Position Paper

Europe’s Digital Decade – 2030 Digital Targets
A perspective from Germany’s digital economy

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Page 1

Introduction

The EU has proclaimed the 2020s as Europe’s digital decade aiming for far-reaching digital transformation in order to preserve the continent’s competitiveness, prosperity and influence. Bitkom supports the European Commission’s ambition to measure the progress of digital transformation in Europe to improve transparency and control.

Address the Gaps

In order to arrive at concrete targets, it is equally important to first analyse obvious shortcomings and quantify them. Already now, there are visible gaps in the EU’s ambition to strengthen its digital economy e.g. with regard to the job market: In Germany, 86 000 IT jobs remained unfilled in 2020 alone. Only every 7th applicant of the workforce in IT is female. Too much potential remains unused, creating enormous economic damage.

This development also has negative effects on the objective of more digital sovereignty, which includes the ability to assess digital technologies before integrating them into products, processes and society as such. The digital economy thrives on global sourcing and draws its innovative strength from its worldwide network and division of labour. The high degree of exchange in technologies and innovations on a global scale must not be put at risk.

Yet, a majority of companies in the entire German economy (not only from the IT sector) feels to be too dependent on importing hard- and software from abroad - particularly with regard to IT communication devices and systems (eight out of ten), 5G technology (seven out of ten), artificial intelligence (68 percent), virtual or augmented reality (67 percent), quantum computers (65 percent), blockchain (65 percent), drones (56 percent) and IT security technologies (55 percent).

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1 Bitkom Research, 86.000 offene Stellen für IT Fachkräfte (Dezember 2020)
2 Bitkom Research, Deutsche Wirtschaft strebt nach mehr digitaler Souveränität (Februar 2021)
The twin transition is an important part of the EU’s agenda – rightly so. Here we need Europe-wide numbers on the costs/benefits of digital technologies if possible by sector and application of digital technologies. The numbers for Germany are staggering: CO2 emissions can be reduced by 37% using digital technologies, while the carbon footprint of the digital infrastructure remains relatively small. If digitalisation accelerates in Germany, costs will be 22 megatons of CO2 equivalents in Germany by 2030, which means that the potential CO2 savings are five times higher than the actual footprint.

General Reflections on KPIs

The aim of setting KPIs will not be enough. KPIs can be misleading, particularly when the person, whose work is to be monitored, defines them.

That’s why we suggest that:

- KPIs should not be defined by the Commission itself, but by an external multi-stakeholder group.
- KPIs should only capture the outcome (goal) and not the output (instrument).
- Compliance with the KPIs should not be monitored by the Commission itself but again by an external multi-stakeholder group.
- Where does Europe actually stand in the digital transformation compared to others? For instance, if the European KPI is fulfilled but still lagging behind in international comparison, little is gained. Without such a ratio, a KPI has little meaning.

Suggestions for a (non-exhaustive) list of KPIs

Based on these initial reflections, we propose the following KPIs. Please note that this list is by no means exhaustive but reflects internal discussions at this point. By 2030:

- Every second Euro from agricultural investment programmes is invested in digital technologies, software and services.
- Half of all small and medium farms in Europe apply digital technologies.
- Half of all farms apply fertilisers and plant protection products on a site-specific basis.
- At least one lecturer at each agricultural school/university is responsible for digitalisation.

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3 Bitkom-Studie „Klimaeffekte der Digitalisierung“ durchgeführt von Accenture, Bitkom Klimaschutz
- At least €10 billion annual investment (private and public) in European Ag & FoodTech startups.

- The EU has produced 300 Unicorns. **Justification:** Currently there are 36 Unicorns in the EU (compare with around 250 in the USA). The number of Unicorns in the EU (incl. UK) has roughly tripled in the last five years.

- The EU matches (at least) the US in venture capital investment. **Justification:** Last year, $43.1 billion of venture capital was invested in the EU (incl. UK). In the US, the value was $156.2 billion USD in the same period. The investment sums grew by a factor of about 3 in the past years, analogous to the Unicorn figure. In the USA, the value grew only marginally in the last free years.

- 15% of the contract volume in tenders should be awarded to innovative start-ups as this represents young SME’s share of the European workforce.

- All public services for citizens and businesses are digitised and available to all users.

- A single digital gateway to public services in Europe is established. All administrative portals (European, national, regional) have been integrated or made interoperable and users can access all relevant administrative services with a single authentication.

- All public administrations have digitised their internal processes, thereby increasing their transparency, efficiency and sustainability.

- All public administrations can enable 2/3 of their employees to work de-centrally and mobile, as they have invested in the necessary hardware and software equipment (e.g. e-file and ERP systems) as well as the corresponding qualification measures.

- All public data is published via a central, European portal (open by default). Exceptions may only be made in a few and well-founded special cases (e.g. if anonymisation of personal data is not possible).

- Investment focuses on the technologies considered to be most important by businesses for their future developments: IT security (96%), AI (96%) and 5G (93%) (based on a survey by Bitkom Research from 2021)

- Half of the students in IT degree programmes should be female.

- The proportion of female IT workers should double. (Currently it is around 18% in the EU).

- All schools in the EU should have sufficient Wi-Fi coverage.
Every European should have free access to digital training formats that teach future skills such as data literacy.

Regulatory Monitoring

Besides concrete targets, Bitkom also supports the idea of a regulatory monitoring system to continuously track progress to this end. In a position from 2019, it was pointed out that an important part of any monitoring system includes a continuous assessment whether regulation meets the EU’s policy objectives. This is particularly important for policy-making in the digital sphere, which is cross-cutting and complex. We propose a digital impact assessment (analysing impact on competitiveness), a digital regulatory scrutiny reserve (assessing coherence with general regulatory framework) and a digital REFIT programme (evaluating whether existing rules are fit for purpose in a digital age). These three steps would look into policies at different steps of their life-cycle and can be integrated in existing processes.

The EU institutions are in a unique position to act as a coordinator for digital policies in member states. They have comprehensive overview of investment levels, state-of-play of specific regulations, implementation of relevant projects or uptake of digital transformation by technology/sector. These strengths should be leveraged by linking developments in national and European policy-making with KPIs. The Commission should play a central coordinating role – not in terms of setting and monitoring KPIs which should be done by an external multi-stakeholder group – but to track policies, facilitating best-practices sharing and coordinating cross-border projects. For that the Commission needs to be given sufficient capacities and resources.

Bitkom represents more than 2,700 companies of the digital economy, including 2,000 direct members. Through IT- and communication services alone, our members generate a domestic annual turnover of 190 billion Euros, including 50 billion Euros in exports. The members of Bitkom employ more than 2 million people in Germany. Among these members are 1,000 small and medium-sized businesses, over 500 startups and almost all global players. They offer a wide range of software technologies, IT-services, and telecommunications or internet services, produce hardware and consumer electronics, operate in the digital media sector or are in other ways affiliated with the digital economy. 80 percent of the members’ headquarters are located in Germany with an additional 8 percent both in the EU and the USA, as well as 4 percent in other regions of the world. Bitkom promotes the digital transformation of the German economy, as well as of German society at large, enabling citizens to benefit from digitalisation. A strong European digital policy and a fully integrated digital single market are at the heart of Bitkom’s concerns, as well as establishing Germany as a key driver of digital change in Europe and globally.

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4 Bitkom Position, Five measures for better policy-making in a digital Europe (Februar 2019)