Introduction to Workforce Planning & Analytics

Charles Goretsky
Agenda

• The Strategic Business Need for Workforce Planning
• An Introduction to Workforce Analytics
• What is Workforce Planning?
• Case Studies

“You have more information at hand about your business environment than ever before. But are you using it to ‘out-think’ your rivals? If not, you may be missing out on a potent competitive tool...”

Thomas H. Davenport; Jeanne G. Harris
Objectives

• Understand the basic concepts of Workforce Planning and Workforce Analytics and their relationship to one another

• Appreciate why strategic workforce planning is a proactive step in an effective Talent Management strategy.

• Think about how Workforce Planning & Analytics can help you understand your future talent needs and many types of talent gaps

• Gain insights from best in class organizations
Workforce Planning

Career Development

Education & Training (Continuous Learning)

Alignment with Recruiting and Retention
Pillar One: Workforce Planning

Workforce planning is a set of business processes which analyze the supply and demand of talent. This discipline helps organizations understand the current state, forecasted gaps and actions necessary to close talent gaps.

Although 92% of companies have some level of workforce planning, only 21% of companies take a strategic, long-term approach.
Less than 40% of Organizations have a Proactive Workforce Planning Process

- Reactive process for future workforce planning, 58%
- Reactive process for future workforce trends and gaps, 31%
- Regular, proactive process to look at future workforce trends and gaps, 7%
- Excellent workforce planning models based on internal and external drivers, 4%
- No process to look at future workforce needs, 4%

Source: Bersin by Deloitte, High-Impact Talent Analytics, 2013
Concerns Among Business Leaders

Figure 1: Greatest HR Challenges Faced by Today's HR Leaders

- Measuring HR Programs in Financial Terms: 35%
- Delivering Workforce Metrics and Analytics: 26%
- Driving Internal Mobility and Career Development: 24%
- Enabling a Strong Self-Learning Culture: 23%
- Motivating a High-Performance Culture: 19%
- Identifying and Developing Future Leaders: 17%
- Promoting Highly Engaged Workforce: 17%
- Encouraging Innovation and Collaboration: 17%
- Allocating Compensation Fairly to High Performers: 15%
- Promoting Health and Wellness: 15%
- Defining Pivotal Roles: 14%
- Defining Roles by Skills: 14%
- Rapidly and Effectively Onboarding New Talent: 14%
- Selection and Recruiting of Talent: 7%
Analytics is Coming to HR

HR Analytics has lagged behind other business processes

The Industrial Economy
- Steel, Oil, Railroads
- Early 1900s

The Financial Economy
- Conglomerates Financial Engineering
- 1950s-60s

The Customer Economy and Web
- Customer Segmentation Personalized Products
- 1970s-80s

The Talent Economy
- Globalization, Demographics Skills and Leadership Shortages
- Today

Finance & Logistics
- Integrated ERP and Financial Analytics
- 1980s Financial and Budget Analytics
- Logistics and Supply Chain analytics

Customer & Marketing
- Web Behavior Analytics
- Customer Analytics – CRM (Data Warehouse)
- Customer Segmentation Shopping Basket

Talent & Leadership
- Predictive Talent Models HR Analytics
- Business-driven Talent analytics
- Integrated Talent Management & Workforce Planning
- Recruiting, Learning, Performance Measurement
Strategic vs. Operational

Organizational Strategy
- HR Strategy
- Workforce Strategy
  - Governance, Organization, Staffing
  - Delivery Capabilities & Processes
- Systems & Technology

Strategic Workforce Planning
- Analyze and Model Demand and Supply

Operational Workforce Planning
- Inputs
  - Internal: HR, Finance, Operations, Internal Benchmarks, Pipeline
  - External: Macro Economic Data, Industry Specific, Labor Market, Benchmarks
- Planning & Modeling
  - Supply Projections: Visualize the organization down to the individual level and calculate "inflow" and "outflow" trends
  - Demand Projections: Incorporate macro economic data and drivers to project workforce demand for the organization
  - Scenario Planning: Allows for "what if" planning

Strategic Alignment
- Strategy
- Strategic WFP Capability
Strategic Workforce Planning in Context

- Business Strategy
- Talent Strategy
- Annual Budget
- Staffing Plan

Alignment Challenge
Need for Workforce Planning

1. Workforce Planning is an acknowledged need; but progress is slow.

2. The global economy continues to be unpredictable and change is constant, requiring both workforce flexibility and efficiency to stay competitive.

