

Berlin *aktuell*

The digital economy – a mainstay in the crisis

December 2021

Editorial by the Chairman of the Board of Investitionsbank Berlin



Dr. Hinrich Holm

The consequences of the Covid crisis have not had the same effect on all industries. There are in fact some sectors that have been able to use this crisis as an opportunity for further development. The digital economy is certainly one such sector, once again proving itself to be an important mainstay of economic development in Berlin.

Due to the crisis, there was an unexpected surge in digitalisation, both in the economy and society, which also demonstrated the enormous potential that digital processes and services had to offer. Within a very short period of time, companies switched to working from home, something that had previously been widely rejected across the board. Companies quickly found that it was in fact possible to hold many business meetings online without any problems and even at much lower cost. Even in 2021, it was already apparent that this development was here to stay. Of course, everyone is looking forward to being able to convene "analogue" meetings again, but the infrastructures for online meetings are now in place and the home office is not going away. Cooking boxes and new delivery services from Berlin have not only been booming since the long lockdown periods, they have become firmly established in many people's lives.

Berlin's digital economy has cushioned the blow of the crisis by providing digital services, even managing to create an additional 9,300 jobs. However, the pandemic also revealed those areas where digitalisation has yet to take hold. Large parts of the public administration have yet to be digitalised, while teachers, students and parents struggled to master a multitude of heterogeneous platforms and online offers to somehow cope with the 'school-free time'. Many areas still have a long way to go, so that Berlin's digital economy will not run out of tasks any time soon.

Berlin has also won international recognition as a digital capital, a fact reported in regular studies conducted by IBB and many other reports on this subject. The start-up community in Berlin has long since entered into a self-reinforcing, self-supporting cycle. This study by IBB economic experts shows that over the past decade the digital economy in Berlin developed at a much faster rate than in any other major German city. In 2020 alone, EUR 3bn was invested in start-up financing in Berlin – more than all the other federal states combined. IBB and its partners also have a share in this success: In 2020, 67 financing commitments were granted through IBB Ventures funds. IBB Ventures alone invested a total of EUR 25.4m in initial and follow-up rounds of financing, marking an increase of EUR 8.4m compared to the pre-crisis year. Together with private investors, a total of EUR 97.5m was invested in start-ups. I look forward to working with the stakeholders and partners in Berlin in order to demonstrate, promote, jointly finance and make use of the enormous opportunities that digitalisation has to offer for Berlin.

A handwritten signature in blue ink, appearing to read 'Hinrich Holm', with a long horizontal stroke extending to the right.

Dr. Hinrich Holm, Chairman of the Board of Investitionsbank Berlin

Results at a glance

The digital economy in Berlin

- A total of 118,172 people are employed in Berlin's digital economy – more than in any other major city in Germany.
- Between 2008 and 2020, 77,363 jobs were created in this sector. This means that the digital economy has grown more than three times faster than any other sector of Berlin's economy (9.3% compared to 2.8% p.a.).
- Every sixth new job in Berlin is created in the digital economy.
- Sales recorded by the 11,423 digital companies in Berlin amount to EUR 17.3bn, with gross value added totalling EUR 8.2bn.
- The digital economy accounts for close to 18% of Berlin's economic growth over the past seven years.

Core area of the digital economy

- In Berlin, 88,187 people are employed in the core area of the digital economy, i.e., software development and data services; that's more than in any other major German city.
- Employment in the core area of the digital economy is growing at an average annual rate of 11.1% in Berlin, twice the rate recorded for Germany as a whole (5.4% p.a.).

Start-ups and choice of location

- In 2020, 4,765 companies were established in Germany's digital economy, of which 631 were set up in Berlin (13.2%).
- The number of companies established in the digital economy in Berlin is higher than in Munich (241), Hamburg (22) and Leipzig (87) combined.
- An average of one new digital company is set up every 14 hours in Berlin.

Covid repercussions

- Berlin's digital economy is proving to be more resilient in the crisis than the rest of the economy and continues to create more jobs. In 2020, employment in the information and communication sector increased by 5.2%, while overall employment remained almost flat at 0.3%. Up to now (September 2021), employment in digital occupations has also risen by 8.5%, much higher than the figure recorded for overall employment (3.2%).
- Following the initial shock, the digital economy is now less dependent on the crisis instrument of short-time work. Since October 2020, the share of short-time workers in this sector has been much lower than in the economy as a whole. In May 2021, it was just under 3%, more than 50% less than the figure recorded by Berlin as a whole (6.8%).
- The digital economy will continue to serve as a pillar of employment in the future. However, the shortage of skilled workers is increasingly slowing down this trend. In November 2021, just under 1,000 job vacancies in the digital economy were reported to the Federal Employment Agency, 38% more than one year ago (Berlin as a whole: +23%).

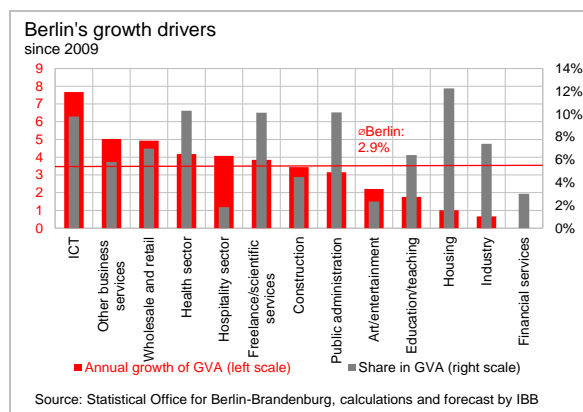
Labour market for IT professionals

- Compared to other sectors in Berlin, the average gross monthly salary in the digital economy, including special payments, totalled around EUR 4,806 in 2020 and was already well above average (average for Berlin: EUR 3,632).

1. Digital economy as a whole

Digital sectors of the economy with strong growth momentum

For many years now, information and communication technology (ICT) has been the strongest growth driver in Germany's capital city. Gross value added generated by this sector rose more than in any other sector: by 7.7% p.a. between 2009 and 2019 (Berlin as a whole: 2.9%). In 2020, the share in total gross value added recorded by the ICT sector rose to 9.8%, reaching the same level as the healthcare sector.



