

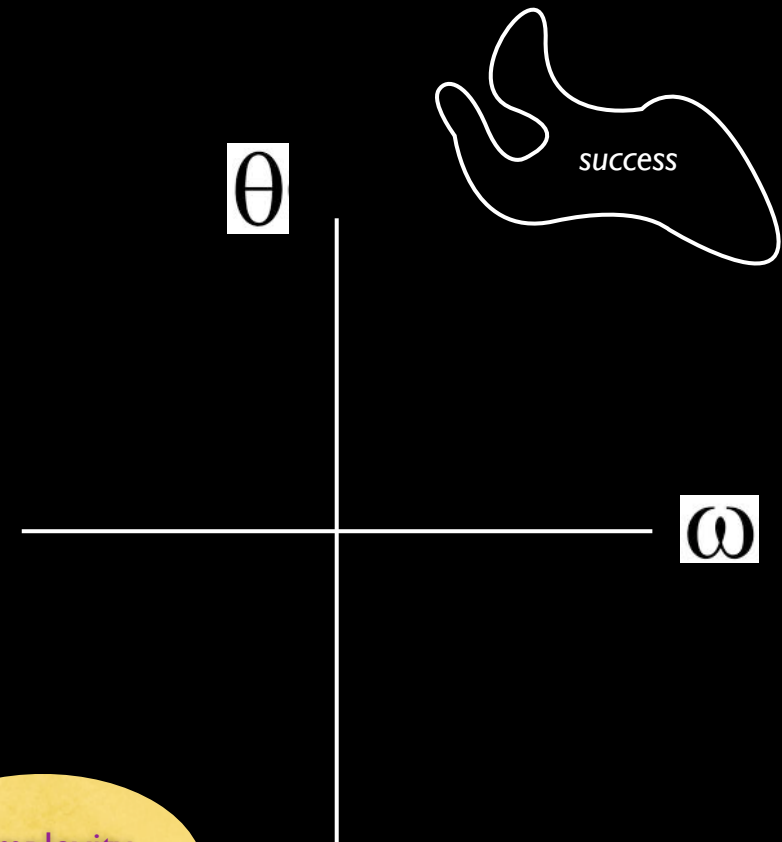
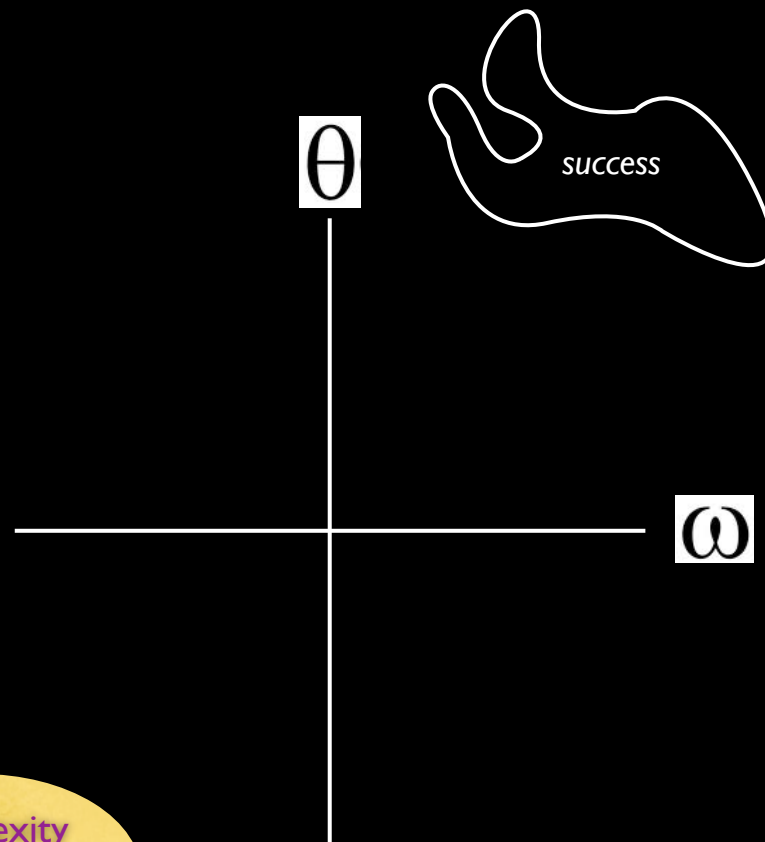
Smart Leadership*

