

WORK SMARTER BY WORKING TOGETHER

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MOTIVATIONS



“The Governor closed the \$10 billion current year gap with no new taxes and no borrowing. He reduced the 2012-2013 gap by 85%”

“The budget reflects Governor Cuomo’s proposed 10 percent year-to-year general fund reductions for all state agency operations”

“Spending and Government Efficiency (SAGE) Commission to reduce the number of state agencies, authorities, and commissions by 20 percent”

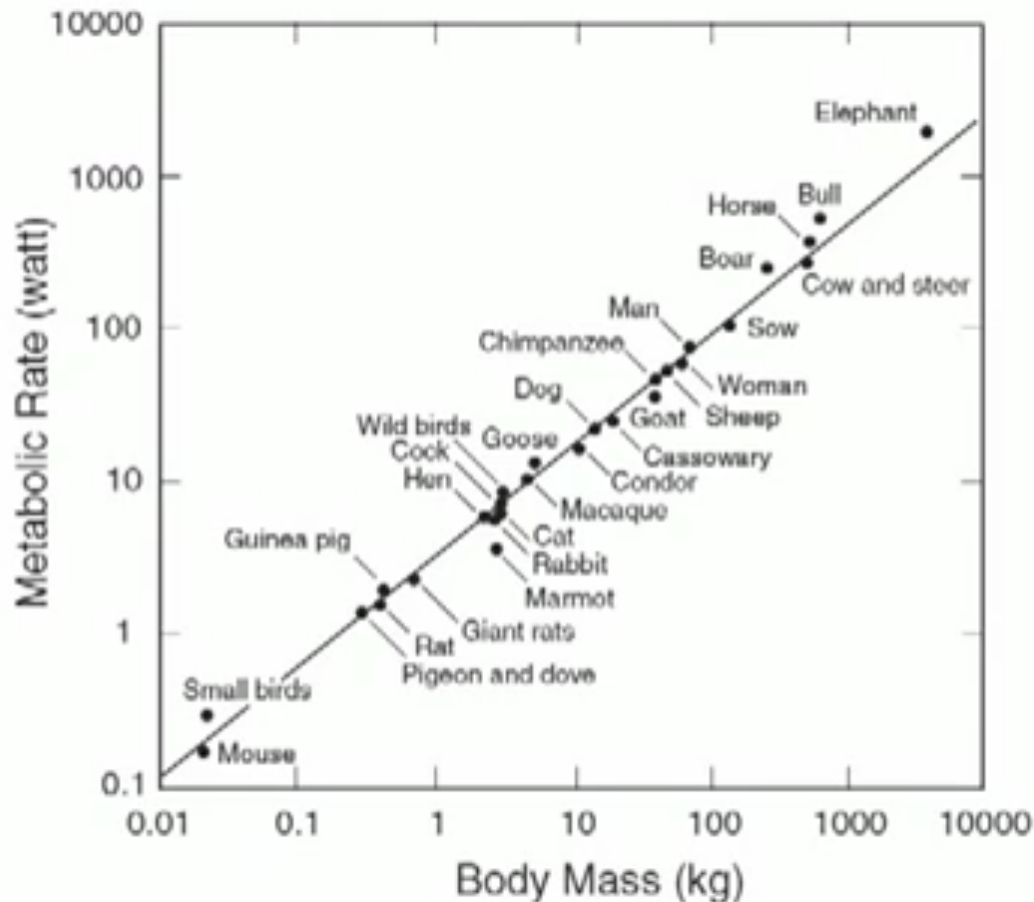
THOUGHT LEADERSHIP: INNOVATIVE & CREDIBLE IDEAS

- Business as usual is no longer a viable option
- You know your business better than anybody else
- Be an agent for change
- Look for SMART ideas

TOP 10 CIO PRIORITIES BY NASCIO

1. Consolidation / Optimization
2. Budget and Cost Control
3. Health Care
4. Cloud Computing
5. Shared Services
6. Governance
7. Security
8. Broadband and Connectivity
9. Legacy Modernization
10. Data and Information Management

