



Federal Ministry
for Economic Cooperation
and Development

Digital technologies for development

BMZ PAPER 01 | 2019
POSITION PAPER



[bmz.de](https://www.bmz.de)

Contents

| | |
|---|-----------|
| 1 TRANSFORMATIVE CHANGE | 2 |
| 2 CHALLENGES AND OPPORTUNITIES | 3 |
| 3 OUR FIVE GOALS | 5 |
| Goal 1: Work and employment | 5 |
| Goal 2: Local innovation | 7 |
| Goal 3: Equal opportunities | 8 |
| Goal 4: Good governance & human rights | 10 |
| Goal 5: Data for development | 12 |
| 4 SUMMARY | 14 |
| 4.1 Goals and challenges | 14 |
| 4.2 Facts and figures on digital projects | 15 |
| 4.3 Endnotes | 16 |

1 Transformative change

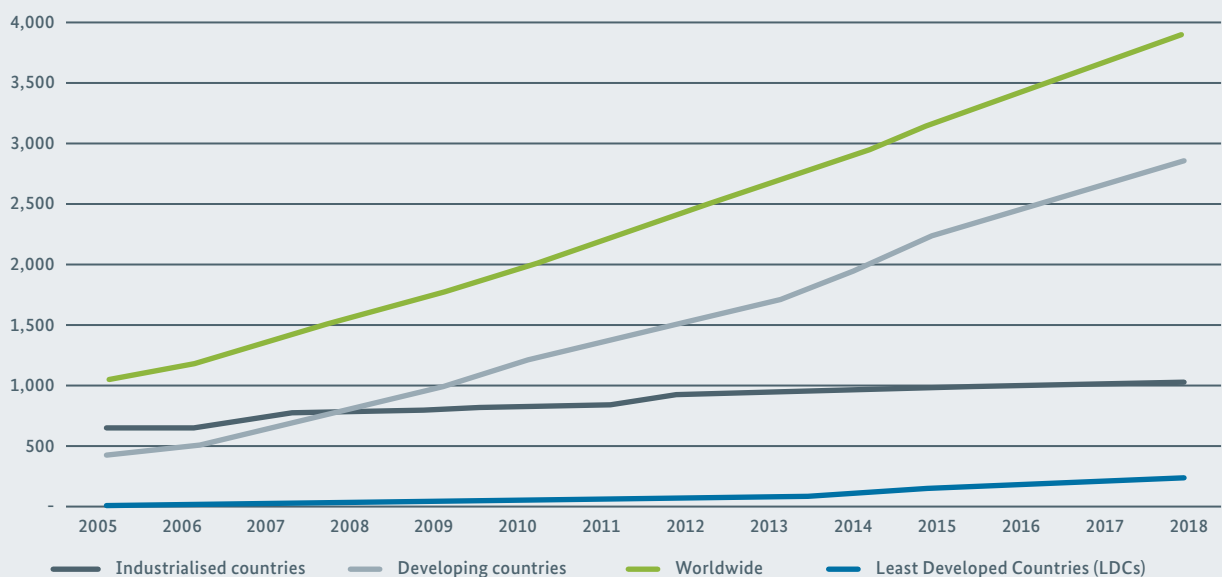
Digital technologies are transforming every dimension of human life: communication, education, work, science, politics, culture and administration. Half of all the people in the world now have access to a global pool of knowledge through the internet. The “global village” has become a reality.

Emerging economies and developing countries can benefit in particular from these changes. Digital technologies can be an effective means to propel people out of poverty and reduce the gap between rich and poor. However, they can also have the opposite effect and actually increase poverty and inequality. In many places, issues around data protection and data security are still unresolved. Digital technology can also make inequalities worse. Women in particular are at risk of being left behind by the digital revolution. Illiteracy and a lack of the skills needed to use the new technologies (e-skills) are the main barriers.

In many places there is a lack of infrastructure and the digital competence that rural people would need in order to actually be able to use and ultimately benefit from digital applications.

Even if there are only a few explicit references to the digital world in the 2030 Agenda, the global Sustainable Development Goals can only be achieved with the help of digital technologies. We want to support the people in developing countries, the private sector, civil society, academia and political leaders in our partner countries in harnessing the potential of the digital transformation and successfully managing related risks. Germany, too, can benefit from the experience thus gained and apply the lessons learned to its own digital transformation. Partner countries are already piloting various digital solutions (such as mobile health and payment systems) which have yet to be applied in Germany.

ACCESS TO THE INTERNET: MORE AND MORE PEOPLE ONLINE IN DEVELOPING COUNTRIES (MILLIONS)



Source: ITU World Telecommunication/ICT Indicators Data Base

2 Challenges and opportunities

The effects of the digital transformation are particularly significant in the following five areas of intervention.



1. WORK AND EMPLOYMENT

Roughly 60 per cent of the people in Africa are under the age of 25 – and 30 per cent of them are without work.

