# Evaluating the Impact of the Second Funding Period of the Digitalprämie Berlin: Insights into SME Digitisation, IT Security and Policy Implications

Paul Sonnenberg

Wirtschaft, Informatik, Recht

Technische Hochschule Wildau
Hochschulring 1, 15745 Wildau
15745 Wildau
E-Mail: paulsonnenberg@t-online.de

**ABSTRACT**
This article analyses and evaluates the results of the second funding period of the Digitalprämie Berlin (Digital Premium Berlin), a public funding program initiated by the state of Berlin to support the digitisation of small and medium-sized enterprises (SME). This study builds upon the previously published article, "Digitisation Funding for Small and Medium-Sized Enterprises in Germany Using the Example of the Digitalprämie Berlin", which examined the outcomes of the first funding period and outlined initial adaptations for the second phase.

By assessing the impact and effectiveness of the second funding period which ran from 15.08.2022 to 31.03.2023 and comparing it to the first funding phase, which ran from 02.11.2020 to 31.10.2021, this article provides insights into the role of public funding in SME digitisation, addressing key challenges such as funding accessibility, digitisation barriers, and sector-specific investment trends. The analysis is based on the "Bericht zur Auswertung der zweiten Förderperiode der Digitalprämie Berlin", published by DAB Digitalagentur Berlin GmbH (DAB), to which the author contributed to his professional capacity.

The findings highlight the ongoing need for public support in SME digitisation, emphasising the effectiveness of targeted funding programs in fostering technological innovation, IT Security, and competitiveness. The article also discusses policy implications and recommendations for optimising future digitisation funding initiatives to maximise impact.

**KEY WORDS**
Digitisation, IT Security, Funding, Small and Medium Enterprises, Digitalprämie Berlin

**INTRODUCTION**
As laid out in the first article, digitisation is a continuing megatrend that accelerates with the speed of which new technologies like autonomous automatization, artificial intelligence (AI) and large language models (LLM) emerge and become practically usable in socio-economic contexts. The latest rise of AI, LLMs has proven that digitisation keeps being a driving force behind economic growth despite ongoing geo-political changes regarding global conflicts and IT security threats as well as changing economic realities.

Digitisation as a scientific term is not definitely defined and leads to two interpretations. In its narrowest sense means the transformation of analogue information, processes, products and business models into their digitally processable equivalents. In a broader sense the term digitisation also encompasses the digital transformation of the whole economy and society and is often compared to the industrial revolution.

The digitisation of businesses directly leads to more efficient and resource-saving processes, while simultaneously increasing profits and reducing efforts. This is primarily due to the higher scalability of digital processes, products, and business models (Lichtblau 2018).

This improved efficiency and scalability of digitised processes, products and business models directly influences the global competitiveness and innovative capacity of Berlin, Germany and the European Union (EU) as business hubs. Consequently, the promotion of digitalisation, particularly for small and medium enterprises has become an increasing focus of political priorities (European Commission 2008). This shift is particularly reflected in the German Federal Government's new digitalisation strategy, in which SME hold a pivotal role, especially regarding artificial intelligence (Bundesregierung 2022).

According to destatis in 2021 99,3 percent of all companies in Germany were small and medium-sized enterprises and employed 55 percent of all employees while realising 26 percent of the German GDP (Statistisches Bundesamt 2025). The European Union defines small and medium enterprises as all companies with 3 to 249 employees, 27.000 to 50 million annual turnover and an exaggerated balance not bigger than 43 million. This definition was presented by the European Commission and agreed upon by all EU member states (European Commission 2008).

Small and medium enterprises are therefore often referred to as the backbone of the German and European economy. The distribution of SME along European lines

resembles with their distribution in Germany (Papadopoulos 2018).

Nevertheless, SME still have disproportionately more unrealised potential in using new technologies and the digitisation as bigger enterprises employ more IT experts, employ new technologies earlier and tap into digital markets earlier which leads to significant advantages of corporation in comparison to SME. Bigger enterprises and corporations also lead in terms of creating innovation and new digital products (Lichtblau 2018).

