

# Measuring Success--Assessment

Paul B. Gandel  
Arnold Hirshon



SYRACUSE UNIVERSITY

School of  
Information  
Studies

**Note: the slides appearing  
in the version of this  
presentation may differ  
from the actual slides used  
during the Institute**

# Basics of Measurement and Evaluation

- Defining measurement and evaluation
- Frameworks for measurement
- Outcomes-based evaluation
- Balance scorecard approach

# Why Measure?

- Reference point
  - Where service was in the past
  - Current situation
  - Future trends
- Informs
  - Decision makers
  - Managers
  - Staff
- Sets Priorities

# Problem

- Not too little data
- NOT THE RIGHT DATA!
- What are the right KPI's?



“That’s the gist of what I want to say.  
Now get me some statistics  
to base it on.”

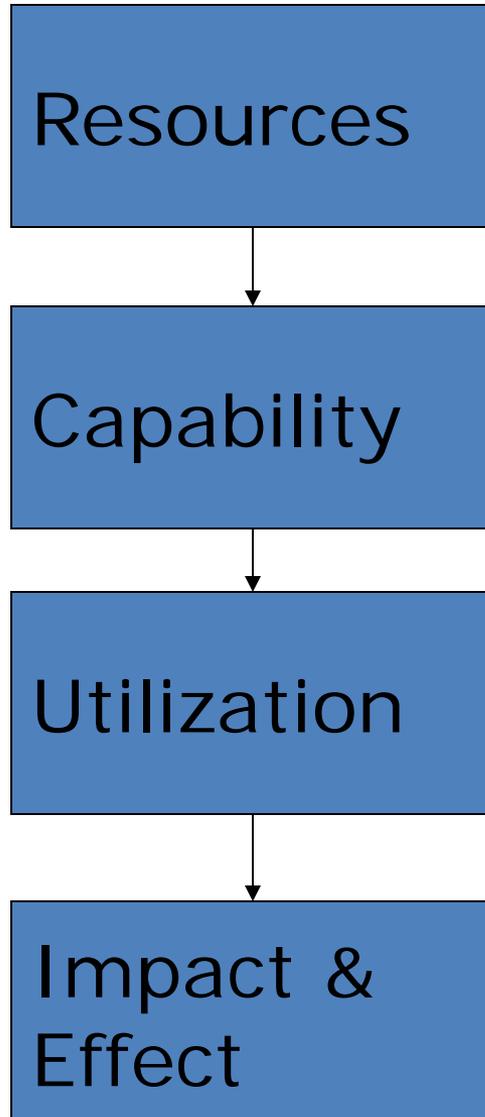
# Measurement vs. Assessment

- Measurement is collecting the raw numbers
- Assessment is the determination of the value of the service
- Assessment requires a perspective
- Creating indicators allows for incorporating some context