The digital economy is an important growth driver within the ICT sector

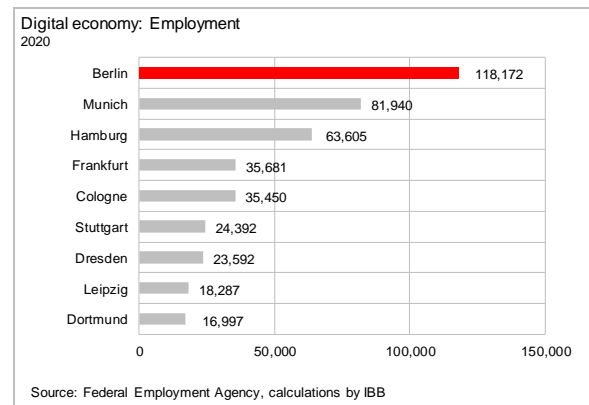
Within the ICT sector, which also includes publishing, media and broadcasting services, companies in the digital economy are in a particularly strong position. The introduction of new technological and digital innovations offers huge potential for growth, not only for digital companies themselves, but also for the rest of the economy. In this study, the digital economy includes the following main areas¹:

1. Provision of IT infrastructure and hardware (with the two sub-areas of ICT basic infrastructure and consumer electronics)
2. Software and data service providers (core area)
3. Organisation of e-commerce

A total of 1.34 million people are employed in Germany's digital economy. Close to 400,000 or 22% of them work in the nine major benchmark cities, although only around 14% of the German population live in these cities. The digital economy is particularly strong in areas where digital infrastructure has been sufficiently developed and digital companies can easily find highly qualified employees.

Berlin is Germany's biggest job location

In 2020, 118,172 people were employed in Berlin's digital economy – more than in any other major German city. In Munich (81,940), Hamburg (63,605), Frankfurt (35,681) and Cologne (35,450), on the other hand, far fewer people were employed in the digital economy in absolute terms.



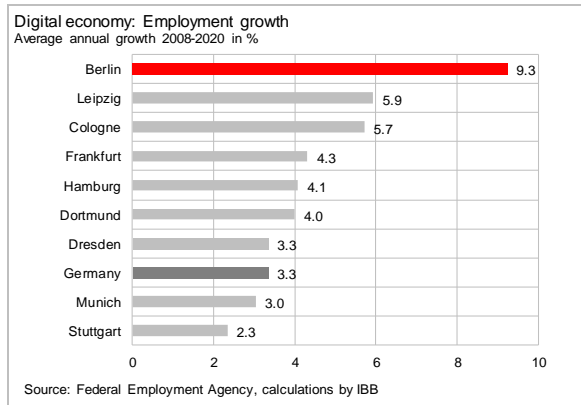
Adjusted for size, i.e., in relation to the total number of people in regular jobs, however, Berlin's digital economy only ranks third. In Munich and Dresden, for instance, the digital economy accounts for 847 and 807, respectively, out of every 10,000 jobs, in Berlin, the adjusted figure totals only 713. The German average totals 358 digital jobs out of every 10,000 jobs.

Digital economy as a job engine

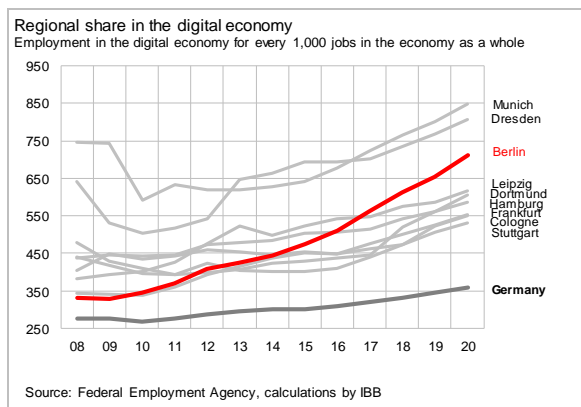
The importance of the digital economy for Berlin's overall economy has increased continuously in recent years. Between 2008 and 2020, a total of 77,363 new jobs were created in Berlin's digital economy. This corresponds to an average annual increase of 9.3% and is

¹ See Appendix: Definition of the digital economy

hence the highest annual growth in employment of all cities, followed by Leipzig and Cologne with annual increases of 5.9% and 5.7%, respectively.

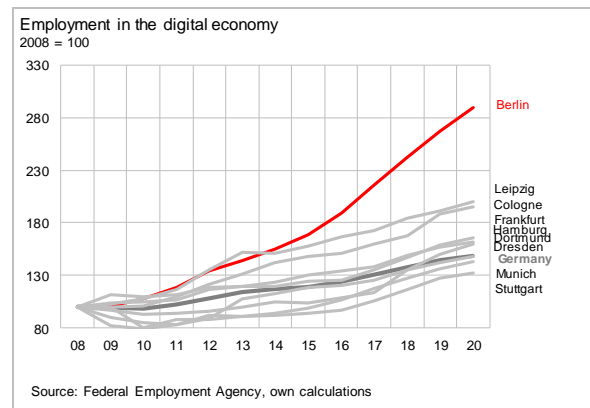


In 2020 alone, around 9,300 people found employment in Berlin's digital economy (+8.5%), almost as many as in Hamburg, Munich and Frankfurt combined. The German average growth rate for jobs in the digital economy is 3.3%. By comparison, total employment in Berlin rose by an annual average of 2.8% during this period and in Germany by 1.4%.



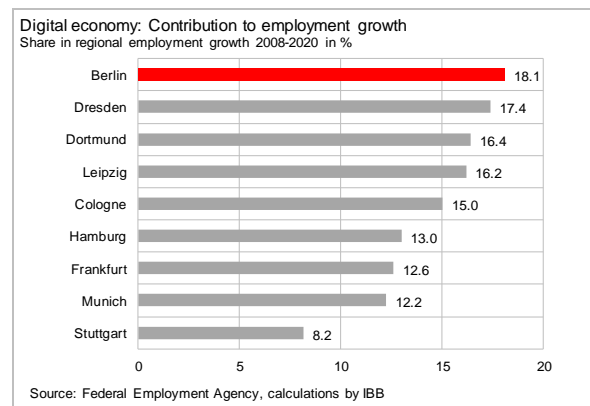
The dynamic development of Berlin's digital economy over the past decade becomes particularly clear when we look at the size-adjusted key figures: The share of digital economy jobs in overall employment in Berlin has more than doubled since 2008. Berlin is now hot on the heels of long-established ICT locations like Munich (Siemens, Infineon) or Dresden, where East Germany's first 'megachip' was developed. If this trend continues, Berlin will have overtaken the former chip hubs within five years at the

latest, not only in absolute terms but also in terms of size.