CSSS2010 Project

Lee, Andreas, Massimiliano, Shiva, Erik

Friday, June 25th, 2010

Santa Fe Institute

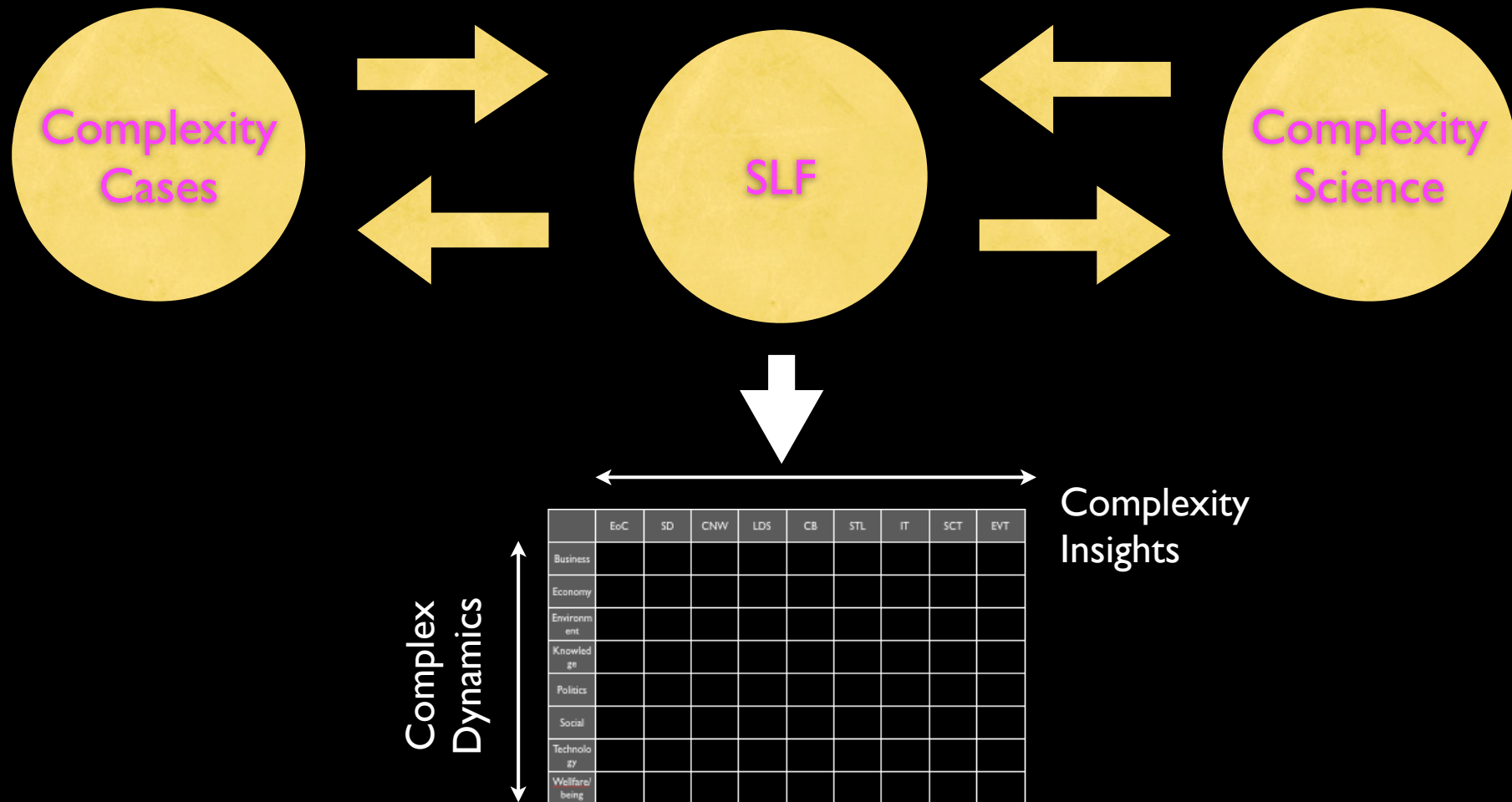


Is this true ?

