



# ***270 Economy Forums***

**Systemic economic development**  
*Lessons from science & industry*

*Commentary on methods, tools and infrastructure for  
process optimization in business systems.*

**Roger Erickson, Ph.D., Pres.**  
***270Tech, Inc.***

**301-370-1097**

***[rge@270Tech.net](mailto:rge@270Tech.net)***  
***<http://www.270Tech.net>***



# Summary

Our regional economy is critically important to local stakeholders.

Our work practices must evolve, and continue to change even more rapidly.

Employers must be more deeply involved in evolving new work practices.

*Management and Operations staff can't do this alone.  
Employers and employees as Work Practice Change Agents.*

Goal: Employers guard a local economy that becomes more adaptive every single day.

Methods: Define models for adaptive supply chains and economy.  
Enable adaptive work practices and objectives.  
Adopt tools that lower the cost of economic alignment.

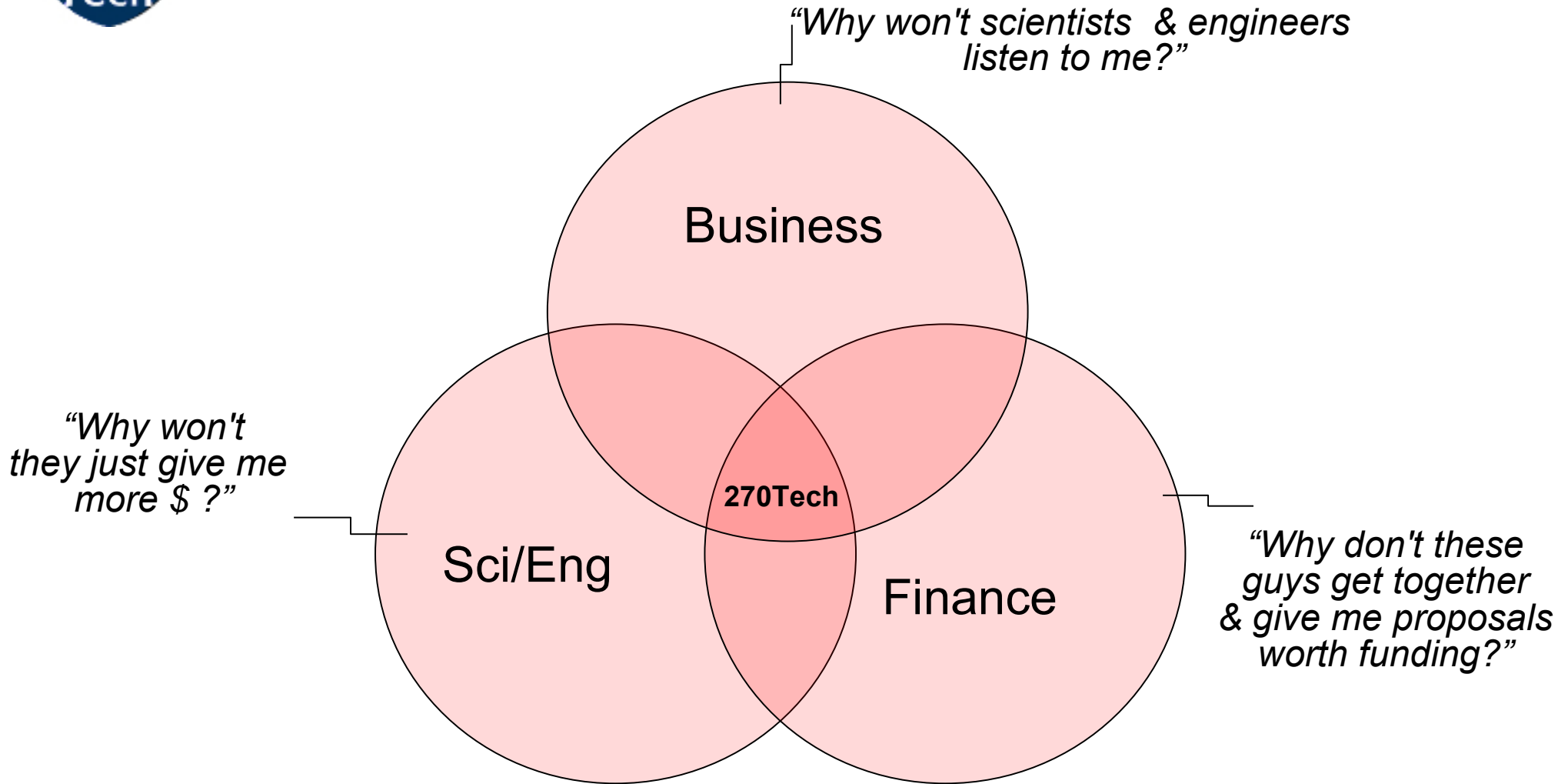
*Collaboration conferences?  
Cost of information sharing?  
Cost of Pattern Recognition?*

