Better Talent Management Through Workforce Analytics

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New Workforce Realities

• Old sources of competitive advantage no longer differentiate firms in the global marketplace.

• Effectively responding to globalization requires flexibility, speed and innovation.....and talent.

• Market for talent becoming much more “efficient”.

• Intense focus within firms on workforce strategy, differentiation, and execution.
The Digital Disruption... Has Already Happened!

- The world’s largest taxi company owns no taxis (Uber)
- The largest accommodation provider owns no real estate (Airbnb)
- The largest phone companies own no telco infrastructure (Skype)
- The most valuable retailer has no inventory (Alibaba)
- The most popular media owner creates no content (Facebook)
- The fastest growing banks have no actual money (SocietyOne)
- The largest movie house owns no cinemas (Netflix)
- The largest software vendor doesn’t write its own apps (Apple)

<table>
<thead>
<tr>
<th>Issues/Innovations</th>
<th>Challenged Firms</th>
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<tbody>
<tr>
<td>Internet</td>
<td>Postal systems/US Postal System</td>
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<tr>
<td>Cloud computing</td>
<td>Routers, servers/Cisco, Dell, HP</td>
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<td>IPADs, “Dumb” terminals</td>
<td>Personal computers/HP, Dell, Lenovo</td>
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<td>Ecommerce</td>
<td>Travel, retail/Wal-Mart, Tesco, Carrefour, Amex</td>
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<td>Electronic readers</td>
<td>Bookstores, publishers/Barnes &amp; Noble, Books-a-Million</td>
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<td>Working at home</td>
<td>Office furniture/Steelcase, Herman Miller</td>
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<td>Digitalization</td>
<td>Photographic film/Kodak, Fuji</td>
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<tr>
<td>New material sciences</td>
<td>Steel, Metal Fabrication/US Steel, Alcoa</td>
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<tr>
<td>Mobile phones</td>
<td>Credit cards, traditional telecoms/Nokia, Ericsson, Motorola</td>
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<tr>
<td>Newsprint</td>
<td>Newspapers/Garnett, New York Times</td>
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<td>Funeral/Crematories</td>
<td>Caskets / Batesville, Astral, Mathews, Chinese, Wal-Mart, Costco</td>
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<tr>
<td>Your firm?</td>
<td>What is the Magnitude of Shift in Your Industry?</td>
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New Developments in Talent Management and Analytics

- Segmentation – Customer, supplier, workforce
- Workforce Differentiation – A players in A positions for A customers
- Zero Based Work Budgeting – Designing work from the customer back
- Line Manager Accountability for Talent
- Big Data and Workforce Analytics
What Do We Mean by Workforce Analytics?

1. Calculating the ROI of individual practices (e.g., training, selection, etc.)?

2. Reporting activity metrics within the HR function (e.g., cost per hire, days to fill)?

3. Developing an HR Scorecard or Workforce Scorecard as a tool to help implement strategy more quickly & effectively?

4. External reporting (to shareholders) of human capital investments?

5. Developing predictive talent analytics to help execute our strategy?
Two Primary Uses of People Measurement Systems

1. *Measuring Levels*: How can we identify and reliably track the performance of our key human capital indicators?, and

2. *Measuring Relationships*: How can we begin to understand *how much* an improvement in these human capital indicators will affect the bottom line?
How do we decide what we need to measure?
- Measures provide answers to questions!

How do we know what questions to ask?
- We need to let our strategy dictate the metrics we adopt
- We’ve got to focus on the data we need, not the data we have.
Measures Provide Answers to Questions!

• How do we identify and quantify the strategic capabilities — bundles of information, technology, and people — that drive our strategic success?

• What are the key strategic positions in our firm and how should they be managed?

• How do we identify and quantify the strategic work that has a major impact on value creation in our firm?
• How well is our strategic work currently being performed? What work needs to be added or deleted?

• How do we develop strategic talent inventories that help us identify 1) the talent we have, 2) the talent we need, and 3) what actions will close this gap?

• How do we design and implement measurement systems (HR and Workforce Scorecards) that ensure managerial accountability for firm’s most expensive resource, the workforce?
Questions (Con’t)

• How well does our current performance management system help us execute our business strategy? Our compensation system?

• How effective is our pipeline at producing “A” level strategic leadership talent?

