The Internet Industry in Germany 2020-2025: Impact of the Corona Crisis
Preview of the study
We have examined the diverse effects of the Corona crisis on the Internet industry – the picture is differentiated

INTRODUCTION 1/2

Since 2008, the eco Association and Arthur D. Little have been regularly investigating the development of the Internet economy in Germany. The previous study from 2015 predicted the size of the Internet industry in 2019 with an accuracy of 95.5%.

In addition to industry trends, this year’s global pandemic in the form of the Covid-19 virus or the so-called “Corona crisis” is a significant factor affecting all areas of the economy. In addition to initial segment-related surveys, company reports, press releases, and research analyses, we base our assessments above all on more than 30 expert and industry insider discussions that we held in April 2020.
We have examined the diverse effects of the Corona crisis on the Internet industry – the picture is differentiated

INTRODUCTION 2/2

In macroeconomic terms, we are guided by the scenarios of the IFO and IMF and base our baseline scenario on a GDP slump of around -5% in 2020, which assumes an easing of the shutdown from summer 2020 and is accompanied by a recovery in 2021-2022.

In most segments, there are opposing effects that have both negative and positive impacts on business development – but overall, we see patterns in many places that will lead to a rapid recovery of many areas from the short-term negative “shock” – only a few areas of the Internet industry will be negatively affected by the crisis in the long term.

Some segments are profiting from short-term demand; however, more important, especially in the Internet industry, are those areas that will be positively affected by the changes in the long term.
## Structure of the Internet Industry

<table>
<thead>
<tr>
<th>Layer 4: Smart Industries &amp; Paid Content</th>
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</thead>
<tbody>
<tr>
<td>Gaming &amp; Gambling</td>
</tr>
<tr>
<td>Public IaaS</td>
</tr>
<tr>
<td>Colocation &amp; Housing</td>
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</tbody>
</table>

Source: Arthur D. Little & eco.
The Internet industry in Germany will grow between 2019 and 2025 with an average annual growth rate of 9.5%.

**Internet industry 2019**

- Turnover (in % of the turnover size of the respective layer)

**Projection Internet industry 2025**

- Turnover (in % of the turnover size of the respective layer)

**Source:** Arthur D. Little & eco, 30.04.2020.
Covid-19 has an initially negative impact on the Internet industry in Germany in 2020, which will be compensated for by the end of 2022.
While the crisis leads to a strong slump, the Internet industry grows again in subsequent years: 11.8% per year across all layers.

Turnover and growth of the Internet industry in Germany

CAGR of the layers

The segments of the Internet industry are impacted on to different extents – clearly negative impact in the short-term, a positive lever in the long-term

Impact of the Corona crisis on the layers of the model of the Internet industry

<table>
<thead>
<tr>
<th>Temporarily negatively affected segments</th>
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<tbody>
<tr>
<td>▪ Segments heavily dependent on other economic sectors suffer most in the short term:</td>
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<tr>
<td>▪ Temporary slump in online advertising due to cancellation and postponement of major marketing campaigns</td>
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<tr>
<td>▪ Massive temporary slumps in sales due to project delays and cost brakes in some user industries such as <em>Industrial IoT</em>, Automotive &amp; Mobility</td>
</tr>
<tr>
<td>▪ Transaction segments negatively affected by consumer shock in both the private and business customer environment:</td>
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<tr>
<td>▪ B2C and B2B e-commerce due to the standstill of the industry and travel market and a historic low in consumer confidence</td>
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<tr>
<td>▪ Temporary slump in sales in the mobile phone segment due to mobility and travel restrictions and weakened corporate demand</td>
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<thead>
<tr>
<th>Potentially long-term affected segments</th>
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<tbody>
<tr>
<td>▪ Due to restrictions in the freedom of movement and travel and changes in value chains, some digital business models in user industries are also potentially negatively affected by the corona crisis in the long term:</td>
</tr>
<tr>
<td>▪ Tourism &amp; Retail</td>
</tr>
<tr>
<td>▪ Transport &amp; Logistics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Segments with temporary positive effects</th>
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</thead>
<tbody>
<tr>
<td>▪ Massively increased demand for entertainment and communication services during the lockdown phases leads to strong, temporary revenue growth in the gaming, TV/video, and especially streaming segments; even if these effects decrease over time due to multiple bookings, test subscriptions, and saturation effects and are reduced by countervailing effects in premium pay TV due to the absence of sporting events</td>
</tr>
<tr>
<td>▪ Increased investment in cyber security through a massive increase in remote work and migration of corporate data to cloud platforms</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Segments with short &amp; long-term positive effects</th>
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</thead>
<tbody>
<tr>
<td>▪ Fast and sustainable adoption of cloud services (IaaS, PaaS, SaaS) due to flexibility and scalability</td>
</tr>
<tr>
<td>▪ Increase in use of Colocation &amp; Housing services as well as the continuing trend in shifting infrastructure in data centers and to cloud services</td>
</tr>
<tr>
<td>▪ Digital business models in user industries aimed at schools, universities, and adult education (the Education segment) and applied in the Health Care industry are experiencing a significant boost in the short term, but above all in the long term</td>
</tr>
<tr>
<td>▪ Sustained increase in fixed network data volumes and upgrade of broadband connections for remote work and entertainment services lead to growing demand for fast access and also a positive development for fixed network operators</td>
</tr>
</tbody>
</table>

