

Reverse innovation

Open source innovation

Large scale innovation

User centered design

Design thinking

Digital innovation

Indigenous innovation

Sustainability innovation

“Do more with less”

“Winning the future”

**Creativity** is the universal human ability to generate new ideas

**Innovation** is creativity applied to a purpose to realize value

Innovation is a set of **capabilities** that enable the continuous realization of a desired future

# Innovation is Evolving

**Industrial** Innovation - mass production, economies of scale, learning curve effects, improvement

**High Tech** Innovation - “startup nation,” r & d, venture capital, culture of entrepreneurship, disruptive technologies, engineering prowess

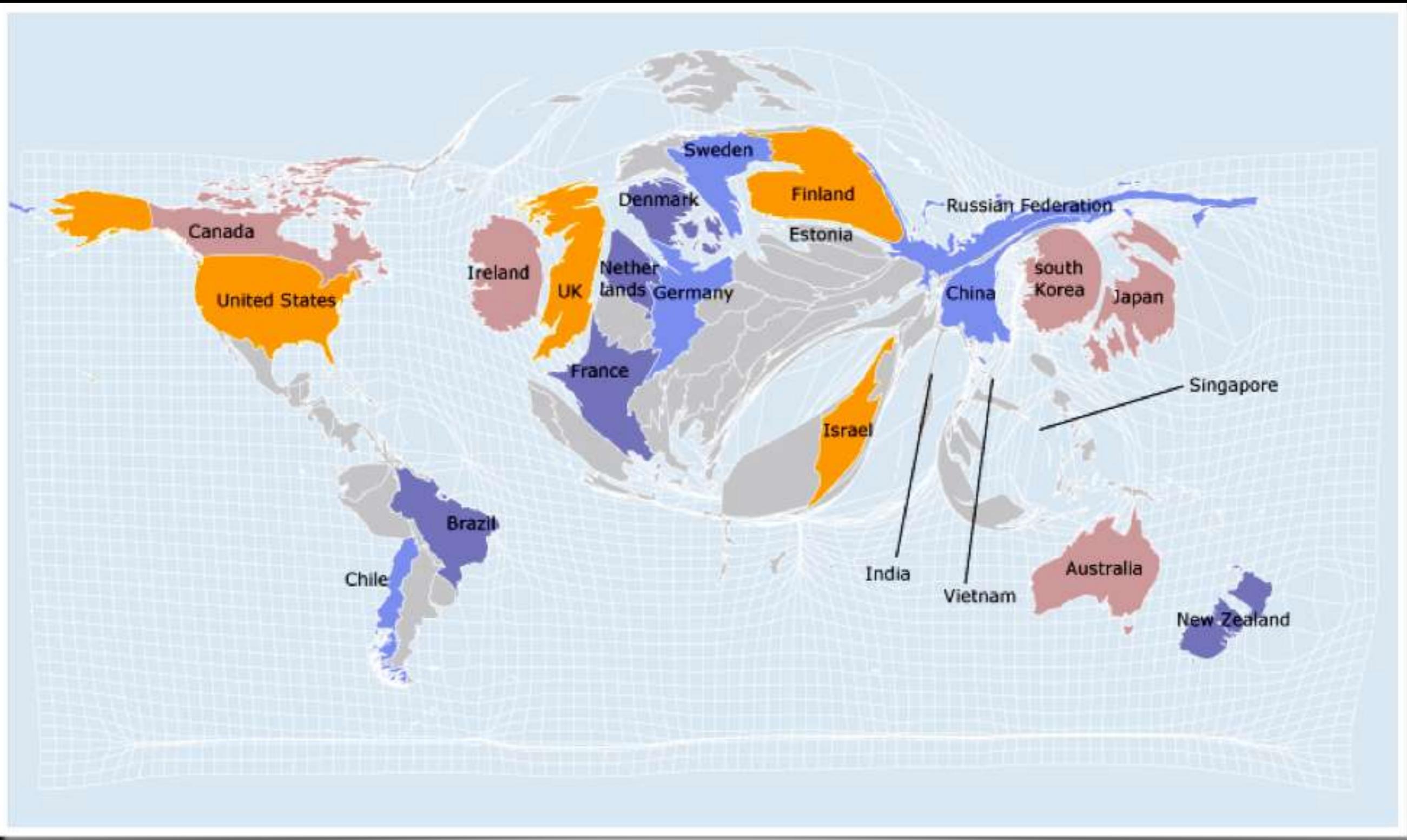
**Innovating** Innovation - design thinking, social innovation, government 2.0, blended stewardship, wicked problems, new geography of innovation, innovation arbitrage, new approaches to innovation finance, digital nervous system, cultural intelligence, STEAM

