Technology-Enabled Government:

Overview of the Center for Public Technology

UNC SCHOOL OF GOVERNMENT

www.sog.unc.edu

The Value of Technology

What percentage of your organization's budget goes towards technology?

What percentage of work does technology support?

Technology is…

the vehicle from which

accurate, reliable, and timely

information is produced for:

strategizing, identifying objectives, improving

productivity, and facilitating service delivery

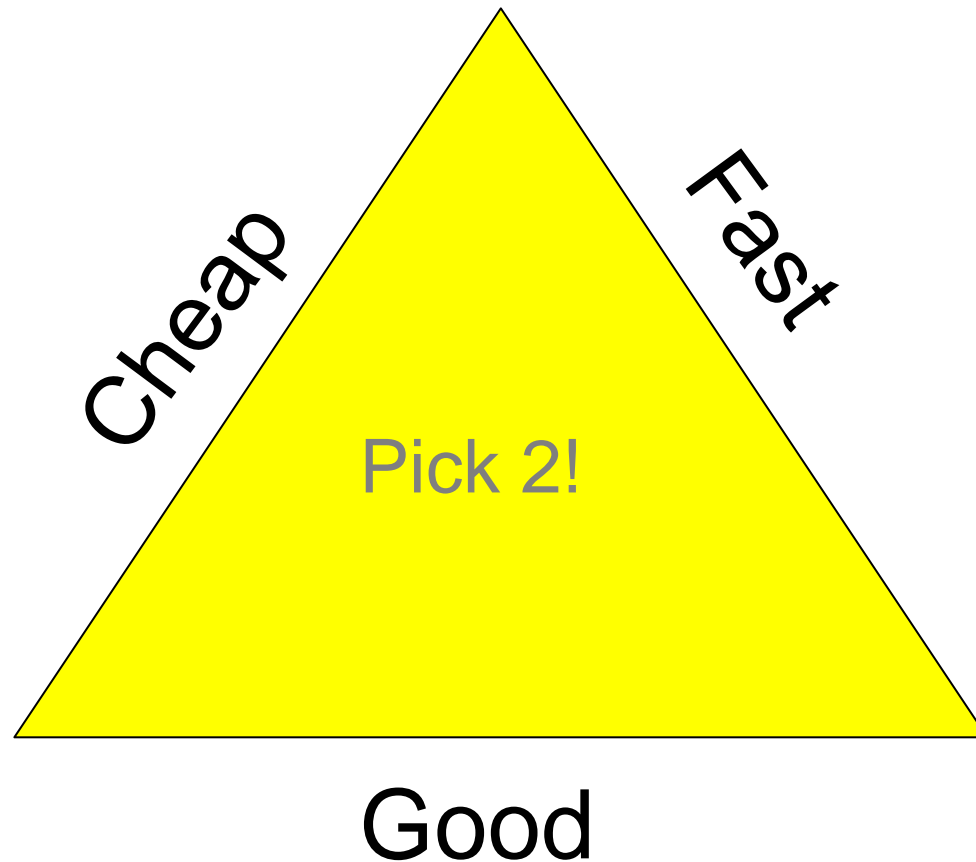# Why have IT Investments Failed Us?

Failure 1: Drinking the Kool-Aid

Failure 2: Believing We Can Have It All!

