5-2015

ENSC 300 (Energy Seminar) Annotated Bibliography, Supplementary Reading

Adam Liska
University of Nebraska - Lincoln, aliska2@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/bseliska

Part of the Bioresource and Agricultural Engineering Commons, Engineering Education Commons, Environmental Engineering Commons, Other Civil and Environmental Engineering Commons, Science and Mathematics Education Commons, and the Transportation Engineering Commons


This Article is brought to you for free and open access by the Biological Systems Engineering at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Adam Liska Papers by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Innovation


new value will be created via synthesis and creativity


entrepreneurs must maximize exposure to upside risks, while minimizing downside risks


new businesses must cut costs and create value innovations to beat competitors


how innovation is driven by group activities, not isolated individuals


new corporate models are more efficient, create more jobs, and deliver more value than previously


the value of services increases with the quality of the experience delivered

Sociology of Innovation, Business, & Work


increased business competition necessitates increased dedication to work and declining family structures
Sustainable Business Strategy

energy use can be dramatically reduced and services and value can be increased with innovation

renewable energy systems have low power densities and require large areas

businesses can increase profit and competitive advantage by quantifying & minimizing environmental impacts


Leadership

in-depth look at how important thinkers built and differentiated themselves from existing trends

argues for a disciplined mind, synthesizing mind, creating mind, respectful mind, and ethical mind


every employee will change jobs many times and it is important to make impacts early for success

maintain high standards, collaborative relationships, & initiative (persistence & hard work)

evaluation of conformity, persuasion, prejudice, and other social interaction

social situations tend to create conformity that very easily modify the character of people

new information about impending downside risks has consistently led society to act to mitigate threats

Science, Engineering, & Business History

how John von Neumann created the electronic digital computer to improve artillery accuracy, fluid dynamics of atomic and hydrogen bombs, & weather forecasting, create game theory, and reinterpret biology
Economics


Daly, H. (1996). *Beyond Growth: The Economics of Sustainable Development*. Beacon Press. future economic growth must and can decrease the flow of resources but increase the value of goods


Piketty, T (2014). *Capital in the Twenty-First Century*. Harvard University Press. concentration of wealth tends to accelerate inequality, and policies are needed to correct the imbalance

Energy, Business, & Environmental Policy

Coll, S. (2012). *Private Empire: ExxonMobil and American Power*. Penguin. this company has continuously altered public perceptions, used politics, & managed risks to stay profitable

Ross, B. & Amter, S. (2010). *The Polluters: The Making of Our Chemically Altered Environment*. Oxford University Press. academic and industrial scientists have consistently been supported by industry and underestimated risks


Climate Change & Insurance


Attali, J. (2006). A Brief History of the Future: A Brave and Controversial Look at the Twenty-First Century. Aracde. insurance will have the power to govern industries in the future


National Academy of Sciences (2002), Abrupt Climate Change: Inevitable Surprises. Washington DC. analysis of past climate change shows that it is often abrupt and not gradual

Casti, J. (2012). X-Events: The Collapse of Everything. Marrow. complex systems are inherently unstable and many possibilities exist that threaten society’s future

**Education**


**Ethics**

Heineman, B. W. (2008). High Performance with High Integrity. Harvard Business School Press. to avoid unwanted business risks and costs, high integrity is essential to not be corrupted by powerful internal and external forces