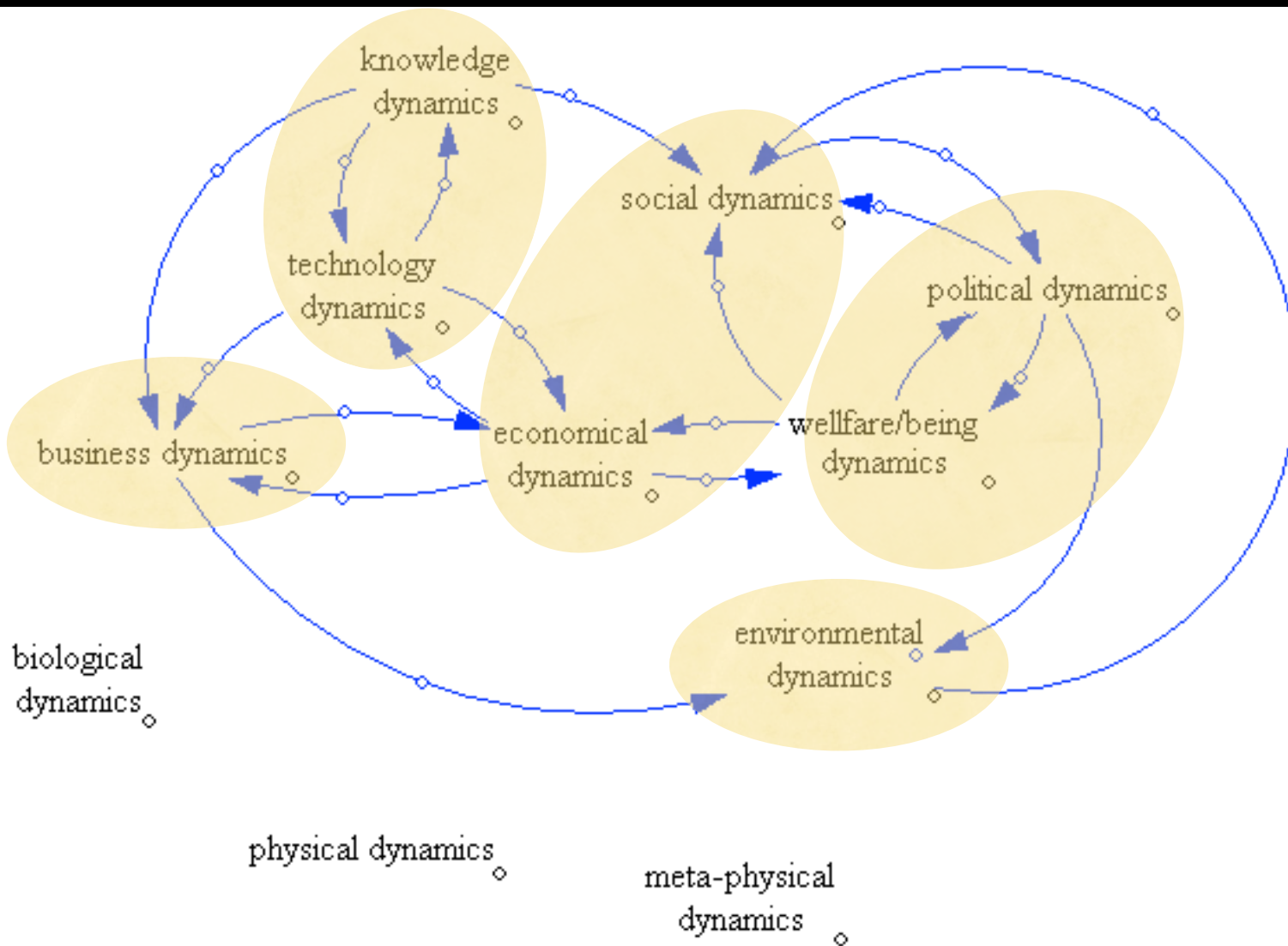
Smart leadership is defined as leadership that understands the **complex dynamics** in its environment, and leverages the appropriate **complexity insights** while dealing with these dynamics.