3. Predicted talent supply shortages in the near future.

4. Competition for top talent will be fierce, making effective talent management very crucial.
Workforce Planning Capabilities

- Generate an insight in the basic organizational demographics of your workforce, make ratios and cross sections of your workforce, and understand how your demographics are related.
- Set a general and integrated talent management strategy, for building leadership bench strength for key positions.
- Provide strategic direction to the function’s talent management activities by identifying and forecasting talent gaps aligned with the business future needs.
- Determine optimum bench strength & talent gaps.
- Quickly assess the ability of employees to adapt to changes.
- Model the impact of talent strategies (productivity improvement, retention, buy vs. build) on mitigating risk to functional strategy execution.
Relationship Between Workforce Analytics and Planning

- Where do I source my leading talent?
- Are we retaining our leading talent?
- What training is most effective?
- Do we have a pay for performance culture?
- Who is at risk of leaving next?
- Where can compensation costs be saved?
- Why are people leaving?
- How will turnover impact our future workforce?
- Where should we allocate people to support the business?

How many people do I need for this job? At what cost?
- How do I communicate changes to the workforce?
- What will these skills and resources cost?
- How does that compare to my budget?

Source: Visier Corporation
Analytics Can Shed light on Business Problems

What factors are contributing to the increases in payroll?

How much revenue do you lose to poor alignment of your workforce to your business needs?

What is the return on investment on human capital initiatives, for example learning and training?

How do I know which employees are at highest risk of leaving my organization and when?

What will our talent gaps be next year based on retirement rates?

How can we globalize our employment brand and talent programs?

How do we assess ROI and returns on leadership development and other HR programs?

How do we assess the “right” candidates?

How do we assess ROI and returns on leadership development and other HR programs?

What is the demographic composition of the workforce?

Which skills are most in shortage and what factors are contributing to these shortages?

What is the training or hiring profile we need to drive greater productivity?

How can I retain and engage my top talent?

Why is turnover high in some areas?

What is the pipeline for our leaders?

How do we plan the workforce in the future in order to meet the organisational strategy?

How do I increase women and diversity in leadership?
What is Workforce Analytics?

Business Value

- Beliefs
- Reactive Checks
- Ad-Hoc and Ongoing Reports
- Dashboards and Benchmarks
- Correlations
- Simulations
- Predictions
- Causal Modeling

Analytics

Reporting

Gut Feel
86% of organizations are focused primarily on reporting.

Just 10% of organizations have taken the next step toward advanced analytics — helping business leaders solve their talent challenges through statistical analyses.

A mere 4% are using predictive analytics to forecast future talent outcomes.

Mature analytics organizations are:

- 2x more likely to improve recruiting efforts
- 2x more likely to improve their leadership pipelines
- 3x more likely to realize cost reduction / efficiency gains
- 2.5x more likely to improve talent mobility: moving the right people into the right jobs

The Value of Analytics
Talent Analytics Maturity Model®

Level 1: Reactive – Operational Reporting
Ad-Hoc Operational Reporting
Reactive to business demands, data in isolation and difficult to analyze
56%

Level 2: Proactive – Advanced Reporting
Operational reporting for benchmarking and decision making
Multi-dimensional analysis and dashboards
30%

Level 3: Strategic Analytics
Segmentation, statistical analysis, development of “people models”;
Analysis of dimensions to understand cause and delivery of actionable solutions
10%

Level 4: Predictive Analytics
Development of predictive models, scenario planning
Risk analysis and mitigation, integration with strategic planning
4%
Moving Up the Model