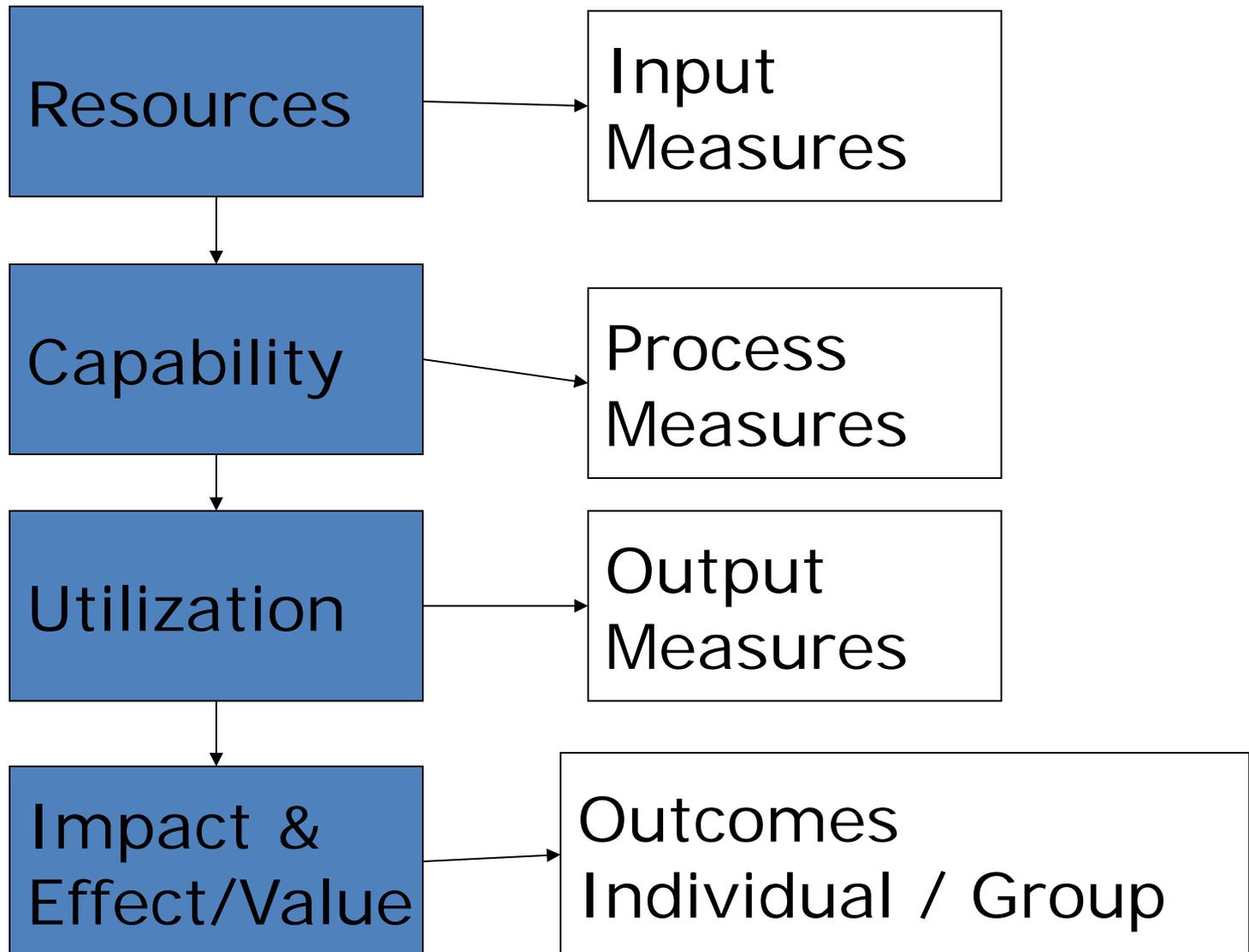


www.shutterstock.com · 143272438

# Measurement Framework



From Joseph Mathews Measuring for Results



**F  
e  
e  
d  
b  
a  
c  
k**

Resources

Input Measures

Capability

Process Measures

Quality

Utilization

Output Measures

Impact & Effect/Value

Outcomes

Value

Demand

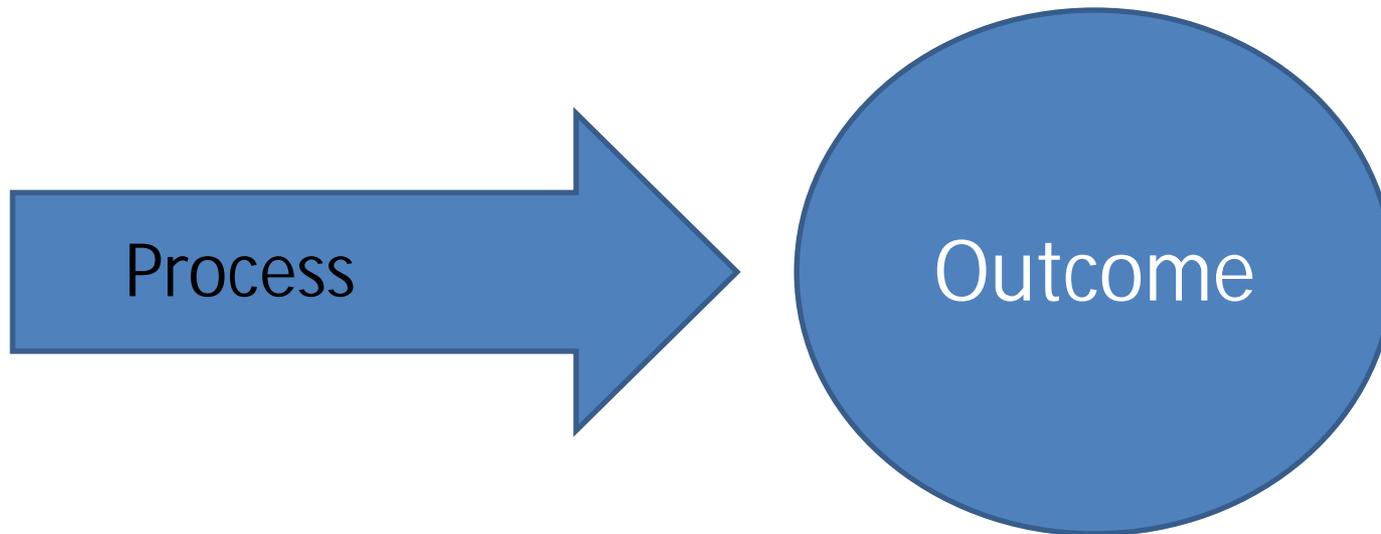
# Input Measures

- Measure the capacity/potential
- Easy to collect and report
