

Organizational Behavior

604/640

Hall #3

Measure Twice, Cut Once: Research
Techniques for OB

Welcome to Hall 3

- Measure Twice, Cut Once: Research Techniques for OB
 - How do we measure behavior?
 - Are some techniques more useful than others in the organization?
 - How much statistics do we need to know?
 - I didn't think this was a math course!
 - (It isn't)

Hall 3 Topics

- Biblical foundations for research, proving and testing
- Quality control and problem solving as scripturally supported
- Distinguishing between qualitative and quantitative research techniques in OB
- Using historical data for analysis and problem solving
- Field research and observation
- Scientific approach
- Experimentation and meta-analysis
- Forming analogies for organizational teaching
- Identifying research problems and methods

Questions for reflection & study

- How do we view the nature of God through measurement?
- What do apples have to do with OB?
- What are the advantages of qualitative and quantitative measures in organizations?

Comparing Apples to Apples



About that...

- You could eat a different kind of apple every day for 19 years and never eat the same kind twice.
- It takes 40 apples to make 1 gallon of cider.
- You can bob for apples (they float) because 25% of the apple is air.
- The largest apple was 3 pounds 2 ounces.
- There are 7,500 varieties of apples world wide.
- An apple tree has to grow 4 to 5 years before it produces fruit.

Unmeasured, it would be just an
apple



OB lessons from an apple

- Every person in your organization is different
- There are all kinds and varieties, yet we're all still made in God's image
- Some varieties require more tending before they produce fruit.
- Measurement helps us to better distinguish among the varieties.
 - This helps in producing “better fruit”

Biblical Foundation

- Deuteronomy 25: 14-16
 - Don't have mixed measures, but have a perfect and a just weight.
 - This is not referring to our personal weight, but how we judge others and how we transact business and exchanges in our lives.

God's values

- Judgment
- Honesty
- Fairness
- Equal treatment
- Specification
- Perfection
- Objectivity
- Time
- Cause and effect
 - Causality
- Consistency
- Righteousness
- Harmony
- Relationship

- Biblical consequences for unjust measures
 - Shorter life expectancy
 - Damaged relationships
 - Sinfulness
 - Which is its own punishment in the separation it causes with God
 - Weakness
 - Failure to fear God
 - Ego
 - Unrighteousness
 - Regret

Dysfunctional organization

Think about how these might manifest themselves in organizations :

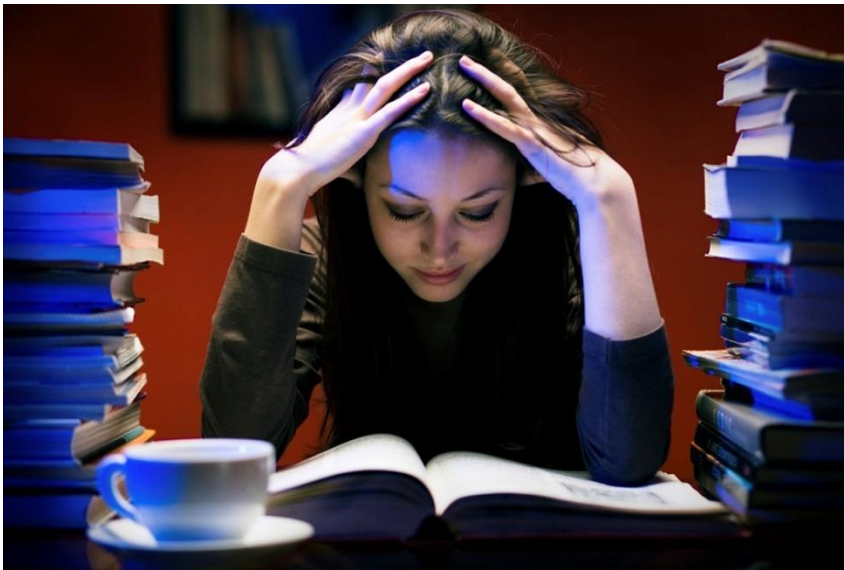
- Shorter life expectancy for the organization
- Higher turnover of the human resources
- Internal dishonesty because the behavior is modeled
- Structural weakness because the firm is not viewed objectively and honestly
- Unnatural self reliance
- Idolizing the organization or an individual in the organization
- Failure
- Loss of reputation and esteem
- Separation from the market

OB rewards of just measures

- Truth
- Objectivity
- Fairness
- Input
- Enthusiasm
- Loyalty
- Righteous confidence
- Respect
- Reputation
- Long life



How do we research organizations?



- Two basic ways
 - Quantitative research
 - Deals with numbers and measurements
 - Qualitative research
 - Deals with descriptions

Let's use the apple as an example

Quantitative (numeric data)

Weight: 8 ounces
Circumference: 7.5 inches
Quantity: 1



Qualitative (descriptive data)

Color: Red
Texture: Smooth
Shape: Round



Seeing is believing

- Neither of the descriptions given in the previous description is adequate for us to make a full judgment about the apple (or even to identify it without seeing it).



The research challenge

- **Meaningful research**
 - What data can be gathered and interpreted to add meaningful information to that which already exists?

Grows on a tree



Where do I start?

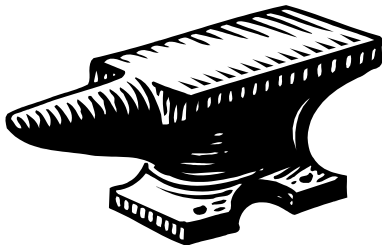
- Research starts with critical thinking
- “Critical thinking is the art of analyzing and evaluating thinking with a view to improving it.”
 - (Paul & Elder, 2007)
- A question that needs an answer
 - Will lead to more questions
- Questions and answers are part of the research process leading to useful information.
- Research is appropriately named because it begins with a search, which is repeated over and over.

