Big Data Collaboration Leads to Big Impact:
Driving Innovation Through University-Industry Strategic Partnerships

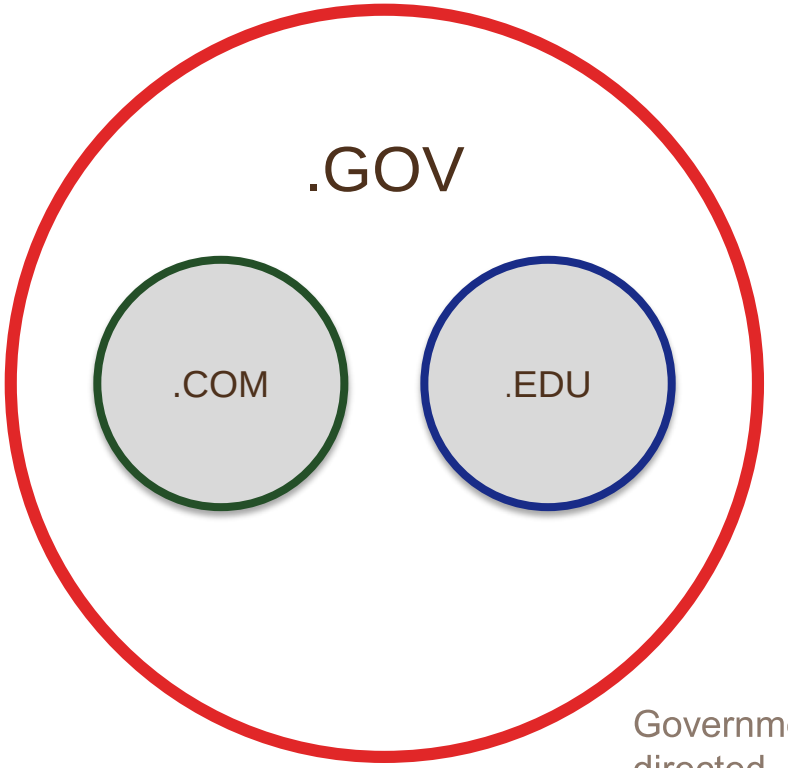
Presented by **Cameron McCoy, AVP Economic Engagement**
Samantha Kahoe, Sr Dir., Industry Engagement

LEHIGH UNIVERSITY

About Lehigh University

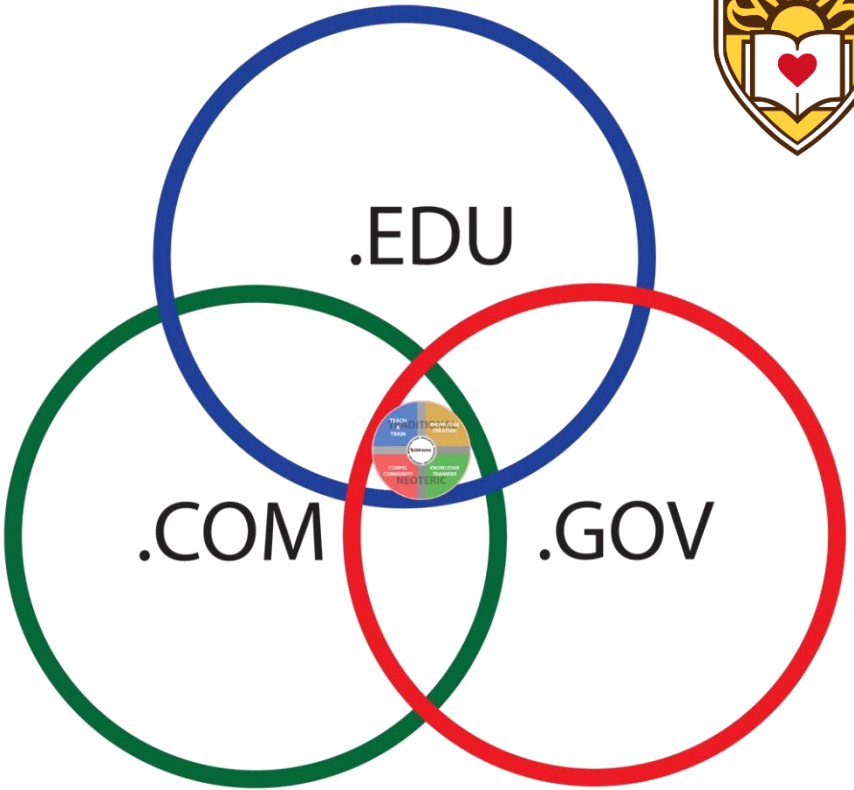
- Founded in 1865
- 7000 students
- 4 Colleges
- 2500 acres
- Heart of Boston-DC corridor
- Interdisciplinary Nature
- History of Industry Collaboration
- Theory to Practice