Smart Leadership Framework

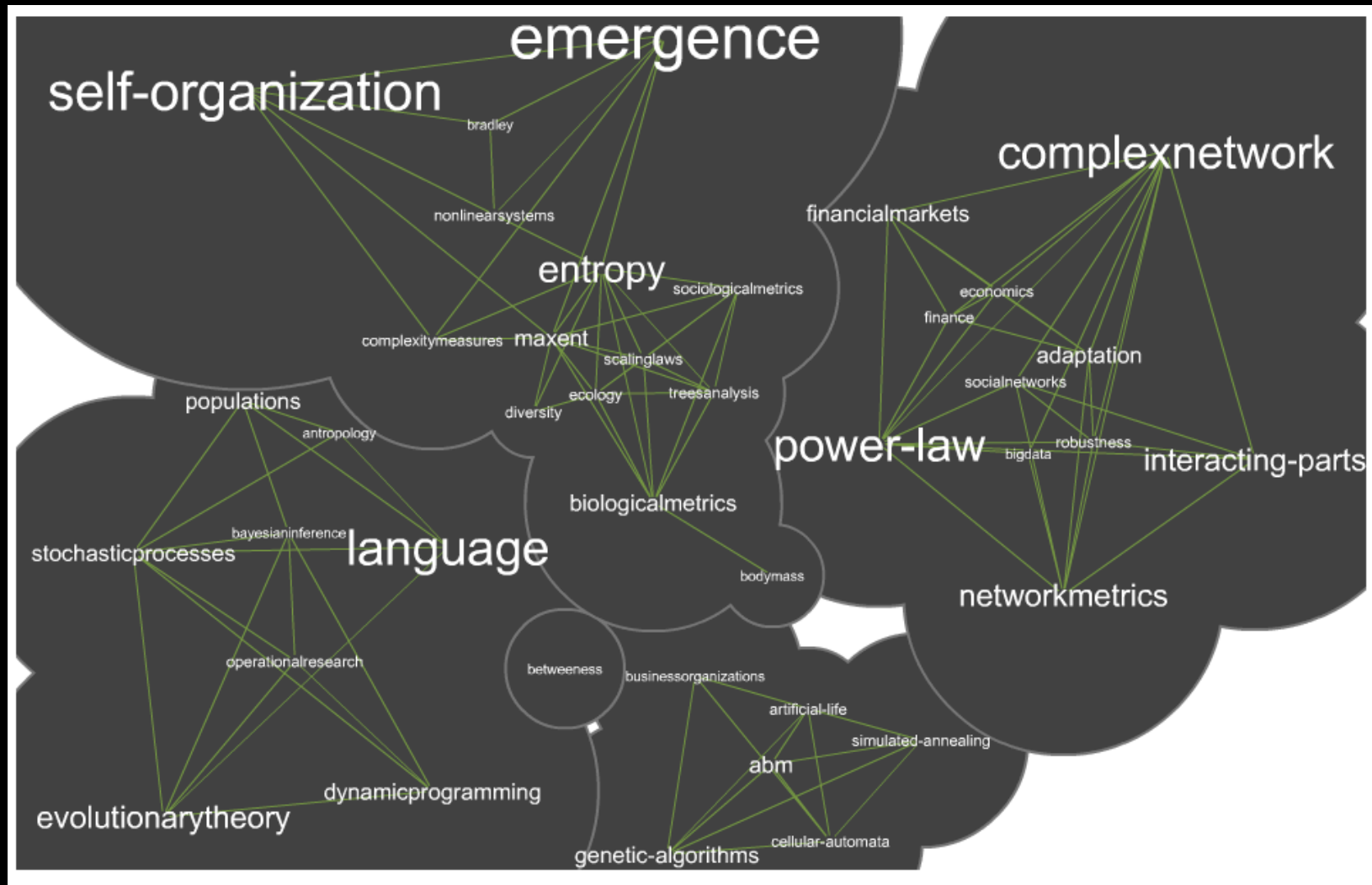
- SLF -



Complex Dynamics

[illegible]

Clustering Complexity Concepts



Complexity Insights

Non Linear Dynamics

Complex Networks

Large Data Sets

Collective Behaviour

Statistical Learning

Evolution Theory

System Dynamics

Information Theory

Scaling Theory



SANTA FE INSTITUTE
complexity research expanding the boundaries of science

R&D								
M&S								
SCM								
PROD								
CustServ								
FIN								
IT								
HR								