ECONOMY OF SCALE IN BIOLOGY



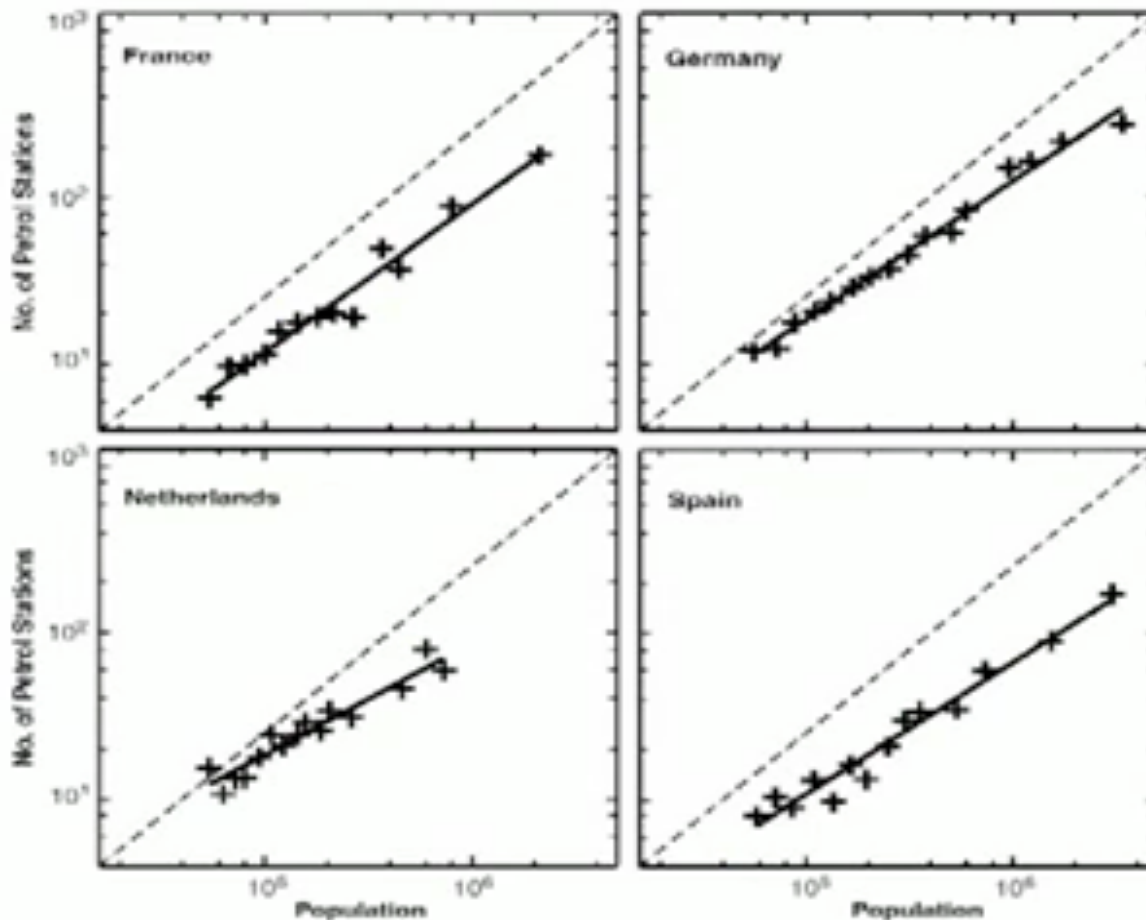
Sub-linear scaling < 1

Universal: $MR \sim M^{0.75}$

Bigger you are the less you need per capita

$\sim 1.5B$ heart beats per lifetime, independent of size

ECONOMY OF SCALE FOR CITY INFRASTRUCTURE (NO. OF GAS STATIONS VS. POP)