Relational Theories



National Model

Government directed relationships

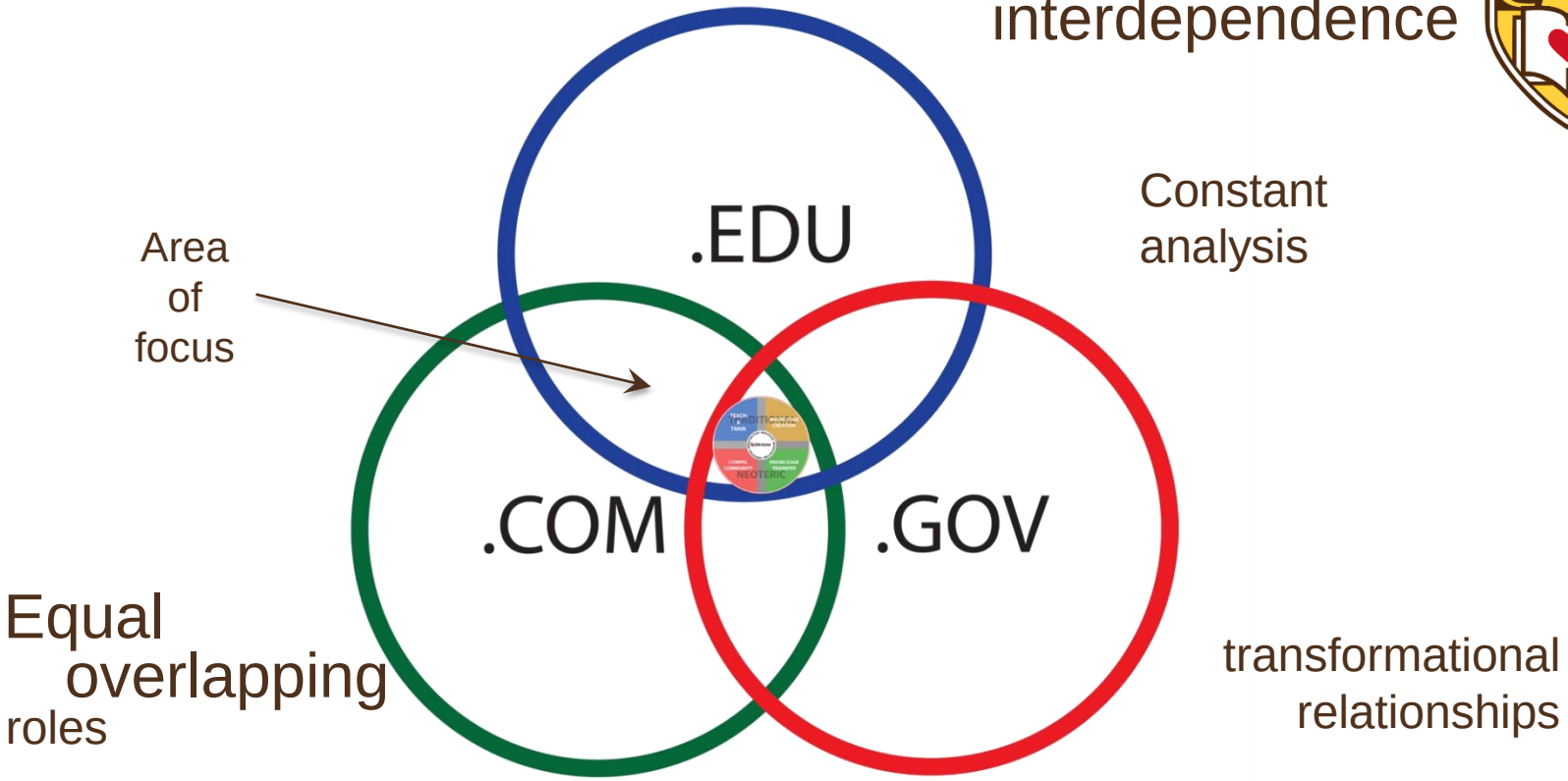


Triple Helix Model