Failure 3: Forgetting the People Part

The challenge…

How can we use information technology…

- to create public value

- through a better division of labor

- where innovation is essential

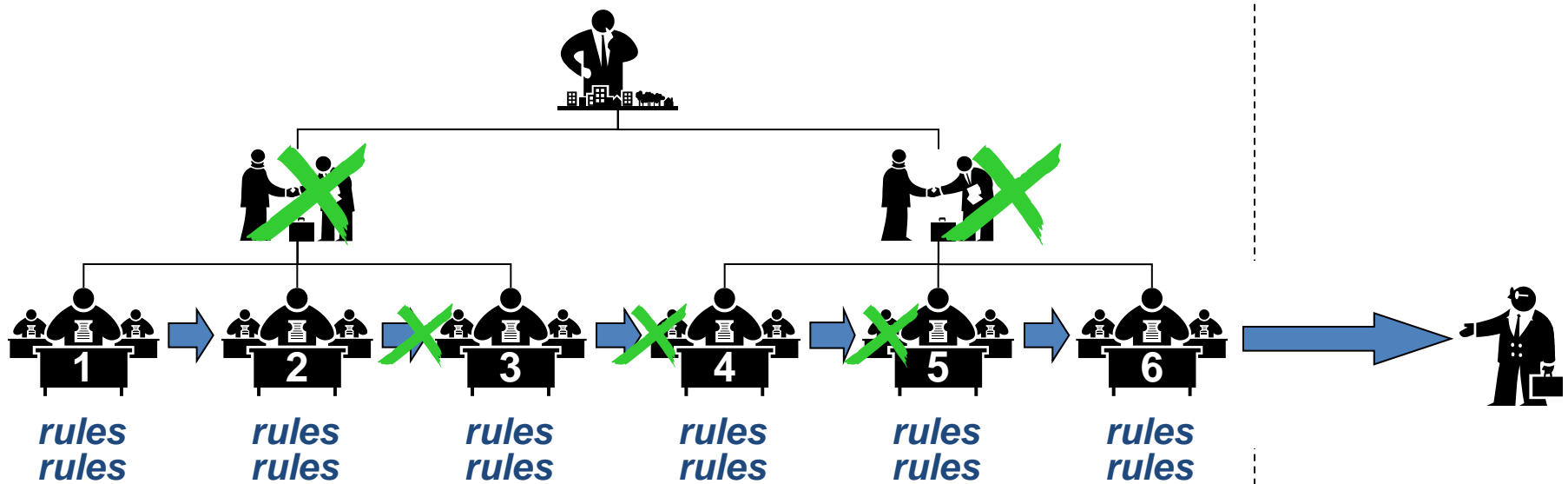- and implementation is often difficult?

How do we add value?

- To citizens?

- To businesses?

- To visitors?

- To employees?

Better Division of Labor…

- remote, asynchronous hand-offs: **access**
- simplified workflow, reduced hand-offs: **productivity**
- negotiated coordination, new authority: **governance**

Failed Predictions

"Everything that can be invented has been invented."
Charles Duell, the Commissioner of the U.S. Office of Patents in 1899

"I think there is a world market for about five computers."
Attributed to Thomas Watson in 1943, then Chairman of the board of International Business Machines (now IBM)

"There is no reason for any individual to have a computer in their home."
Ken Olsen, President of Digital Equipment Corp. in 1977

"640k ought to be enough for anybody."
Attributed to Bill Gates in 1981

Reaching a new generation on YouTube "Go Out and Play an Hour a Day"