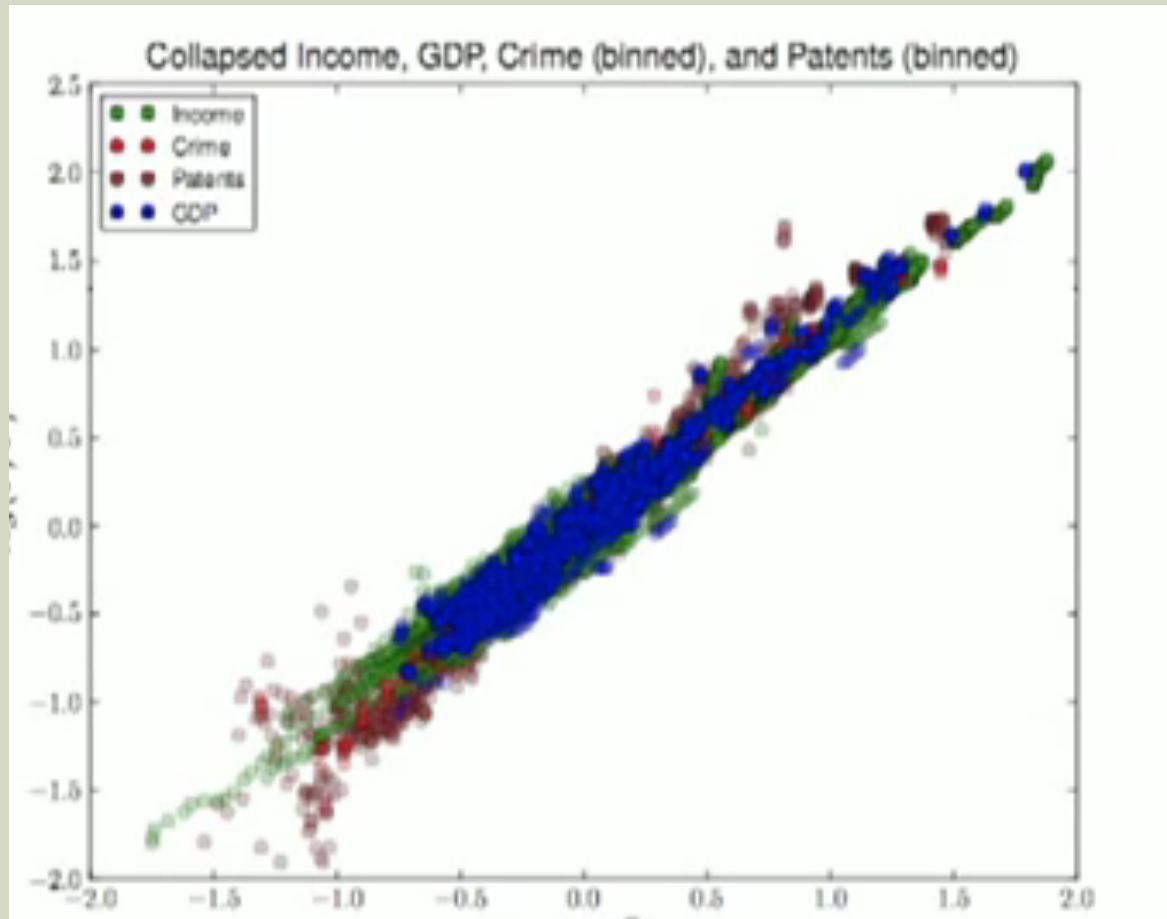


**Similar scaling as
biological
systems
(sub-linear)**

PROJECTED COST REDUCTION FROM ECONOMY OF SCALE

Relative Size	Cost Reduction
2	15.9%
10	43.8%
50	62.4%
100	68.4%