• How can we equip both HR and Line managers to use data and analytics to improve the quality of decision-making?
A Focus on the Design, Implementation, and Measurement of Workforce Strategy
25 Companies in 36 Months: The Workforce Disruption Project
Disrupting Workforce Competition:

How Strategic Work, Workforce Differentiation, and Big Data are Changing the Way that you Work – and Win
Investing in differentiated management systems that support that work (strategic focus not best practices)

Strategic Work
Identifying the *strategic work* that is truly necessary to execute your strategy (work not jobs)

Workforce Differentiation
Investing in *differentiated management systems* that support that work (strategic focus not best practices)

Workforce Analytics
Designing and implementing *targeted measurement systems* that help to hold line managers accountable for strategic talent
Workforce Management Disruption 1: Strategic Work
The Quest for Competitive Advantage

- Restructuring the Portfolio and Downsizing Headcount
- Reengineering Processes and Continuous Improvement
- Reinventing Industries and Regenerating Strategies

Unfair Fights

Smaller
Better
Different
Understanding the Impact of Work Quality

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
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<tbody>
<tr>
<td>Fix</td>
<td>Keep</td>
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<tr>
<td>Eliminate!</td>
<td>V P C</td>
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<tr>
<td>Low</td>
<td>High</td>
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### Strategic Workforce Planning: A Process Overview

<table>
<thead>
<tr>
<th>Business Strategy</th>
<th>Strategic Capabilities</th>
<th>Strategic Capability Gaps</th>
<th>Strategic Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Grow?</td>
<td>At what must we be great?</td>
<td>How good do we need to be? vs. How good are we?</td>
<td>What work must be done to achieve our strategic capability targets?</td>
</tr>
<tr>
<td>• Where play?</td>
<td>“Bundles of technology, information, and people uniquely arrayed to create or extend a competitive advantage”</td>
<td>Destination Target</td>
<td>Desired</td>
</tr>
<tr>
<td>• How win?</td>
<td>V = Impacts customer’s perception of value</td>
<td>Progress Metric</td>
<td>GAP</td>
</tr>
<tr>
<td></td>
<td>P = Enables charging our desired price</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td></td>
<td>C = Enables producing at our desired cost</td>
<td></td>
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**Value Creation**
- Customer
- Economic

**Operational Excellence**
- Product Leadership
- Customer Intimacy

**Operational Excellence**

\[ V = \text{Impacts customer’s perception of value} \]
\[ P = \text{Enables charging our desired price} \]
\[ C = \text{Enables producing at our desired cost} \]
Workforce Management
Disruption 2:
Workforce Differentiation
Where Do We go From Here?: The Growth Strategy Matrix

- **NEW**
  - **New product creation:** Innovative
    - Focus: Product innovation
    - Capability examples:
      - Consumer insight
      - Speed
      - M&A
  - **New market creation:** Disruptive
    - Focus: New market creation
    - Capability examples:
      - R&D
      - Consumer insight
      - Joint ventures & acquisitions
  - **Commoditization**
    - Focus: Process innovation
    - Capability examples:
      - Process improvement
      - Manufacturing excellence
      - Supply chain management
      - Purchasing
  - **Geographic expansion**
    - Focus: Market expansion
    - Capability examples:
      - Real estate
      - Supply chain/channel management
      - Purchasing
      - Logistics/distribution
      - Information systems

- **NOW**
  - **Offerings**
    - Consumer insight
    - Speed
    - M&A
  - **Markets**
    - R&D
    - Joint ventures & acquisitions
  - **NEW**
    - Licensing
    - Alliances/joint ventures
  - **Focus:**
    - Product innovation
    - Process improvement
    - Market expansion
“The top software developers are more productive than average software developers not by a factor of 10X or 100X, or even 1,000X, but

10,000X.”

–Nathan Myhrvold, former Chief Scientist, Microsoft
There are Substantial Differences in Economic Returns Across Jobs
Performance Variability Is Critical for a Position to Be Strategic

This company, highly regarded for its customer service, surveyed about 45,000 customers to gauge the impact of its 4,583 service reps. It discovered that the top 10% had a positive effect on customer attitudes with 71% of the customers they talked to; the top 7 reps created a positive effect with every customer. In sharp contrast, the bottom 10% had a net negative impact of 14% on customer attitude scores, while the bottom 3 employees alienated every customer they spoke with.

