



Can AI Shape the Path to a More Sustainable Energy Future?

8 December 2022

David Steven Jacoby

Panel Discussion at:

**THE AI
SUMMIT
NEW YORK**

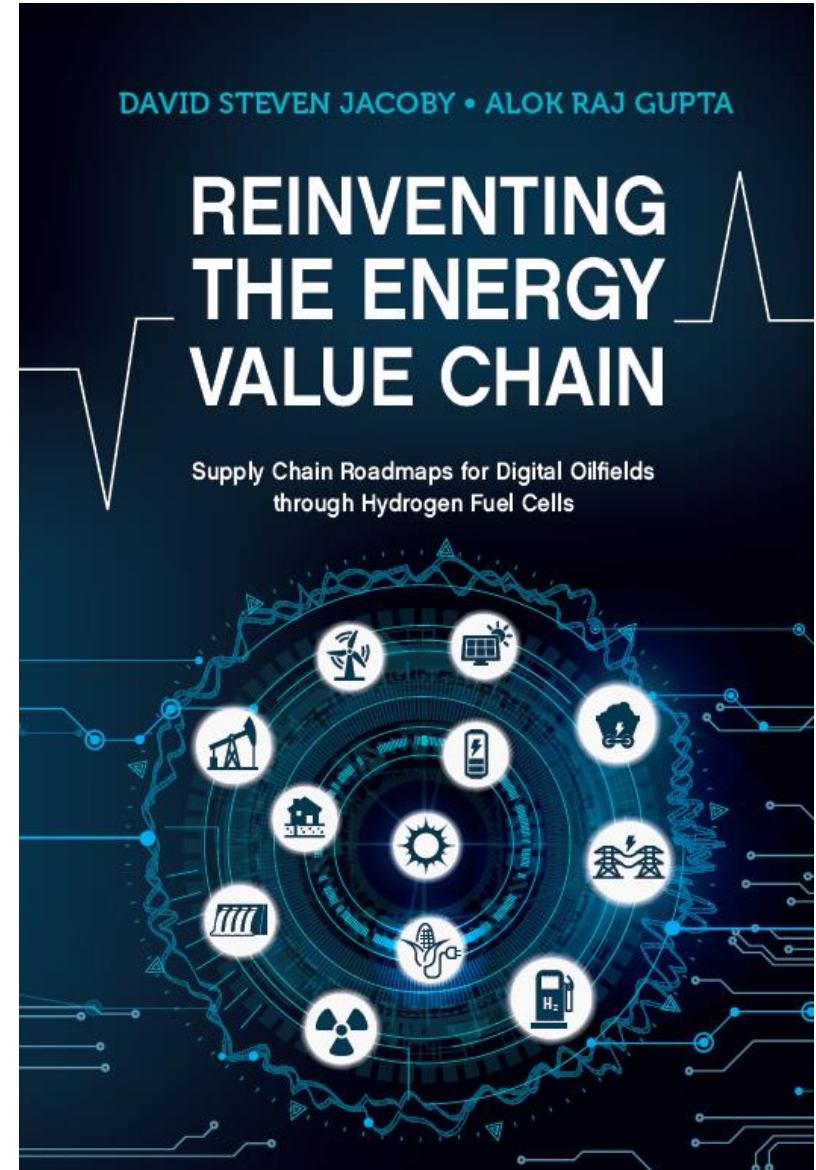
Austin | Boston
Dubai | Miami | Milan
New Delhi | New York

CONFIDENTIAL

David Steven Jacoby



- Consulting in transport, logistics & supply chain (ex-Kearney)
- CEO of Boston Strategies International since 2005
- Teaches operations management and supply chain management at NYU
- Senior Fellow at Boston University's Institute for Global Sustainability
- Author of *Reinventing the Energy Value Chain*; *High Cost of Low Prices*, and other books on supply chain sustainability