- Examples:
  - Income/Expenditures
  - Staffing
  - Collection (total, growth, recency)
  - Infrastructure (cost, speed, space, number of workstations, etc.)
  - User base statistics

# Process/Efficiency Measures

- Are we doing things correctly?
- Efficiency—how economical is an activity?  
Cost per transaction for reference service, document delivery, etc.
- Productivity—focus on time to complete task or activity. Time to catalog an item, time to process a transaction, etc.
- System Reliability—focus on percent of uptime or availability of the system

# Outcome Measures



Library Services

- Reference
- Circulation
- Instruction

Satisfaction

- Productivity Numbers
- Quality

# Thinking About Outcomes

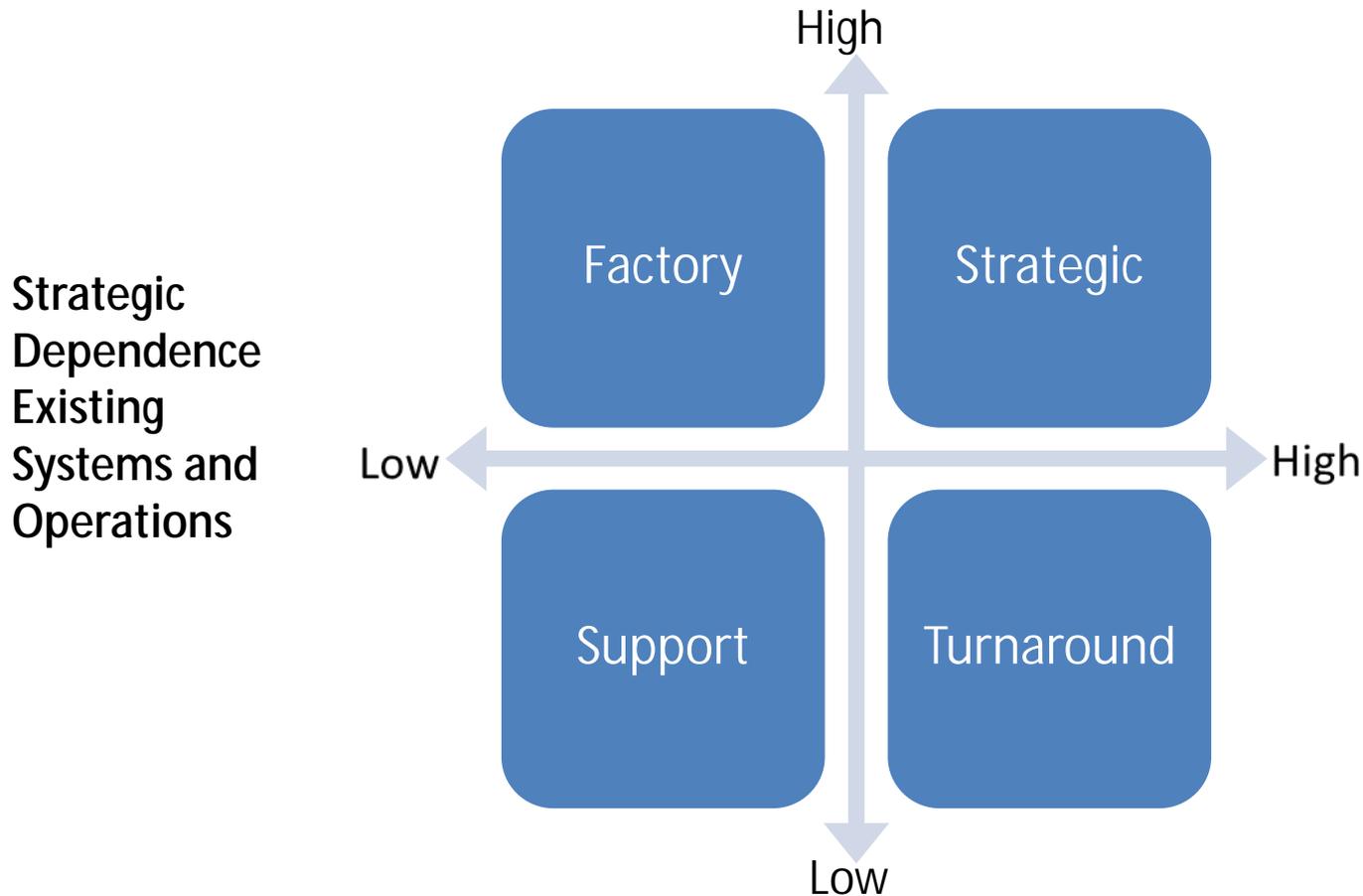
- What is the desired end result of a digital library service?
- What effect does the digital library service have on the user?
- Can it be measured?