## DIGITALPRÄMIE BERLIN

### Initial Situation

The Digitalprämie Berlin is a public grant issued by the senate of Berlin that is awarded based on European state aid law, Art. 107 et seq. TFEU3 and the so-called "de-minimis" criteria, established by the European Commission. The "de-minimis" criteria state that no public subsidies above 300.000 Euro over a three-year time span can be allowed to any enterprise (European Commission 2013).

While the first funding period of the Digitalprämie Berlin was initially founded to counter the effects of the Covid-19 pandemic while digitising small and medium-sized companies in Berlin on a broader scale to make them more resilient in face of ongoing supply-chain problems, the focus of the second funding period shifted to IT-Security and advanced technologies like automatization and artificial intelligence in practical use by small and medium-sized enterprises.

Berlin is characterised by small and medium-sized enterprises, which often see financial investment in digitisation projects as a major challenge. In response to this, the Senate Administration for Economic Affairs, Energy, and Industry launched the Digitalprämie Berlin on November 2, 2020, and commissioned Investitionsbank Berlin Business Team GmbH (IBT), a subsidiary of Investitionsbank Berlin Unternehmensverwaltung, to implement the funding program (Berliner Senatsverwaltung für Wirtschaft, Energie und Betriebe 2020).

As the central coordination agency for digitisation measures for companies in Berlin and a subsidiary of Investitionsbank Berlin (IBB), DAB Digitalagentur Berlin GmbH is responsible for analysing and evaluating the Digitalprämie Berlin and deriving recommendations for further measures based on the data.

The primary goal of the Digitalprämie Berlin was to strengthen the competitiveness and future viability of Berlin's SME. The program aimed to encourage companies and self-employed individuals to invest in digitisation by providing financial incentives. The COVID-19 pandemic further emphasised the need for businesses to optimise their processes and develop new digital sales channels and business models. At the same time, declining revenues and consumer reluctance made investments in modernisation more difficult. The Digitalprämie Berlin was therefore designed not only to enhance the innovative capacity and sustainability of Berlin's businesses but also to mitigate the economic impact of the pandemic.

The funding could be applied for entirely online and was deliberately designed to be broad and inclusive. It was not restricted to specific industries, trades, or business types, nor was it limited to certain software, hardware, or services, as long as the investments contributed to the company's digitisation. With this comprehensive approach, the Digitalprämie Berlin sought to reach as many SME as possible and provide them with extensive support in their initial steps toward digital transformation.

### First funding period

The first funding period of the Digitalprämie Berlin provided a total of 25 million Euro in funding to over 4,000 companies, with 71 percent of recipients receiving support through the "Basic" module and 29 percent through the "Plus" module. By October 25, 2021, a total of 4,010 individual measures had been approved across 1,720 applications.

Most of the funded projects focused on Digital Work & Transformation Processes, followed closely by IT security (25.1%), Digital Management Processes (19.7%), and Digital Consulting & Qualification (14.7%). Most of these projects were small-scale, with an average funding amount of 7,800 Euro, and primarily involved SME with fewer than 10 employees (66%). Companies with 10–50 employees accounted for 28.2 percent of the recipients, while only 5.8 percent were medium-sized enterprises with 50–249 employees. The majority of participating businesses had an annual turnover between 10,000 Euro and 1 million Euro, with companies generating higher revenues more likely to apply for the "Plus" module.

Regarding sector distribution, the largest funded industries were ICT and medical technology, followed by construction and the food industry. However, 45.9 percent of companies reported working outside the 24 predefined sectors, indicating that the sector classification was too limited. In terms of investment allocation, 44.7 percent of funds were spent on software, 29.7 percent on production-related hardware, 17.6 percent on a mix of hardware and software, and 8 percent on qualification and training. IT security emerged as a key priority, representing 60 percent of all projects.

Within software investments, 37.4 percent was allocated to IT security software, while 22.6 percent went to websites, web shops, and inventory management systems. For hardware, 56.3 percent of funds were used for server and internet hardware, 16.3 percent for office hardware, and 9.5 percent for camera and video equipment. IT security funding was mainly used for acquiring security hardware, licenses, and certificates, highlighting the increasing importance of cybersecurity for businesses.

In terms of geographic distribution, over two-thirds of funded companies were located in Berlin's central districts, particularly Mitte, Charlottenburg-Wilmersdorf, Pankow, and Friedrichshain-Kreuzberg. This concentration suggests that businesses in these areas were more engaged with the program or had better access to information regarding available funding opportunities.