Every sixth new job in Berlin created in the digital economy

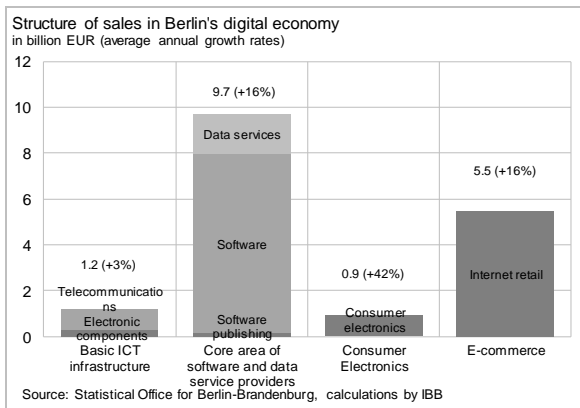
Since 2008, every sixth new job in Berlin has been created at a company working in the digital economy, corresponding to 18.1% of all new jobs. With this contribution to job creation, the digital economy has become very important for Berlin and is more important as a regional growth driver than in other German cities. More than three decades after German reunification and the invention of the World Wide Web, Dresden is the only other city where the digital economy is as important as a job driver (17.4%).



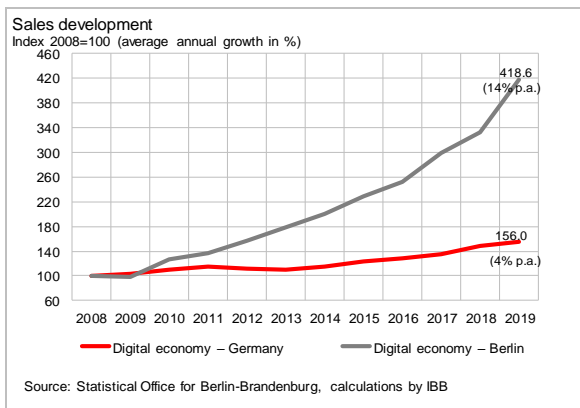
Internet companies generate sales of more than EUR 17bn

In 2019 (latest available figures), the 11,423 Internet companies in Berlin together generated sales of around EUR 17.3bn, corresponding to an annual increase of 13.9%. Sales recorded in the digital economy are now much higher than that of the construction

industry (EUR 12.5bn). Compared to the previous year alone, sales in the digital economy rose by a quarter.

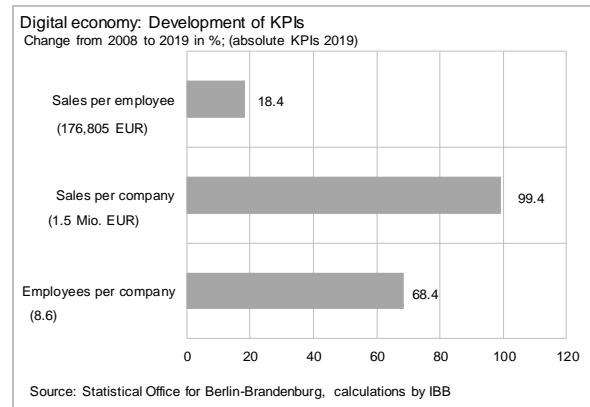


In the core area of the digital economy (software and data services), where the number of companies most recently totalled 9,200, sales since 2008 have risen from EUR 2.3bn to close to EUR 9.7bn. This corresponded to an average annual increase of 16%. Long-term development in e-commerce is just as dynamic – this sector has also grown by 16% annually and now accounts for around one third of Berlin's retail sales.



The rate at which sales are rising in Berlin (14%) is remarkable compared to the rest of Germany where the average increase since 2008 has been only about 4% per year. Other key figures also pay testimony to the rapid rate at which Berlin's digital economy is growing. The number of employees per company in the digital economy, for instance, has increased by 68% over the past 11 years to an average of 8.6 employees. Across all sectors, this figure is only 7.6 employees per company. From an entrepreneurial perspective,

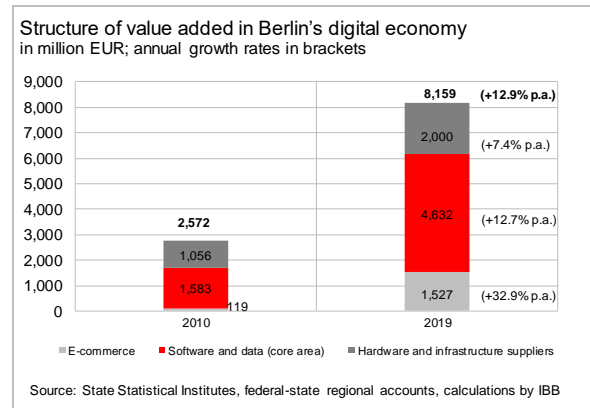
this high level of hiring is necessary because sales per company have doubled since 2008 to EUR 1.5m, which is well above the average for Berlin (EUR 1.22m). The shortage of skilled workers in the digital economy is increasingly proving to be a constraint, especially since qualified professionals often have to first move to Berlin.



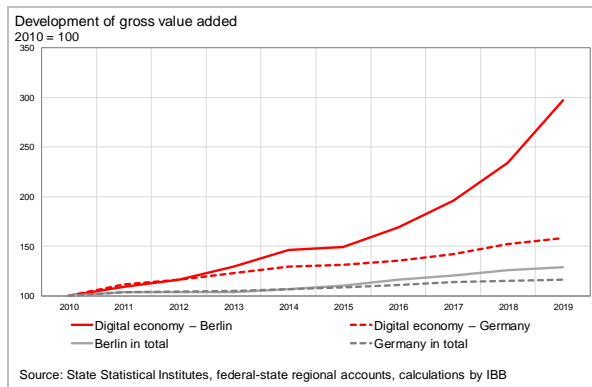
Digital economy responsible for 18% of Berlin's economic growth

Since 2010, gross value added in Berlin's digital economy, expressed in 2015 prices, has more than doubled to around EUR 8.2bn (last official figures available from 2019). Around 53% of gross value added is generated in the core area of software and data services (EUR 3.4bn). Hardware and infrastructure account for EUR 1.9bn and e-commerce with its dynamic growth for EUR 1bn.