1000	82.2%

BENEFITS AND LIABILITIES FOR DIFFERENT CITY SIZES

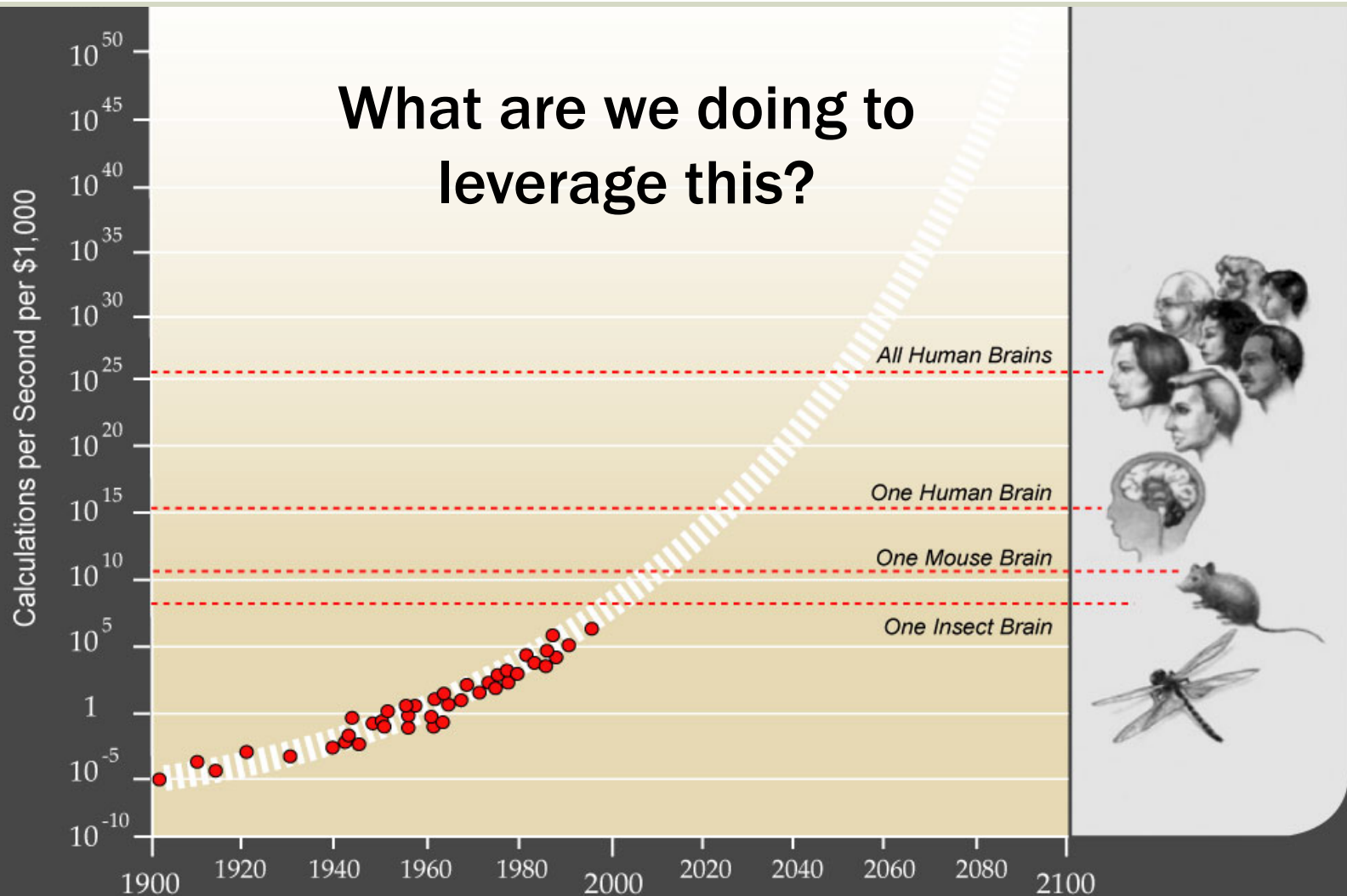


Income,
Productivity,
Intelligence and
Crime Increase at
 $\sim P^{1.21}$ (super-linear),
 P = Population