(Etzkowitz & Leyesdorff, 2000, p.111)

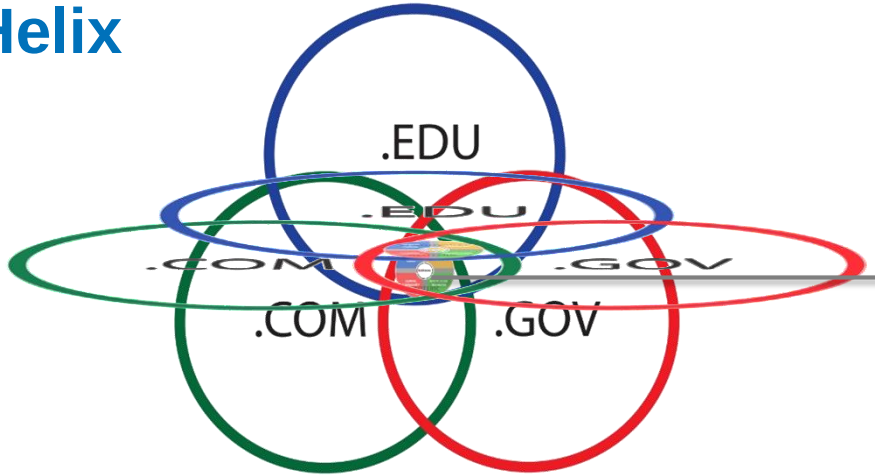
“Triple Helix”

areas of interdependence



(Etzkowitz & Leyesdorff, 2000, p.111)