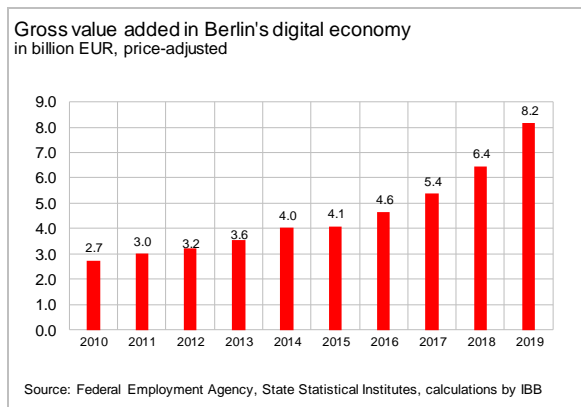
Around 18% of Berlin's total economic growth between 2010 and 2019 can be attributed to the digital economy. The reason for this is that since 2010 gross value added generated by Berlin's digital economy has grown by a price-adjusted figure of EUR 5.4bn.



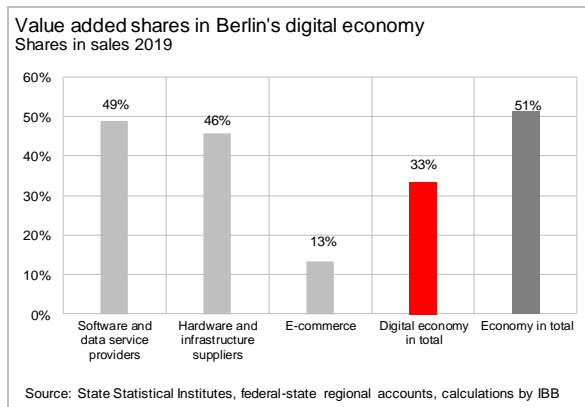
This corresponds to an average annual increase of 12.9%. By comparison, the price-adjusted increase recorded for Berlin's economy as a whole totalled EUR 29.6bn, corresponding to average growth of 2.8% each year.



When compared with the development recorded for Germany as a whole, Berlin once again proves itself to be a driver for digital structural change. In Germany, for instance, gross value added in the digital economy rose sharply over the same period from EUR 100bn to EUR 153bn. However, on an annual average level, this corresponded to an annual growth rate of only 4.9%.



In addition to the considerable increases in employment and value added, it also makes sense to take a look at how much value added is actually being generated in Berlin. Value added is, after all, what fuels wages, salaries, profit distributions and dividends. Higher demand for goods and labour indirectly creates new jobs in the region. In Berlin's digital economy, gross value added totals 33% of sales generated.



There are, however, enormous differences in the individual sub-sectors of Berlin's digital economy when it comes to their shares in value added. Providers of software and data services reach 49% and are almost on par with the value added share of Berlin's overall economy (51%). However, hardware and infrastructure suppliers (46%) along with e-commerce (13%) have only below-average shares in value added because these sectors require a particularly high level of input from other regions.

The digital transformation will also lead to a loss of jobs in some areas in Berlin. This will be felt particularly in those sectors where the automation of simple tasks will lead to greater efficiency and cost savings. But even if simple jobs are lost, new, high-quality jobs will be created at the same time to steer digitised processes. What's more, a growing number of jobs will be created in the digital economy and this will ultimately benefit private consumption as well as government revenues. Public investment and public services will be stepped up and this too will create new jobs.

Labour market for IT professionals

Although companies in the digital economy need many employees with different qualifications, IT employees from the core area of the digital economy are of outstanding importance for the industry.

Due to strong growth in the digital economy, companies are continuously on the lookout for programmers, database specialists and web designers. In recent years, the sector has benefited particularly from the influx of young

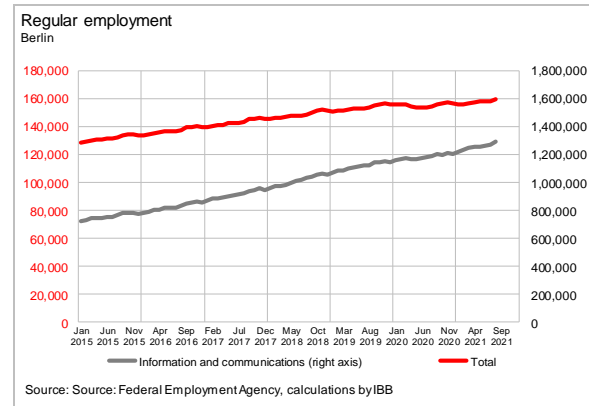
career starters from all over the world who are happy to come to Berlin. But even this international influx was not sufficient to satisfy Berlin's demand for qualified specialists in the digital economy. Asked about the biggest obstacle in the recruitment of IT staff, companies cited salary expectations among qualified applicants. Potential candidates can expect to find generally good working conditions and high salaries for Berlin standards. Compared to other sectors in Berlin, in 2020 all full-time, part-time and marginally employed workers in this sector earned an average gross salary of around EUR 4,806 per month, including special payments, which is significantly higher than the Berlin average (EUR 3,632). For IT professions in the core area of the digital economy in Berlin, average gross monthly salaries, including special payments, range from EUR 4,979 for computer scientists to EUR 5,278 for software developers and programmers. These salaries increase in line with the degree of specialisation.

Development during the Covid crisis

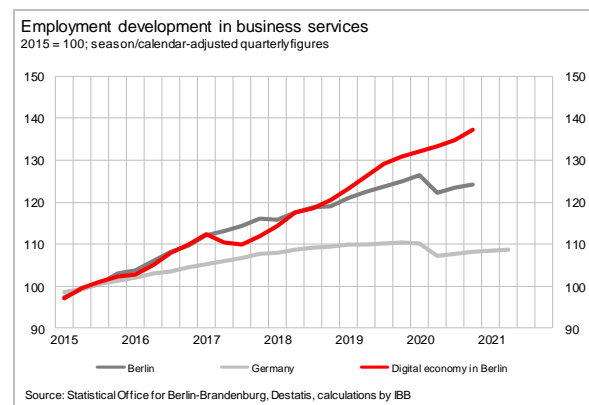
Demand for qualified IT specialists in Berlin has been very high in recent years. Even during the crisis, demand for skilled workers remained high. Many companies reviewed their business models and opted for a more digital approach. Physical restrictions, especially lockdowns, had a far lesser impact on digital services than, for example, on the catering industry. In the digital economy, the possibility of working from home has been more widespread for some time compared to other areas, which is why the industry was better prepared for the pandemic. Thanks in part to this strong mainstay, Berlin's economy proved to be resilient during the crisis. Although unemployment initially rose significantly, from below 8% before the crisis to 10.8% at its peak in July 2020, as the first comprehensive lockdown came to an end, this figure fell again and has been back in single digits since June. In November 2021, the unemployment rate was 8.9%.

