

# PRACTICING EVIDENCE-BASED MANAGEMENT

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# The Challenge

- In fields ranging from medicine to management to education to criminology, many organizations do *not* practice evidence-based management, to their detriment and the detriment of their employees and customers
- In business, there is evidence of amazingly large opportunities for potential improvement—there is “money on the table”
- Our task is to ***quickly*** understand the barriers and help you to overcome them

# Opportunities for Improvement

- Surveys of employee engagement and disengagement
- Surveys of job satisfaction
- Turnover and turnover intentions
- Measures of distrust in management
- Customer defection

# We Reject the New, Different, and What We Don't Agree With

- From Wikipedia: "Semmelweis reflex: automatic dismissal or rejection of scientific information without thought, inspection, or experiment...reflex-like rejection of new knowledge because it contradicts entrenched norms, beliefs, or paradigms. It is named after Ignaz Semmelweis who discovered that childbed fever mortality rates could be cut ten-fold if doctors would wash their hands with a chlorine solution." **AVOID the Semmelweis reflex!**

# The Semmelweis Reflex

- Semmelweis (an Austrian obstetrician) essentially discovered the “germ theory” of disease in 1847. 20% death rate in his hospital, compared to 1% for mothers who delivered at home. Following the implementation of hand washing with a bleach, death rate in his hospital also fell to 1%
- His reward: he was dismissed from his job.

# The Semmelweis Reflex

- It took more than *30 years* for the germ theory of disease to become accepted and for its implications for disinfection to be implemented
- Even today in the U.S., 2 million people a year will contract an infection while in the hospital and 90,000 will die from that infection. Hand-washing rates (outside of surgery) remain below 60%. The primary vector for the spread of SARS in China was the hands of health-care workers.

# Business Is No Different

- Estimates are that between 70% and 80% of all mergers fail to deliver the promised economic benefits and destroy value in the process
  - **A recent meta-analysis of 93 studies covering more than 200,000 mergers published in peer-reviewed journals showed that, on average, the negative effects of a merger on shareholder value are evident less than a month after the merger is announced and persist thereafter.**

# Business Is No Different

- The effects of stock options and other executive share ownership
  - A review of some 220 studies concluded that senior management equity ownership had no consistent effects on financial performance
  - Large stock option awards to senior executives *are* associated with a) a greater likelihood of the company's restating financial results and b) greater strategic risk taking
  - Many HR consulting firms don't know or care about these data

# Why?

- Sometimes, there are conflicting recommendations about what to do
- Excessive trust in our own experience and competence
- Fear of loss of power & autonomy to guidelines for practice
- Absence of training in EBM in business education

# Why?

- Ideology/belief trumps evidence
- We succumb to the tyranny of conventional wisdom and benchmarking—the absence of critical thinking in the presence of an “accepted” explanation or widespread practice
- We think we don’t have enough time or available information

# Why?

- The search for the “big” idea: “We always hope for the easy fix; the one simple change that will erase a problem in a stroke. But few things in life work this way. Instead, success requires making a hundred small steps go right.”

*Atul Guwande, “Better”, p. 21*

# First Recommendation

- Cultivate an “attitude of wisdom”
- Guard against excessive pride (or hubris)
  - The evidence shows that pride leads to overpaying for acquisitions and to engaging in risky (defined as producing high variance in performance) strategies

# Cultivate an “Attitude of Wisdom”

- Defined as “knowing what you know and knowing what you don’t know.”
- “Ignorance more frequently begets confidence than does knowledge”  
(Charles Darwin)
- “Real knowledge is to know the extent of one’s ignorance”  
(Confucius)



“I think it is very important for you to do two things: act on your temporary conviction as if it was a real conviction; and when you realize that you are wrong, correct course very quickly .... And try not to get too depressed in the part of the journey, because there’s a professional responsibility. If you are depressed, you can’t motivate your staff to extraordinary measures. So you have to keep your own spirits up even though you well understand that you don’t know what you’re doing.”

Andy Grove, Intel

# Second Recommendation

- Get the facts
- Don't blindly accept conventional diagnoses
- Think expansively about the sources of problems and possible solutions
- A "mini" exam
  - What was the principal problem confronting GM, Chrysler, and Ford
  - What is the principal problem facing the U.S. airline industry

# The U.S. Automobile Industry

- “Conventional wisdom” was that the problem was cost—particularly the costs of health care and retirement for a no-longer-working labor force (estimate was that this added \$1,500 per car to costs)
- Companies act and allocate their time and attention on the basis of their diagnosis of and assumptions about the situation

# The U.S. Automobile Industry

- Fact: in 2004, Toyota received \$6,000 more per vehicle sold in the U.S. than GM
- Fact: once this number came to light, the U.S. auto industry refused to provide the data that would permit this number to ever be calculated again!
- Source: The Oliver Wyman Harbour Report

# The U.S. Airline Industry

- The “conventional wisdom” is that the U.S. airlines’ problems come from a) unionized workforces that are paid too much; b) high fuel prices; and c) a bad air traffic control system that results in delays

# The U.S. Airline Industry

- According to the July 1, 2008, *New York Times*, a survey by a travel industry trade group showed that travelers avoided 41 million trips in 12 months because of “deep frustration” with air travel, costing the airlines an estimated \$9.6 billion
- Because this is a high fixed-cost industry, with this incremental revenue, the industry would have been profitable in 2008

# The U.S. Airline Industry

- According to an article in the June 17, 2008, *NYT*, between 2000 and 2007, the number of premium passenger trips fell from 79 million to 42 million (46.8%)
- In 2007, there were 17 million one-way trips on business aircraft (40% of the total of premium trips on the commercial carriers)
- U.S. airlines have low (and falling) customer satisfaction scores—they are driving business away!