Complexity Insights

Non Linear Dynamics

concepts

State variable, state space, initial condition, trajectory, fixed point (stable/unstable), attractor, bifurcation, fractal, eigenvalues, manifold, topology, connectedness

techniques

discrete systems analysis, continuous system analysis, ODE, PDE, Lyapunov exponent, poincaré section

tools

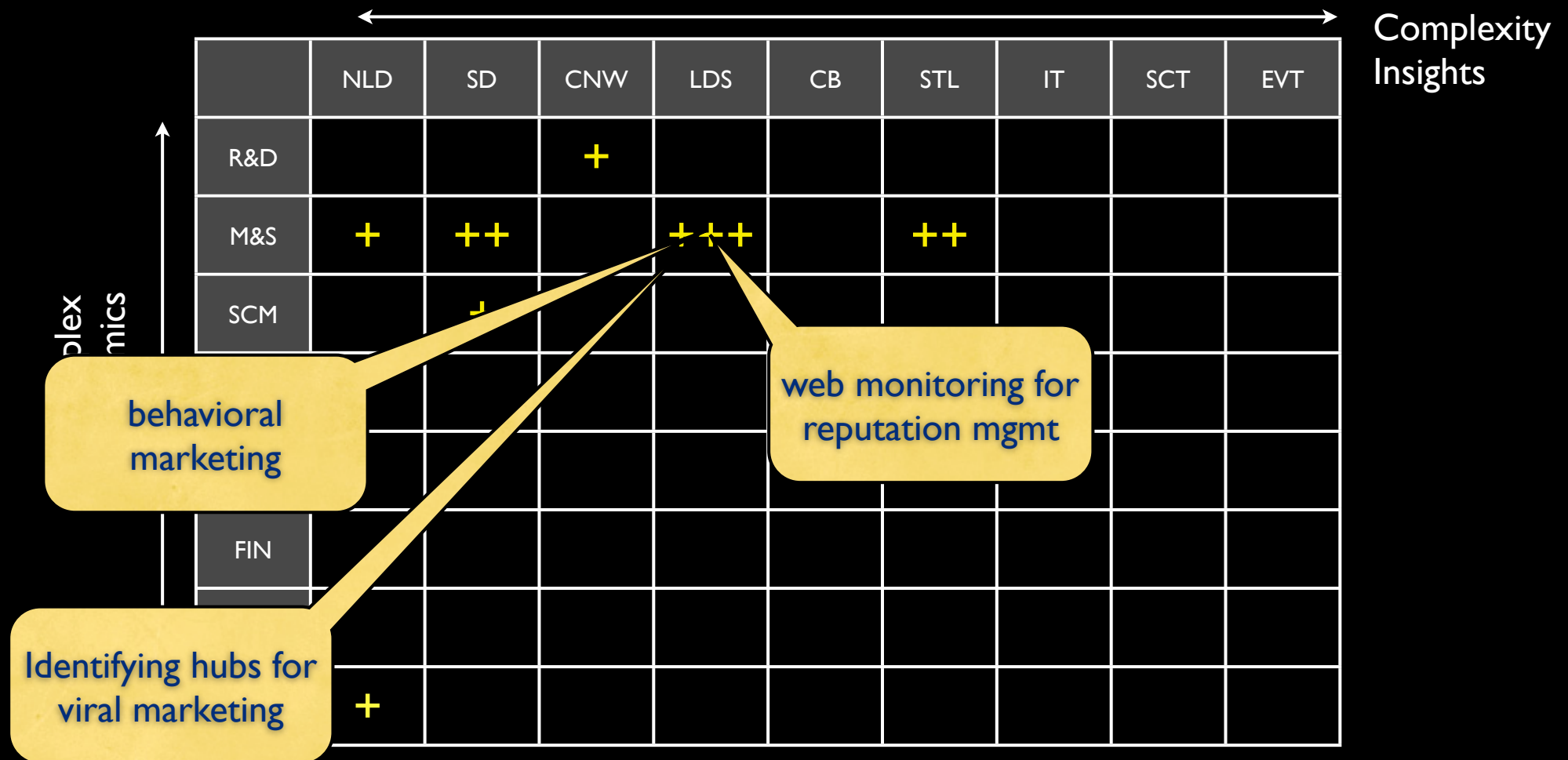
MatLab, VisSim, SimPy, ...

applications

leading on the edge of chaos, defining strategic attractor zones, using attractor force, ...

