

International competition Make-IT DigitalTalents 2024

city partnerships Berlin

Handout for participation in the competition



Executing organization:











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About the competition

The **international competition Make-IT DigitalTalents 2024** is a performance competition aimed specifically at young people who want to face the constantly growing challenges with digital skills and actively shape the future. The aim of the competition is to bring together digitally motivated and creative minds from different nations and to create added value for professional orientation and vocational training through digital projects with a signal effect. The entries are placed on the Make-IT Digitalprojekte platform as role models for digital projects.

Participants have the opportunity to submit a project of their own choice that demonstrates their engagement with digitization. The result should be a transformation process, a hardware or software product or a multimedia (teaching) material.

The international Make-IT Digital Talents competition was initiated as part of Berlin's city partnership to promote digitalization in vocational training and international exchange. The *Senate Administration* for Labor, Social Affairs, Equality, Integration, Diversity and Anti-Discrimination and the GFBM-Akademie as the executing organization, jointly launched this project.

Where do the participants come from?

In recent years, the competition entries have mainly come from Berlin's partner cities, including Beijing in 2021, 2022 and 2023, Moscow in 2021 and Paris in 2022 and 2023, as well as other cities and regions from Germany, Europe and China.

Who can take part?

Trainees, pupils, students and makers up to the age of 29 can take part. Team applications, mixed gender and interdisciplinary skills are welcome.

What was the character of the previous competition entries?

Below we have selected some of the competition entries to give you an insight into the selected tasks and the range of digital solutions.

Developing new products

In the "Campus Rookie APP" project, the team at Shaanxi Xinhua Computer School (China) has developed a locker system for students to exchange learning materials. The focus here is on the opportunities for sustainable thinking through digitalization. Students can use the app to either pass on their own old teaching material to future years or access the material of their older fellow students.

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Improve operating resources with digital tools

In the "3D-printing failure detection with computer vision" project at Mercedes-Benz AG in Berlin, a 3D printer was expanded to include an image recognition system. The software created for this compares the active print with the production data provided. If there is a deviation, an error message appears and the process is aborted. This avoids unnecessary material consumption and further printing errors and reduces unnecessary operation of the 3D printer.

Expanding traditional learning through the use of digital teaching and learning materials

In the "New mechanical workshop" project at C2M " Campus Métiers Marzy " (France), trainees and their trainers planned the redesign of the training workshop on their campus. In particular, teaching and learning materials with digital technologies were identified, selected, procured and integrated into the training process. The trainees therefore had a significant influence on the equipment and were able to contribute and expand their skills.

Redesigning the operational work process with digital tools

In the "Digitization of the order folder" project at stahlotec GmbH in Hagen a.T.W., trainees from various disciplines were able to convince management to digitize the previously paperbased order process. Thanks to the transformation measures developed, the entire order processing for the company now takes place on a PC and tablet.

Overcoming traditional role and task attributions in digital problem solving

In the "Digital concept Rädersaison" project, four budding businesswomen from the BMW branch in Hanover show how even people from outside the field can implement a digital process transformation with the right idea and the right support. By using digitized documents and forms, they reduced paper consumption and the workload of customers and employees. At the same time, they adapted the workflow to the new processes and made them more effective. They were also able to save CO2 in the process.

Trying out new forms of cooperation

In the "Agriprotect" project, Evangelisches Gymnasium Nordhorn and Krone GmbH & Co. KG have joined forces to develop an agricultural protection system. The team developed an automated system that protects plants from excessive solar radiation by mounting solar panels, thereby generating energy at the same time. Students and trainees are equally involved in the project.

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Using artificial intelligence

In the "Orch_ai_d" project, the team from Humboldt-Gymnasium Berlin looked at image classification to determine the health of orchids and implemented it in an app. This makes it possible to take a picture of orchids with a smartphone. The individual components of the orchid are then analyzed and the evaluation is displayed as a result. The team has trained various AI applications for this purpose.

For inspiration, you can find more digitalization projects on our Make-IT Digitalprojekte platform.



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Which topics will be in focus in 2024?

The competition focuses on how we can deal with advancing digitalization and places particular emphasis on participants developing innovative and sustainable solutions to various digital challenges. The focus is on topics that demonstrate the diversity of modern digital technologies.

One focus is on virtual worlds and digital design. The aim here is to create immersive experiences, whether in virtual reality or through innovative digital design concepts. The promotion of intelligent solutions in everyday life and research into mobility and logistics in a digital context are also important aspects of the competition. Digital processes, robotics and app development are other important subject areas in which participants can demonstrate their skills. The focus here is on the development of efficient processes, robotics applications and innovative mobile applications.

Last but not least, the importance of digital learning is emphasized. The competition encourages the design and presentation of technologies that advance education in new and effective ways. Overall, this competition reflects the breadth and depth of modern digital technologies and promotes solutions that are not only technologically impressive, but also make a positive contribution to society and vocational education.

A new theme of the competition is the application of artificial intelligence, which plays an important role in the automation of processes and the development of intelligent machines. Participants should present solutions that are not only technologically advanced, but also ethically and socially responsible.