# Airlines Have Data, But They Don't Use It—Or Run Experiments

- Think of 3 relatively simple experiments airlines could run (or could have run) that might improve their decisions and performance

# Bad Assumptions, Not Confronted with Evidence, are Driving Bad Decisions

- Downsizing is a smart thing to do
- Cutting labor rates and benefits makes companies more competitive
- During economic stringency, cutting advertising and research and development helps

# There Is Lots of Evidence on the Effects of Downsizing

- Does not increase stock price
- Does not increase productivity
- Does disrupt existing internal networks useful for innovation and bringing products to market
- Does increase fear and diminish morale and employee engagement
- Does not invariably reduce costs

# Labor Rates v. Labor Costs v. Profits

- Which airline has had the highest hourly rate of pay, even prior to the bankruptcies and wage givebacks of the post-2001 world?
- Which pays more, Costco or Sam's Club? Which earns more per employee?
- Which country is the largest (or depending on the year, the second largest) exporter in the world?

# Sam's Club v. Costco

- Average Costco employee earned \$15.97 an hour in 2004, 39% more than the average Sam's Club employee who earned \$11.52
- Costco provides benefits such as health insurance (82% of employees covered), Sam's does not (47% covered by a less generous plan)
- Which discount chain is more profitable?

# Sam's Club v. Costco

- Turnover is 6% in the first year at Costco v. 21% at Sam's
- Costco generated \$795 sales per square foot, Sam's Club \$516.
- Therefore, profit per employee was \$13,647 at Costco v. \$11,039 at Sam's Club
- Labor rates do not equal labor costs or profits!

# What to Do During a Downturn

- Kellogg's v. Post during the Great Depression
- A.G. Lafley, ex-CEO of Procter and Gamble, argues that it is easier to gain ground on competitors when they are in retreat
- Systematic research shows that companies that maintain R & D and advertising outperform those that cut

# Data Are Great, Evidence Better, But You Can Always...

- Examine and uncover the assumptions that underlie managerial actions and interventions (third recommendation)
  - What happens when you cut wages and benefits?
  - What are the assumptions that underlie merit pay for teachers?
  - What are the assumptions underlying forced-curve performance appraisal systems

# Understand Feedback Dynamics—Actions Have Consequences

- The Circuit City Story
- Home Depot under Nardelli
- The “success ruins everything” trap

# Fourth Recommendation: Build an Evidence-Based Management Culture

- It is a mind-set, not so much data or statistics, that is at issue
  - Many companies have invested enormous sums in ERP and HR data bases, but then fail to use these data for purposes other than budgeting and control, and/or fail to allocate the small but vital incremental resources necessary to turn data into business intelligence

# An EBM Culture Sees Data as A Strategic Resource

- “What I learned is that to the CEO of the company, they had no way of understanding what data could mean to them. They thought of it as another service, part of the infrastructure, stuff that IBM does.”

*Usama Fayyad, former chief data officer at Yahoo!*

# An EBM Culture is an Experimenting Place

- Treat your organization as an “unfinished prototype”
- Learn by doing—“enlightened trial and error outperforms the planning of flawless intellects” (David Kelley, IDEO)
- Run experiments, and get away from the idea that if something is a good idea, it should be implemented everywhere, or if you think it is a bad idea, it should be implemented nowhere

# In An Experimenting Culture...

- Failure is expected
- IDEO: “Fail early and fail often”  
(which is better than failing once,  
failing at the end, and failing big)
- “Forgive and remember”

# In An EBM Culture, People Learn from the Past

- Do after action or after-event reviews of important decisions—but not to apportion credit or blame, instead to learn
- Many people or companies that think they have, for instance, 20 years of experience, don't; they have one year, repeated 20 times

# An EBM Culture Challenges Conventional Wisdom

- Challenging conventional wisdom at Harrah's Entertainment
  - Radio and TV advertising is effective
  - Make casinos family-friendly
  - High-rollers are the biggest source of profits
  - Building huge edifices is a cost-efficient way of building business
  - You can not tweak the hold on slot machines because customers will rebel

# Leading an Evidence-Based Management Culture

- Gary Loveman at Harrah's Entertainment
  - Was a Harvard Business School untenured associate professor, appointed as COO in 1998, CEO in 2003
  - An "outsider" in an insider's industry
  - What did he do?

# Leading a Evidence-Based Management Organization

- Be committed to fact-based, evidence-consistent decisions and actions
  - “No brag, just facts” (DaVita)
  - Be sure you have a problem before you embark on trying to fix it
  - Tell the truth, and reward others who do

# Some Final Questions to Think About

- How and are you keeping up with the latest thinking and data—what have you read?
- Do you and your colleagues have a regular format to share ideas, data, and engage in discussions about data and ideas?

# The Paradox:

“Most companies don’t do this.” Therefore, 1) we won’t either, but 2) those that do, will outperform the competition. In order to earn exceptional returns, you have to do things differently. And that requires courage and insight.