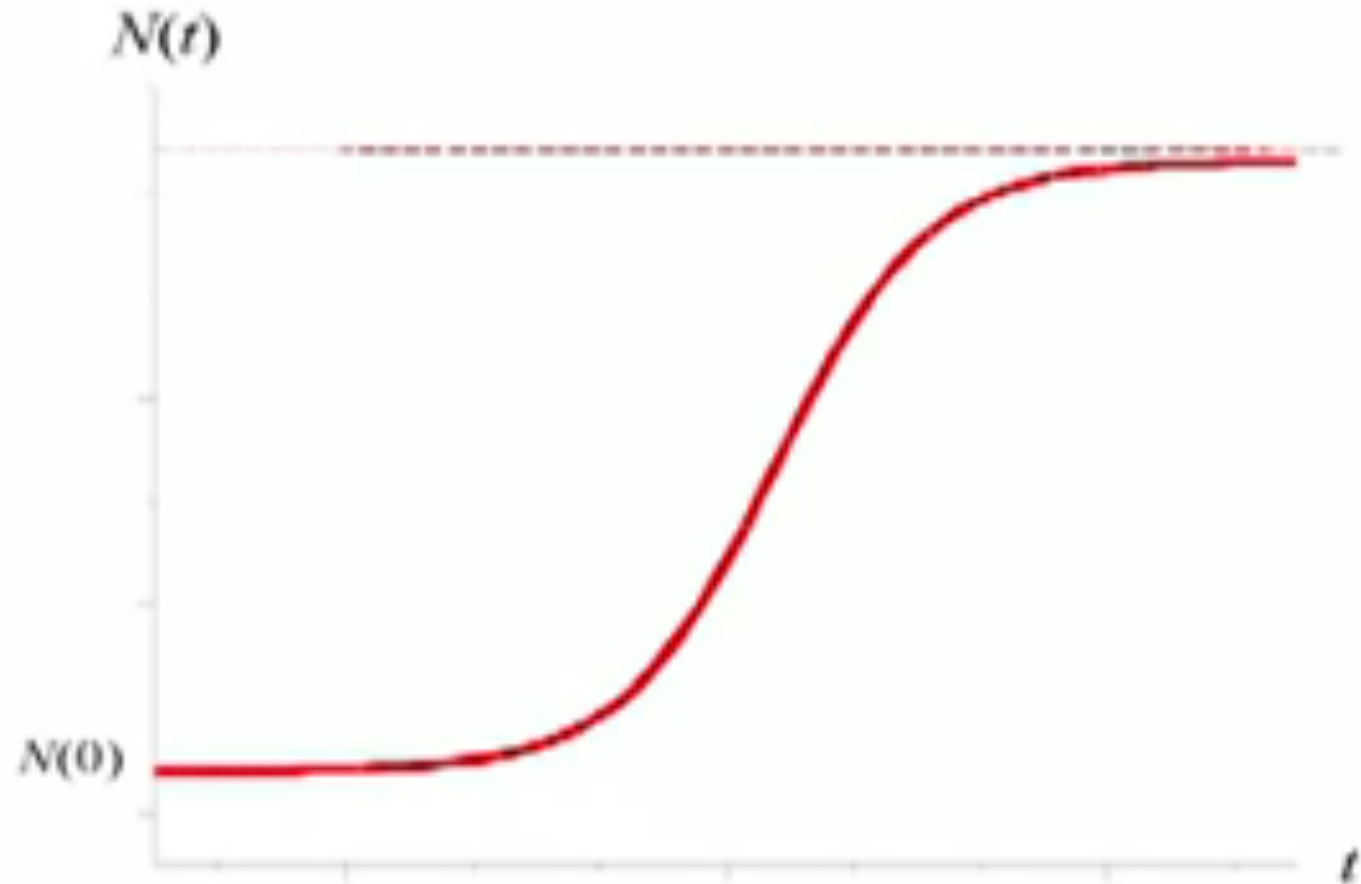
PROJECTED INTELLECTUAL CAPACITY GROWTH FOR DIFFERENT SIZES

Relative Size	Growth
2	15.7%
10	62.2%
50	127.4%
