

# The Five Forces of 21<sup>st</sup> Century Innovation Strategy

## Insights for Leaders

*By Douglas J. Arent, Jacquelyn Pless, and Patricia Statwick*

JISEA provides leading-edge analysis to guide global investment and policy decisions by focusing on the nexus of energy, finance, and society. Understanding these dynamics informs 21<sup>st</sup> century innovation strategies that government and business leaders rely upon to address modern technological, social, environmental, and demographic realities. This Research Highlight previews JISEA’s continuing work on innovation strategy.

Today’s corporate leaders face an increasingly complex innovation and decision space characterized by ubiquitous connectivity, the Internet of Everything, globalization, unprecedented levels of transparency, new consumer demands for more independence and control, and changing policy and regulatory contexts.

These trends require rethinking innovation. While Porter’s seminal five forces analysis provides a framework for analyzing the level of competition within an industry and business strategy development, we provide a critically needed framework for aligning innovation and business strategies in the 21<sup>st</sup> century.<sup>1</sup>

We conducted a series of 30+ interviews with today’s corporate leaders across numerous industries to explore how today’s trends are influencing strategy. Based on these interviews, we offer a new framework for innovation strategy: The Five Forces of 21<sup>st</sup> Century Innovation Strategy. Our research suggests that the ability of businesses to embrace these forces and understand their interactions contributes to their success in harnessing 21<sup>st</sup> century innovation strategy.



The five forces of 21<sup>st</sup> century innovation strategy

<sup>1</sup> Porter, Michael E. “The Five Competitive Forces That Shape Strategy.” Special Issue on HBS Centennial. *Harvard Business Review* 86(1): 78–93, 2008.

## Force 1: Data-Driven and IT-Enabled Solutions

Today, there are over 15 billion connected objects worldwide.<sup>2</sup> New machines, devices, and sensors come online every day, feeding information about consumer and firm behavior and decision-making into systems that can provide data in a useful way for business analytics. Enhanced computing power and sophisticated analytical tools allow for such data to be translated into actionable solutions. Businesses are combining data accessibility with sophisticated analytics to develop strategies for adaptive learning and implementing IT-enabled business solutions that create value for customers.

## Force 2: Social Engagement

Earning and keeping society's trust and support has become a growing concern for C-suite executives in today's ubiquitous, rapid social communications and 24-hour news cycles. A "social license to operate" is now a prerequisite for doing business. Innovation strategy in the 21<sup>st</sup> century engages society at large and integrates such engagement deeply into decision-making.

## Force 3: Climate Resiliency and Environmental Stewardship

Corporate leaders today recognize the value of investing in our world's future. Consequences of climate change could have debilitating effects on business profitability, economic growth, and human development in this generation's lifetime. More firms are committed to reducing their environmental footprints and enhancing resiliency, recognizing that resource efficiency holistically encompasses environmental, social, and economic sustainability. Environmental stewardship and climate resiliency are now at the core of innovation strategies as firms seek to meet and exceed both customer and stakeholder expectations while also improving their bottom line.

## Force 4: Hyper-Efficient Use of Assets

Hyper-efficient use of complementary assets, products, services, and resources facilitates the development of innovative business models that provide higher quality of life with less capital and lower environmental impact. For instance, society values the services that products provide, not just strictly the products themselves. Business models today require innovative financing and investment modalities to appropriately assess risk and profitability as these service-based values evolve while considering complementarities of existing assets. Firms face a novel set of obstacles related to changing revenue streams that challenge legacy business models.

## Force 5: Radical Innovation at Speed and Scale

Successful business strategies in the 21<sup>st</sup> century recognize the rapid speed at which innovation must occur. Competitiveness depends upon how quickly a firm can adapt to changing stakeholder demands and policy and regulatory environments. This has always been a critical component of innovation; however, today's connectivity and transparency require accelerating idea generation. Our research suggests that firms that successfully innovate embrace rather than resist the changing business landscape as well as the rapid speed and scale at which innovation must occur in the 21<sup>st</sup> century.

---

<sup>2</sup> Cisco Consulting Services (CCS). *Internet of Things in Logistics: A collaborative report by DHL and Cisco on implications and use cases for the logistics industry*. Bonn, Germany: DHG Trend Research and Cisco Consulting Services, 2013.