**Second funding period**

The second funding period also provided non-repayable grants for SME with a registered office or business location in Berlin and up to 249 employees, including self-employed individuals and full-time freelancers without employees. However, businesses had to be established before December 31, 2021, to be eligible. The "Basic" and "Plus" modules were merged, eliminating the previous classification of SME. As a result, eligible applicants could request up to 17,000 Euro, with a maximum co-financing rate of 50 percent of eligible costs. Up to 10 individual measures could be funded in the following areas:

- Digital work, production, and management processes
- Implementation or improvement of IT security
- Digital consulting and qualification

The most significant changes included the merging of the "Basic" and "Plus" modules and the introduction of a digital maturity assessment based on self-evaluation. Additionally, early project implementation was now permitted for all applicants.

The disbursement of approved grants was now subject to the completion of the utilisation verification process, and funding for net costs was made possible regardless of VAT deduction eligibility. In addition to adjustments to key deadlines, a mandatory income threshold of 27,000 Euro in annual revenue for self-employed applicants was introduced. Furthermore, the requirement to submit proof of registration in the Transparency Database at a later stage was removed.

**Resarch questions & methods**

The dataset analysed consists of 865 project documentation records (compared to 1,720 in the first funding period), which include key data on approved grant applications and responses from funded companies to various questions. Since a single application could cover multiple projects, the dataset comprises a total of 2,326 individual measures (4,020 in the first funding period). The responses to the questionnaire provide insights into the business activities, objectives of the digitisation measures, specific use of funds, and project progress. Additional information such as the number of employees, annual revenue, and project costs offers a fundamental overview of the applicant companies.

The extensive amount of data per entry, along with the length and complexity of some responses, made a thorough analysis more challenging. To facilitate statistical evaluation, the unstructured data was processed, categorised using keywords, and assigned to predefined categories. Unlike the analysis of the first funding period, Natural Language Processing (NLP) was not used this time. Due to differences in analytical methods and the expansion of search criteria in this evaluation, not all results are directly comparable to those from the previous funding period. Additionally, the elimination of the "Basic" and "Plus" modules from the first p3hase complicates the comparison of project costs and funding amounts. Another factor limiting comparability is the significantly smaller sample size in this evaluation, with less than half the number of applications compared to the first funding period.

Nevertheless, the analysis provides valuable insights into the use of the Digitalprämie, as well as an overview of the funded companies. The objective of this evaluation is to generate data-driven insights into the recipients, funded projects, and their purposes, thereby supporting the Senate Department for Economic Affairs, Energy, and Public Enterprises and the Investitionsbank Berlin in further developing the Digitalprämie Berlin.

## RESULTS AND INTERPRETATION

**Results**

In total, the second funding period of the Digitalprämie Berlin supported 865 companies with approximately 10,000 employees and a combined revenue of around one billion euros, distributing approximately 10 million Euro in funding (as of September 13, 2023).

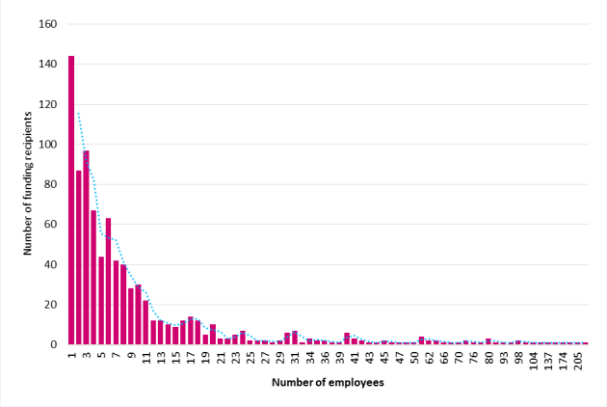


*Figure 1 – Number of employees of recipients*

The evaluation of company sises in Figure 1 clearly shows that the Digitalprämie was primarily utilized by smaller businesses and self-employed individuals. Figure 2 presents the distribution based on the EU definition of SME, indicating that 17 percent of funding recipients were self-employed individuals, while the remaining 83 percent were companies with more than one employee. For better clarity, self-employed individuals were recorded separately in this analysis. Micro-enterprises (<10

employees) accounted for the largest group of funding recipients, with 468 approved applications (54%).