Layered Triple Helix

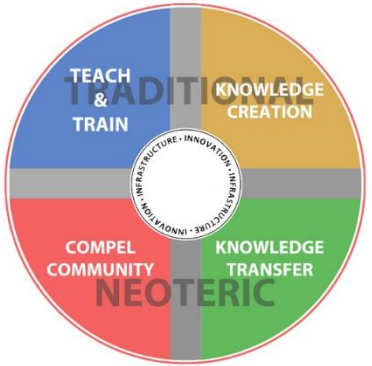


National/Global Layer

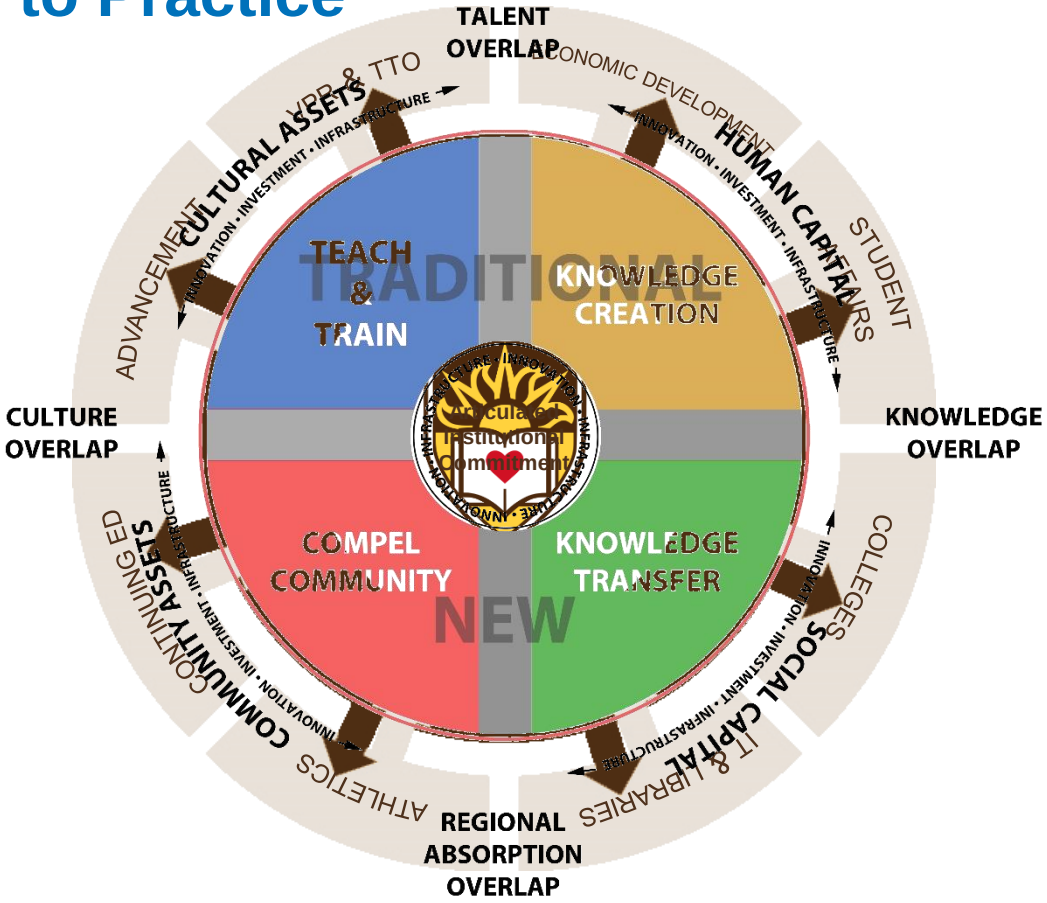
State/Regional Layer

Local/University Layer

Innovation Pipeline



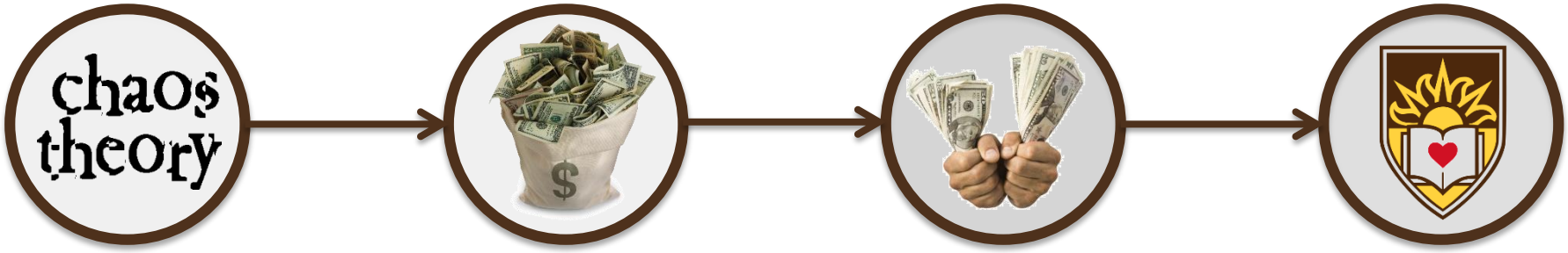
From Theory to Practice



*note: these are representative entry points, not all of the possible

Organizational Models or “Why Lehigh?”