# Defining Value

Value = quantity of commodity produced x unit price

Library value = perceived value/perceived cost

# Value of the Library?



Strategic Impact—New Services and Applications

# Value Measures

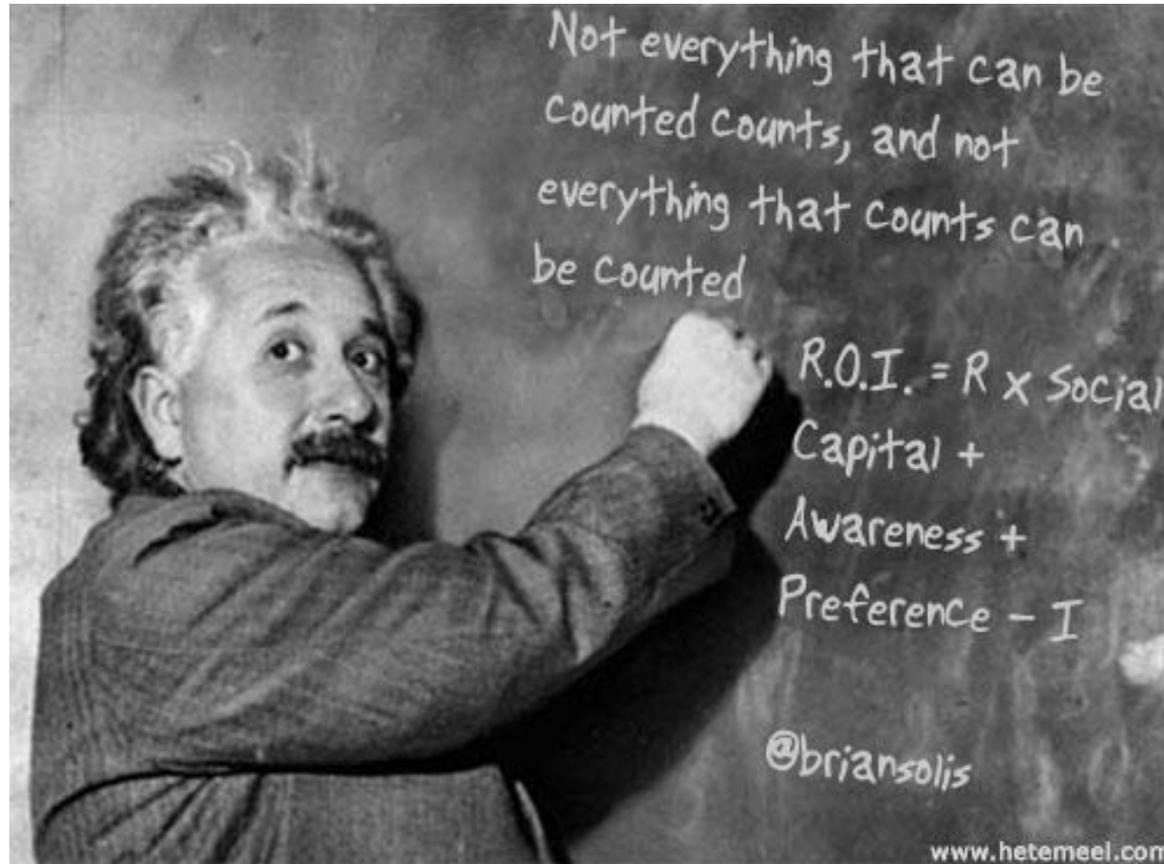
- Direct
  - Cost Savings
  - Price of competitive services
  - Cost/Benefit analysis
  - Rate of return
- Indirect
  - Willingness to Pay
  - Willingness to Accept