Figure 2 compares the first and second funding periods. In the first period, it was already noticeable that micro-enterprises (48.6%) and self-employed individuals (17.2%), which together make up approximately 89 percent of all businesses in Berlin, were underrepresented, accounting for only 66 percent of funding recipients.

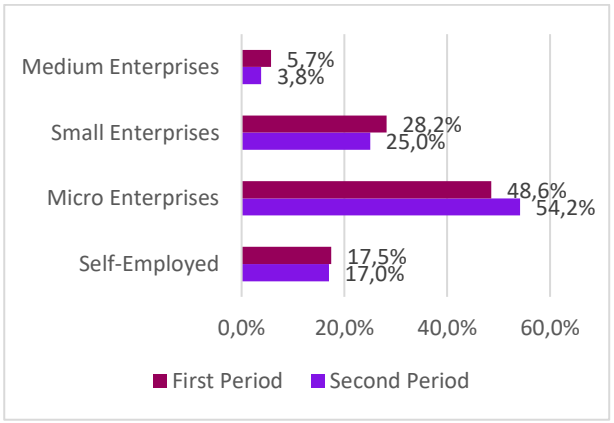


*Figure 2 – Comparsion of Distribution along SME-criteria*

In the second funding period, this trend persisted, although there was a slight improvement, with these groups now making up 71 percent of recipients. Small enterprises (<50 employees) were also well represented, accounting for 25 percent of recipients, though their share declined slightly from 28 percent in the first period. Despite this, they remained significantly overrepresented compared to their 9.2 percent share in the Berlin business landscape.

Medium-sized enterprises were the smallest group among funding recipients, with only 33 approved applications (3.8%), a slight decrease from 5.7 percent in the first funding period. This shift brings their representation closer to their actual share in the Berlin economy (2%).

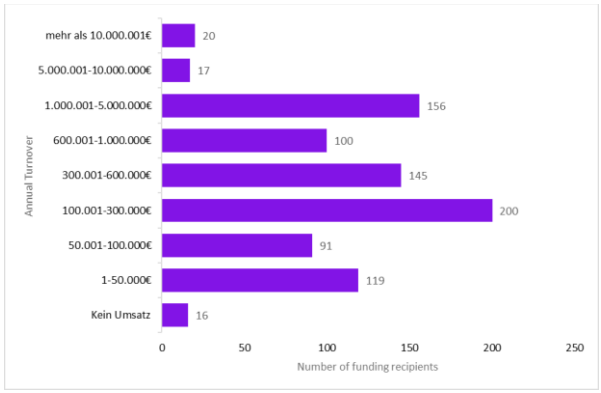


*Figure 4 – Distribution of annual turnover along recipients*

As illustrated in Figure 4, the revenue data provided by the companies indicates that the Digitalprämie successfully reached a broad range of businesses, as can be seen in Figure 4. However, there is a slight prevalence of lower-revenue companies, which aligns with the fact that smaller enterprises made up the majority of funding recipients. Businesses with less than 100,000 Euro in annual revenue formed the largest group, accounting for 226 recipients (26.1%).

At the same time, 193 companies (22.3%) with over 1 million Euro in annual revenue also benefited from the program. This suggests that the funding measures effectively targeted businesses with growth potential, supporting both small enterprises in their digital transformation and larger companies in expanding their digital capabilities.

Figure 5 compares the sector distribution based on official industry classifications between the first and second funding periods, highlighting several notable discrepancies. One of the most striking differences is the significant increase in funding recipients from the healthcare sector. While only 8.8 percent of beneficiaries in the first funding period came from social services and healthcare, this figure rose to 17.4 percent in the second period.