Automation driven by digital innovation could make up to two thirds of all the jobs currently available in developing countries disappear. Unless it is regulated, digital technology can enlarge the informal sector and cause the number of precarious jobs to increase instead of creating employment that involves contracts and social protection. The expansion of internet connectivity however also comes with tremendous opportunities: It can create jobs for hundreds of millions of people in developing countries. Platform economies offer a way to record informal employment and provide insurance cover for those doing informal work. Especially in the agricultural sector, which is still a major employer for people in developing countries, digital technologies pave the way for new jobs and employment. They are the foundation for productive modern agriculture and for linking up with global markets. They help to make agriculture more attractive so that it can offer young people, in particular, a better outlook for the future.



2. LOCAL INNOVATION

Less than one per cent of all patent applications worldwide are filed in least developed countries. Yet, the

young generation living in these countries has tremendous creative potential. Given the right conditions, technical progress can become an engine for social development and long-term economic growth. Inventiveness is our partner countries' biggest asset.



3. EQUAL OPPORTUNITIES

Digital technologies are still benefiting too few people and there is a risk that people who are already disadvantaged may be left even further behind. Some 3.9 billion people around the world are still without access to the internet. In addition, in many countries power supply is intermittent and broadband internet connectivity and the availability of computers is poor. The more than 750 million illiterate adults worldwide are also mostly excluded from the digital world.

Digital technologies can contribute towards the implementation of the “leave no one behind” principle of the 2030 Agenda. Having simple, inexpensive and rapid access to relevant information available online offers teachers and pupils worldwide new opportunities for digital learning and teaching. If all people had access to the internet, they could use more than 1.4 billion books and learning materials that are freely available online for better learning outcomes. There needs to be more versions in local languages and content to match a specific context, better accessibility and barrier-free access and better digital skills, particular in the case of disadvantaged groups.

Today, more people in Africa have access to a mobile phone than to electric power or good sanitation. By 2025, mobile internet connectivity in Africa can increase from less than 20 per cent to more than 50 per cent, the equivalent of 600 million users. Worldwide, 1.6 billion people could have access to digital financial services for the first time by 2025; which would also enable them to make payments by using their mobile phones without having to have a bank account.

Digitising processes in the health sector and in social protection systems is helping to increase efficiency, improve quality and make such services more widely available.



4. GOOD GOVERNANCE & HUMAN RIGHTS

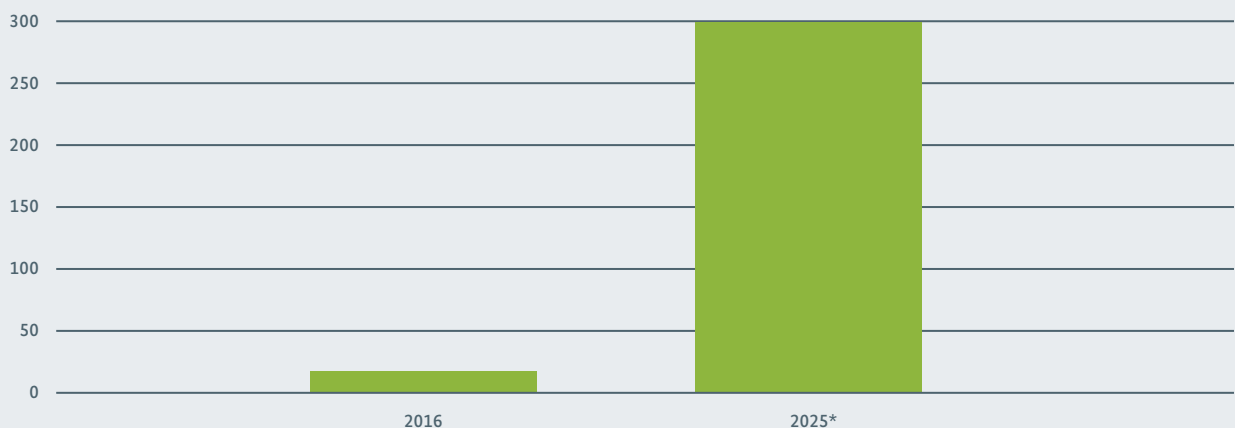
The majority of people in developing countries live in countries that suppress content in the internet in various ways or use internet technology to oppress people. Authoritarian regimes use software, for instance, to keep civil society under surveillance, spread fake news and suppress the freedom of information online. Even in the digital age, having a strong state governed by the rule of law and a strong civil society is crucial. It takes strong institutions and educated and empowered citizens with digital skills to fight intimidation and surveillance and prevent oppression. Digitising public administrations helps to improve services, for instance via networked civil and social registers. If technological innovation is backed by comprehensive reforms, it can help strengthen civil rights and lay corruption bare. Digital technology is not an end in itself. It takes good governance, sufficient funding and the necessary technical know-how for digital technologies to fully develop their potential to foster democracy and freedom.