Analysis Tasks: What data to share, where to use it, why, and how?

# Economy Forums

Barriers to full “Context Awareness” exist

And most audiences can be modelled, example1:



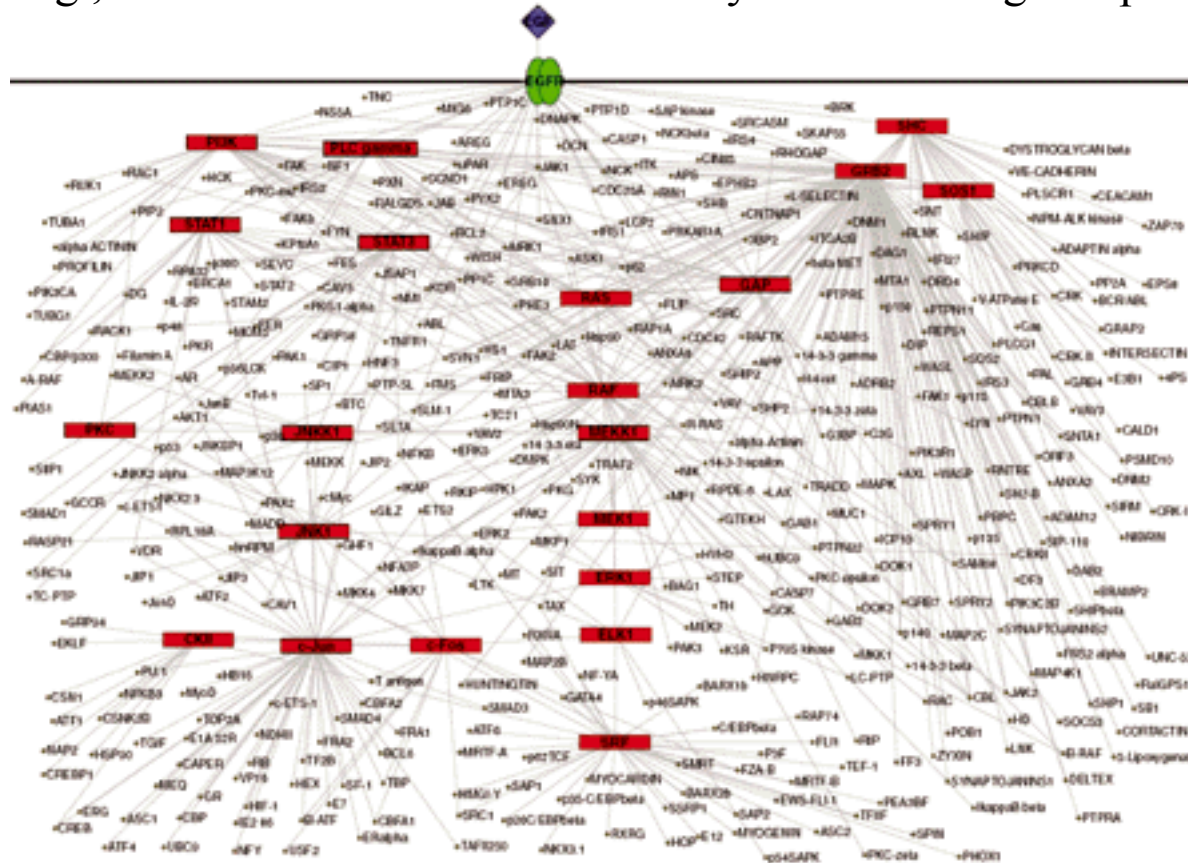
Community: ***“We need you ALL to collaborate more effectively.”***  
***(Why ISN'T there more coordination?)***