# Outcome--Organizational Value

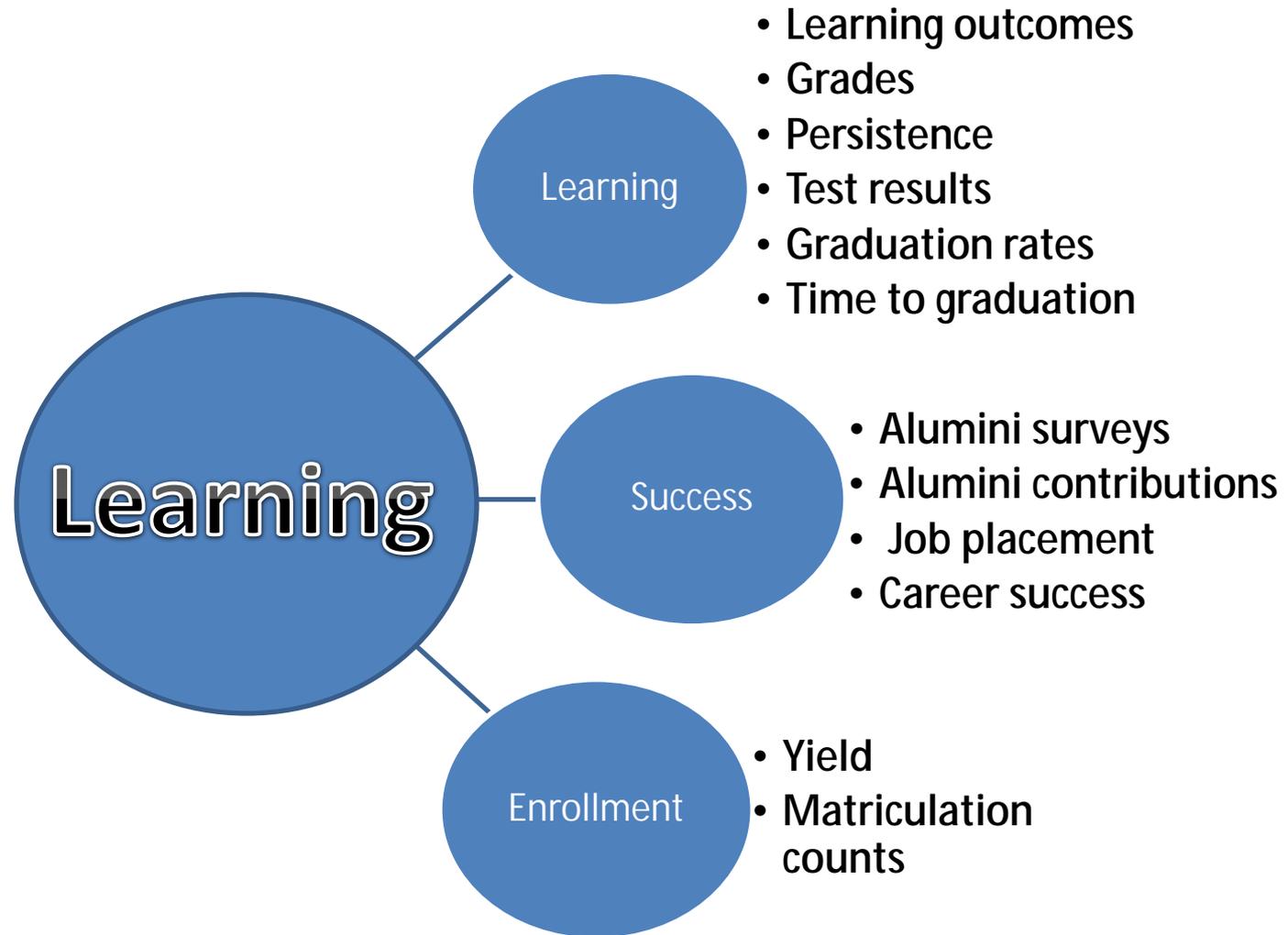
Student	Faculty	University
Enrollment	Research	Reputation & Prestige
Retention/Graduation rates	Grants	Cost Savings
Recruitment	Faculty Recruitment	Fund Raising
Success/Achievement	Teaching effectiveness	Community Engagement
Learning	Productivity	
Experience		