5. DATA FOR DEVELOPMENT

By using the internet, people create valuable and sensitive data – in the age of the internet this data is a much sought currency, which can be used to compile profiles that show preferences, social status, financial strength, consumption patterns and health, and track people's movements. At the same time, a broad data base enables greater efficiency, and better decision-making and value creation by the state and the private sector. When administrations disclose their data, for instance, people have better control over what happens with their data and start-ups have a resource that they can use to develop new offers and business ideas. New technologies such as artificial intelligence require representative, non-distorted, open and non-discriminatory data to fully tap the potential of machine learning for sustainable development (without, however, deepening the digital divide or making discrimination worse). Yet, it is often not clear what happens with personal data. Fewer than one third of the countries in Africa have data protection laws. In addition, both the authorities and the people are often not well informed about the risks of data abuse. The rights to freedom of opinion and privacy online need to be protected.

POTENTIAL CONTRIBUTION OF DIGITAL TECHNOLOGIES TO GDP IN AFRICA BY 2025



* Potential contribution

Source: World Bank, World Development Report 2016

3 Our five goals

GOAL 1: WORK AND EMPLOYMENT



Sustainable economic development is key for employment. Digital technologies can serve as a catalyst for fair, sustainable and inclusive economic growth. We are working worldwide to promote fair and decent working conditions both online and offline. We are helping our partner countries to use the possibilities of digital technologies to increase trade and create new jobs, in particular for young people and women.

HOW WILL WE SUPPORT THIS?

We want to create new jobs in agriculture, industry and the growing digital sector with the help of **targeted economic cooperation** between European and African companies. Digital technology offers opportunities to better include disadvantaged groups and small and medium-sized companies in economic cycles.

DIGITAL AFRICA INITIATIVE

The BMZ uses digital technologies in projects as part of the Digital Africa initiative with a view to making German development cooperation even more efficient. Since 2015, almost 40 projects have been launched with a volume of 164 million euros.

We want to support developing countries employ digital technologies along the entire **value chain**, and we want to develop new digital solutions together with our partners. Modern production processes can help create well-paid jobs that provide social protection, and have a lower impact on the environment.

One issue that is of great importance to us is promoting **fair and sustainable trade** through online platforms, both for goods and for digital services. We will help small and medium-sized enterprises in particular to establish a long-term digital presence in global markets. We want to do this by sharing knowledge about online commerce and finding solutions so that online platforms can make a contribution to fair, formalised and safe employment.

STRATEGIC PARTNERSHIP – DIGITAL AFRICA (SPDA)¹

The SPDA is a network in which the BMZ, companies and business associations develop concrete business models by implementing joint projects in Africa (for instance the e-mobility initiative Moving Rwanda). The SPDA taps into the potential of digital technologies to develop Africa and also opens up business opportunities in Africa for German and European companies.

Digital solutions can offer a way for **farmers** to access more and better information and services. They will need that access in order to survive in global markets. Real-time information on commodity prices increases transparency and fairness for farmers selling agricultural commodities. The digital transformation plays a role along the entire value chain: from training and information to help improve agricultural cultivation, to price transparency in local markets and the production of end products for consumers. IT-based traceability systems such as blockchain technology can create total transparency for global agricultural supply chains and provide solutions that bring producers and end consumers into direct contact with one another. Such transparency can help businesses and end consumers make better purchasing decisions in favour of sustainable and ethically-sourced products.

LAB OF TOMORROW²

The BMZ is bringing together company owners, founders of new businesses and political actors in our partner countries with the aim of jointly developing digital solutions for specific challenges and then implementing them through projects.

Better **access to financial services** fosters the development of new markets and economic participation, and allows entrepreneurs to bring their business ideas to fruition. M-pesa, a mobile phone-based money transfer system from Kenya, is one of the best-known financial innovations. A payment system that completely bypasses the need for a conventional bank account is a huge advance in development. Digital solutions are able in particular to also reach low-income and vulnerable groups, micro enterprises and rural areas, so that they can be integrated into the overall economy.

ALLIANCE FOR TRADE FACILITATION³

The global and national Alliance for Trade Facilitation is our partner for implementing projects in collaboration with the private sector aimed at facilitating trade and customs procedures. Reducing non-tariff barriers both helps local producers on the ground and creates new opportunities for investment and development, including for German companies.

FAIR TRADE OF DIGITAL SERVICES THANKS TO THE FAIRWORK FOUNDATION

Fair working conditions are needed to minimise the negative fallout from digital platform economies on workers in developing countries. That is why the BMZ has been working with the Oxford Internet Institute to set up the Fairwork Foundation. Its task will be to certify fair labour platforms and rank the providers of such platforms based on their labour standards and the social security systems that they provide.

FOSTERING DIGITAL TRADE IN RWANDA

We are cooperating with a major German logistics company and with the International Trade Centre to promote digital trade in Rwanda. By establishing logistics centres we are helping small and medium-sized enterprises to offer and sell their products online via the Made in Rwanda platform.

GOAL 2: LOCAL INNOVATION



Local digital solutions for challenges on the ground create sustainable development processes.

Many developing countries and emerging economies are already bringing forth important digital innovations. Compared with the rest of the world, Africa has the youngest population and hence enormous innovative potential. We want to help the people of Africa realise their visions of economic and social development.