At the same time, however, the trend in employment continued even in the crisis, as personnel continued to be added in some sectors of the economy, especially in the health and digital industries. In 2020, for instance, em-

ployment in the information and communications sector alone rose by 5.2%, while overall employment remained almost flat at 0.3%. In September 2021, employment in digital occupations also rose by 8.5%, much higher than the figure recorded for overall employment in Berlin (3.2%).

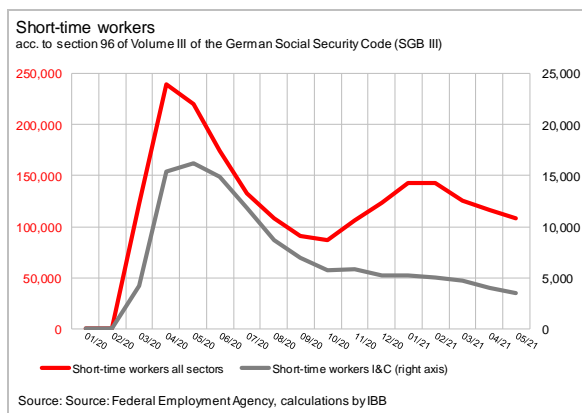


This shows that employment in the digital economy is proving to be more resilient to the crisis than in comparable economic sectors. Seasonally adjusted, employment in business services in Berlin did fall by 0.8% in the second quarter compared to the previous quarter. However, the service statistics issued by the Statistical Office for Berlin-Brandenburg show that according to seasonally adjusted calculations employment in the digital economy increased by at least 6.0%.

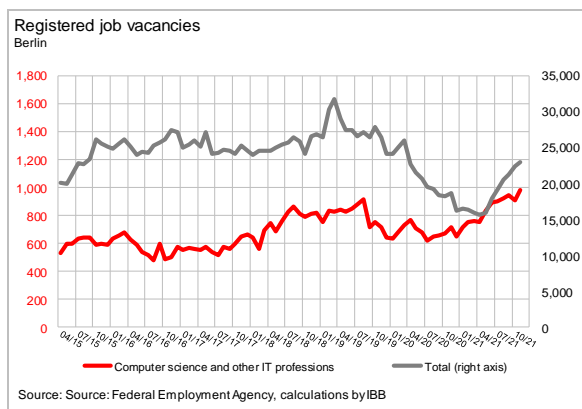


During the crisis, short-time work helped to support employment in many sectors. Here, too, it became apparent that the digital economy – after the initial shock had subsided – did not need to rely as much on this crisis tool. By October 2020, the share of short-time

workers in the workforce had developed similarly to that of Berlin’s economy as a whole. At its peak in April and May 2020, the proportion of short-time workers was over 13%. Since October 2020, however, the share of short-time workers has been much lower than the figure recorded for the overall economy. In May 2021, it was just under 3%, more than 50% less than the figure recorded by Berlin as a whole (6.8%). In the wake of the new restrictions to curb the fourth wave and the unknown, new Omicron variant, this figure is likely to increase again somewhat over the winter.



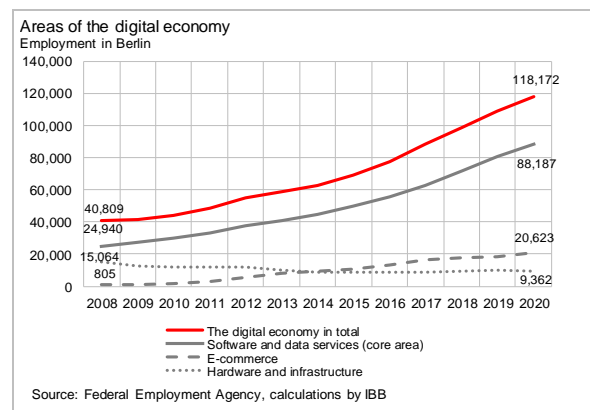
Demand for skilled workers in the digital economy remained very high even during the crisis. The number of jobs in information and communication occupations registered with the Federal Employment Agency has been rising since October 2020. In November 2021, the Federal Employment Agency recorded nearly 1,000 vacancies in the digital economy, 38% more than a year ago. The number of job vacancies in the economy as a whole grew by 23%.



The digital economy will continue to drive employment in the future. Even after the crisis, companies will not be willing to surrender new digital achievements and advances. The growing shortage of skilled workers is the only thing holding back growth.

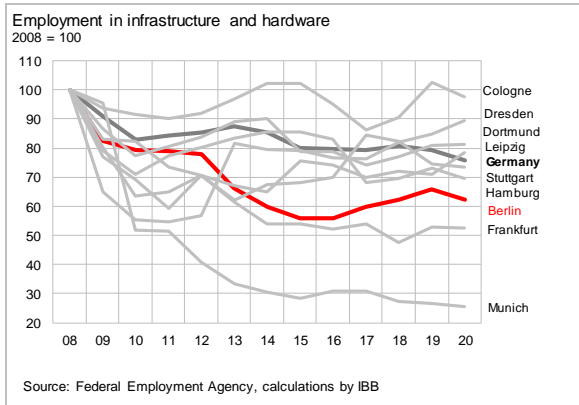
2. Sub-sectors of the digital economy

The individual sub-sectors of the digital economy, the core area (software and data services), hardware and infrastructure as well as e-commerce, each have at times very different development trends that must be analysed separately.



