

Exploring the Entrepreneurial Mindset

Brian Stengel



COMPUTING SERVICES AND SYSTEMS DEVELOPMENT





Related Talks/Panels

- Monday, August 8th: PLENARY: Effective Communication: <u>How to Talk to Researchers about Their Research</u> (Henry Neeman OU OSCER)
- Monday, August 8th: PLENARY: <u>Faculty Tenure and Promotion</u> (Bruce Mason, OU Physics)
- Tuesday, August 9th 3:45-4:30pm: Ongoing Assistance of Researchers (Panel moderated by Lauren Michael UW-Madison)



Introduction

- The purpose of this session is to explore the *persona profile* of faculty acting as "entrepreneurs" in our organizations.
- *Persona profiles* are an informed summary of the mindset, needs, and goals typically held by key stakeholders.
- Through stories and discussion we will present an archetype and explore distinguishing characteristics.
- This session is not about the practice of "entrepreneurship" or commercialization topics.
- Help participants recognize these types and begin to develop effective methods for engagements.

Dr. J. Karl Johnson

William Kepler Whiteford Professor
Department of Chemical & Petroleum Engineering
Swanson School of Engineering
University of Pittsburgh





EDUCATION

- Brigham Young University, Chemical Engineering, B.S. (magna cum laude)., 1985.
- Brigham Young University, Chemical Engineering, M.S., 1987.
- Cornell University, Chemical Engineering, Minor in Computer Science, Ph.D., 1992.

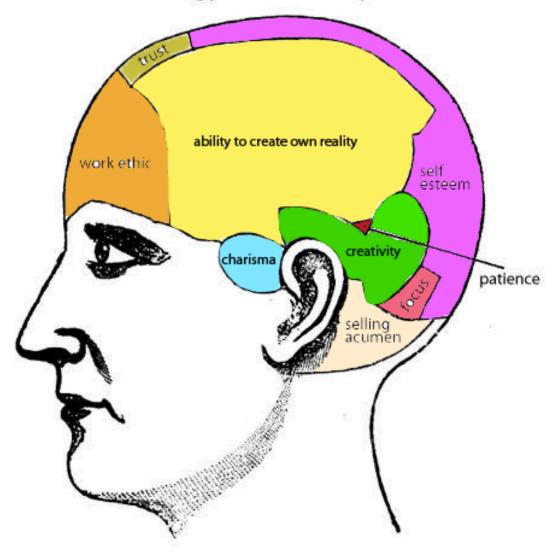
APPOINTMENTS

- Co-Director, Center for Simulation & Modeling, University of Pittsburgh, 2008-Present.
- William Kepler Whiteford Professor, Chemical & Petroleum Engineering, University of Pittsburgh, 2005-Present.
- Interim Chair, Chemical & Petroleum Engineering, University of Pittsburgh, 2008-2012.
- Associate Professor, Chemical & Petroleum Engineering, University of Pittsburgh, 2000-2005.
- Assistant Professor, Chemical & Petroleum Engineering, University of Pittsburgh, 1995-2000.
- National Research Council Research Associate, Naval Research Laboratory, 1992-1994.





Phrenology of an Entrepreneur





Entrepreneurs – Distinguishing Characteristics

- Traditionally, an entrepreneur has been defined as a person who organizes and manages any enterprise, especially a business, usually with considerable initiative and risk.
- Rather than working as an employee, an entrepreneur runs a small business and assumes all the risk and reward of a given business venture, idea, good, or service offered.



Continued

- Entrepreneurial spirit is characterized by innovation and risk-taking.
- Entrepreneurs tend to be good at perceiving new opportunities and often exhibit positive biases in their perception... and a pro-risk-taking attitude that makes them more likely to exploit the opportunity.
- An entrepreneur is typically in control of a commercial undertaking, directing the factors of production the human, financial, and material resources that are required to exploit a business opportunity.