HOW WILL WE SUPPORT THIS?

We are strengthening the environment for local IT businesses in our partner countries, for instance through **Digital Transformation Centres** and the **Tech-Entrepreneurship Initiative Make-IT, which promotes tech start-ups**. We are thus creating space for start-ups and inventors in Asia, Africa, Latin America and Eastern Europe to develop their business ideas and move sustainable development forward.

We want to promote the use of **innovative key technologies** such as blockchain, 3D-printing, artificial intelligence, the internet of things and other technologies, in order to foster sustainable development. Blockchain, for instance, could help make supply chains and administrative processes more transparent, reduce corruption and increase the traceability of funding allocations.

DIGITAL TRANSFORMATION CENTRES IN AFRICA⁴

Digital Transformation Centres are meant to be physical and virtual hubs in Africa that promote digital solutions for sustainable development. Technical know-how, IT competence, research and entrepreneurship will all be brought together under one roof. The digital centres are to be a place that brings together investors, tech entrepreneurs and talented tech inventors in order to develop creative digital solutions. At the same time the digital centres are intended to assist African governments in establishing structures and capacities for developing, implementing and rolling out digital strategies and solutions.

PROMOTING BUSINESS START-UPS THROUGH THE TECH-ENTREPRENEURSHIP INITIATIVE MAKE-IT⁵

Under the Tech-Entrepreneurship Initiative Make-IT, the BMZ is collaborating with more than 20 German digital companies, social enterprises and associations. The founders of digital tech start-ups in partner countries receive support in the form of joint training programmes and networking opportunities both in Germany and at home. The aim is to improve the local environment for tech start-ups so as to foster local digital innovations and create new jobs in the long term.

GREEN INNOVATION CENTRES⁶

Green innovation centres provide extension services to smallholder farmers and small and medium-sized companies regarding innovative digital solutions. In these centres, we are establishing digital technologies as a central theme which affects the entire value chain. We have already introduced more than 30 digital technologies in 14 countries by means of this approach.

GOAL 3: EQUAL OPPORTUNITIES



The digital transformation is a historic opportunity to overcome inequalities. We will use digital solutions in particular to provide more education for all and better access to health services in developing countries. It is of special importance to us that we are able to ensure that disadvantaged groups enjoy better access to these new opportunities.

HOW WILL WE SUPPORT THIS?

Education programmes can be expanded with the help of digital technologies and can be adapted to specific user needs. This includes special courses for university graduates and programmes for users in rural areas, offered in local languages and adapted to the local context. This way, disadvantaged population groups in particular can get access to education. We will expand various education programmes, thus reaching more teachers, trainees, students and pupils online.

AFRICA CLOUD – OFFERING INNOVATIVE DIGITAL KNOWLEDGE AND LEARNING⁹

The Africa Cloud is meant to reach selected target groups in Africa, offering them digital knowledge and learning options. High-quality learning material will be made available through a pan-African knowledge and learning platform; efforts to further develop the cloud in cooperation with African partners on the basis of an innovative data model will be continued.

We are promoting **digital competences in collaboration with the private sector** by expanding our vocational education and training projects to include digital job profiles and promote coding courses. We are supporting the Africa Code Week, for example, in cooperation with the private sector, where young people can acquire some initial coding skills. A special focus is on promoting women and girls, who have so far had less access to the internet than men and who often lack the necessary digital skills. We are expanding successful cooperation arrangements with the private sector, investing explicitly in digital skills and offering courses for online trade and coding courses for women and girls.

MODERN YOUTH IN IRAQ – A BETTER FUTURE THROUGH DIGITAL TECHNOLOGIES⁹

The project on modern youth in Iraq is promoting young entrepreneurs and their digital skills. It offers coding courses and training courses for entrepreneurs in cooperation with German tech companies in refugee camps. Support is also being provided for setting up and expanding three technology hubs in the country (known as Maker Spaces).

Digital solutions help improve the quality of medical processes and make it possible to expand health services such as prevention, diagnosis and treatment. Telemedicine can help to improve healthcare services in rural and hard-to-reach areas. By putting in place a digital early warning system to monitor epidemics and check the likelihood of outbreaks it is possible to detect situations of particular risk in real time. Authorities can thus identify potential trouble spots and respond in time.

#ESKILLS4GIRLS – DIGITAL INCLUSION OF WOMEN AND GIRLS WORLDWIDE¹⁰

Digital skills and qualifications are the basis for making sure that women and girls have better opportunities and access in an increasingly digitised world. That is why we launched the #eSkills4Girls initiative in 2017 during Germany's G20 Presidency. The aim is to train and upskill women and girls in digital competences. In Rwanda and Mozambique, for instance, we are preparing teachers and students during vocational training for a digital future; in Cameroon, female micro entrepreneurs are offered training in digital skills. In addition, we are strengthening EQUALS, the international alliance for digital inclusion.