# Value and ROI

## Not always the Same!



# Student Learning



# Institutional Quality

Retention Rates

Student  
Satisfaction

Graduation  
Rates

Class Size

Full Time Faculty

Library Holdings  
Technology

Freshman Merit  
Scholars

Standardized  
Test Scores

Faculty  
Publications

Grants

Peer Assessment

Endowments  
Financial  
Resources

# Tools for Assessment Measuring Measures

# Benchmarking Measures in a Context

- Measure against what?
- Data benchmarking
- Process benchmarking

# Surveys

- Figure out what you would like to be able to say at the end
- Craft questions appropriately
  - Closed versus open questions
  - Analysis of the results a consideration
- Test survey

# Developing Appropriate Elicitations

- Developing Surveys
  - Mail – if you have an audience list
  - E-mail – As above (spam)
  - Handouts – if you have a physical presence
  - Web-based – attached to the service
  - Web-based pop-up – Blocker problems
- Combining methods

# Sampling

- Identify who or what
- Avoids having to survey or test everyone
- Kinds
  - Random – everyone has an equal chance
  - Purposeful – all decision makers, all people who use the system at a certain time under certain conditions, etc.
  - Convenience—whichever is available

# Determining Sample Size

- Depends on how specific you need to be and how accurate
- Depends on resources

# Focus Group Studies

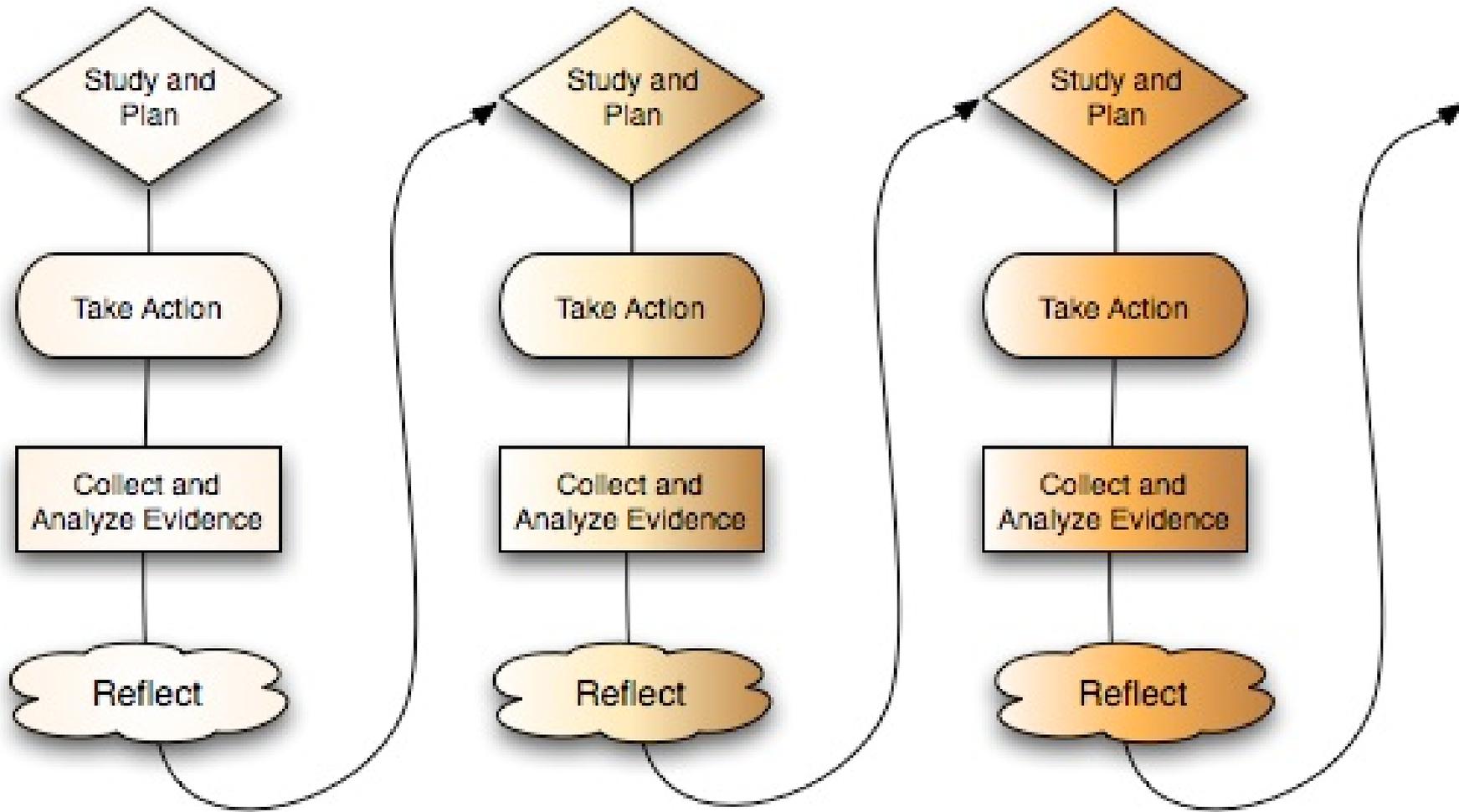
- Effective for telling a story or gaining insight
- Often misunderstood—deceptively simple
- Purpose is to promote self-disclosure
- Often used as part of planning exercise, marketing, as a follow-up to survey and sometimes as way to help develop surveys
- Should be done when insight is needed but should not be done in a highly emotionally charged environment

# Action Research

Cycle 1

Cycle 2

Cycle 3



Over time, action researchers develop a deep understanding of the ways in which a variety of social and environmental forces interact to create complex patterns. Since these forces are dynamic, action research is a process of living one's theory into practice (McNiff & Whitehead, 2010).

# Putting it all together....

# Creating effective performance measurements

- Clarity of Purpose
  - Both measured group and the group for whom measures are collected are clearly stated
- Focus and Alignment
  - The measures collected are in line with the mission, goals, vision, and values of the library
- Regular Refinement
  - Measures are reviewed and changed to keep up with changes in environment
- Rigorous indicators
  - Measures are well-defined using unambiguous language and with as little bias as possible

From Matthews, J. (2004) *Measuring for Results: The Dimensions of Public Library Effectiveness*

# Keeping Balance in Measures

- Balance the library and performance
- Absolute vs. Relative measures
  - Comparisons add context (not always appropriate, however).
- Objective vs. Subjective
  - How much does background of evaluator affect the interpretation of the results?
- Process vs. Function
  - Focus on processual steps as compared to outcome of process
- Performance vs. Diagnostic
  - Measuring achievements vs. Measuring to find problematic areas

From Matthews, J. (2004) *Measuring for Results: The Dimensions of Public Library Effectiveness*

# More concepts for balance of measures

- Direct vs. Indirect
  - Measuring a specific activity vs. measuring a surrogate for an activity (looking at citations as surrogate for measuring value of materials)
- Lagging vs. Leading
  - Lagging = actual performance, while leading = prediction of something else
- Social vs. Economic
  - Measures indicative of the impact of the DL on a community as compared to the economic importance of the DL

From Matthews, J. (2004) *Measuring for Results: The Dimensions of Public Library Effectiveness*