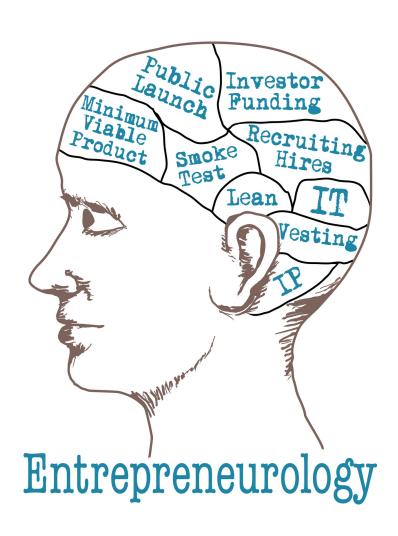


Intrapreneur?

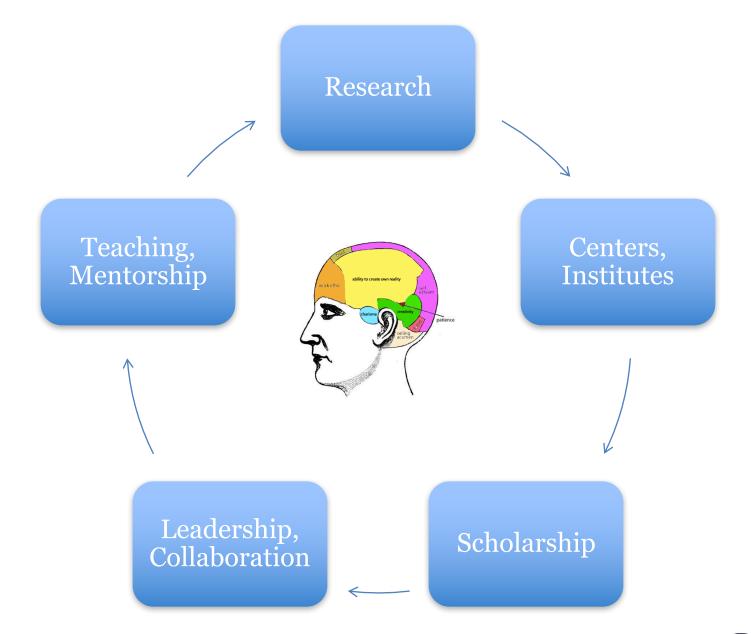
An intrapreneur is an employee who is given the authority and support to create a new product without having to be concerned about whether or not the product will actually become a source of revenue for the company. Unlike an entrepreneur, who faces personal risk when a product fails to produce revenue, an intrapreneur will continue to receive a salary even if the product fails to make it to production.

Source: Wikipedia

Start Up?