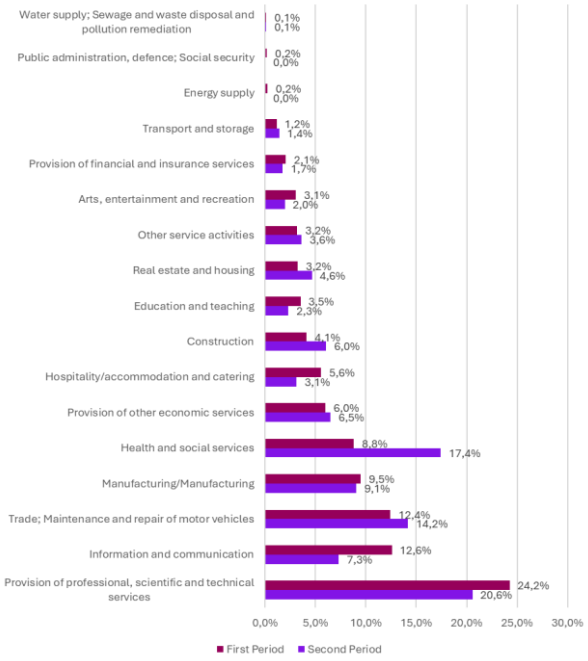


*Figure 5 – Comparsion of Distribution along Industries*

Conversely, the information and communication sector saw a notable decline, with its share dropping from 12.6 percent to 7.3 percent. Other decreases were observed in freelance, scientific, and technical services, which fell from 24.2 percent to 20.6 percent, and in the hospitality and catering sector, which declined from 5.6 percent to 3.1 percent.

To provide an overview of the intended uses of the Digitalprämie, project descriptions were analysed for keywords and categorised accordingly. The results were grouped into four main categories: Hardware, Software, IT Security, and Training, with further classification into subcategories.

Due to the nature of the analysis process, some data imprecision is expected, which may affect comparisons with findings from the first funding period. If a measure contained keywords from multiple categories, it was assigned to each relevant category.

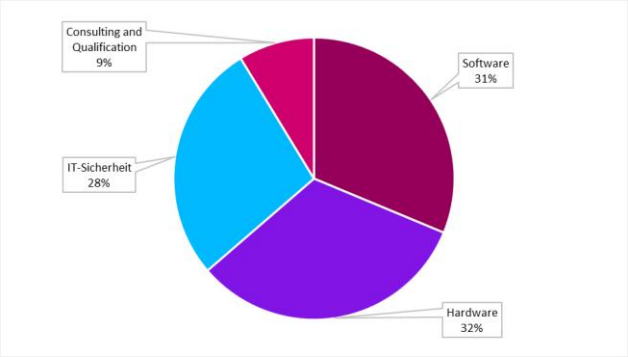


*Figure 6 – Distribution of single measures along clustered use cases*

Figure 6 illustrates the distribution of individual measures across the main categories. The categories Software, Hardware, and IT Security will be further broken down into specific product areas in the following sections. Comparing these results with the previous funding period is challenging, as IT Security measures in the first period's analysis were only recorded within subcategories, making direct comparisons more difficult.

As a next step, the individual measures classified as software were analysed based on specific keywords and categorised into subcategories. Seven of the most common software product groups were identified and defined as follows:

- Communication Software & Streaming Tools – Includes all internet telephony solutions, video conferencing software, and tools for broadcasting live streams and webinars.
- Design, Image & Video Editing Software – Specialised tools for editing and processing digital images and videos, as well as software for creating graphic content.
- Websites, Web shops & Inventory Management Systems – Covers projects related to a company's online presence. Since web shops are often implemented alongside inventory management systems, these are included in this category.
- Computer-Aided Design (CAD) / Computer-Aided Manufacturing (CAM) Tools – Specialised software for modelling products and components and their computer-assisted production.
- Customer Relationship Management (CRM) – Databases designed for managing customer data and documenting customer interactions.
- Content Management Systems (CMS) – Tools for editing and managing websites and online content.
- Enterprise Resource Planning (ERP) – Software used for resource planning and managing business processes.