- Standalone Analytics in each HR Function (recruiting, training, engagement, performance, comp)
- Small or no budget for integrated reporting
- Lack of standard tools
- No data dictionary
- Chasing Ad-Hoc Report Requests
- Data inconsistent and may not be accurate or believable across the organization
- Likely many standalone systems

Level 1
Operational Reporting

Level 2
Strategic Reporting

Level 3
Advanced Analytics

Level 4
Predictive Analytics

56%

Moving Up the Model

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Moving Up the Model

- In-house statistical skills to build models which can be deployed in the business
- Workforce planning and talent analytics come together, along with organization design, engagement, and other analytics functions
- Deep credibility in the business and strong business leader in place
- Strong ongoing relationship with finance, IT, marketing, and other analytics groups
- Deep experience with 3rd party data providers, consultants, and advanced tools
## Examples of Insights from Analytics

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Key Concerns</th>
<th>Wouldn’t it be great to have insights into…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Talent Acquisition</strong></td>
<td>“…Attracting top quality candidates is critical for Amway to differentiate ourselves from competition.”</td>
<td>What are the most effective strategies for attracting critical talent? How can we predict the best candidates (most likely to be hired or rise in the organization)?</td>
</tr>
<tr>
<td><strong>Career &amp; Succession Planning</strong></td>
<td>“…Career and succession planning for each key position is critical for Amway to prepare for the future of the company.”</td>
<td>What percentage of our key positions have identified successors? What percentage of our workforce is promoted annually? How are we developing leadership experience?</td>
</tr>
<tr>
<td><strong>Learning &amp; Development</strong></td>
<td>“Keeping up with the ever-changing landscape of technology is critical for eBay to stay ahead of the curve.”</td>
<td>What are the top learning needs for our employees? What is the most effective way to deliver training in Amway? Are employees putting learning into action?</td>
</tr>
<tr>
<td><strong>Retention</strong></td>
<td>“…Losing our top performers to high growth start up companies has been an increasing concern.”</td>
<td>Why talented employees may be leaving the company? Which categories of employees and which specific employees are at flight risks?, and, Why?</td>
</tr>
<tr>
<td><strong>Workforce Planning</strong></td>
<td>“…Specialized and technical talent needs are high. Contractors are hired at high costs to fulfill skill needs.”</td>
<td>What are the critical workforce segments based on current and future business needs? How should we expect the inflow/outflow of talent to change, and meet the demand?</td>
</tr>
<tr>
<td><strong>Performance Management</strong></td>
<td>“…Top performers expect to grow and get compensated based on their performance and objectives.”</td>
<td>How are our critical workforce segments performing? How do we tie compensation to performance in order to incentivize and retain them?</td>
</tr>
<tr>
<td><strong>Demographics &amp; Diversity</strong></td>
<td>“…The ratio of women in the workforce is relatively low in the Technology industry.”</td>
<td>Where are the gaps in employee diversity? How does a diverse workforce create greater value?</td>
</tr>
<tr>
<td><strong>HR Effectiveness</strong></td>
<td>“…HR productivity and impacts are typically hard to quantify and measure.”</td>
<td>How effective are our HR functions? What are the key areas of improvement that would show the greatest results? How effectively is HR integrating with the business?</td>
</tr>
</tbody>
</table>
## Leading Practice Examples

**Company Approach:**

A State Medicaid Department analyzed supply and demand for critical clinical workforce segments to anticipate the inability to provide adequate care in the future.

A global auto manufacturer analyzed existing workforce planning capabilities to determine how to develop a sustainable planning capability going forward.

A government-run health system with over 1.4M employees used Deloitte’s Subscription Analytics service to develop an advanced enterprise workforce planning capability.

