**The impact of Big Data on China's digital economy: Strengths, barriers, and Global leadership**

**Introduction**

The integration of big data and the digital economy has led to a transformational change that has reshaped the global economy. China is a key player in this digital revolution. This article explores the relationship between big data and the digital economy, focusing on the advantages of big data adoption in China and the obstacles faced by businesses. In addition, the article also considers whether China can lead the development of the global digital economy.

**Advantages of big data in China's digital economy**

China has gained significant advantages by rapidly integrating big data in its digital economy. First, big data analytics improves market intelligence, enabling companies to interpret consumer trends and preferences with unprecedented precision. This insight contributes to accurate marketing strategies, optimized resource allocation, and enhanced business growth. China's digital economy grew strongly in 2020, reaching 39.2 trillion yuan, accounting for 38.6 percent of GDP, 2.4 percentage points higher than the previous year, according to a White paper on the Global digital economy released by the China Academy of Information and Communications Technology.

In addition, big data stimulates the continuous optimization and upgrading of the digital economy structure. According to the core digital industry statistical classification of the National Bureau of Statistics, China's digital economy is mainly driven by two parts: one is the industrialization of digital products and services, and the other is the digitalization of traditional industries. Among them, the industrialization scale of digital products and services has reached 7.5 trillion yuan, and the economic scale spawned by the digitalization of traditional industries has reached 31.7 trillion yuan. Both emerging and traditional industries can leverage big data analytics to streamline operations, reduce costs and improve overall efficiency.

**Obstacles faced by Chinese enterprises**

Despite many advantages, Chinese companies face significant obstacles in harnessing big data's full potential. Privacy issues and regulations are the main issues. Striking a balance between data-driven innovation and protecting personal privacy is a huge challenge for businesses when they adapt to a changing environment.

The scarcity of big data analytics professionals is a key obstacle. The demand for data scientists and analysts far exceeds the current supply, constraining the widespread adoption of big data.

In addition, whether the security of the data can be guaranteed is also an issue. As reliance on big data increases, the risk of attacks of cyber also increases. Ensuring the security of data remains a long-term challenge.

**China's leadership in the global digital economy**

With the new era coming, China's strong moves to integrate big data in its digital economy, combined with its vast market size and technological prowess, have made it a leader in the global digital economy, rather than a follower in the past. Over the past decade, new models of China's digital economy, such as mobile payment and shared bicycles, have impressed the world. Recently, China has made new progress in information aggregation, data sharing, artificial intelligence analysis, which makes it possible to efficiently allocate social resources, improve the normal flow of goods, and develop remote working.

The sheer size of China's digital ecosystem underpins its influence in global industries. Looking ahead, China will not only inject a steady stream of vitality into the recovery and development of the world economy, but also provide the world with a "Chinese example" and a "Chinese solution" for digital economic innovation.

**Conclusion**

All in all, in China, there is a symbiotic relationship between big data and the digital economy, and the two are inseparable. The application of big data in China has obvious advantages. For example, we can use big data technologies to improving the economic structure. However, businesses face huge challenges in terms of privacy issues, talent shortages, and cybersecurity. Despite these challenges, China's strategic measures and technological strength in the digital economy have made it a global leader in the digital economy.