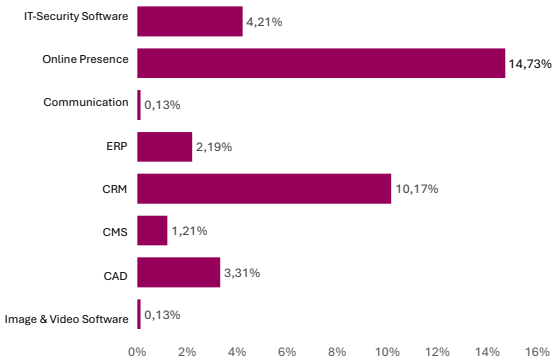


*Figure 7 – Distribution of measures in the sub-cluster Software*

Figure 7 displays the percentage of funded projects that included at least one measure within these software subcategories. The most frequently funded measures were those aimed at enhancing online visibility, accounting for 14.7 percent of projects. One in ten projects involved the acquisition of a CRM system. The high number of investments in websites and CRM systems highlights that expanding digital marketing channels and improving customer acquisition remain the most in-demand digitisation initiatives. IT security software was the third most frequently funded measure, making up 4.2 percent of projects.

Afterwards, hardware product categories were defined, and the entries were categorised based on keywords.

- Workplace Equipment (formerly: Office Hardware) – Includes all technical devices for daily use, including portable devices for field operations.
- Server Hardware – Covers hardware servers, physical data storage, as well as infrastructure for internet connectivity and online service provision.
- Printers & Scanners – Includes both standard office units and specialised machines such as 3D printers.
- Point of Sale (POS) Systems – Includes cash register systems along with their back-office hardware.
- Image & Video Hardware (formerly: Camera & Video Technology) – Includes video conferencing systems, webcams, microphones, as well as cameras for film and photography.
- Industrial Hardware (formerly: IT Hardware for Manufacturing) – Encompasses specialised high-tech equipment for component and product manufacturing, including milling machines, lasers, and other CNC machines.
- Internet of Things (IoT) – Covers all hardware required for IoT infrastructure. This category

was recorded separately to gather key metrics on this increasingly important area.

- IT Security Hardware (New Category) – Hardware that enhances IT security.

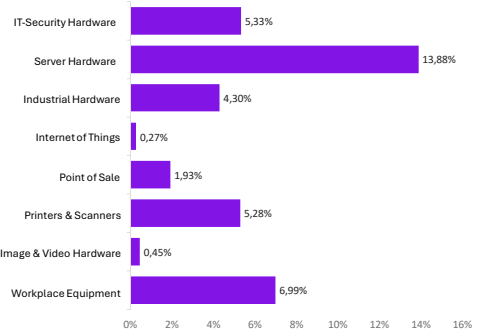


*Figure 8 – Distribution of single measures in the sub-cluster Hardware*

According to the Digitalprämie funding guidelines, general consumer devices such as laptops, printers, or telephones are not eligible for funding, with a few exceptions. As in the first funding period, server hardware and workplace equipment accounted for the largest share of hardware investments. IoT still plays a minimal role for the majority of companies in this funding period.

When applying for the Digitalprämie, 20 percent of companies included a measure aimed at introducing or improving IT security. In the first funding period, this figure was 25 percent. However, an analysis of keywords in project applications reveals that nearly 30 percent of applications contained at least one measure related to IT security.

For this funding period, data protection measures were evaluated separately to provide a more detailed assessment of this critical area within the Digitalprämie. Data protection accounted for 12.4 percent of all measures, making it one of the most in-demand investment areas.

Due to the wide variety of IT security measures, four categories were defined:

- General IT Security – Measures aimed at enhancing IT security within the company.
- IT Security Hardware – Includes hardware firewalls, server hardware that provides redundancy or failover protection, and other technical security infrastructure.
- IT Security Software – Covers traditional antivirus programs, software firewalls, password managers, Virtual Private Networks (VPNs), and anti-spam filters.
- Data Protection – Includes measures related to GDPR compliance, such as consulting services, certifications, and data security improvements.

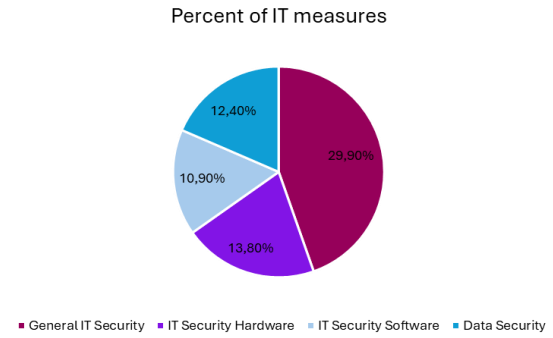


*Figure 9 – Distribution of single measures in the sub-cluster IT Security*

Since the evaluation method and categorisation used in the previous funding period were different, comparisons between the two funding periods in this area are only partially possible.