### Leading Practices:

- Visualization tool to view gaps by workforce type / location
- Roadmap with 11 specific areas to proactively address gaps
- Detailed assessment of planning maturity across key enablers
- Organizational roadmap to mature workforce planning capability
- Sample algorithm to prove out supply / demand analysis
- Multi-tenant workforce planning application to cover the entire 1.4M+ employee base
- Access to advanced analytics
- Low cost of ownership for leading edge planning technology
Examples of Methods & Tools

- **Transactional**
  - Basic KPI Reporting
  - Visual data
  - Basic employee lists & extracts
  - Data integrity & quality
  - Understanding business parameters
  - Visualizing transactions

- **Workforce Information Maturity**
  - Understanding business parameters
  - Visualizing transactions
  - Data integrity & quality
  - Basic employee lists & extracts

- **Increasing business value**
  - Predictive Modelling
    - Understand groups and outliers
    - Discover white spots
  - Simulation & Optimization
    - Integrated analytics
    - Multiple sources of data
    - Forecasting and predicting future outcomes
    - Modelling and understanding correlations and causalities
    - Simulate and experiment with possible scenarios

- **Strategic**
  - Simulation & Optimization
    - Integrated analytics
    - Multiple sources of data
    - Forecasting and predicting future outcomes
    - Modelling and understanding correlations and causalities
    - Simulate and experiment with possible scenarios
Level 4: Enterprise Strategic Workforce Planning
Strategic Workforce Planning on an Organization-wide Level

Level 3: Strategic Workforce Planning
Alignment with Business Strategy and Workforce Segmentation

Level 2: Workforce Analytics
Workforce Skill Gap Analysis, “What If” Scenarios

Level 1: Headcount Planning
Head Count Data Collection, Head Count Analysis, Static Data Reporting
Overview: The Workforce Planning Process

1. Clarify the business problem; identify if WFP is the right solution
   - Determine organizational readiness and support
   - Identify necessary resources to support
   
   Situation Analysis

2. Analyze critical underlying assumptions on business goals, critical roles, capabilities, environmental / growth changes
   
   Assumption Analysis

3. Identify anticipated roles / capabilities needed
   - Determine anticipated future supply of roles / capabilities
     - Within organization
     - Within target geographic markets
   
   Supply / Demand Analysis

4. Given projections, identify gaps and extent of risk they represent to business strategy execution
   
   Gap Analysis

5. Generate potential organizational solutions
   - Determine potential financial impacts of those actions
   
   Response Brainstorming and Analysis

6. Identify recommended actions
   - Develop options for how they will be implemented
   
   Action Planning

Note: Six steps based on interviewed organizations’ experience using both home-grown and vendor solutions.
Step 1: Understand If Your Organization Needs Workforce Planning

1. Clarify the business problem; identify if WFP is the right solution
   • Determine organizational readiness and support
   • Identify necessary resources to support

Data Sources: Internal & External
Talent Analytics Maturity
Multi-disciplinary Team

Situation Analysis
Examples of Data Elements Used for Analytics

**Employee Data**
- Tenure
- Job Role/Level
- Competencies/Skills
- Demographics
- Engagement/Satisfaction scores
- Supervisor tenure, ratings
- Compensation
- Performance ratings

**Financial/Operational Data**
- Revenues
- Profitability
- Production
- Safety incidents
- Worker compensation claims
- Theft or leakage
- Customer satisfaction
- Complaints

**HR Data**
- Headcount
- Turnover
- Retirements
- Promotions
- Transfers
- HR data (e.g. spend per employee)
- Learning data (e.g. hours per learner)
- Recruiting data (e.g. time-to-fill)

**External Data**
- Labor stats / forecasts
- Economic forecasts
- Skills supply projections
- Education trends
- Demographic trends
- Market compensation
- Industry production trends
- Competitor information
Step 2: Understand where your organization wants to go

- Analyze critical underlying assumptions on business goals, critical roles, capabilities, environmental / growth changes

Business goals: growth initiatives, forecasts, investments needed

Required skill sets and scarcity or abundance of them in the future
# Example: Attrition in Critical Segments

