


Chapter 2

Digital Dominance and Economic Power: Interplay of Technology and Geopolitics in Modern International Relations

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ABSTRACT

The digital age has reshaped global geopolitics and economic power dynamics with technology at the core of international relations. Nations and corporations

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vie for supremacy in strategic sectors like artificial intelligence, 5G and quantum computing, transforming traditional power dynamics. Data is the new oil, the oil that fuels economic growth and strikes in the public policy. The geopolitical competitive landscape especially between tech behemoths like the U.S. and China emphasizes the dual nature of technology as a means to prosperity and as a potential purveyor of conflict. Cybersecurity, digital sovereignty and the ethical use of AI are just some of the issues that highlight the complexities of global governance in the digital age. Connecting the digital gap and ensuring equal access to technology remain interrelated issues that must be resolved to achieve a balanced and sustainable international order.

1. INTRODUCTION

Dwelling deeply in the age of digital revolution, we see a whole new paradigm of the world of global geopolitics and power. Technology most prominently AI, big data, quantum computing and the Internet of Things (IoT) is reshaping global influence, prospects for economic dominance and how countries relate to each other. The conventional balances of power are being rewritten in this new era, with digital capabilities taking center stage in both strategic competition and global governance. Digital technologies are now key assets of geopolitical strategy. Countries that dominate the development, deployment and governance of transformative technologies like AI and 5G infrastructure accrue outsized economic and strategic benefits. The emergence of “tech superpowers,” especially the United States and China, demonstrates how technological leadership can be converted into geopolitical leverage. For example, applications of AI in areas such as national security, surveillance, and defense increase the means by which a nation can project power beyond historical borders. Control of global semiconductor supply chains such as that done by Taiwan remains another matter, underpinning the vital place of technology in modern geopolitics (Keser, 2023).

At the corporate level, tech companies like Google, Amazon, Tencent and Alibaba exercise economic force on par with nation-states. Indeed, these multinationals wield control over data and technology ecosystems, monopolizing a global marketplace, and thereby transforming into transnational forces within the geoeconomic theatre. Their categorization as monopolistic entities in technology leads to asymmetries in economic power, cementing their role as influential actors in the realm of international policymaking. Advancements in e-commerce, data monetization, and financial technologies are reshaping the distribution and exercise of economic power in what is being called the digital economy. Data is the “new oil,” the foundation of innovation and growth. Organizations and countries that

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