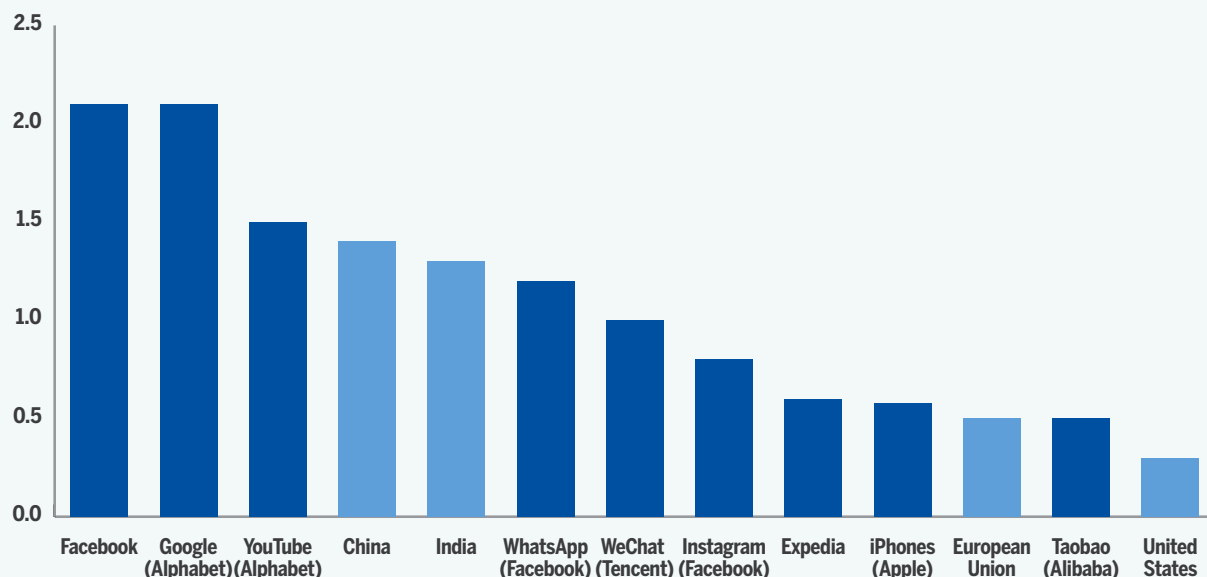


# Digital Empires Thrive on Users

Digital businesses exhibit network effects, which refer to the rise in a business's value with each additional user it acquires. Other examples include the telephone during its early days and currently the internet. Understanding the scale and growth rates that the network effect brings to today's largest global internet companies is critical when choosing investments in these companies.

## The Digital Economy Dwarfs Nations

Population / Users (billions)



Source: Digital users are Alger estimates. Populations are from Wikipedia.

Notes: Taobao number represents mobile-only users in China.

- Some of the largest digital networks, such as Facebook, Google Search and YouTube, surpass the huge populations of China and India, as well as the smaller United States.
- Metcalf's law states that the value of a network increases exponentially with its number of connected users. It is no wonder that many of the world's most valuable companies have massive networks of users.
- Networks help users interact with each other, expediting the transfer of knowledge from one user to another with wide-ranging benefits, such as increased transparency in society, governments and economies.
- Forecasting how networks will evolve and what may be the next huge network is paramount to understanding today's economy and stock market. While it is difficult to know its current size, Blockchain is an important group of networks to watch; it is adding millions of users each month.

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