



GERMANY

Population: 80,457,737 | GDP: \$4.199 trillion | Language: German | Unicorns 2009-2018: 7



What did Germany do right?

Testing of self-driving vehicles is legal with a backup driver behind the wheel. Also, the country demonstrates widespread access to internet and telecommunications services, as well as a highly-visible supply chain. Germany also produced seven unicorns in the past decade and boasts a welcome environment for entrepreneurs starting businesses.



What can Germany do better?

Germany could eliminate rules that require rideshare drivers to have professional operating licenses and ease regulations that require all drone users to get permits and that set overly broad location limits.

KEY TAKEAWAYS

Germany is one of only two countries to achieve Innovation Champion status in 2019 after being named an Innovation Leader last year.

An international automotive powerhouse, Germany is the first country in the world to develop ethical guidelines surrounding self-driving vehicles, and China and many other countries are eager to adopt similarly innovative policies.



Credit: International Transport Forum, Flickr

A demonstration of crash avoidance technology takes place in Leipzig during the 2018 International Transport Forum. Germany is the first country to set ethical standards around SDVs.

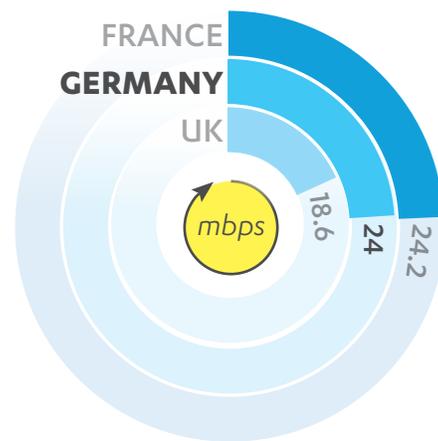
Germany invests heavily in research and development, spending 2.9 percent of its gross domestic product on R&D operations, an increase over last year.

Germany traditionally limits drone operation to military applications. Regulators hesitate to allow its widespread commercial usage given negative associations with its past military uses, as well as privacy concerns.

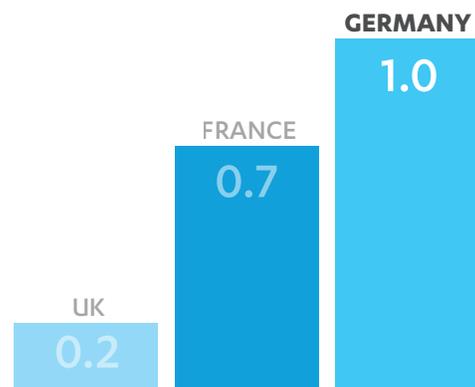
Ridesharing services in Germany also operate under burdensome federal regulations that compel drivers to obtain professional licenses, a barrier to the country's overall adoption of the services.

Sources: (Heureka) (Online Focus) (Reuters) (Robotics Business Review)

Mean Download Speed (Fixed & Mobile)



Fixed Broadband Cost Per Month



Shown as a percentage of gross monthly income per capita



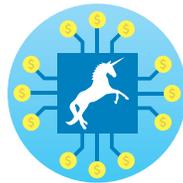
Broadband

The mean download speed of fixed and mobile internet is fast, at 24 Mbps. The monthly cost of fixed broadband is 1 percent of GNI per capita, and prepaid mobile broadband is 0.3 percent of GNI per capita.



R&D Investment

The country spends 2.9 percent of its GDP on research and development.



Unicorns

The country produced seven unicorns between 2009 and 2018.



Short-Term Rentals

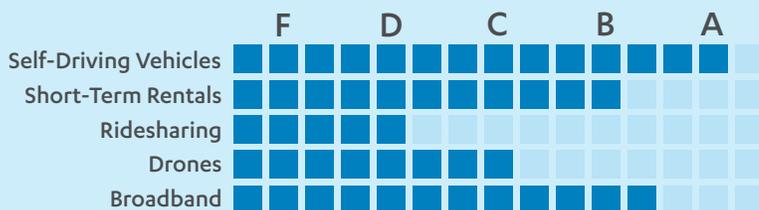
Although short-term rentals are legal throughout the country, authorities have asked platforms to share host data for tax purposes.



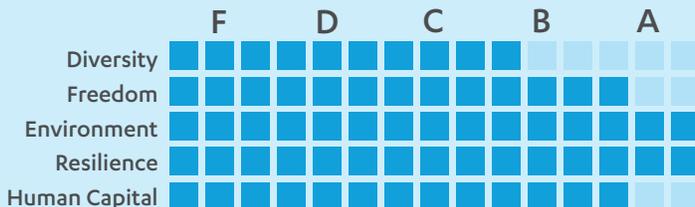
Human Capital

43.9 percent of Germany's workers are highly skilled, a slight increase from 43.3 percent in 2018, and the country awarded 41.8 percent of its college degrees in STEM fields, an increase from 34.8 percent in 2018.

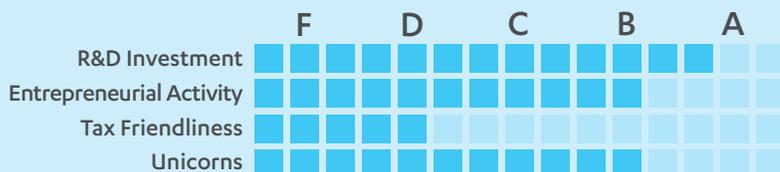
Technology



Society



Economy



ABOUT THE SCORECARD

With the 2019 International Innovation Scorecard, the Consumer Technology Association expands the report in breadth and depth, adding 23 new countries and two new categories. In this second edition, we evaluate 61 countries and the European Union across 28 indicators to determine whether they stifle progress or fuel the fires of innovation.

Each country on the Scorecard ranks in one of four tiers: Innovation Champions excel in almost all areas, followed by Innovation Leaders, which earn high scores in most. Behind the Leaders are Innovation Adopters, which promote innovation in some areas but not others. Finally, Modest Innovators may support innovation in one or more areas, but they show the greatest room for improvement.

ABOUT CTA

The Consumer Technology Association (CTA)[™] is the preeminent trade organization representing the \$398 billion U.S. consumer technology industry, which supports more than 15 million jobs. CTA serves over 2,200 companies, ranging from the startups and small businesses that make up 80 percent of its membership to some of the world's best-known brands. CTA also owns and produces CES[®], the world's premier gathering for consumer technology and the innovators who turn today's dreams into tomorrow's realities. Profits from CES are reinvested into CTA's industry services.

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