# A New Definition of Wealth

- **Traditional** definition— Stuff. Money in the bank, oil in the ground, assets with an economic life. **Nouns.**
- **New** definition - The sum of innovation ability, foresight, agility, risk appetite, and ability to experiment that continuously transforms what is possible into what is valuable. **Verbs.**

If innovation is  
the **big** answer  
you seek, what is  
the question?

# Innovation has globalized



# THE INNOVATION VALUE WEB

Discovery

Invention

Development

Applied R&D

Strategic foresight

Customer insight

User-centered design

Prototyping

Finance

Scaling/ramp up

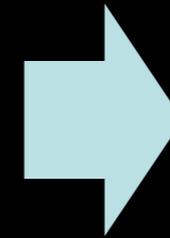
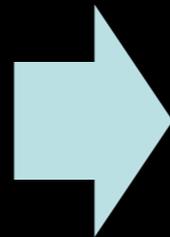
Business development

Deployment/roll-out



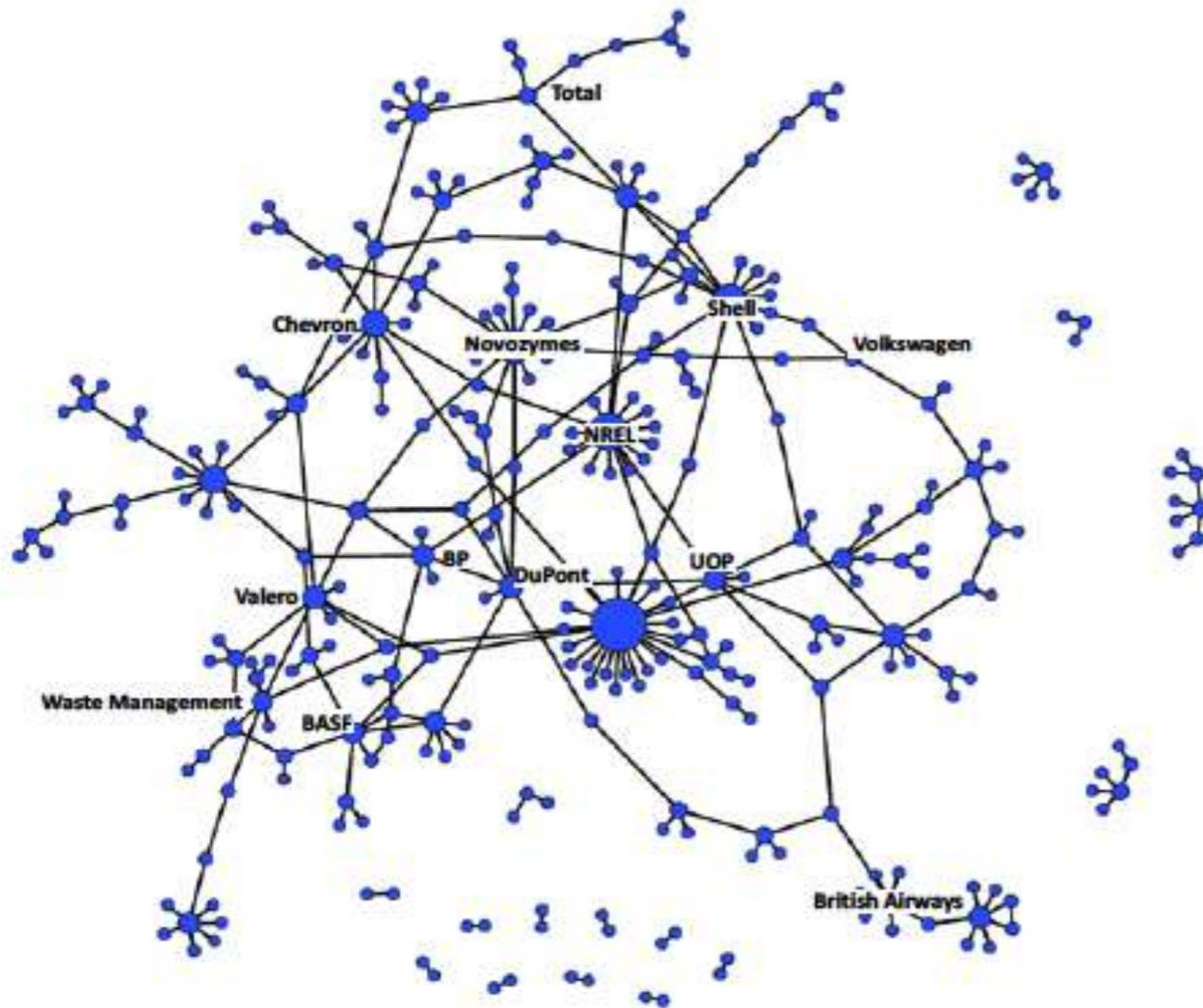
Today new business models become commoditized faster than at any time in history. The only sustainable competitive advantage is the ability to innovate faster than your competitors.