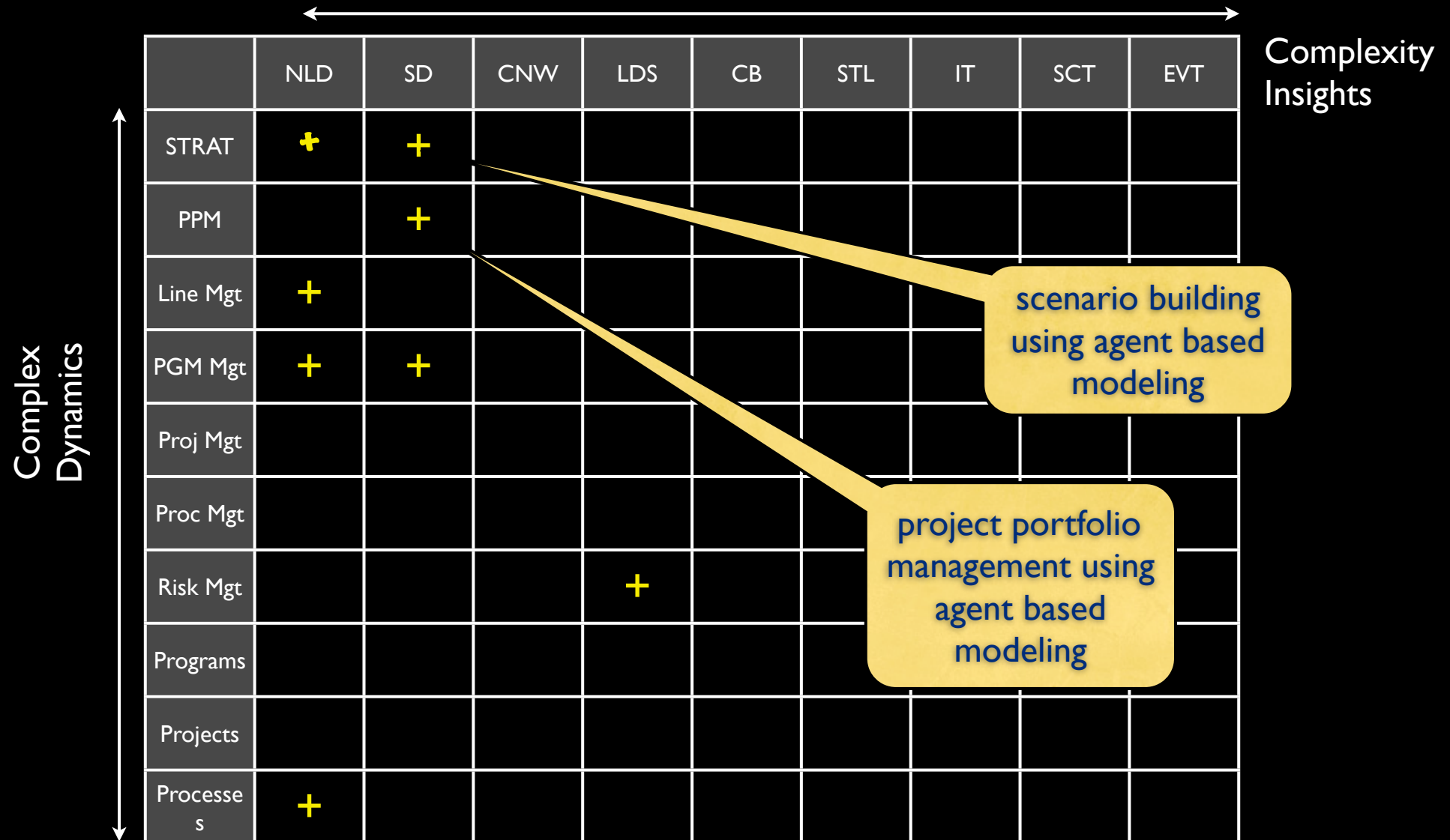
Leveraging Complexity

in business verticals



Leveraging Complexity

in business horizontal



Next Steps

[illegible]

team meetings: 3pm brussels/rome/amsterdam, 9pm shanghai, 7am santa fe, 9am washington dc

Wiki Workplace

[\[edit\]](#) Smart Leadership Framework

[\[edit\]](#) **next meeting**

Wednesday, July 7th, Skype

3pm brussels/rome/amsterdam, 9pm shanghai, 7am santa fe, 9am washington dc

[\[edit\]](#) **slide pack**

under development

[\[edit\]](#) **working paper**

under development

[\[edit\]](#) **discussion area**

[\[edit\]](#) **non linera dynamics**

under development

[\[edit\]](#) **large data sets**

under development

Want to Participate and Co-Create ?

contact Erik van den broecke at
erik.van.den.broecke@imsc.be

Questions ?