2.1. Decline in infrastructure and hardware

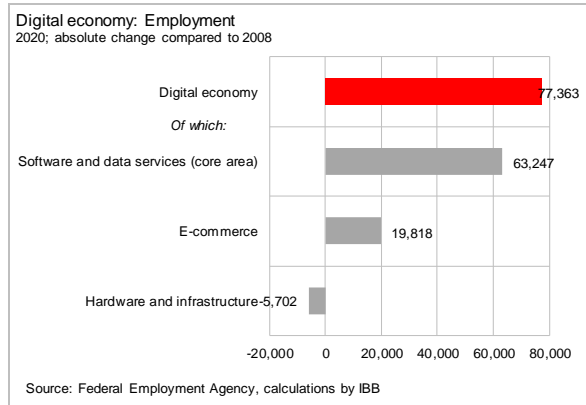
The sub-sector of hardware and infrastructure suppliers includes all those companies that provide the infrastructure needed to transmit (basic ICT infrastructure) and display (consumer electronics) the content and services generated in the core area of the digital economy. In this more industry-orientated sector of the digital economy, employment has been declining for years due to the migration of production to more low-cost regions of the world, but also primarily due to growing automation. Thanks to higher productivity, the remaining companies are still making a significant contribution to regional economic growth.



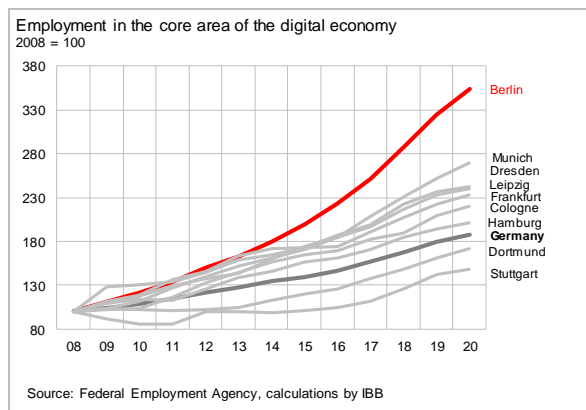
Since 2008, employment in this sub-sector in Berlin has fallen from a good 15,000 to most recently close to 9,400 jobs, corresponding to a decline of 38%. Since 2017, this sector in Berlin has once again recorded rising employment figures, however, Covid did temporarily put a stop to this trend. Compared to the employment low in 2016, 900 more people are now employed here. However, employment in this sector has declined throughout Germany where today's 276,000 jobs are 88,600 below the figure recorded in 2008 (-24%). Especially in Munich, employment fell by 74% to only around 7,900. It can, however, be assumed that employment in this sector is higher in the area around Munich. Cologne was the only city where employment remained at the same level.

2.2. Core area accounts for strongest growth in Berlin

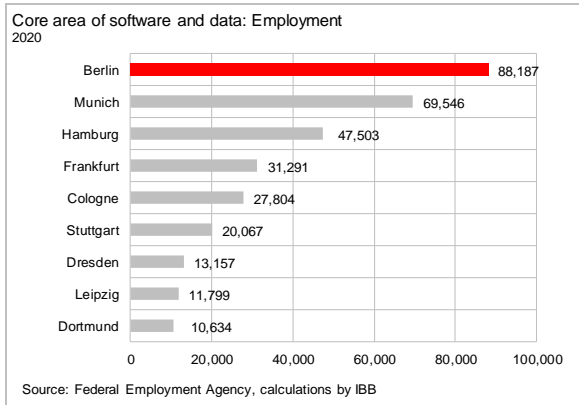
Software and data services, the so-called core area of the digital economy, have proven to be particularly important for Berlin, and not just in Berlin. The services provided by these industries are required by many companies worldwide as part of the digital transformation of work processes. In absolute terms, more than three times as many jobs have been created in this sector in Berlin since 2008 (+63,247) than in the much more dynamic e-commerce sector (+19,818).



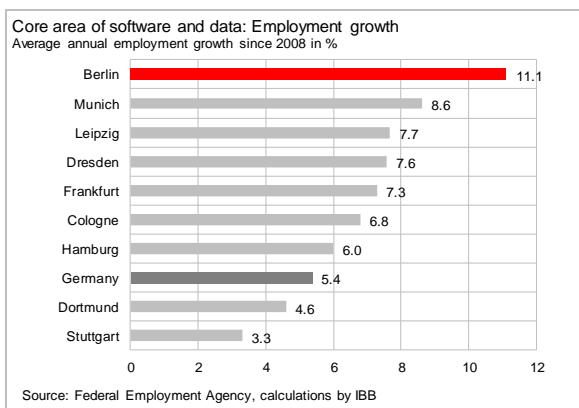
In Germany, 903,054 people are currently employed as software developers and service providers in the core area of the digital economy. Especially when compared to Germany's most important digital cities, the development of this sub-market has been particularly dynamic in Berlin.



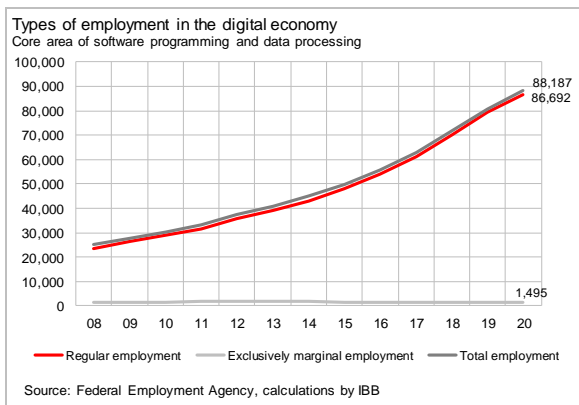
The majority of jobs in Berlin are located in the core area of the digital economy (88,187). This represents close to 10% of all software programmers employed in Germany. More than one third of all German software developers (around 320,000) work in the nine major cities surveyed. By comparison, these nine major cities account for only close to 14% of overall employment in Germany.



Employment figures in the core area of the digital economy in the capital city are increasing at an average rate of 11.1% each year. Neither Munich (+8.6%), Leipzig (+7.7%) nor Dresden (+7.6%) recorded such high growth in employment. The average increase in employment for the country as a whole is only 5.4%.