SORMAS – SOFTWARE FOR EARLY DETECTION OF EPIDEMICS

The digital Surveillance and Outbreak Response Management System (SORMAS) helps health systems in Africa to detect epidemics early on and respond rapidly. SORMAS is already covering more than 50 million people in Nigeria. They can be quickly reached via mobile phones with information about possible diseases and how to treat infected persons. At the same time, SORMAS enables better forecasting of how a disease is likely to spread and helps fight and contain epidemics in remote areas. There are plans in hand to further expand the system in Nigeria and also in Ghana.

BETTER SOCIAL HEALTH PROTECTION WITH DIGITAL TECHNOLOGIES¹¹

The BMZ is financing the openIMIS initiative together with the Swiss Agency for Development and Cooperation. Countries receive assistance to introduce ICT-based management information systems. Some 1.6 million insured persons in Tanzania, Cameroon and Nepal are currently benefiting from this system. It is based on open source software and serves as a tool to make health financing more efficient and transparent, and less expensive.

GOAL 4: GOOD GOVERNANCE & HUMAN RIGHTS



We are promoting digital solutions in our partner countries in order to help build more transparent, efficient and democratic governance systems and to better protect human rights – especially with regard to the challenges of the digital age. Our support is aimed at promoting the modernisation of administrative structures and people's participation, and protecting fundamental democratic rights and freedoms that need to apply universally online.

HOW WILL WE SUPPORT THIS?

We are supporting our partner countries in their efforts to make their **administrative systems** more efficient, transparent and participatory, for example when it comes to managing access to high-quality and affordable health services, school enrolment or the registration of land rights. Introducing digital solutions (such as online portals and blockchain) helps to strengthen administrative processes and increase transparency and traceability. Corruption and illegal cash flows, for instance, can be prevented and stopped. This benefits both citizens and companies. New technologies are also a tool to ensure that political decisions are taken based on facts, that the allocation of funds is needs-based and that public accountability is improved.

TRUBUDGET – TRANSPARENCY AND PROTECTION AGAINST FORGERY THROUGH BLOCKCHAIN¹²

Carrying out development projects in a transparent, secure and uncomplicated manner is a challenge for all actors and countries involved. TruBudget is a digital working platform for transparent and secure implementation of public investments in developing countries which was developed by KfW and is based on blockchain. It is currently being rolled out in Burkina Faso.

THE #SPEAKUP BAROMETER – POLITICAL PARTICIPATION IN DIGITAL LIFE

We are supporting ways to promote digital participation in public and political affairs. The #speakup barometer developed by DW Academie is a tool that we use to assess whether and to what extent all groups within society can participate in digital life. The focus is on digital information media and journalism, and on freedom of opinion online – including everything from infrastructure and legislation to cultural aspects. Uganda was the first country to be assessed.

Digital systems improve the way scarce resources are managed in health and social systems. Health insurance providers are provided with electronic registration and accounting systems so that they can improve the way they process the data of their insured members. Digital hospital bills that are sent out automatically can also be verified and paid more quickly. This ensures reliable cash flows in health care systems. Registration systems that are inter-linked make it easier for people to access social benefits. They increase transparency both for recipients and for public institutions.

Digital media can lead to a very new form of transparency in governance. However, it is also becoming more and more important for people to be able to distinguish in digital media between what is reliable information and what is not, and to defend themselves against cyber mobbing, for example. We want to offer special programmes to help people in developing countries strengthen their **media skills**. We are advocating strongly for democratic basic rights such as the freedom of opinion and privacy rights to also be protected online.

Up to 70 per cent of women experience violence in the course of their lives. The most common form of violence against women worldwide is domestic violence. We are collaborating with local groups and the private sector to develop digital solutions which provide information and offer professional and sensitive **online counselling** for women who have suffered domestic violence at the hands of family members.

The digital age is opening up **opportunities for the judiciary** worldwide. In many countries, the internet has already become the most important source of judicial information. Digital technologies can be a crucial step towards more access to justice – in particular in many developing countries, where courts may be impossible to reach due to geographic conditions and distances. We are providing judicial systems with what they need so as to ensure that litigants, lawyers and companies can find information on legal assistance, judicial procedures and legal remedies on the internet. Applications can be filed online, and legal proceedings can be initiated via the internet. In addition, a digital procedural management system supports these processes within the courts.

CHAMPIONS FOR DIGITAL SECURITY – KEEPING CHILDREN AND YOUNG PEOPLE SAFE ONLINE

We are collaborating with the data protection authorities in Morocco to enable children and young people to navigate safely in digital media and exercise their right to privacy and to participation. They work with security experts to develop an online platform to raise awareness of the opportunities and the risks online.

WOMEN@WEB – PROTECTING WOMEN AGAINST ONLINE VIOLENCE

In Kenya, as many as three quarters of female journalists have experienced online attacks at some point, for instance in the form of threatening messages. In Uganda, almost a quarter of the female internet users surveyed had experienced cyber mobbing. That is why the Women@Web network was created in 2017. This network of female journalists, female influencers, and leading human rights activists lobbies to protect women against cyber mobbing and hate speech on the internet.