As things stand today, we are seeing strong temporary positive and negative influences due to the crisis – despite the shock, long-term positive effects predominate.
Layer 1 benefits from the changed demand situation in the medium term: Increased data throughput through home office, e-commerce & streaming

- Network infrastructures are being further expanded; trend toward higher bandwidths continues
- Companies relocate their own IT operations to data centers and use colocation & housing
- CDNs continue to gain in importance
- Price pressure remains high in all segments, so that e.g. transit is shrinking

All segments in layer 2 benefit from the additional need for flexibility and scalability during the crisis

**Layer 2: Services & Applications**

<table>
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<tr>
<th>Demand (in billion EUR)</th>
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<tr>
<td>2019</td>
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<tr>
<td>11.4</td>
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- **Edge / Fog Computing**, currently still a small segment, is growing strongly at 35% p.a.
- **IaaS** and **SaaS** are also growing strongly at 30% and 21% p.a.
- New framework conditions EU-USA strengthen trend towards cloud services also in smaller companies and medium-sized businesses.
- Changing infrastructures and security needs also continue to drive cyber security at 11% CAGR p.a.

**Effects of the Corona crisis**

- The already fast-growing segments in Layer 2 are experiencing even faster adoption due to the crisis – flexibility and scalability of cloud services, in particular, are in the foreground.
- **Web Hosting & Domains** remains relatively stable.
- Working from home increases exposure to cyber-threats and thus the need for investment in security.

Layer 3 suffers considerable negative growth in 2020, especially due to slumps in e-commerce sales; recovery will take place from 2021.

- End-customer behavior towards online consumption is also continuing to develop, especially via mobile devices, so that e-commerce B2C and advertising are growing accordingly.

The B2C e-commerce market has been hit by a YoY decline of 20%, mainly caused by the complete collapse of the travel industry and major purchases.

There is also a significant temporary cut in B2B business due to cost cutting and driven by spill-over effects, e.g. from events, gastronomy, tourism, travel etc.

Layer 4a primarily experiences temporary demand effects, which, however, only partially lead to additional sales.

- Gaming continues to grow – increasing usage, microtransactions both mobile and stationary, subscriptions to online networks
- Digitalization in the school system drives e-publishing
- SVOD initially fragmented with increasing platform competition
- Gambling benefits from legalization

**Effects of the Corona crisis**

- Gambling clearly temporarily negatively affected due to the radical cutbacks in local and global sports
- Gaming, music, and TV/video are experiencing a significant increase in demand – although in subscription/flat-rate models only partial positive sales effects and rather a loss of profitability; in platform competition many new test subscriptions on several platforms, where a later consolidation is expected

Digital business models in user industries are directly affected by the crisis – mostly temporarily.

Digitalization and networking continues in all sectors, infrastructures and business models are emerging and gaining momentum. In both B2B and B2C fields as well as in school and learning applications, networking increases efficiency and is increasingly gaining acceptance due to lower entry barriers and proven applications.

Cost-cutting and directly affected sectors (tourism, travel, trade, transport) of the crisis also influence the market development of the Internet industry in this area: even if the negative effects are mainly temporary, projects in this area are being postponed or delayed and the limited demand/usage possibilities also significantly inhibit some fields.

The Internet industry in Germany is clearly feeling the effects of the Corona crisis and will be significantly affected by it in the short and long term.

"The Corona crisis has shown us all how important digital infrastructure is and how much it makes possible"

"With turbo-digitalization, institutions and companies no longer ask whether, but only how"

"Monopolists are preferred in this development – because they can scale. The danger of monopolies solidifying is considerable"

"Customers appreciate the flexibility and closeness that we offer them"

"SMEs – small and medium-sized companies in the Internet industry must rethink and question their own positioning: How do we manage the balancing act of profitable business development, scaling, and customer proximity and take advantage of the very concrete additional growth opportunities?"

**Conclusion**

- The COVID-19 crisis is dramatically slowing down the growth of the Internet industry in 2020 – but will have a long-term catalytic effect on the expansion of digital infrastructure and the implementation of digital business models.
- The Internet industry will recover rapidly in 2021 - 2022: It will continue to grow at an average annual growth rate of 11.8% and thus gains in importance for the economy as a whole: By 2025, the Internet industry will account for ~7% of German GDP (today ~4.2%).

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