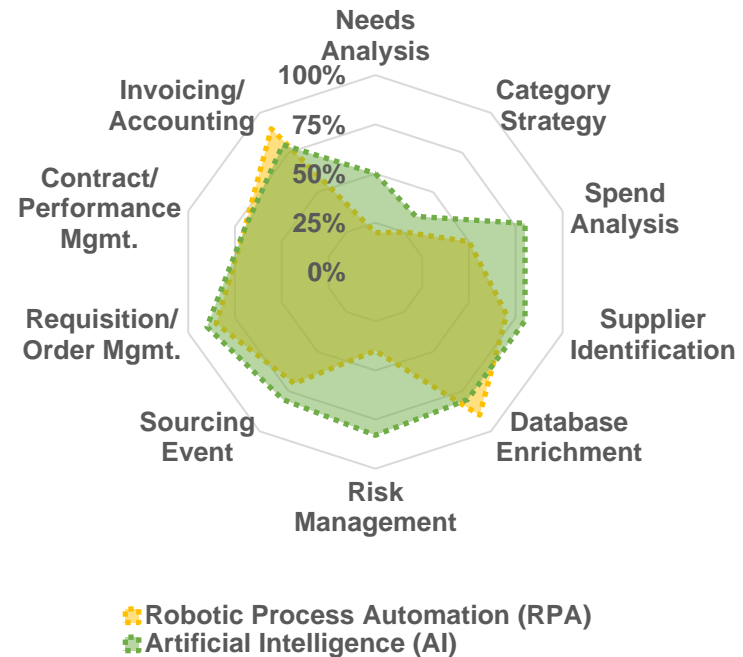




AI is Evolving via RPA, Cognitive Automation, and Predictive Analytics Over a 10+ Year Horizon

- COVID-19 boosted RPA and AI
- Shift away from transactional activities will continue, but expand to “smart” (cognitive) automation
- Not a separate industry from the current major players
 - Auto: Ford, Toyota, etc.
 - Equipment: Rockwell, Siemens, etc.
 - Energy Storage: ABB, Tesla, etc.
 - Medical: Phillips, GE, etc.
 - Search: Google