A new feature introduced in the second period was the integration of a digital maturity survey into the application process. Funding recipients were required to self-assess their company's level of digitisation twice, once before the start of the measure and once upon project completion, by evaluating the following five aspects:

- Business processes are digitalised.
- IT security is ensured, and the company is adequately protected against cyberattacks.
- Products/services are digital.
- Management and employees possess sufficient digital competencies.
- The business model is digitalised.

The responses were rated on a five-point scale, ranging from "Does not apply at all" to "Fully applies".

Compared to their pre-participation status, the number of recipients reporting that their business processes were digitalised increased by 67.5% following their involvement in the Digitalprämie Berlin. Additionally, 42.3% more recipients stated that their IT security was adequately protected against cyberattacks than before receiving funding. Furthermore, 37.3% more recipients reported that their management and employees had sufficient digital competencies after completing the program. Overall, the number of recipients confirming that their business model was digitalised rose by 43.8% after participating in Digitalprämie Berlin.

Although the survey results should be interpreted with caution, as they are based on self-assessments and may reflect a tendency toward positive affirmation by participants, the clear findings underscore the transformative impact of the Digitalprämie during the second funding period. It is evident that the funding contributed to a perceived positive change in many businesses.

**Summary**
Like the first funding period, the second funding period of the Digitalprämie Berlin successfully reached its target groups and provided broad support for the digitisation of the Berlin economy. Despite ongoing economic challenges and strained supply chains, the digital transformation of Berlin's businesses continues to accelerate—partly as a response to these macroeconomic factors.

The majority of recipients were self-employed individuals, micro-, and small enterprises with up to 49 employees. Specifically, 15.8 percent of approved grants went to self-employed individuals and freelancers, 53.5 percent to micro-enterprises, 26.3 percent to small enterprises, and only 4.5 percent to medium-sized enterprises (50+ employees). As in the first funding period, no clear correlation was found between project costs, the number of employees, or revenue, indicating that initial investment barriers affect all companies seeking to digitalise.

Compared to the first funding period, the second phase primarily supported larger projects, although micro and small enterprises still represented the majority of recipients. The average planned expenditure was 34,533 Euro for medium-sized enterprises, 31,248 Euro for small enterprises, 27,024 Euro for micro-enterprises, and 24,011 Euro for self-employed individuals and freelancers. However, the differences across business sizes were relatively small, with an overall average project cost of 27,854 Euro. The largest approved project had a budget of 245,000 Euro from a small enterprise with 22 employees, while the smallest project, at 2,000 Euro, was implemented by a business with five employees.

48.7 percent of companies applied for the maximum grant of 17,000 Euro, a 20 percent increase compared to the first funding period, where only 29 percent of companies received "Plus" funding of 17,000 Euro. This shift also reflects a greater demand for investment among smaller businesses, demonstrating that capping funding based on company size is not effective. Regardless of company size, the Digitalprämie served as a strong incentive to initiate digitisation projects.

However, the second funding period saw increased participation from less- digitised industries, unlike the first phase, which was dominated by businesses already advanced in digitisation. This suggests that informational asymmetry has decreased, allowing more companies from traditionally less- digitised sectors to benefit from the program.

Measuring actual digitisation progress remains a challenge. However, based on insights from the first funding period, a self-assessment questionnaire was introduced, allowing funding recipients to evaluate their own level of digital maturity. The analysis of these results will be included in the final evaluation report.

## CONCLUSION AND OUTLOOK

The second funding period of the Digitalprämie Berlin successfully expanded access to SME, self-employed individuals, and micro-enterprises, confirming its role as an effective instrument for digital transformation. Despite economic challenges, the strong demand and increased participation from less- digitised industries indicate that the program addressed critical investment gaps, particularly among smaller businesses.

However, information asymmetry remains a challenge, affecting the equitable distribution of funds and leading to potential windfall effects. To optimise public funding programs, three key improvements are recommended:

1. Further integrating the digital maturity model into the application process to tailor funding to company needs.
2. Standardising application requirements and eliminating free-text fields to improve data consistency and transparency.
3. Mandating follow-up evaluations to measure long-term digitisation impact and refine future funding strategies.