# The Shrinking Unit of Action



# Innovation Emerges in Ecosystems

## Case example – Alternative fuels



What we see:

- Corporate-startup partnerships are maturing the space
- Leading developers are shifting focus from science to scaling up capacity
- IPOs are succeeding: Amyris, Codexis, Gevo, Solazyme (tbd)

What it means:

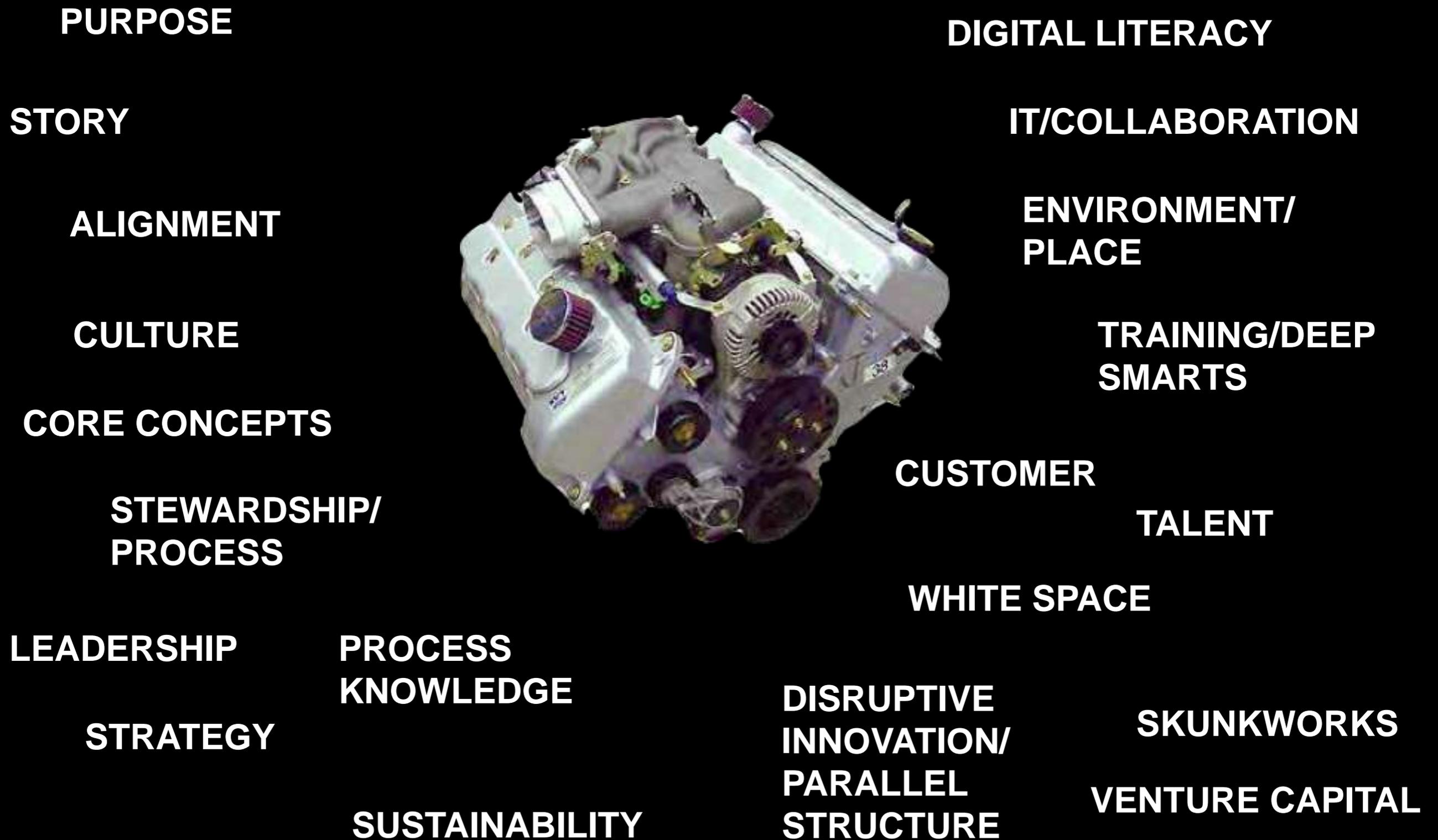
- Very difficult to enter with technology innovation today; partnerships are a must
- Drop-in fuels will leapfrog cellulosic ethanol



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So how do we move  
from “getting it” to  
“getting it done?”

# Innovation is **Complex**



# Models of Innovation Leadership

- attention to detail, risk reduction, judgments, analytics and impersonal criteria, decisive, solving problems, getting to closure
- big picture, risk embracing, judgments based on gut feel, personal values, openness of creative process, horizons



# Innovation Leadership Skills

Originate useful exceptions

Launch new initiatives

Sense and actualize emerging  
opportunities

Find, empower, provision talent

Enable meaningful experimentation

Provide air cover

Keep the vision

Communicate to affirm the innovation  
culture

# WHY INNOVATION EFFORTS FAIL

- Lack of a sense of urgency
- Lack of processes and process skills
- Lack of a story around the need for transformation and investing for the future
- Shortage of leaders who are willing to be evangelists for a new vision
- No place for innovative, unstructured work; skunkworks
- Lack of bridges that connect stakeholders in the innovation process
- Culture of relentless busy-ness that crowds out the white space needed for reflection; no time for the work of transformation
- Innovator's dilemma – default to improvement, not game changing
- Lack of flexible funding for new initiatives
- Innovation as mood, not capability building
- Failure to sustain
- Penalties for divergent thinking

Do you have a **vision** of the desired future that defines the purpose of and direction for innovation today?