Aligned Organizational Approach



DECENTRALIZED **PHILANTHROPIC** **INDUSTRIAL** **HYBRID**

common alignments

Theory to Practice

Initiatives

common partners

Alumni

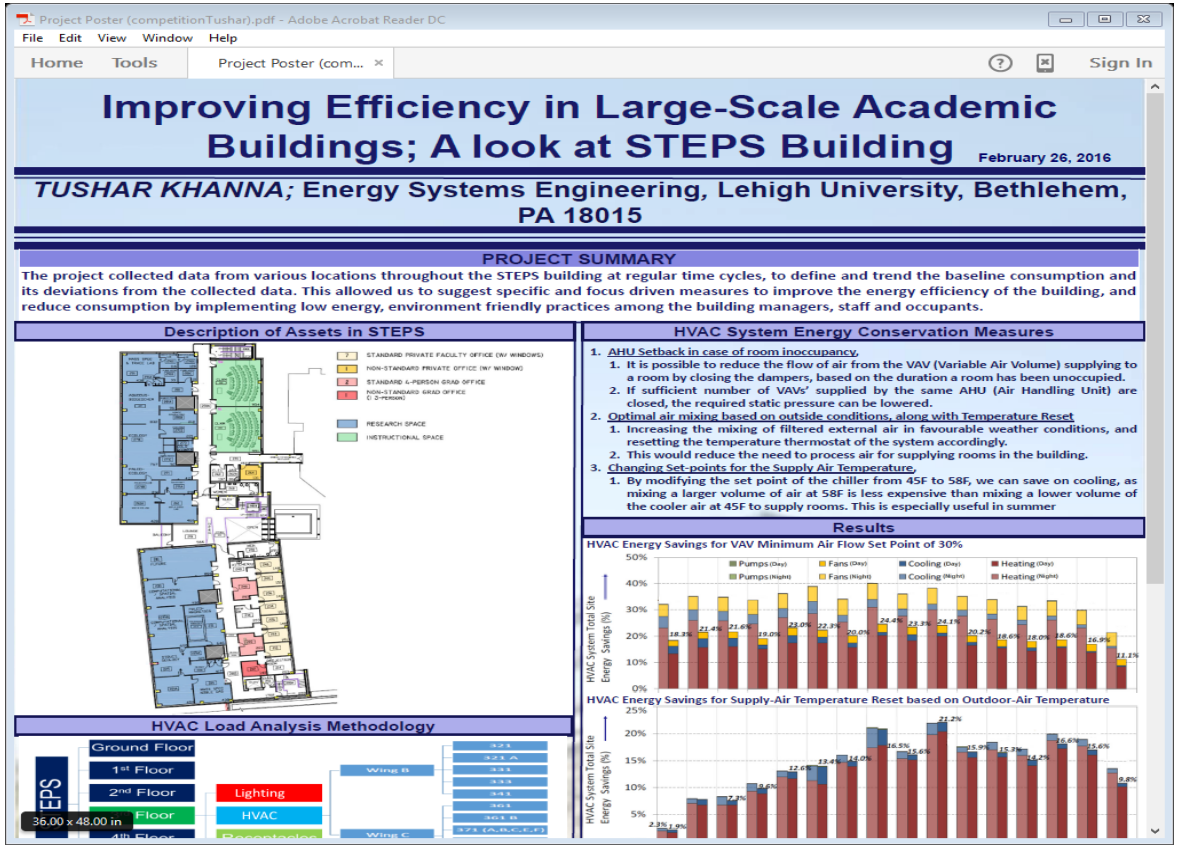
luck

Case Study:ZO

Data X Initiative at Lehigh

- A strategic initiative to drive computer and data science curriculum and research across disciplines at Lehigh
- A major investment in faculty and IT infrastructure

Energy Management Student Project powered by PI



DoE Center on Cybersecurity for Energy Delivery Systems

- $12.5M grant from Department of Energy across 5 universities (LU, U. Ark, U. Ark-LR, CMU, FIU) and one company (AECC).
- Lehigh Integrated Networks for Electricity (INE) Cluster
- Large industrial advisory board (**OSISoft,** MISO, SPP, Lockhead, PPL, PJM, PECO/Exelon, SEL, Fisher Block, and many others).

Renewable Integration

Real-time monitoring

Energy efficiency

More consumer engagement

Improved grid security

Looking Forward – Smart Campus

Metrics For Success