GOAL 5: DATA FOR DEVELOPMENT



Data provides information on how to better plan and organise growing cities. It provides us with warnings of drought risks or flooding. We want to use data to provide people, businesses and policy-makers with better information, to push forward sustainable development in a more targeted manner and to make impacts more measurable. Germany is sharing its competence as a global champion in data protection and is supporting its partner countries in developing and implementing data protection standards. Data protection is a hallmark, a competitive advantage and a value that we stand for.

HOW WILL WE SUPPORT THIS?

The way data is collected, processed and evaluated in our partner countries needs to be improved so that **data can be used for development**. This means strengthening capacities in these countries and improving access to digital data. The analysis of satellite data, for example, holds huge potential for improving **agricultural value chains**. Mapping forest areas designated as having high conservation value and air-borne forest monitoring create transparency and improve monitoring possibilities.

LAB FOR MORE CITIZEN ENGAGEMENT AND INNOVATIVE DATA ANALYSIS¹³

Together with the African Union (AU) we are promoting the implementation of the AU lab for more citizen engagement and innovative data analysis. We are helping the AU and its member countries to improve the way they collect, analyse and use data. The intention is to get more people in Africa involved in political processes online. In addition, there are plans to set up an interactive information platform which will increase exchanges between the public sector and civil society. Rigid principles of anonymisation ensure that the data publicly available through the data lab cannot be used to repress individuals or groups.

We are calling for **open data** so that people have greater control over their own data and companies have access to anonymised public data for their business ideas and models. Locally collected data should be available to both local people and local companies so as to facilitate local innovation and value creation.

USING WEATHER DATA TO IMPROVE HARVEST YIELDS IN EAST AFRICA

German tech companies are developing a sensor-based data platform for smallholder farmers in East Africa together with German development cooperation actors. The sensors are digitally linked and generate hyper-local weather data by measuring data such as soil moisture, root growth or mineral content. This data helps smallholders to maximise their yields.

Many partner countries **do not provide any data security** or data protection, which is the biggest obstacle to making better use of data. If there are no laws to protect personal data, people quite rightly fear that their data could be misused. That is why we are working to improve public data infrastructures, which – in combination with the appropriate legal provisions – will create digital security for people and companies. We want to help our partner countries to firmly establish data protection in their legal frameworks. We are assisting national regulatory authorities such as central banks and finance ministries in developing data protection standards in the financial sector and are using international fora to showcase these standards (for instance at the G20).

DATA FOR TARGETED VOCATIONAL EDUCATION AND TRAINING: BUILD4SKILLS¹⁴

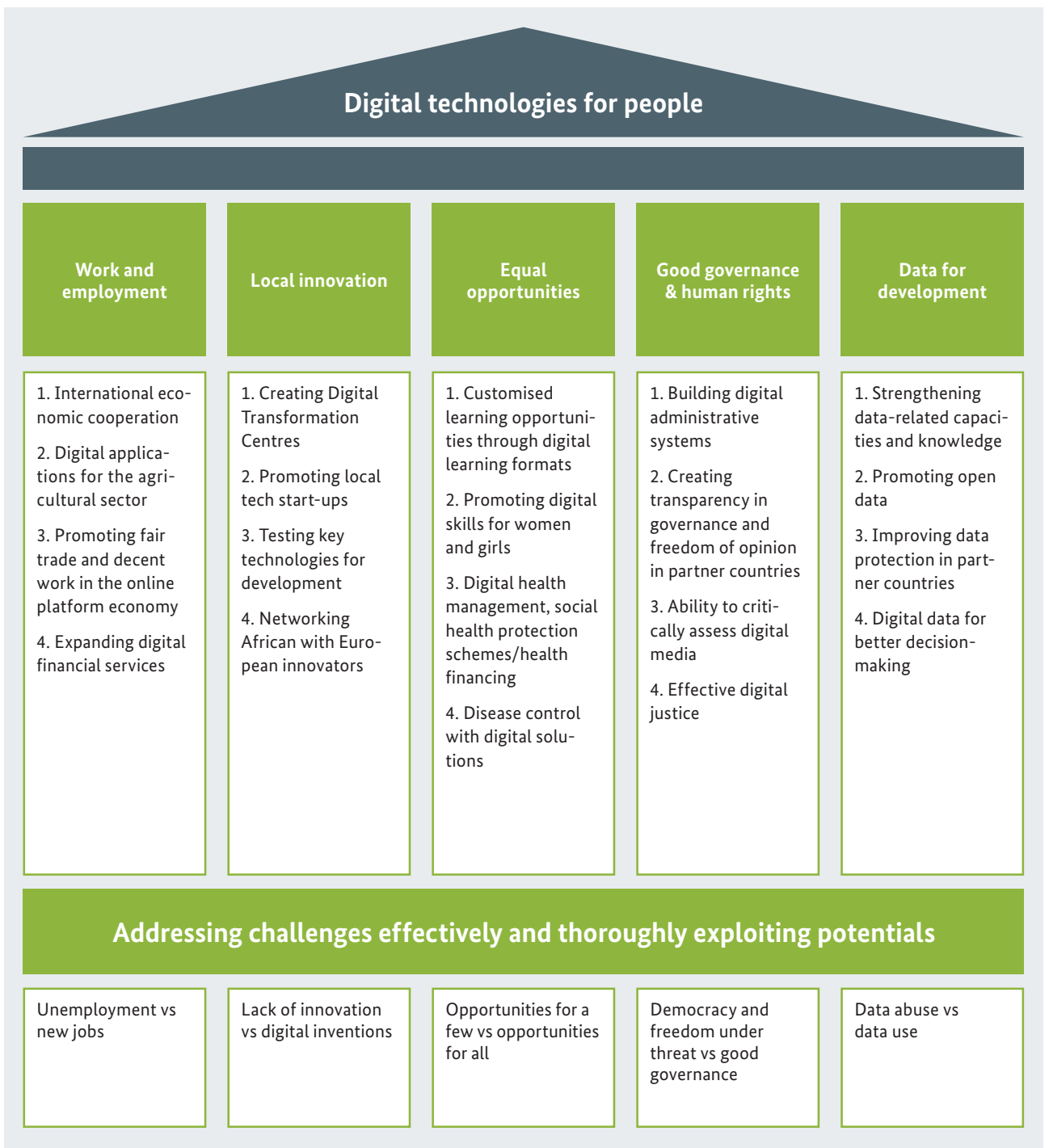
We have launched the global Build4Skills initiative in cooperation with the Asian Development Bank so as to promote vocational education and training within the framework of infrastructure projects. Mongolia and Pakistan are pilot countries where we are using big data schemes and other digital tools to better identify training and employment potentials and design vocational education and training programmes that better meet the needs of the private sector.