## *Limited interactions limit coordination.*

Scientists marvel at the complexity of their own nose ...  
(but often haven't looked beyond it).

E.g., Protein interactions activated by a known drug receptor.



define an  
"interaction network"

Could you draw  
a similar chart  
for members of  
your industry?

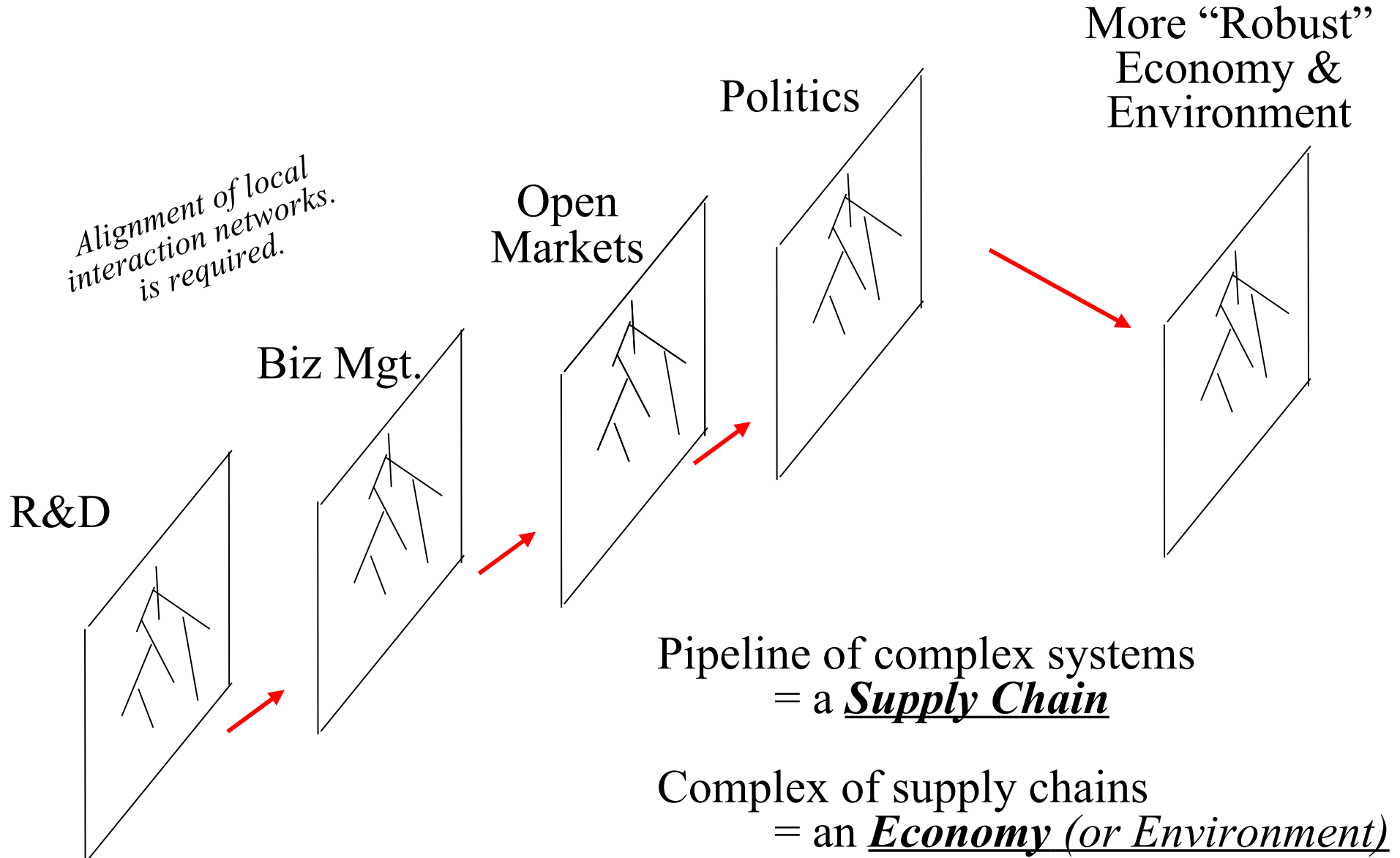


# Navigating *local* complexity is only the start.

Cost of system organization is ***Rate Limiting***, over time!

*How is complexity managed across domains?*

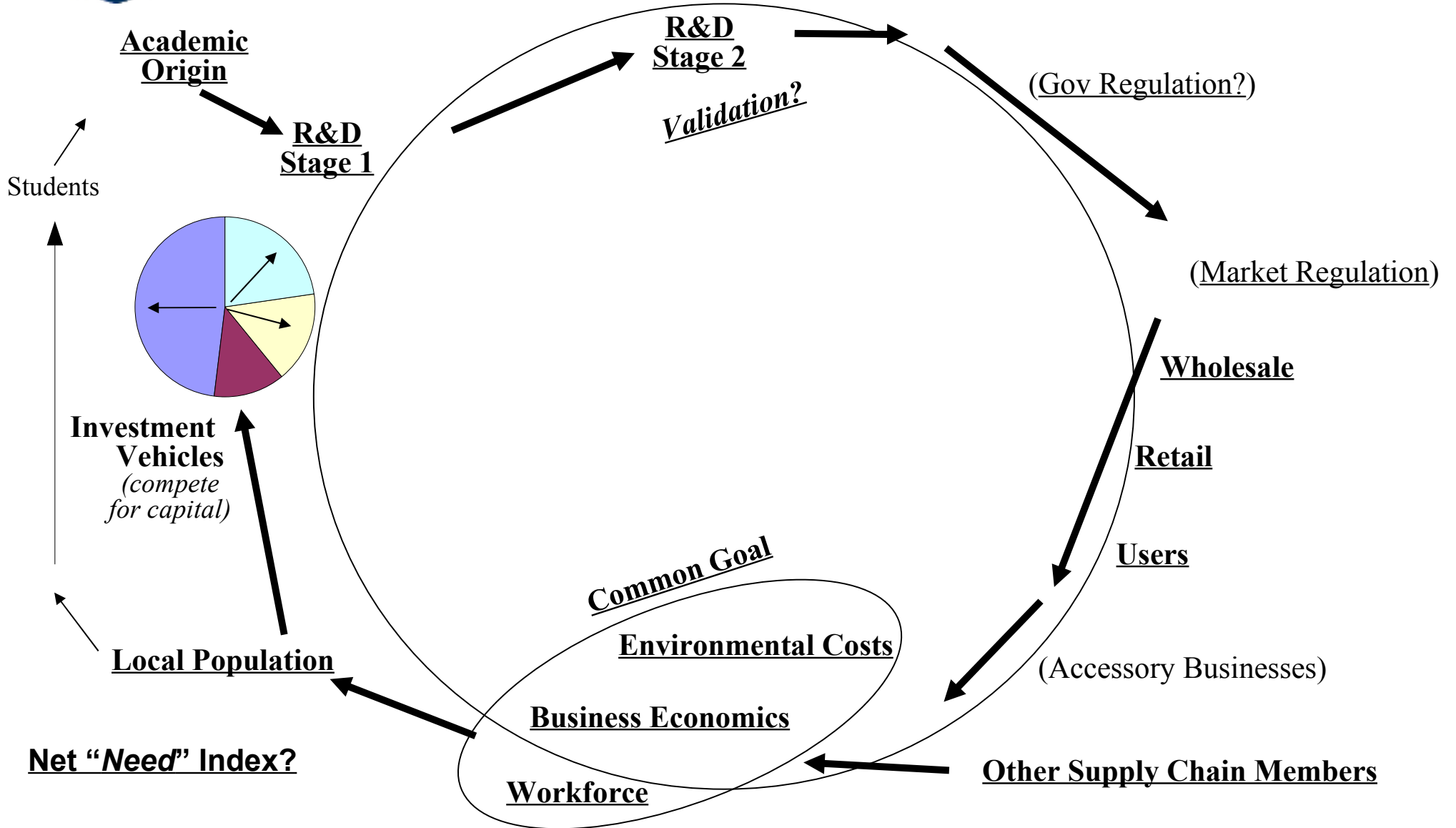
*The core task is identifying net (sustainable) value,  
as opposed to local (reference-less) value.*