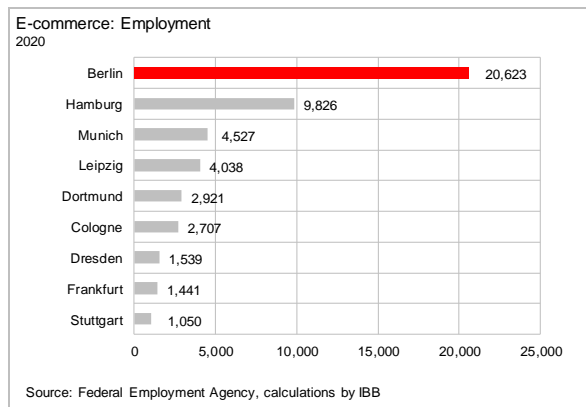


According to the Federal Employment Agency, almost all of the jobs in the core area of the digital economy are regular jobs. Of the total 88,187 employed in 2020, only 1,495 are employed in exclusively marginal jobs.

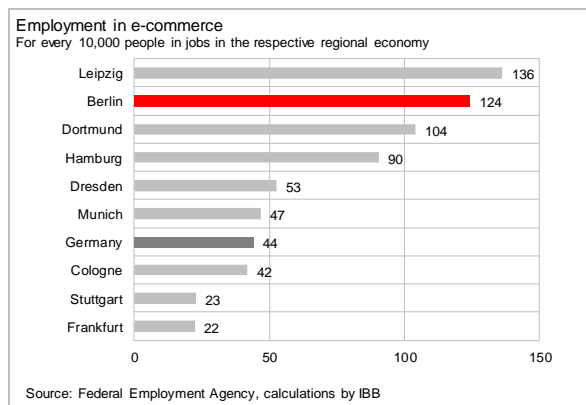


2.3. E-commerce concentrated in Berlin and Leipzig

Over the last decade, Berlin has undergone structural change. Although employment in the hardware and infrastructure sub-sector in Berlin has fallen by almost 5,700 since 2008, the decline in this sub-sector has been more than compensated for by strong growth in e-commerce, where three times as many new jobs were created over the same period (19,818). The around 1,000 e-commerce companies operating in Berlin currently employ 20,623 people. In Germany as a whole, this sub-sector employs around 165,500 people. From a national perspective, this means that every eighth job in e-commerce is based in Berlin (12%).

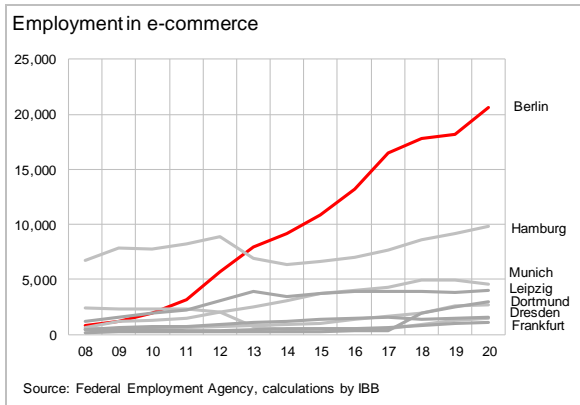


Today, 20,623 people work in e-commerce in Berlin, more than in Hamburg (9,826), Munich (4,527) and Leipzig (4,038) combined.



Even when adjusted for size, e-commerce can still be seen to be concentrated in Berlin, ranking second after Leipzig. For every 10,000 people employed in Berlin, 124 work

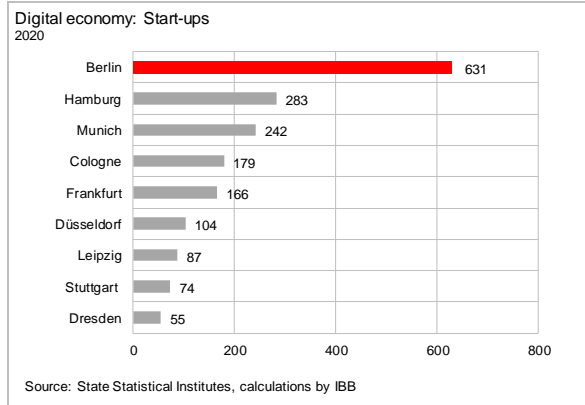
in e-commerce. Only Leipzig records a significantly higher figure of 136. That being said, however, Leipzig with its 4,038 jobs is just a fifth of the number of people working in e-commerce in Berlin (20,623). The steep increase in sales – additionally driven by the Covid crisis – and plans by major mail order companies to locate here ensure that this industry will continue to grow in Berlin in the future.



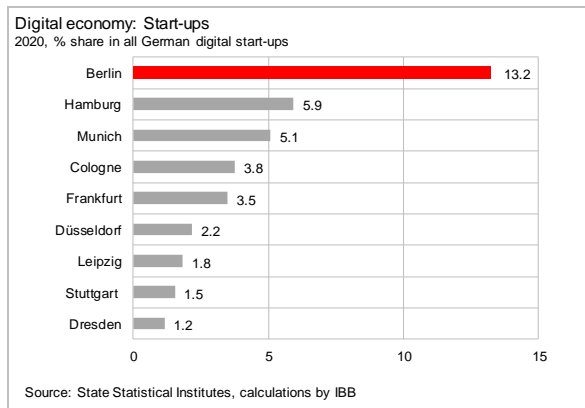
3. Start-ups and hubs

One new digital company every 14 hours

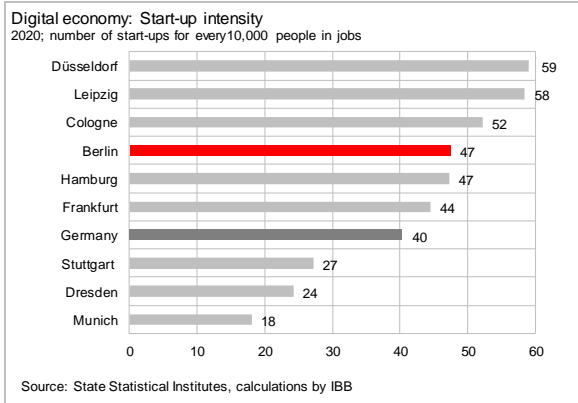
In Germany, a total of just over 117,000 business start-ups were registered with 4,765 of these setting up shop in the digital economy. These start-ups include corporations, such as limited liability companies, stock companies or limited partnerships. Unlike simple business registrations, companies like these can be assumed to be of greater economic importance as soon as they are set up due to the high costs involved in their registration. The nine benchmark cities accounted for a total of around 40% of all start-ups in the digital economy.