Estimated Penetration of AI and ML in Procurement by 2030

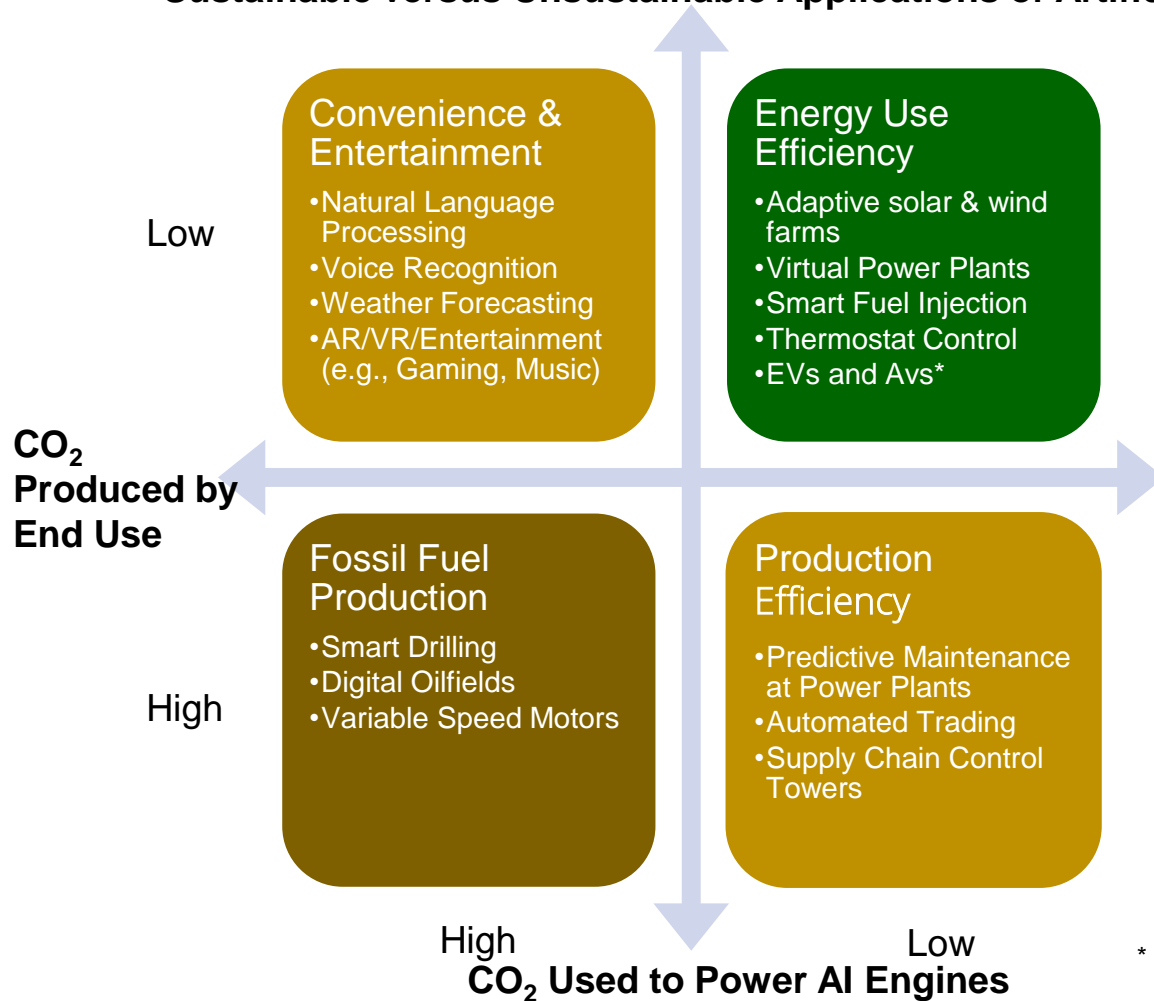


Source: “Artificial Intelligence in Supplier Selection and Management.” ISM World 2021. David Steven Jacoby and Francois Charvet



AI Can be Net Sustainable or Net Unsustainable, Depending on the Application

Sustainable versus Unsustainable Applications of Artificial Intelligence (AI)



* If charged by green power



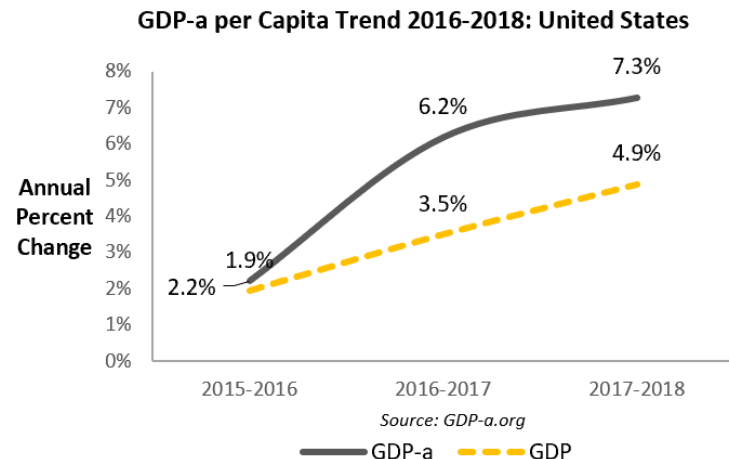
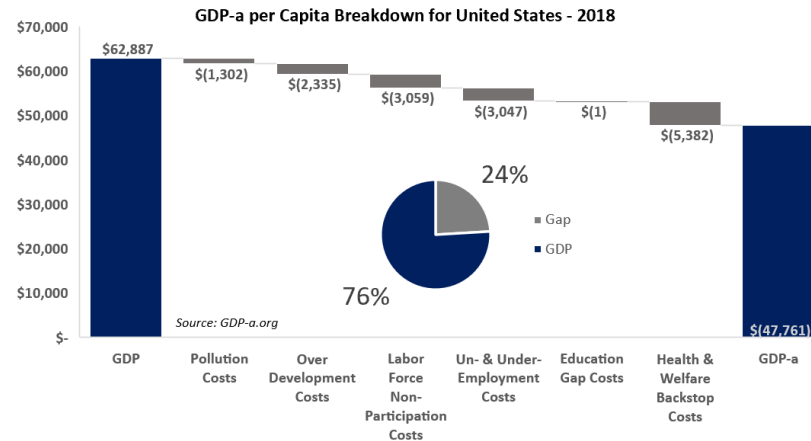
AI Can Move the Sustainability Needle in a Strong Net Positive Direction by Powering Sustainability Information, Labeling, and Measurement

Examples of GDPa (more at davidsteven.us)

Sample D-Factor for a Smartphone

| Major Cost | SubCost | D-Factor |
|-------------------------------------------------|---------------------------------------|--------------|
| Retail Store | | |
| Labor | Retail Sales | 6.76 |
| | Management | 2.25 |
| Capital | Facility Overhead | 13.51 |
| | Total | 22.52 |
| Transport, Logistics, & Distribution | | |
| Labor | Ship Crew | 0.48 |
| | Truck Drivers | 0.36 |
| Equipment | Container ship China to US | 1.91 |
| | Truck from Port to Warehouse | - |
| | Truck from Warehouse to Retail Outlet | - |
| | Total | 2.75 |

Source: Jacoby, David Steven. *The High Cost of Low Prices*. Business Expert Press.



12/7/2022

Source: davidsteven.us



For Those Who Want to Make Near-Term Carbon Footprint Reductions, Consider the REVchain™ Master Class

rev  chain

@ NET ZERO

Learn to Map your Net-Zero Pathway Online!

REVchain™ is a learning platform that helps companies map their pathway to Net Zero.

[Know More](#)





Contact:



David Steven Jacoby
djacoby@bu.edu
Tel: +1 617 593 2620