# Start by Visualizing YOUR Supply Chain

Ref. Value: Adequate “health” of your regional economy.





# Information Sharing Among Supply Chain Members Expands Gradually – in 2 stages

- 1) *Gradual analysis of local data.*
- 2) *Eventually - expanded definition of supply chain.*

Reference Goal

Politics

*What's YOUR position in a supply chain?  
Who should you meet and talk to?  
How to meet them in a neutral setting?*

*What % of system data is adequately shared?*

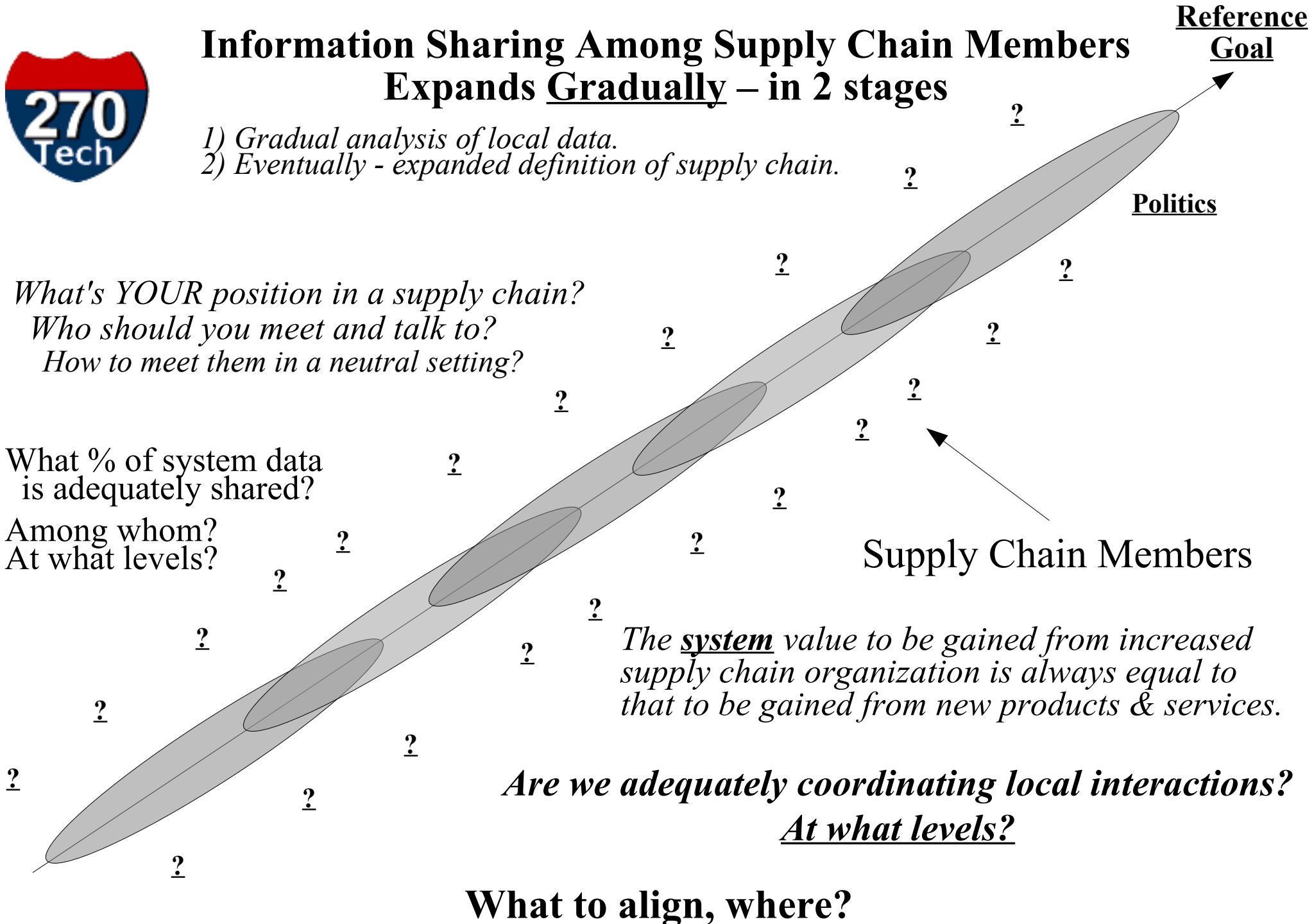
*Among whom?  
At what levels?*

Supply Chain Members

*The system value to be gained from increased supply chain organization is always equal to that to be gained from new products & services.*