U-preneurs



Research

Centers, Institutes

Scholarship

D-Scholarship Pitt

core for analyte detection

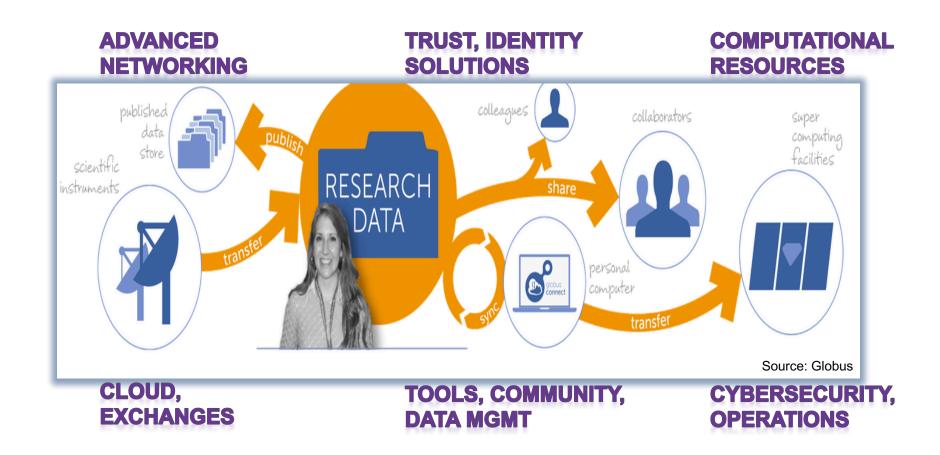
Leadership, Collaborate

Teaching, Mentoring



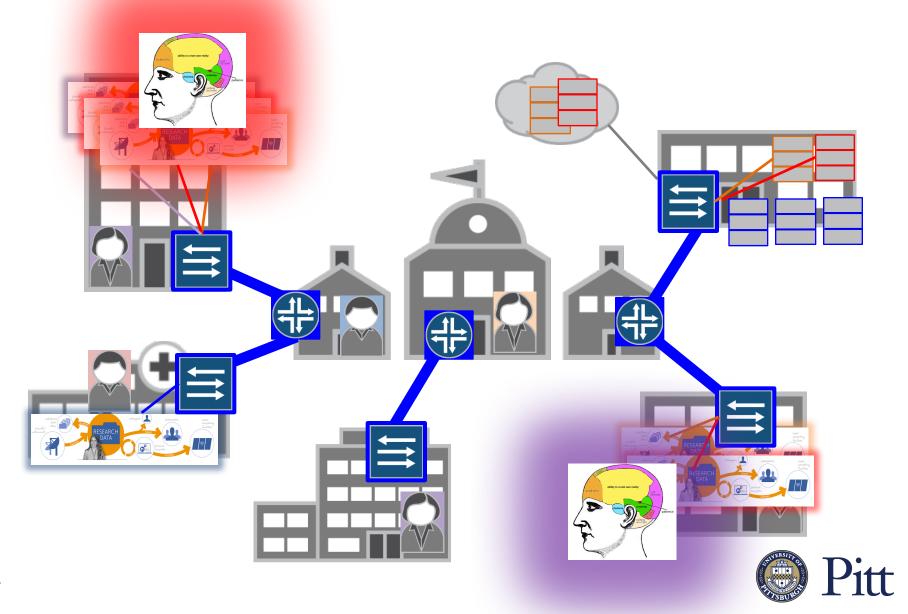


Cyberinfrastructure Landscape



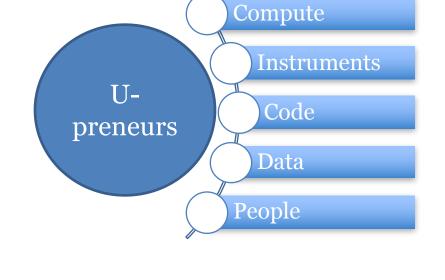


Cyberinfrastructure in the .edu



U-preneurs = our customers

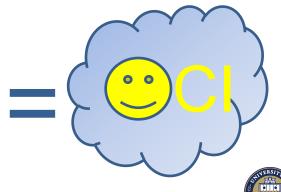
- Their "business" is increasingly reliant on CI
- Can be providers of CI in our institutions
- Can be influencers, disruptors, partners
- Not necessarily high-consumption users
- Can go elsewhere for their CI needs











Deep Dive

- Risk
- Competition
- Personnel
- Collaborating
- Engagement
- Decision making
- What about commercialization?



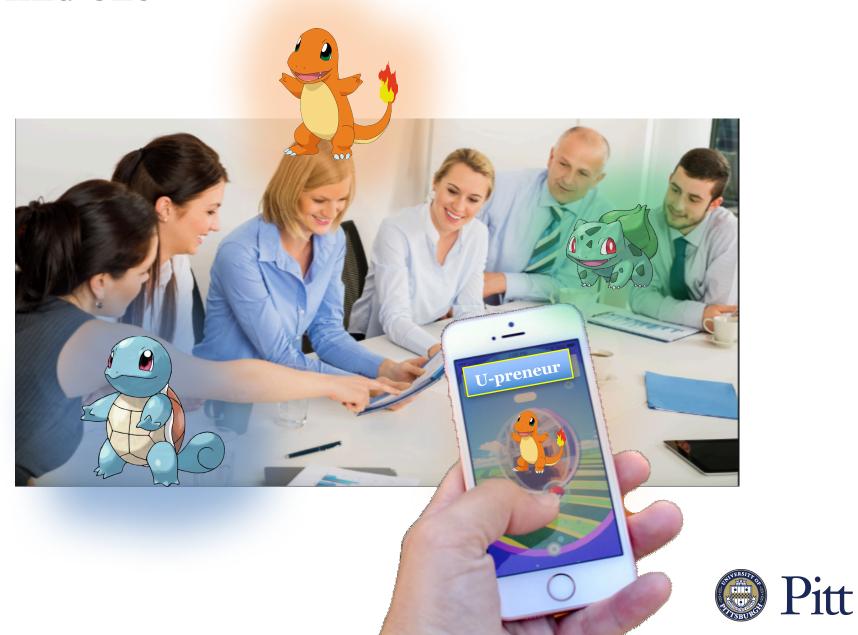


What to do next!