STRENGTHENING DIGITAL SECURITY AND CYBER RESILIENCE

We are developing ethical and technical standards in collaboration with Harvard University and local partners so as to ensure that the data of particularly vulnerable groups, for instance in a refugee context, is better protected in administrative processes. The project is aimed at identifying and minimising the risks linked to the use of ICT and data, including in crisis contexts.

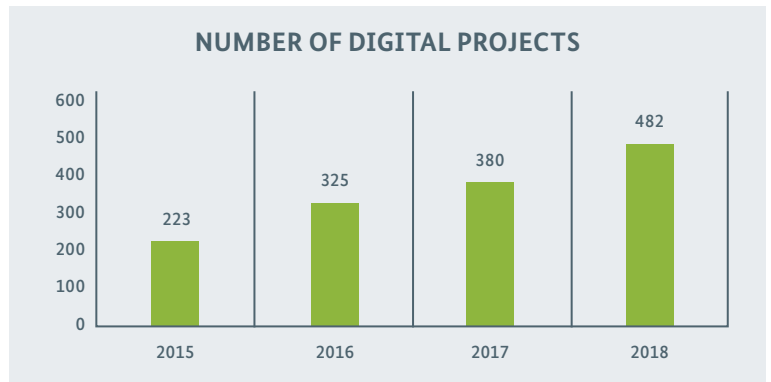
4 SUMMARY

4.1 GOALS AND CHALLENGES

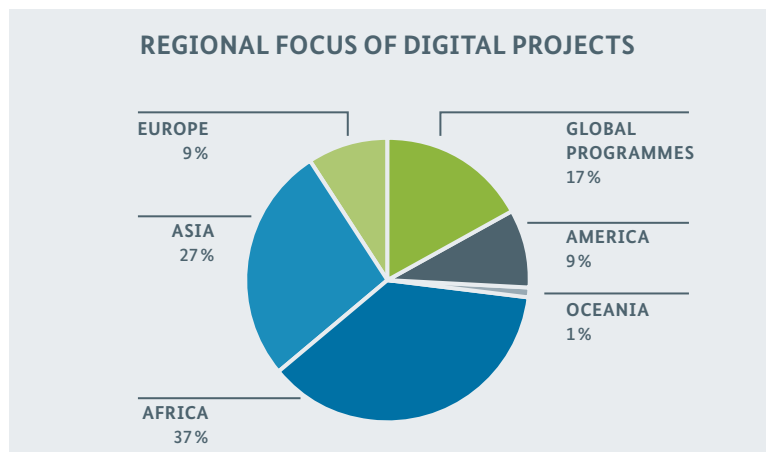


4.2 FACTS AND FIGURES ON DIGITAL PROJECTS

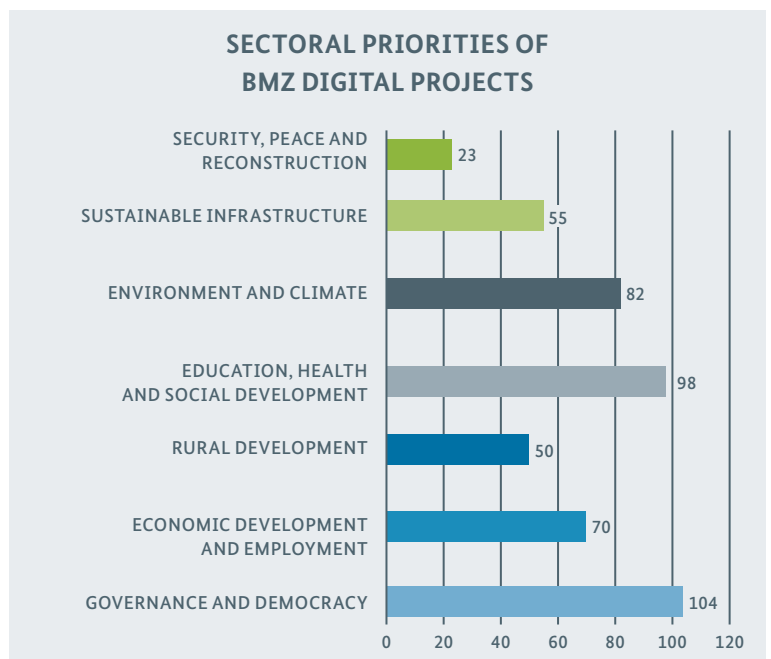
The BMZ has significantly increased its funding for digital projects. Since we first began recording projects with digital components in September 2015, the portfolio of projects with digital components has grown from 223 to **482 projects**.



Projects with a digital focus are being carried out in more than 90 countries and are aimed at helping to better achieve the Sustainable Development Goals of the 2030 Agenda. The regional focus of these projects is on **Africa**, followed by Asia. We are currently implementing 181 digital projects in Africa. In Asia, we are running 131 projects with digital elements.



Digital instruments contribute to increasing the effectiveness of our projects in all areas and sectors of German development cooperation. A clear thematic focus of the activities is on promoting development in the area of **governance and democracy**. Digital elements are also frequently integrated into projects relating to economic or social development. In the areas of **security, peace and reconstruction**, the number of projects with digital components is still low. Nevertheless, this particular area is currently producing an increasing number of innovative digital approaches.



4.3 ENDNOTES

1. Sector project Private Sector Cooperation (Strategic Partnership Digital Africa), duration 1/2017 – 12/2020; budget: 28 million euros; partner: private sector.
2. Sector project Private Sector Cooperation (Lab of Tomorrow), duration 1/2017 – 12/2020; budget: 28 million euros; partner: private sector.
3. Global Alliance for Trade Facilitation: duration: 10/2015 – 4/2019; budget: 6 million euros; partner: donors, private sector.