ACME research example

- Why is turnover high at ACME Anvil Company?
 - Response: Is turnover high? What is historical data? What is the industry average for anvil companies?
 - Requires research and measurement.
- Research ensues:
 - Industry average is 1% and ACME Anvil's turnover is 2%, twice the industry average.
 - Question: Why?
 - Hypotheses:
 - Low pay
 - Injury
 - Working conditions
 - Incentives

Acme's research approach

- Secondary research
 - Industry information about turnover, pay, injuries, working conditions
- Primary research
 - Employee interviews
 - Surveys
 - Exit interviews
 - Aggregate employee information



Acme's findings...

- Acme discovers that the reasons for higher turnover appears to be related to injuries...
 - Acme's anvils are actually 10 pounds heavier than the industry average
- What can Acme do with this information to positively impact turnover?

Generating options

- Acme options
 - Make smaller anvils
 - would require retooling plant, customers require anvil of this weight
 - Hire stronger people
 - Would require terminating existing work force
 - Offer incentives
 - Does not solve long term problem
 - **Add robotics and retrain workforce**
 - Would address problem and offer higher tech base

Approaches to OB research

- Varied!
- Much debate about whether scientific approach can be applied to human behavior
- Good use for practitioners , but there are many choices



The scientific approach

- Procedures are public
- Definitions are precise
- Data collecting is objective
- Finding must be replicable
- Approach is systematic and cumulative
- Purposes are explanation, understanding, and prediction

The idea is that the scientific approach is a controlled rational process

Behavioral science methods

- Case study
 - Examines multiple characteristics of people over a period of time
 - Might involve socializing with others
- Limitations
 - Not replicable
 - Different outcomes
 - Significance of findings is left to interpretation
 - Not generalizable

Behavioral science methods (cont.)

- Field study
 - Personal interviews
 - Observation
 - Archival data
 - Questionnaire surveys
- When survey data are limited, researchers can make hypotheses that may account for the findings
 - Comparisons and statistical tests can support or fail to support

Behavioral science methods (cont.)

- Lab experiment
 - Researcher creates environment
- Field experiment
 - Researcher attempts to control the variables in the field
- True experiment
 - Researcher has complete control over experiment

Behavioral science methods (cont.)

- META-ANALYSIS
- Summarizes findings across independent studies
- May include aggregate data
- Concerns include:
 - What studies to include in the aggregation
 - What research rigor should be required of the studies
 - What are the truest data?



Qualitative research

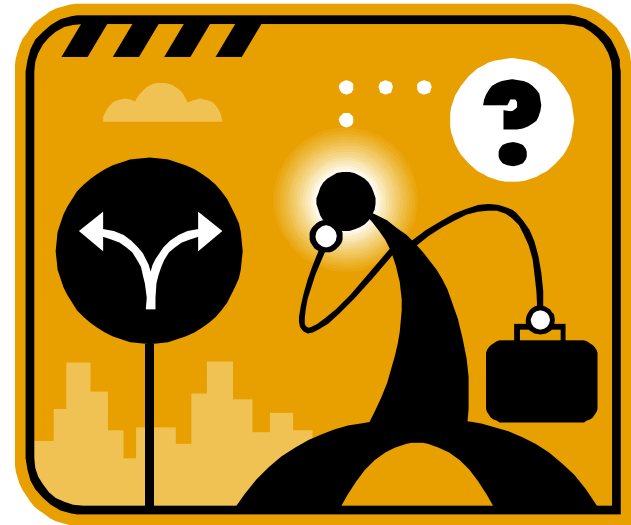
- Researcher's interpretation of data is important
 - Qualitative data are those:
 - Whose meanings are subjective
 - That are rarely quantifiable
 - That are difficult to use in quantitative comparisons
- Qualitative method includes:
 - Ethnographic studies
 - Content analysis
 - Informal interviews
 - Archival data surveys
 - Historical analysis
 - Unobtrusive measures

Qualitative research (cont.)

- QR characteristics
 - Analytical induction – first hand inspection
 - Proximity – first hand witness
 - Ordinary behavior – normal routine behaviors
 - Descriptive emphasis – aim to disclose & reveal
 - Shrinking variance – explanation of similarity
 - Enlightening the consumer – goal is to explain without confusing

Which to use?

- Qualitative or quantitative
 - It depends on the question you are trying to answer, the potential for data collection, the availability of rich data, and the subsequent use of the information being collected.
 - In some cases, a mixture of qualitative and quantitative can be used.



Review the questions

- How do we view the nature of God through measurement?
- What do apples have to do with OB?
- What are the advantages of qualitative and quantitative measures in organizations?

What next?

- Take the Hall Quiz
- Complete your detailed reading
- Consider your organizational research
- Answer the discussion questions
- Discuss your research possibilities
- Complete the writing assignments

What are you measuring?



References

- <http://www.sixwise.com/newsletters/06/09/06>
- Ivancevich, J.M., Konopaske, R., & Matteson, M.T. (2010). *Organizational behavior*. NY, NY: McGraw-Hill/Irwin.
- Paul, R. & Elder, L. (2007). *The miniature guide to critical thinking concepts and tools*. The Foundation for Critical Thinking.
- The Holy Bible

This concludes Hall 3