CDC in Second Life: Hygeia Philo
Message: Take precautions against STDs

The Largest Challenges Governments Face

What Does Change Look Like?
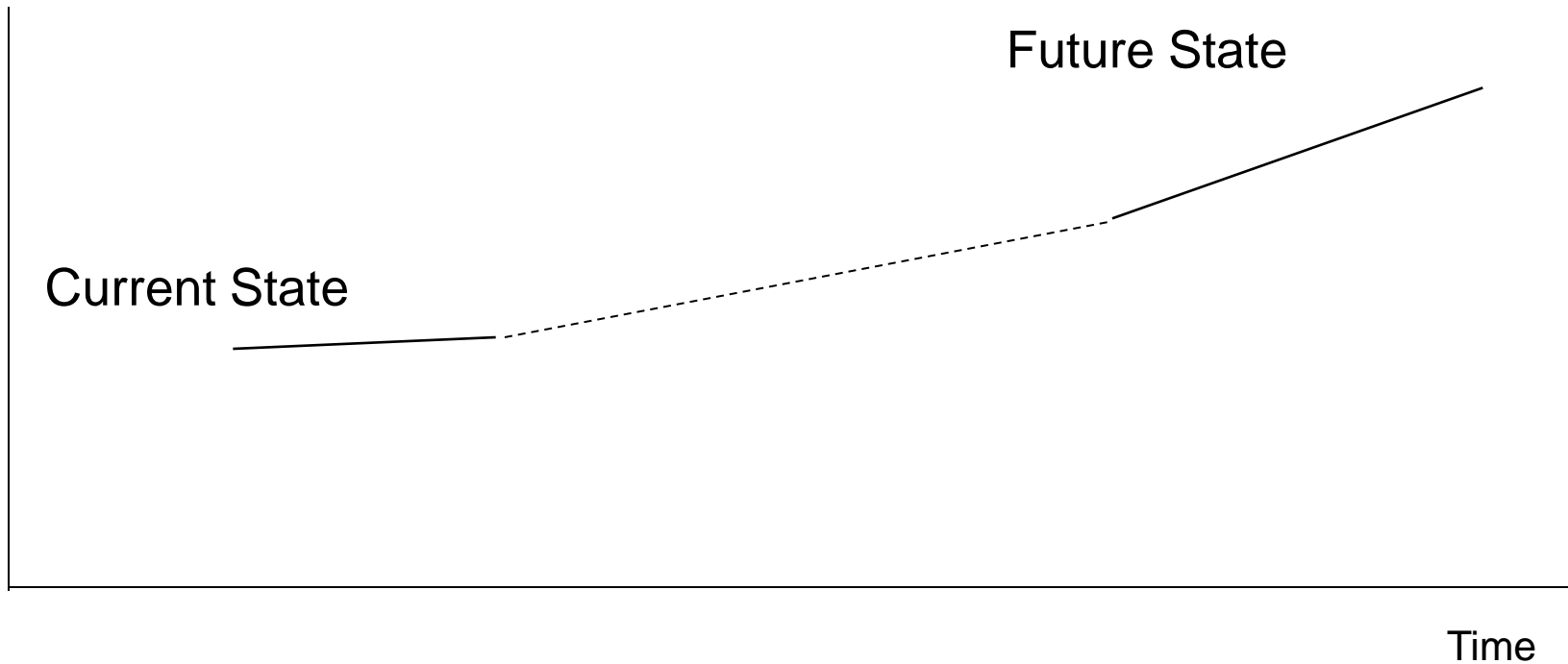
The expectation...