100	163.0%
1000	326.6%

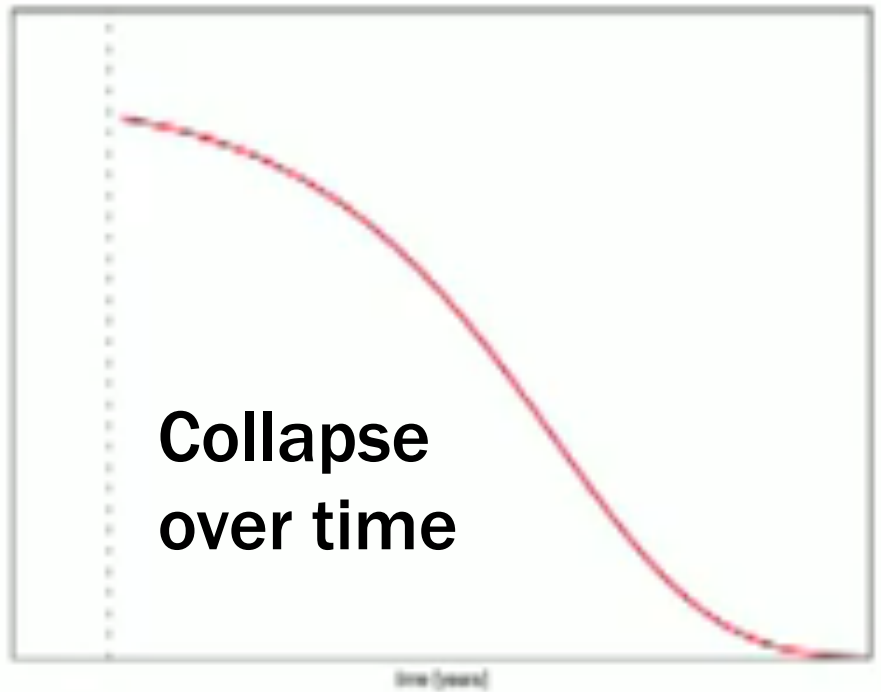
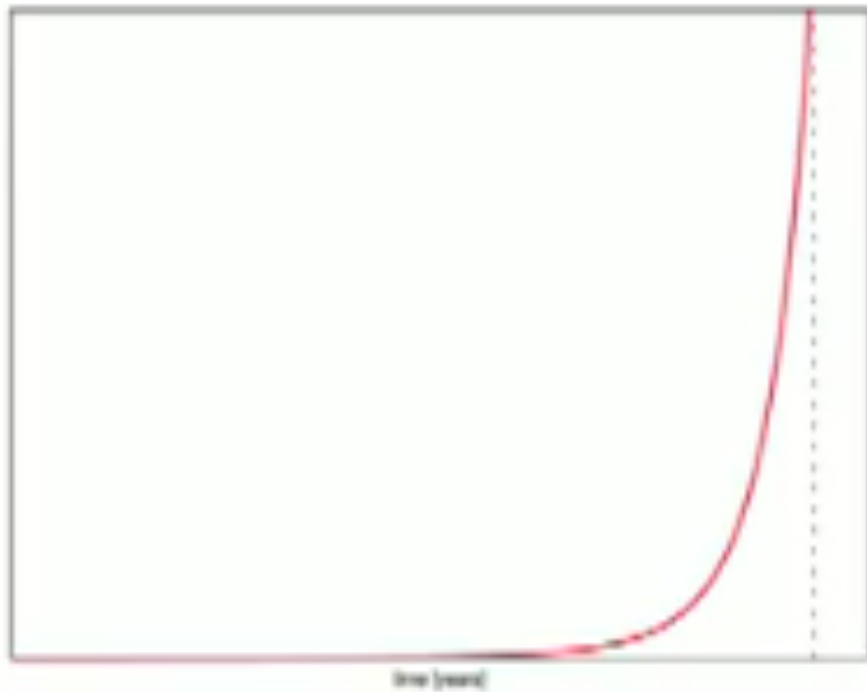
IMPACT OF EXPONENTIAL GROWTH IN COMPUTING SPEED