Source: Gallup, Inc.
### NORDSTROM

**Customer Perception of Firm Attributes**
- Best solution
- Fashion forward
- Professional expertise
- Personalized service

**Strategic Capabilities**
- Customer impact
- Wealth Impact
- Performance Variability

|---------------------|--------------------------|----------|----------------|--------------|--------------|

### COSTCO

**Customer Perception of Firm Attributes**
- Best value
- Convenient
- Variety
- Speed

**Strategic Capabilities**
- Consumer-facing Sales
- Buying
- Supply Chain
- Marketing
- Leadership

|---------------------|--------------|--------------|------------------------------------------|-----------------|--------------------------|
Workforce Management Disruption 3: Workforce Analytics
New Developments in Big Data and Business Analytics

• Academic and practitioner interest is substantial:
  — Firms are spending billions on data and infrastructure across all functional areas
  — Hundreds of books and thousands of articles have been written on this topic, and the pace seems to be accelerating

• Big Data are everywhere!
But......Big Data Require Bigger Theory!

• Ironically, more data isn’t necessarily always a good thing.....

• Moving from data to actionable information requires that we understand behavioral science theory and ask the right questions about how the workforce contributes to your success.

• Data collection and infrastructure is not your biggest problem – knowing what to measure and how to measure it is!
Three Issues:

- Asking the Right Questions
- Conducting the Right Analyses
- Influencing the Right Decisions

Workforce analytics as derived demand: If talent doesn’t matter, analytics won’t either
Too often the focus is on the technical issues associated with data, often at the expense of clearly operationalizing the questions that we are trying to answer.

Analytics doesn’t always just mean statistics – key emphasis should be on developing a cause-effect a conceptual understanding of what you are trying to measure, before you begin to think about data, measures, or inferential statistics.

Don’t start with the data: Start with the question.

Must begin with a review of prior research and the development of plausible hypotheses!
The Role of Theory

- “Nothing so practical as a good theory” Kurt Lewin

- “Every good regulator of that system must be a model of that system (Conant & Ashby, 1970)

- “Every good solution must be a model of the problem that it solves. (Scholten, 2010)
An Example of a Strategy Map at Advertising Inc.

Goal: Be revered as the hothouse for world changing creative ideas that transform our clients’ businesses, brands and reputations

Financial
- Reduce Costs
- Double EPS
- Grow Revenues
- Build Advertising’s Brand Equity

Client
- Create PICS -- Permanently Infatuated Clients

Product & Process
- Financial Discipline (Eliminate Inefficiencies)
- Work Smarter Across the Network
- Excel at Account Management & Create Great Ads
- Focus Business Development (New clients & assignments)
- Identify and Implement Appropriate Communication Services
- Win Global Fame for Our Idea Leadership

People & Culture
- One Team: One Dream: create a rewarding, stimulating environment where nothing is impossible

Source: Kaplan & Norton
More Detail at Advertising, Inc.

Be revered as the hothouse for world changing creative ideas that transform our clients’ businesses, brands and reputations.

Financial

- Maximize Profit
  - Reduce Cost
  - Grow Revenue

Client

- Create PICS -- Permanently Infatuated Clients

Product & Process

- Financial Discipline
- Work Smarter Across the Network
- Identify Appropriate Communication Services
- Excel at Account Management & Create Great Ads
  - Create Big Fabulous Ideas
  - Generate Ideas
  - Sell Ideas

People & Culture

- One Team: One Dream: Create a Rewarding, Stimulating Environment Where Nothing is Impossible
  - Develop skills and competencies
  - Drive Motivation
  - Create stimulating work environment

Source: Kaplan & Norton
Third-Order Strategy Map at Advertising, Inc.

Theme: “Excel at Account Management & Create Great Ads”
Objective: Big Fabulous Idea (BFI) Objective

Internal Perspective

Generate Idea
- Challenge meeting brief process
  - Get physical engagement of right people
  - Organize marketing
  - Leaders with a point of view
  - Select type of account working on
  - Develop position accountability

Create Big Fabulous Ideas (BFI)

Sell ideas
- Build Benefit Case
- Build relationship with client
  - State Deliverable
  - Success with Advertising, Inc.
  - Knowledge of business (company, product, market, etc.)
  - Anticipate client issues “Tell clients what they have not thought of yet”