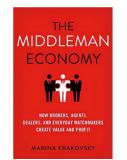


Go find one



Assume the Role of a Middleman

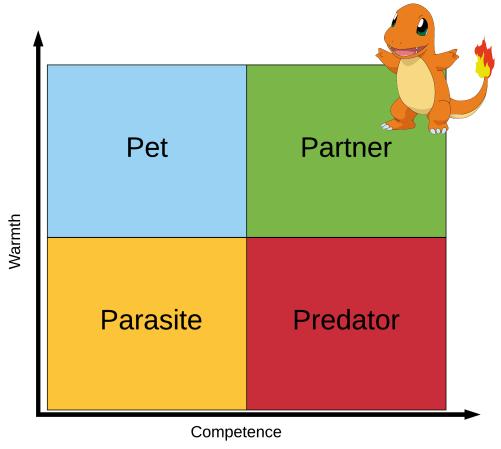
- The Bridge promotes trade by reducing physical, social, or temporal distance
- The Certifier separates the wheat from the chaff and gives buyers reassuring information about the seller's underlying quality
- The Enforcer makes sure buyers and sellers put forth full effort, cooperate, and stay honest
- The Risk Bearer reduces fluctuations and other forms of uncertainty, especially for risk-averse trading partners
- The Concierge reduces hassles and helps clients make good decisions in the face of information overload
- **The Insulator** helps clients get what they want without the stigma of being thought too greedy, self-promotional, or confrontational



The Middleman Economy. How Brokers, Agents, Dealers and Everyday Matchmakers Create Value and Profit. Marina Krakovsky.



Try to catch one...

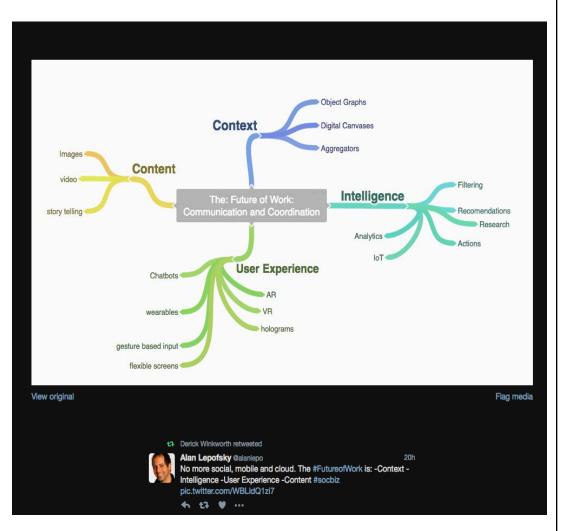


Each quadrant represents a unique combination of warmth and competence. The Partner, combining warmth and competence, inspires admiration. It's opposite, the Parasite, inspires contempt or disgust. The Predator and Pet inspire ambivalent feelings; the cold and competent Predator breeds resentment, while the warm and incompetent Pet inspires pity.

Source: The Middleman Economy, Marina Krakovsky.



Keep your eyes open for changes



Future of Work

New Worker Categories

- Micro-Workers
- Dream Builders
- Amplified Entrepreneurs
- Makers and Hackers

New Workers, New Skills. Marina Gorbis. Educause Review. 5/16



Additional Resources

- Innovating for People Handbook of Human-Centered Design Methods, LUMA Institute
- ACI-REF http://aci-ref.github.io/facilitation_best_practices/
- Econtalk podcast http://www.econtalk.org/ Hosted by Russ Roberts



Thank You!

Brian Stengel bstengel@pitt.edu 412-624-8688