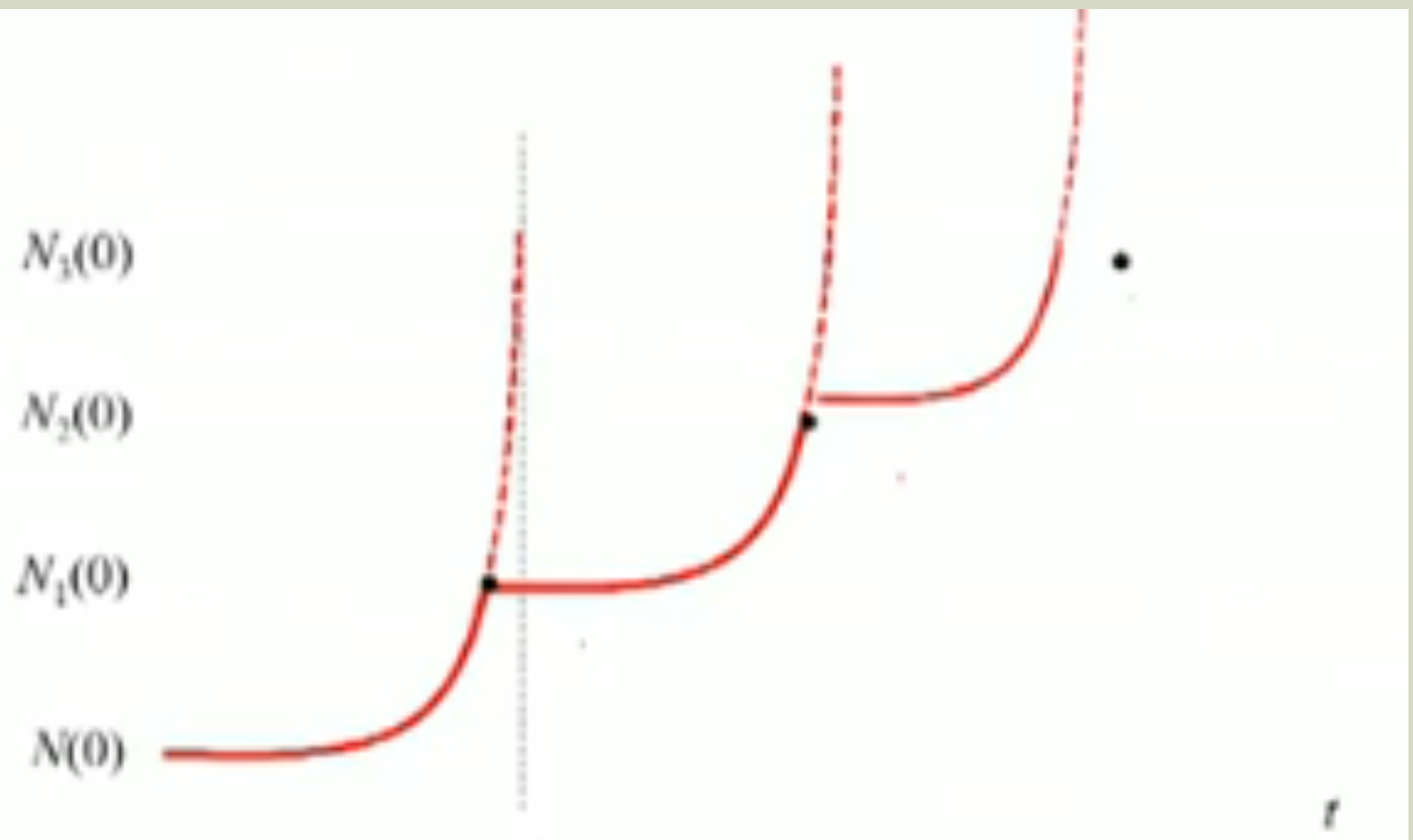
LIMITATION OF SUB-LINEAR GROWTH



SUPER-LINEAR GROWTH NOT SUSTAINABLE



NEED CONTINUOUS INNOVATION/ IMPROVEMENT



FIRST STEP: ESTABLISH MEASUREMENT CAPABILITY TO BUILD DISCIPLINE

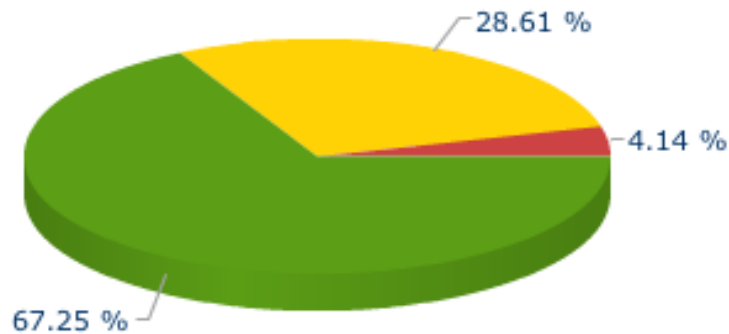
- How we are doing?
- Identify opportunities & dependencies
- Establish plan of attack
- Make the improvement
- Continue to monitor the new state

FEDERAL IT DASHBOARD BUILT ON OPEN SOURCE TECHNOLOGY



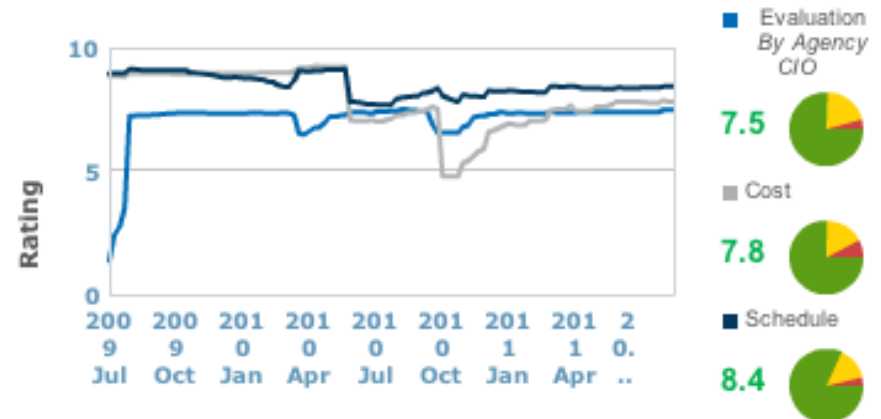
FEDERAL IT DASHBOARD (8/11)

