube in Australia. These new figures are for 2017 and take into account the latest publicly available information:

■ **Business benefits**: We estimate that YouTube supported $147 million in benefits for business in Australia in 2017. This reflects the total impact of the value created for businesses who advertised on YouTube, and the income earned by Australians from advertising displayed on their content on YouTube.

■ **Distribution to content creators**: We estimate that YouTube distributed $87 million to content creators in Australia in 2017. This amount reflects the income generated by Australians from advertising displayed on their YouTube content.

■ **Consumer benefits**: We estimate that YouTube supported $336 million in consumer benefits to Australians in 2017. These benefits represent the value that individuals place on accessing the diversity of free videos on YouTube.

The attached document presents a summary of the methodology used to calculate each of these figures.

Yours sincerely

Dr. Andrew Charlton
Director
AlphaBeta
Appendix – Methodology and Data

Overview of Method

Business Benefits

- New economic activity from advertising
- Revenue distributed to individuals (average of two methods)
- Advertising expenditure on YouTube
- Share of advertising distributed to individuals
- Calculation based on public data on revenue distributed to YouTube content creators in Australia
- Return on Investment from advertising
- Economic activity multiplier

Consumer Benefits

- Consumer surplus
- Average surplus value of YouTube to user
- Number of users

Business benefits

The business benefits generated by YouTube is a sum of the income earned by Australians from YouTube advertising displayed on their content (See method under “Distribution to individuals” below), and the extra revenue generated by businesses who use YouTube to advertise their products. In addition, the business benefits include the indirect and induced impact as this additional revenue is expended across the economy.

To calculate the extra revenue directly generated by advertising products, we estimate the total advertising expenditure on YouTube in Australia and the Return On Investment (ROI) to businesses which made these expenditures. Data for this calculation is based on IAB Australia,1 US data from Statista,2 and an academic study into the effectiveness of digital video advertising.3 We then applied a multiplier to this amount to reflect the extra economic activity that is generated indirectly. The calculation for the income earned by Australians from YouTube advertising displayed on their content is described in the next section.

---


Table 1: Inputs and sources for calculating business benefits of YouTube

<table>
<thead>
<tr>
<th>Metric</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Australian online video advertising expenditure</td>
<td>IAB Australia</td>
</tr>
<tr>
<td>YouTube’s share of online video advertising market</td>
<td>Statista</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>Pauwels, Kirev &amp; Gupta (October 2015)</td>
</tr>
<tr>
<td>Economic impact multiplier</td>
<td>Average of select government statistical multipliers for information services industries</td>
</tr>
</tbody>
</table>

**Distribution to content creators**

This figure is calculated as the share of total advertising revenue earned by Google which is distributed to content creators.

The total advertising expenditure on YouTube is estimated as an average of two methods. First, the top down method estimated the total video advertising spend in Australia and YouTube’s share of that market as described above. Second, new data released from YouTube allowed estimates of the revenue earned by individuals.4 YouTube data revealed that 2000 of its content partners earned between $1,000 and $100,000 per year in Australia, and a further 100 of its content partners earned above $100,000. An average of each revenue bracket was multiplied by the total number of content creators in that category.

Table 2: Inputs and sources for calculating distribution of revenue to individuals from YouTube

<table>
<thead>
<tr>
<th>Metric</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Australian online video advertising expenditure</td>
<td>IAB Australia</td>
</tr>
<tr>
<td>YouTube’s share of online video advertising market</td>
<td>Statista</td>
</tr>
<tr>
<td>% revenue shared with content creators</td>
<td>Estimates from various public sources</td>
</tr>
<tr>
<td>Direct estimate</td>
<td>AlphaBeta analysis of YouTube data</td>
</tr>
</tbody>
</table>

---

Consumer benefits

Consumer surplus is typically calculated by observing how customers respond to price changes. For example, if customers reduce their consumption rapidly in response to price increases, that may be an indication that they do not value the product much higher than its current price and are not deriving much benefit from it. The consumer benefits supported by YouTube are challenging to measure and calculate because individuals typically do not pay for the service, and paid versions of the product have only recently been released. In the absence of public price indicators, the established methodology for estimating the consumer benefits of free services such as YouTube is to calculate the “willingness to pay”. This method estimates benefits by surveying individuals to understand the value they place on the product.

We estimated the willingness to pay of individuals based on an average of existing research from McKinsey, and an original survey conducted by AlphaBeta for YouTube in 2016. This per-person figure is then turned into a total consumer surplus with reference to the total number of YouTube users as reported by Nielsen in its monthly Digital Ratings.

Table 3: Inputs and sources for calculating consumer benefits of YouTube

<table>
<thead>
<tr>
<th>Metric</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount that consumers value YouTube relative to other products</td>
<td>AlphaBeta Consumer Survey 2016</td>
</tr>
<tr>
<td></td>
<td>McKinsey</td>
</tr>
<tr>
<td>Number of YouTube users</td>
<td>Nielsen</td>
</tr>
</tbody>
</table>


6 Nielsen (2017), Digital Ratings (Monthly)