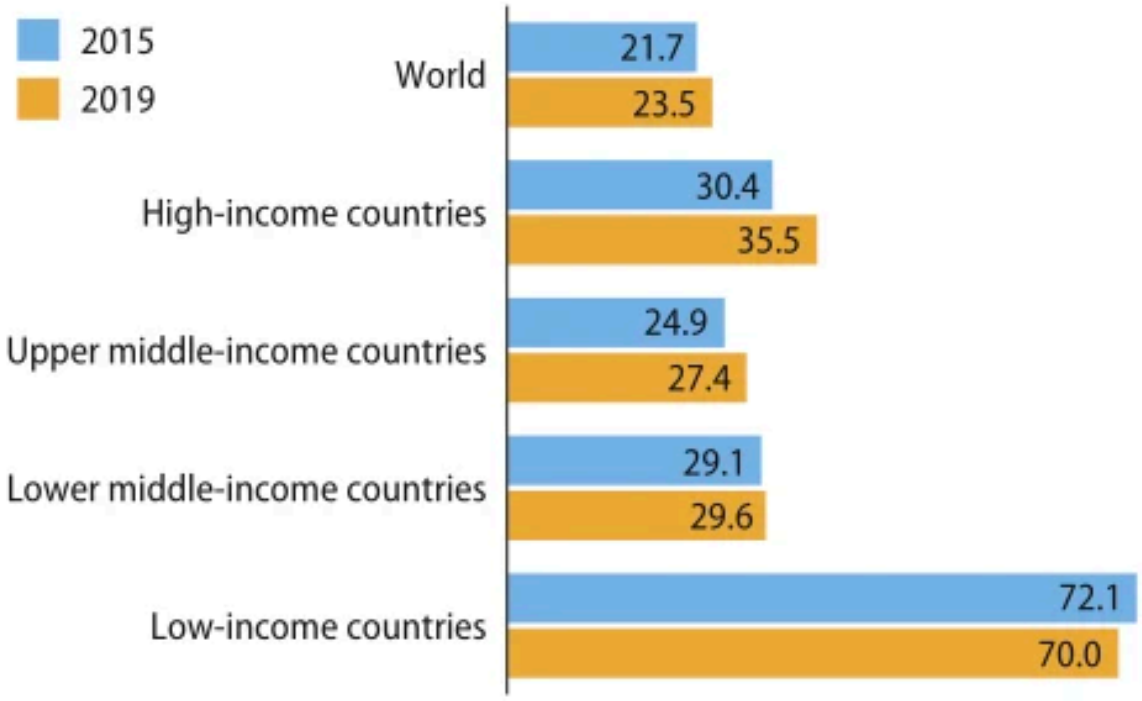
Introduction:

Open Science is a rapidly growing movement aimed at making scientific research and its outcomes more accessible, transparent and reproducible. The Open Science concept seeks to promote the sharing of data, ideas and results, with the goal of advancing science and solving complex global problems. This report will provide an overview of the adoption of Open Science in academia and business, the level of awareness and readiness, and the enabling technologies for Open Science.

Adoption of Open Science in academia and business:

Open Science is being adopted by both academia and the business world. In academia, Open Science has been embraced as a way to increase transparency and accountability, as well as to encourage collaboration and innovation. Many universities and research institutions have established Open Science policies, while funding agencies are increasingly requiring researchers to make their data and results publicly available. In the business world, Open Science is being used to drive innovation and collaboration, particularly in industries such as pharmaceuticals and biotechnology. Companies are using Open Science to share research and data with partners, customers and competitors, and to attract talent and investment.

Figure 1: **Share of publications involving co-authors from two or more countries, 2015 and 2019 (%)**



Source: Scopus (excluding Arts, Humanities and Social Sciences); data treatment by Science-Metrix

Awareness and readiness level of Open Science:

The awareness and readiness level of Open Science is growing, but there is still room for improvement. Many researchers and organizations are still not fully aware of the benefits of Open Science, and may be uncertain about how to participate. There are also significant cultural and technical barriers to overcome, including issues related to data sharing, privacy, and intellectual property. However, many organizations and funding agencies are actively promoting the benefits of Open Science, and providing support and resources to help researchers and businesses adopt and implement Open Science practices.

Enabling technologies for Open Science:

Technological advances are playing a key role in enabling Open Science. There are many tools and platforms available to support Open Science, including repositories for data and code, collaboration tools, and scientific publishing platforms. These technologies are making it easier for researchers to share and reuse data, collaborate on research projects, and disseminate their results. They are also enabling the use of big data techniques and other advanced analytical methods, which are increasingly important for solving complex scientific problems.

Conclusion:

Open Science is a rapidly growing movement that is transforming the way science is conducted and shared. By making scientific research more transparent, accessible and reproducible, Open Science is helping to drive innovation, increase collaboration and tackle complex global problems. The adoption of Open Science is growing in academia and business, and awareness and readiness levels are improving. Technological advances are playing a key role in enabling Open Science and helping to overcome barriers to its adoption.

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