*Are we adequately coordinating local interactions?  
At what levels?*

**What to align, where?**





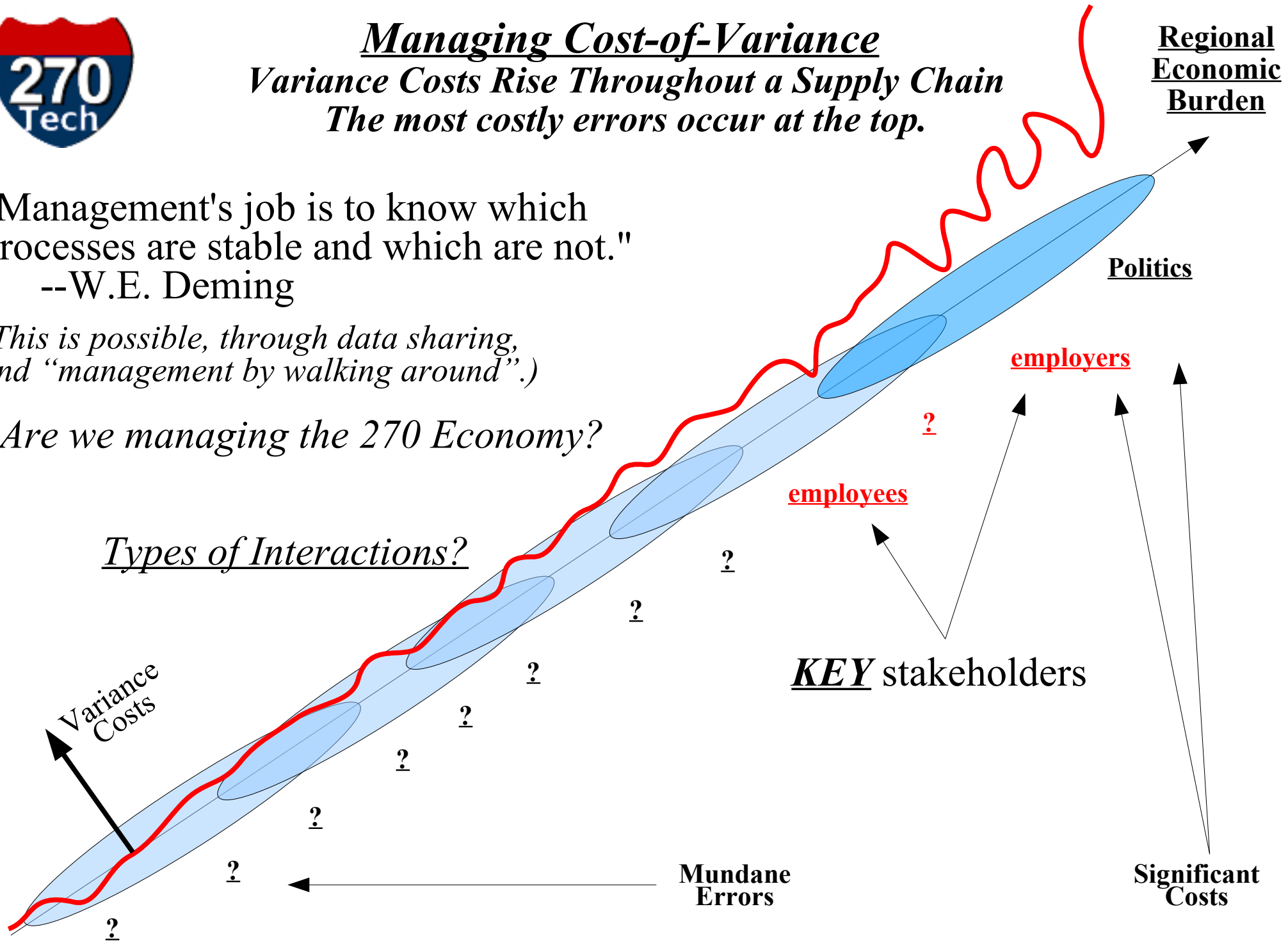
**Managing Cost-of-Variance**  
*Variance Costs Rise Throughout a Supply Chain*  
*The most costly errors occur at the top.*

"Management's job is to know which processes are stable and which are not."  
 --W.E. Deming

*(This is possible, through data sharing, and "management by walking around".)*

*Are we managing the 270 Economy?*

Types of Interactions?





Reducing Practical System Tasks to  
5 Key Pattern-Recognition Questions for any Supply-Chain member:

- 1) What supply chain are you a part of? (***complete*** definition, or don't bother)
- 2) Where do you sit in that supply chain?
- 3) What are the simplest changes that can most improve the entire supply chain?
- 4) How to become indispensable (to the supply chain, not just one client)?  
*(Reference Value = more organized supply chain)*

*Seeking answers forces interaction, exposure and communication.*

- 5) *When to stop over-analysing local data and expand the supply-chain definition?*

***Practical Systems Science: most people aren't aware of how much local actions do affect supply chains (and economies)***



## Simplified Economic Goals *for aligning local efforts*

Process Values to Promote and Monitor (don't sweat the details)

- \* *continuous analysis of **entire** local supply chains and economies*  
(get SOME feedback from all members, force interaction)
- \* *% of system information that is shared*  
(invest in information sharing tools)
- \* *continuously updated system Reference Value perceptions*  
(how to be indispensable to your supply chains and local economy)
- \* *% of information that is actually fitted to process patterns*  
(most information is irrelevant – only elegant shortcuts count)



## Adaptive Systems

Biology

Statistical Process Control  
General Systems Theory  
*Shewhart/Deming/Toyota*

Physiology

Environments

## Faux-Adaptive Systems

Capitalism ? *(only with vigilance)*

Baldrige, Six Sigma, ISI-9000  
*"When management talks about  
improving productivity, they are  
never talking about themselves..."  
[especially politicians]*

Health Care Systems

Regional Governments  
*(are nation states obsolete?)  
(are county councils irrelevant?)*

*Your Local Economy ?*