What prizes can be won?

Three main prizes are awarded in the international competition Make-IT Digital Talents:

International City Award	The winning team that convinces the jury as a whole of its innovative and sustainable approach to digitalization will receive the International City Award.
Innovation Award	The Innovation Award goes to the project team with the highest degree of innovation.
Sustainability Award	The Sustainability Award goes to the project team with the highest sustainability score.

Up to four **additional prizes** will also be awarded:

Digital Solution:	The "Digital Solution" prize is awarded for a special achievement in the development or enhancement of hardware or software products.		
Digital Process:	The team with an outstanding performance in the area of digital process transformation receives the "Digital Process" prize.		
Digital Training:	The "Digital Training" prize is awarded for the development of a digital teaching and learning system.		
Digital Media:	The "Digital Media" prize is awarded for convincing media achievements in which the jury can be impressed by the development of a digital media system or a virtual system.		

The winners will receive prize money of up to 1000 €. There is also a trophy and a certificate from the state of Berlin and the GFBM Academy.

The jury has the option of awarding additional teams a special prize without prize money.

What are the deadlines for 2024?

Register for participation in the competition at https://make-it.berlin by 30.06.2024.

Submit the required documents - see the following explanations - in **English** to the GFBM Akademie by **31.07.2024**. Please use the e-mail address

make-it@gfbm-akademie.de with the keyword "Wettbewerbsteilnahme 2024".

The award ceremony will take place as a public event on November 15, 2024 in Berlin.

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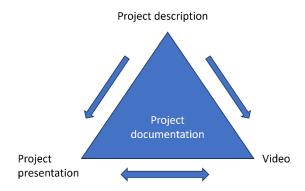






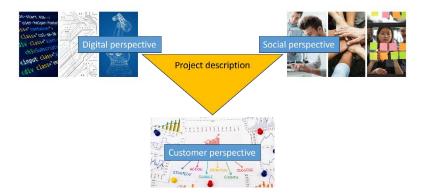
What documents must be submitted and what purpose do they serve?

The **documents to be submitted** consist of three parts:



(1) Project description

The project description presents the competition entry from three perspectives.



The digital perspective

- The performance of the manufactured product and/or the effects of the new process developed (performance description),
- Technical documents (sketches, design drawings, circuit diagrams, program code, assemblies used, data sheets).
- Image and sound documents (photos, videos, audio, animations)

The social perspective

- Introduction of the project team (first name, surname, age, education and year of birth) The introduction of the supporters
- The history of the project development (how and when did the idea come about, what challenges were there, what obstacles had to be overcome, what significance did time and costs have?)
- Division of labor and collaboration for team submissions!

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The customer perspective

 Arguments that will convince customers to use/buy the product or adopt the modified work process. Specifically address who you are targeting/buying with your development result.

Requirements

Number of pages: together for all 3 perspectives maximum 10 DIN A4 pages

Format: PDF-file

(2) The media preparation | Project presentation

In contrast to the project description, the second part of the project documentation is about the customer: Imagine you have 10 minutes to convince the jury to award your product the prize.

Produce a 1-page text and a maximum of 10 PowerPoint slides to support your personal presentation.

Create graphics, photos or animated texts.

Requirements

Text: 1 page for a fictitious presentation

• Folienzahl: a maximum of 10 slides in the form of a PowerPoint presentation.

(3) The project video

The video is your project's calling card. It serves to introduce you in a sympathetic and convincing way and to present your project in a tasteful light. It is your promotional video.

The main purpose of the video is to promote your project publicly: firstly on our website https://make-it.berlin. Secondly, we will present all competition entries in a trailer at the closing event and award ceremony for the international competition in November 2024.

If you have any questions about creating the video, the right format or the structure of the content, please do not hesitate to contact us.

Requirements

Quality: Full HD- Resolution 1920 × 1080p/MP4

Format: LandscapeDuration: max. 3 Minutes







How will your competition entry be judged?

The submitted entries are evaluated by an independent jury whose members are selected by the state of Berlin and the GFBM Akademie from the industrial and trade sectors as well as public administration.

The jury evaluates the submitted documents in three categories (A) Project description, (B) Presentation und (C) Video.

Category	Weight	Characteristics for weighting
Project character and project description	70 %	 Idea/originality of the task solution Comprehensible task and description of the associated context Explanation of the importance of digitization in solving the task Explanation of the sustainability Degree of realization/status of implementation Presentation of the customer benefit Traceability of the work organization (division of labor, quality control) Quality of the documents (overall impression, credibility, completeness)
Presentation	15 %	Part 1: Short text It should include the task, the particular challenge, the solution developed, the customer benefit, Part 2: Supporting slides Expressiveness, layout, text-slide allocation
Video	15 %	 Picture and sound quality Editing and montage Overall impression Adherence to the time schedule







Concluding remarks

We hope that our handout has encouraged you to take part in the International City Competition.

And please be assured: if you have any questions or suggestions for improving our handout, we will be happy to listen to you, read your comments and are grateful for your feedback.

So be there (again) in 2024!

Your Make-IT Team

Contact

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