What Does Change Look Like?
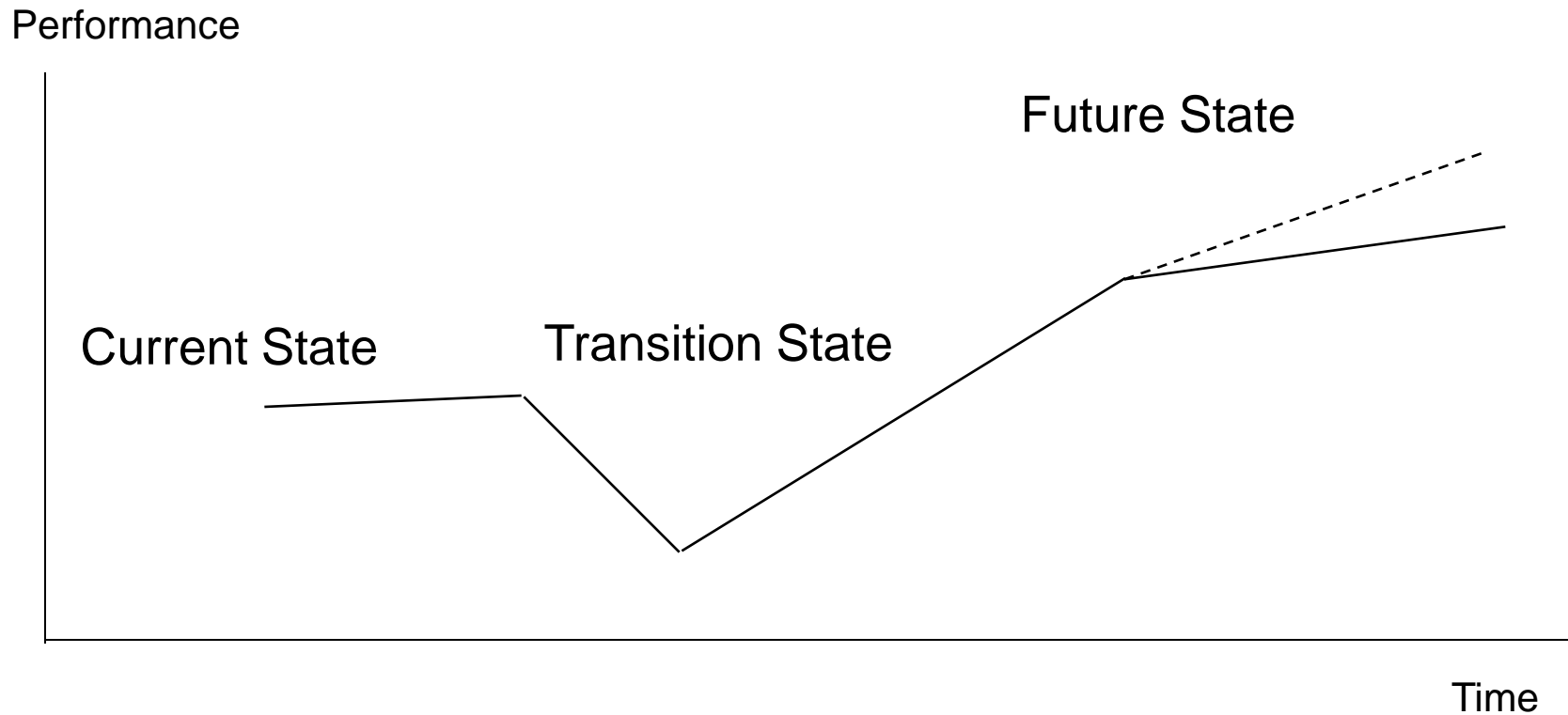
The reality...

Strategic Investments in Technology
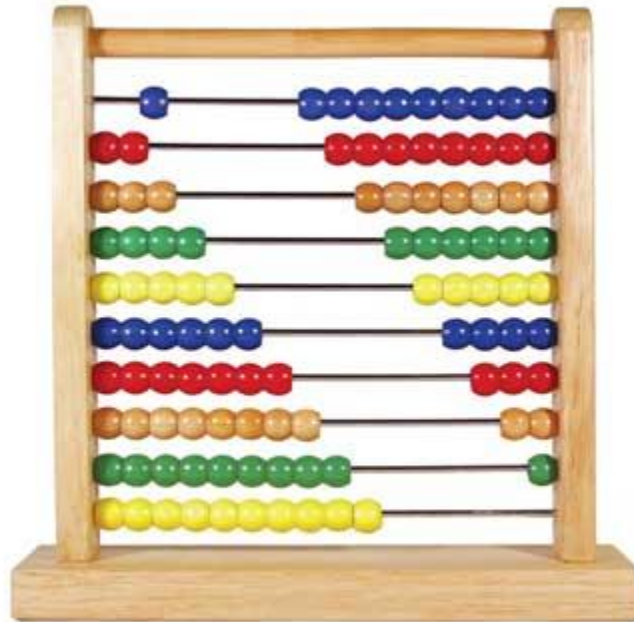
Three Primary Objectives of CPT

- **Education/teaching.** Includes training, assessment and evaluation, and best practices for engaging in technology-enabled government, along with a host of other services