Furthermore, the digitisation of public administration presents an opportunity to enhance efficiency, fraud prevention, and data-driven decision-making. The adoption of AI-driven tools can streamline application processes, automate risk detection, and personalize funding allocations based on sector-specific digital maturity levels.

By embracing automation, AI, and standardized processes, funding programs can become more inclusive, transparent, and results-driven, ensuring that SME truly in need of digital transformation support receive targeted assistance. The Digitalprämie Berlins success demonstrates that broad-based, accessible funding remains essential for fostering economic resilience, innovation, and competitiveness in Berlins SME sector.

Digitised businesses are undeniably more competitive, efficient, resilient, and innovative. However, for small and medium-sized enterprises, which make up the vast majority of businesses, cost, time, and complexity remain the biggest barriers to digital transformation. This underscores the critical role of targeted public funding in facilitating digital adoption and ensuring that SME can fully benefit from technological advancements.

Against the backdrop of economic and budgetary constraints in Europe, Germany, and Berlin, as well as the growing necessity to build a digitally innovative and resilient economy, the importance of broad-based, easily accessible funding programs becomes even more evident. Additionally, in light of disrupted global supply chains, fostering digital diversification and technological adaptability is essential to enhancing economic stability, long-term competitiveness and IT security.

## CONTACT

Paul Sonnenberg was born in Bergisch-Gladbach in 1991 and attended the Wildau University of Applied Sciences, where he received his Master's degree in European Management in 2019. Since then, he has been working in the field of digitalisation support for small and medium-sized enterprises. First at the Mittelstand-4.0 Kompetenzzentrum Berlin, since 2021 at the public Digitalagentur Berlin. His email address is paulsonnenberg@t-online.de/paul.sonnenberg@digitalagentur.berlin.

## REFERENCES

Berliner Senatsverwaltung für Wirtschaft, Energie und Betriebe (2020): Förderrichtlinie Digitalprämie Berlin, checked on 3/15/2025.

Bundesregierung (2022): Digitalisierungsstrategie Deutschland. Umsetzungsstrategie zur Gestaltung des digitalen Wandels. Edited by Bundesregierung. Available online at https://digitalstrategie-deutschland.de/, updated on 9/21/2022.

European Commission (2008): Small Business Act. Mitteilung der Kommission an das Europäische Parlament, den Rat, den Europäischen Wirtschafts- und Sozialausschuss und den Ausschuss der Regionen - Vorfahrt für KMU in Europa. Europäische Kommission. Available online at https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=celex%3A52008DC0394, updated on 6/26/2022, checked on 6/26/2022.

European Commission (2013): Verordnung (EU) Nr. 1407/2013 der Kommission vom 18. Dezember 2013 über die Anwendung der Artikel 107 und 108 des Vertrags über die Arbeitsweise der Europäischen Union auf De-minimis-BeihilfenText von Bedeutung für den EWR. Available online at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:352:0001:0008:DE:PDF, checked on 9/27/2022.

Lichtblau, Karl (2018): Digitalisierung der KMU in Deutschland. Konzeption und empirische Befunde. Available online at https://www.iwconsult.de/fileadmin/user_upload/projekte/2018/Digital_Atlas/Digitalisierung_von_KMU.pdf, checked on 7/1/2022.

Papadopoulos, George (2018): Statistics on small and medium-sized enterprises. With assistance of Samuli Rikama, Pekka Alajääskö, Ziade Salah-Eddine (Eurostat, Structural business statistics), Aarno Airaksinen, Henri Luomaranta (Statistics Finland). Edited by Eurostat. Eurostat. Available online at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Statistics_on_small_and_medium-sized_enterprises, updated on 4/29/2022, checked on 6/26/2022.

Statistisches Bundesamt (2025): Anteile Kleine und Mittlere Unternehmen 2019 nach Größenklassen in %. Available online at https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Unternehmen/Kleine-Unternehmen-Mittlere-Unternehmen/Tabellen/wirtschaftsabschnitte-insgesamt.html;jsessionid=4D515FBFD4EABDD66C5B7B7BBB6CBCDE.live712, checked on 6/26/2022.