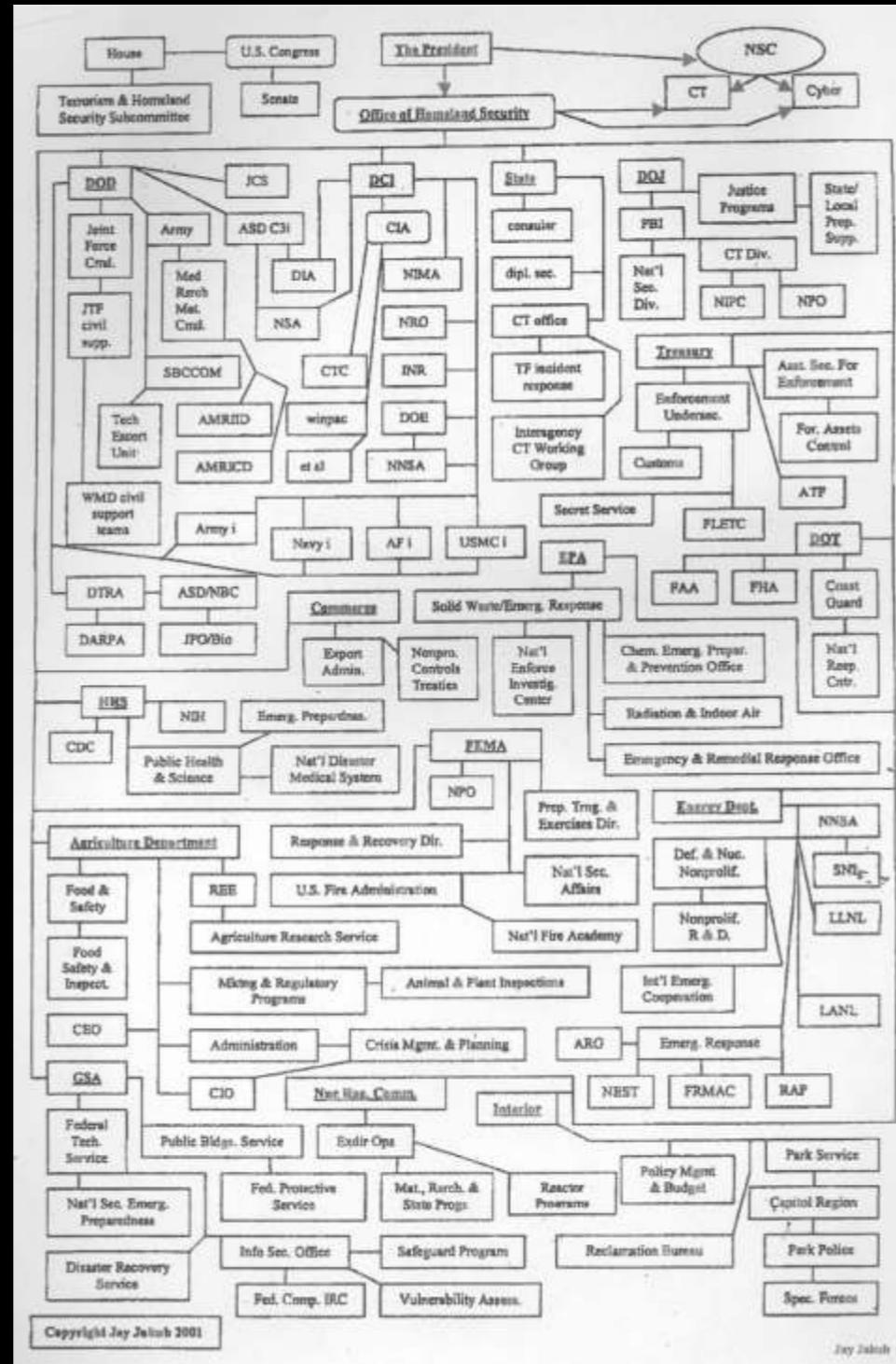
Do you have a way for disruptive innovation to **coevolve** with the day-to-day?







# Are your innovation processes fast, smart and agile enough?



Do you have the rocket fuel for innovation in such terms as money, time, and slack that are balanced with the needs of today?



# Do you have the right innovation stewardship model?

TOP DOWN - President/White House  
vision, narrative, provisioning, commissioning,  
team formation, empowerment



COALITION OF THE WILLING - Innovation Office/PCNI  
Responsibilities: accountable, responsible for the strategy,  
resourced, focused, integrative, entrepreneurial, skunkworks



BOTTOM UP - Whole of government/all of us  
inclusive, diverse, comprehensive