Source: Kaplan & Norton
<table>
<thead>
<tr>
<th>Old Focus</th>
<th>New Focus</th>
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<tbody>
<tr>
<td><strong>Communication</strong></td>
<td>• Is our workforce satisfied / happy?</td>
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<tr>
<td></td>
<td>• Is our top talent in strategic positions thrilled with our firm?</td>
</tr>
<tr>
<td><strong>Work Design</strong></td>
<td>• How do we do our work?</td>
</tr>
<tr>
<td></td>
<td>• Are we focusing on value creation in every job?</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td>• Are we “fair” in our selection process?</td>
</tr>
<tr>
<td></td>
<td>• How well does our top talent in strategic roles compare to the labor supply?</td>
</tr>
<tr>
<td><strong>Training/ Development</strong></td>
<td>• How did our participants feel about our training?</td>
</tr>
<tr>
<td></td>
<td>• How can we accelerate the skills of our emerging talent in strategic roles?</td>
</tr>
<tr>
<td><strong>Performance Management</strong></td>
<td>• Are performance appraisals completed and on time?</td>
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<tr>
<td></td>
<td>• Is our performance management system a tool to help execute our business strategy?</td>
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<tr>
<td><strong>Rewards</strong></td>
<td>• Is our program fair?</td>
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<tr>
<td></td>
<td>• Are we adequately rewarding our value creators for their success?</td>
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## Basic HR / Workforce Metrics Questions

<table>
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<tr>
<th>Focus</th>
<th>Workforce Focus</th>
<th>Workforce Practitioner</th>
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<tbody>
<tr>
<td></td>
<td><strong>Workforce</strong></td>
<td><strong>HR Function</strong></td>
</tr>
<tr>
<td></td>
<td>• What do we want our workforce to understand about our company?</td>
<td>• How effective are our HR practices in delivering the workforce to win in the markets we choose to compete in?</td>
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<tr>
<td><strong>Organization Wide</strong></td>
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<td></td>
<td><strong>Strategic Talent</strong></td>
<td><strong>Leaders/Line Managers</strong></td>
</tr>
<tr>
<td></td>
<td>• What is our level of top talent in strategic positions?</td>
<td>• How effective are our leaders in delivering HR policies and practices in managing their workforces to leverage our firm’s competitive advantage?</td>
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</table>
What Have We Learned?
Conclusions

• There are many, many roles that can destroy wealth in organizations. But only a very few roles that can actually create great wealth.

• In contrast to the conventional wisdom, you probably don’t need – and truly can’t afford – world class talent in all positions.

• All (or at least most) jobs are important, but only a few jobs are truly strategic.
Conclusions (Con’t)

• “A” or *strategic positions* are those which impact strategy and exhibit high variability in employee performance.

• Strategic capabilities provide the *context* for improvement: Variability in employee performance provides the *opportunity* for improvement.

• Strategic positions can appear at any level in the firm.
Conclusions (Con’t)

• Great firms manage their workforces like a portfolio and leverage its return – investing disproportionately in the highest return strategic work and strategic positions.

• But.....Most organizations invest in talent by hierarchical level, not by strategic impact.

• As a result, over time firms tend to underinvest in strategic work and over-invest in nonstrategic work.
• What does this mean? The greatest potential opportunity to impact firm performance is likely to be located in (some, very specific) strategic positions.

• But we’ll never know unless we build an analytical framework and collect the data we need to help us understand how talent makes a difference.

• And then act on these insights!
Key Steps in Successful Analytics Initiatives

• Read the research and build a theory or model that shows *what causes what* in your organization

• First determine *what to measure* – *then* collect reliable and valid data

• Use analytical tools to estimate the impact of talent on the organizational outcomes you care about:
  – Regression
  – Network analysis
  – Swarm analysis

• Focus on data for decision-making, and hold managers accountable for enacting evidenced-based management
Influencing the Right Decisions

- Critical causal thinking
- Principles of good measurement
- Estimating causal relationships
- Communicating HR strategic performance results to senior line managers
The DMSB Center for Workforce Analytics is dedicated to advancing the science and practice of workforce analytics and to helping organizations effectively execute their strategies through the workforce.

We believe that the practice of evidenced-based management is best facilitated by close partnerships between the academic and practitioner communities, and we are therefore focused on delivering leading edge research and outreach programs focused the development and implementation of workforce metrics and analytics.

Our ultimate goal is to help to generate the predictive analytics and workforce insight needed to create better, more meaningful jobs for employees and value for shareholders through effective strategy execution.
Serving our Constituencies

- **Scholars**
  - Connect with practitioners to help shape research agenda
  - Provide access to data and research sites
  - Marketplace for ideas
  - Special Issue of *Human Resource Management* on Workforce Analytics

- **Senior HR and Line Executives**
  - Answers to the question: Where & how do we invest in our workforce?
  - Drive managerial accountability for talent

- **The “Workforce Analytics” Community**
  - Training and developmental resources
  - Help “make the market” & build an analytics community

- **Our Students**
  - Leading edge training and developmental opportunities
  - Potential Co-op sites
The Center for Workforce Analytics
Board of Advisors
Questions and Comments?