- **Advising/Technical Assistance.** Includes addressing issues, opportunities, and challenges in information technology management that are specific to North Carolina local governments

- **Research and Writing.** Includes technology-related research and publications on a variety of topics

Certified Government
Chief Information Officer Program

- Ten-month program

  - Two consecutive days per month

  - 240 total contact hours, including readings and homework

  - 5 hours of graduate credit available

- Modular, iterative approach to learning

  - Tailored content for each cohort

  - Exercises, case studies, class discussions are essential

- Offerings include Local, State, K-12 & National CGCIO programs

The Emerging Role of the CIO

Few senior managers are skilled in leading all the major changes necessary to capture value from major IT-intensive initiatives.

This is where the effective CIO comes in.

The CIO can and should shape the vision with the senior executives, marshalling *all* the resources necessary to get the job done, including training, business process redesign, and new hires if needed.

Roadmap and Planning Series

Module 1	Understanding the Enterprise	- Goal Alignment - IT Roles - Value Add of IT - Building a Business case - Measuring & Communicating Success - Organizational Constructs
Module 2	Strategic Technology Planning and Management	- Capital / Infrastructure Planning - Unifying Potential - SDLC - IS Scorecard/Metrics - Project Charters - Stakeholder Identification - Relationship/process modeling
Module 3	Communication: Creating a Shared Understanding	- Elected Officials - Management - Users

Development Series

Module 4	Project Management	- Developing requirements - Work breakdown structure - Estimating techniques - Schedule and cost plans - Managing Change Requests - Project Organization & Reporting
Module 5	Emerging Issues and Technologies Best Practices	- Integrating Strategic Technology Planning into the Organization - Being the Champion for Departmental IT Requests - E-commerce - E-business - Cross-boundary

Development Series

Module 6	Risk Management	▪Tools for risk management plan ▪Risk identification (financial, technical, budgetary) ▪Risk/opportunity costs ▪Portfolio management ▪Risk mitigation techniques ▪Knowledge transfer
Module 7	Legal and Regulatory Issues	▪Purchasing Rules/Regulations ▪Public records law ▪Open meetings law ▪E-discovery ▪PCI Compliance ▪Identity theft protection acts

Implementation Series

Module 8	Change Management	- Enterprise approaches to IT - Change resistance - Leading change - Opportunity identification - Knowledge management - Outsourcing - Managed competition
	Leadership in a Change Environment	- Roles of CIO - Decision-making - Conflict negotiation - Team building skills - Motivation techniques - Marketing

Operations and Maintenance Series

Module 9	Securing the Enterprise: Policies and Procedures	- Disaster recovery - Business continuity - Security Awareness & Management - Privacy & HIPAA - IT's Role in a Disaster
Module 10	Financing Technology Initiatives	- Budgeting - Cost Accounting - Grants (writing, availability) - TCO, ROI - State Contract Purchasing - Other Legal Issues

Impacts of CPT CIO Certification

➢ Improved critical non-technical skills

➢ Enhanced relationships

➢ Elevated positions within organization

➢ Salary increases

➢ International recognition for professional certification

Major Advising/TA Competencies

- ➤ **Strategic Technology Planning**

- ➤ **Wireless**

- ➤ **Convergence**

- ➤ **Aggregation**

- ➤ **Web Services**

- ➤ **RFP/RFI Development**

- ➤ **Technology Evaluations**

Sample Client List:

Alexander County; Cabarrus County; City of Burlington; City of Greensboro; City of Greenville; City of Jacksonville; City of Kannapolis; City of Newton; Town of Chapel Hill; Town of Cary; Greene County; Haywood County; Nash County; Wayne County; NC Dept of Environmental and Natural Resources; NC Dept of Agriculture; and, NC Office of State Treasurer

Final Thought…

Somebody has to do something, and it's just incredibly pathetic that it has to be us.

Questions?

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