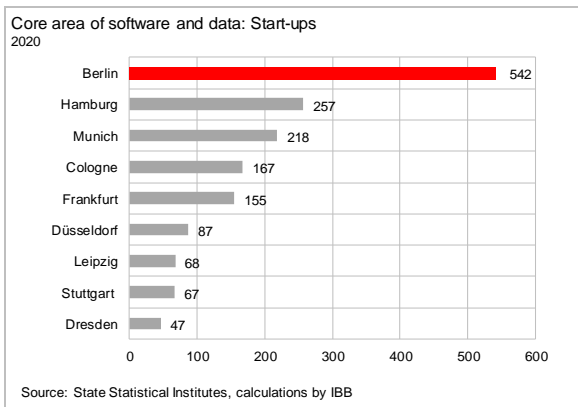
In 2020, 631 new digital companies were launched in Berlin. This means that on average one new digital company is set up every 14 hours in the German capital. The new companies being set up in Berlin’s digital economy are largely headquarters, just 22% of these are branches.



Adjusted for size, Berlin is in the upper mid-field with 47 start-ups per 10,000 digital jobs, after Düsseldorf with 59, Leipzig with 58 and Cologne with 52. The national average is 40. Especially when it comes to start-ups, Berlin’s ecosystem of investors, banks, business angels, universities and entrepreneurs has made a name for itself internationally. The digital economy accounts for many of these start-ups. In a comparison of cities across Germany, digital start-ups in Berlin come out on top with almost every eighth digital start-up in Germany being launched in Berlin (13.2% of all start-ups). This means that more companies are set up in the capital city than in Munich, Hamburg and Leipzig combined. In Munich, the number of start-ups is significantly lower at 242 (5.1%).



With 542 start-ups, Berlin is – in absolute terms – also the leading major German city when it comes to the technologically innovative core area of software and data services – far ahead of Hamburg (257 start-ups), Munich (218) and Cologne (167). However, when the number of digital start-ups is compared to the number of people working in this sector, Berlin only comes third after Hamburg and Düsseldorf.



Conclusion

The Covid pandemic has thrown a spotlight on the strengths and weaknesses of the economy. The digital economy proved to be the 'ace up the sleeve' of Berlin's economy. With a colourful range of digital products and services, this sector was well prepared for the demands that society and the economy suddenly had to face. The crisis has given a huge boost to digitalisation. Working from home, online school lessons, innovative forms of online shopping, virtual meetings in professional and family contexts, new apps for medical certificates and health warnings, and virtual doctor consultations – all of these new achievements will remain after the pandemic. Because there will be no going back to the old days. Instead, the experience gained with new digital platforms and tools will continue to be used and further developed as best as possible.

Digitalisation has already been underway in many sectors. In Berlin, the future sectors of healthcare, energy, transport and logistics are already well positioned. But here too, in the years to come, the companies in these sectors will also have to find solutions to some of the most urgent social challenges, such as the shortage of finite resources, environmentally friendly mobility and an ageing society. So, developers and programmers in Berlin will not run out of work. On the contrary, skilled workers are urgently needed and digital education and training is one of the most important topics in the focus of the newly elected government coalition in Berlin.

The digital economy will therefore remain a dynamic growth driver in the long term. Employing close to 120,000 people, Berlin is not only the most important German location for the digital economy, but also a beacon attracting skilled workers from all over the world.

New product ideas are being developed and tested here. Start-ups benefit from the lively start-up landscape in Berlin, the strong science and research institutions and a strong network with established companies. It is not

without reason that numerous industrial companies have opted to locate their innovation hubs and digital laboratories in Berlin. This involves the fusion of IT technologies with production technologies and the development of new, innovative and mostly digital services.

To ensure that these new digital products are in fact accepted by the economy and society, data security, technical standards and a modern legal framework must be further developed. But it is not only at company level that a functioning regulatory framework is needed. If Berlin is to remain an attractive location for skilled workers from all over the world, the quality of life must continue to be ensured and the framework conditions for companies must be designed to be as stress-free as possible.

The digitalisation of government and the streamlining of bureaucratic requirements and processes must be driven forward with greater resolve. Skilled workers are in demand the world over and they also have demands. Berlin, with its colourful social mix, creative urban culture and a cost of living that is not yet excessive by international standards, still has a lot to offer. But this is not a sure-fire recipe for success. The heated discussions on topics like rising rents or slow and inefficient government services show where people see a considerable need for action.

Appendix: Definition of the digital economy

This study is intended to enrich public debate on the digital economy with up-to-date figures from official statistics. The digital economy itself is not listed as an independent industry in the classification of economic sectors by the Federal Statistical Office (WZ-2008). For research purposes, it can be defined quantitatively with the help of the relevant service and industry sectors.

Breakdown of the digital economy based on the official statistical industry classification

WZ-2008	Economic branch	
26.1	Manufacture of electronic components	ICT base infrastructure
26.3	Manufacture of devices and setting up telecom systems	
61.1	Line-based telecommunications	
61.2	Wireless telecommunications	
61.3	Satellite telecommunications	
61.9	Other telecommunications	Hardware and infrastructure
58.2	Software publishing	
62.01	Programming activities	
62.02	Consultancy services in the field of IT	
62.03	Operation of IT facilities for third parties	
62.09	Other IT services	Software and data service providers (core area)
63.11	Data processing, hosting and related activities (database service, data storage services)	
63.12	Web portal	
26.2	Manufacture of IT devices and peripheral devices	Consumer Electronics
26.4	Manufacture of consumer electronics	
26.8	Manufacture of magnetic and optical data carriers	
47.91	Internet and mail-order retail	

Source: Destatis, composed by IBB

In addition, the digital economy can be divided into the following main areas:

1. Provision of IT infrastructure and hardware (with the two sub-areas of ICT basic infrastructure and consumer electronics)
2. Software and data service providers (core area)
3. Organisation of e-commerce

It is in the so-called 'core area of the digital economy' that the software and data services necessary for digital structural change are being created. E-commerce has become an important part of the digital economy in Berlin. With the expansion of the Internet, mail-order commerce has changed dramatically, paving the way for new, innovative companies which, to a very large extent, are setting up shop in Germany's capital city and are also operating on an international scale.

Published by:
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10719 Berlin

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Publishing date: December 2021

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