4. Digital solutions for sustainable development (Centre for Digital Transformation Rwanda), duration 8/2017 – 12/2020; budget: 7 million euros; partner: Ministry for Youth and ICT.
5. Make-IT in Africa – Tech-Entrepreneurship Initiative; duration 1/2017 – 6/2019; budget: 4 million euros; partner: selected ministries in partner countries.
6. Green innovation centres for the agriculture and food sector: duration: 1/11/2014 – 31/3/2022; budget: 287,204,331 euros (incl. 8.5 million euros EU cofinancing).
7. Innovation factory – global partnerships for promoting digital innovations for sustainable development: duration 1/2018 – 3/2021; budget: 3.5 million euros; partner: innovation networks in Africa, Asia and Latin America.
8. Global project Africa Cloud; duration 1/2019 – 1/2022; budget: 10 million euros.
9. Information and Communication Technologies for Youth Baghdad; duration 12/2017 – 6/2020; budget: 5 million euros; partner: Ministry of Planning.
10. #eSkills4Girls: several components ongoing since 2017. 14 million euros was made available through Digital Africa. Partners are selected ministries in partner countries.
11. Sector programme Social Protection (health financing through digital technologies – openIMIS); duration 9/2017 – 8/2020; budget: 3 million euros; cofinancing by DEZA, worldwide network of partners.
12. TruBudget – blockchain-based workflow tool: duration 2017 – 2022, budget: 1 million euros; partner: counterparts of German Financial Cooperation.
13. DATA-CIPATION – Citizens' engagement and innovative data use for Africa's development (Data Lab of the African Union); duration 7/2018 – 3/2019; budget: 1.7 million euros; partner: African Union.
14. Build 4 Skills – Digital ways in Vocational Education; duration 1/2018 – 12/2020; budget: 4 million euros; partner: Ministry of Labor and Social Protection of Mongolia and Pakistan (tbd).

PUBLISHED BY THE

Division for digital technologies
in development cooperation

DESIGN AND LAYOUT

Atelier Hauer + Dörfler GmbH

AS AT

January 2019

ADDRESSES OF THE BMZ OFFICES

→ BMZ Bonn

Dahlmannstrasse 4

53113 Bonn, Germany

Phone +49 (0) 228 99 535-0

Fax +49 (0) 228 99 535-3500

→ BMZ Berlin

Stresemannstrasse 94

10963 Berlin, Germany

Phone +49 (0) 30 18 535-0

Fax +49 (0) 30 18 535-2501

CONTACT

poststelle@bmz.bund.de

www.bmz.de