Overall Rating



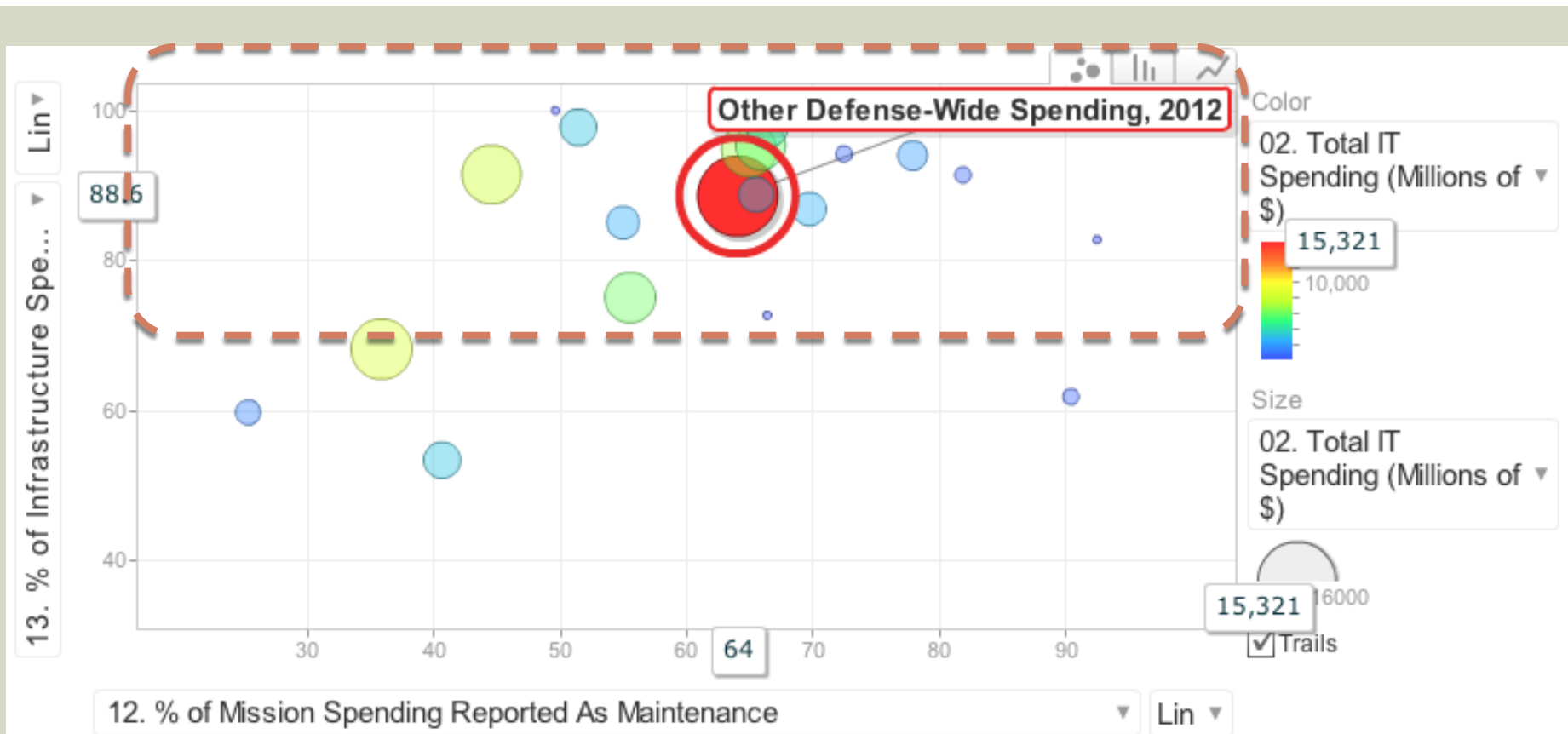
■ Normal ■ Needs Attention ■ Significant Concerns

Rating History



- Blended Rating of CIO + Schedule + Cost
- Required Reporting by Law (Clinger-Cohen Act Of '96)
- Managed by OMB (Exhibit 53 & 300)

LARGE SPEND ON MAINTENANCE & INFRASTRUCTURE



MAKE INFORMED DECISION

- Governing bodies and structure
- Repeatable processes
- Standards based
- Predictive analytic tools
- Transparency and accountability

LEAN SIX SIGMA PROCESS



KEY OBSERVATIONS MADE WITH ANALYTICAL TOOL R

↑ Cost ↓ Overall Rating
 CIO accountability evident
 Not all “Red” projects are \$\$\$

Overall.Rating
 CIO.Evaluation.i
 Overall.Rating.ir
 Total.Spending.I

Overall.Rating
 CIO.Evaluation.in.Red...Spending.In...million.
 Overall.Rating.in.Red...Spending.In...million.
 Total.Spending.In...million.