<table>
<thead>
<tr>
<th>Voluntary attrition (2 years)</th>
<th>Region 1</th>
<th>Region 2</th>
<th>Region 3</th>
<th>Region 4</th>
<th>Region 5</th>
<th>Region 6</th>
<th>Overall CWS attrition</th>
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<tbody>
<tr>
<td>Field support specialist</td>
<td></td>
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<td>Toolpusher</td>
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<tr>
<td>Second engineer</td>
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<td>Driller</td>
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<td>Chief mechanic</td>
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<td>Electronic technician</td>
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<td>Master</td>
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<td>Electrician</td>
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<td>Chief Electrician</td>
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<td>Mechanic</td>
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<td>Hydraulic technician</td>
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<td>Installation manager</td>
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<td>Rig manager</td>
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<td>Chief engineer</td>
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<td>Technical coordinator</td>
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<td>Control room operator</td>
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<tr>
<td>Chief electronic technician</td>
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<td>Total BU/Region vol. attrition</td>
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Step 3: Understand implications of current and desired future state

- Identify anticipated roles / capabilities needed
- Determine anticipated future supply of roles / capabilities
  - Within organization
  - Within target geographic markets

Supply / Demand Analysis

Scenario planning
- Internal factors
- External factors

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Example: Forecasted Growth in Business Unit

U.S. Degrees Granted

Source: Sample data only

Source: Society of Petroleum Engineers
Step 4: Gap Analysis

- Given projections, identify gaps and extent of risk they represent to business strategy execution

Shortages of Key Positions

Ability to Fill Skills Gaps

Impact on Business
Fewer than 1/3 of Organizations Understand Their Talent Gaps

- 47% have little or no view of talent gaps
- 28% have a good view of talent gaps
- 21% have some view of talent gaps
- 4% have an excellent view of talent gaps

Step 5: Determine how your organization should respond

- Generate potential organizational solutions
- Determine potential financial impacts of those actions

Cost-benefit analysis of available options

Analysis of options given business strategy
Example: Modeling Scenarios

Source: Visier Corporation
Step 6: Plan for your organization’s next steps

- Identify recommended actions
- Develop options for how they will be implemented

Workforce planning action plan

Updating of talent management strategy / plan given recommendations
Case Studies

Workforce Development
Leading Best Practices
## Leading Practices – Financial Services

<table>
<thead>
<tr>
<th>Company</th>
<th>Background</th>
<th>Leading Practices in Workforce Planning &amp; Career Development</th>
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</table>
| A Mutual Funds Company  | This mutual funds company partnered with Deloitte to address challenges with retention and internal climate related to career progression and career development. The company was interested in taking a more formal look at their workforce planning process, determining who their most critical workforce groups were and assessing the current workplace relative to the needs of those critical workforce members. | - Developed an initial three-year Talent Management Roadmap. Deloitte conducted an intense half-day workshop, which led to the identification of Critical Workforce Segments and the Value Drivers to enable business objectives. Career Progression Planning emerged as an immediate priority, and a Career Development Framework, methodology, and approach were created based on internal assessment results and external leading practices.  
- Design and facilitate customized Talent Management Workshop.  
- Validate Critical Workforce Segments.  
- Validate Value Drivers and HR Programs (such as Career Progression Planning) which will enable the Critical Workforce Segments to achieve their business objectives.  
- Design initial three-year Talent Management Roadmap.  
- Prioritize Critical Workforce Segments to establish implementation activities as part of the overall roadmap. |
Kentucky currently has an estimated 640,000 uninsured individuals (~16% of the state’s 4.4 M population) and it is expected that:
- 300,000 could be eligible for Medicaid expansion
- 220,000 could be eligible for some type of premium assistance

Pent up demand from this uninsured group may exacerbate workforce shortages.

KHBE secured Deloitte to identify:
- Current and future health care workforce shortage areas
- Legislative and administrative policy changes that may be needed to increase the supply of health care providers to improve population health
- Recommendations and strategies for recruiting, reconfiguring through leverage, and maintaining an adequate and available health care workforce

The following clinician groups were determined to be essential to the study with licensing data and benchmarks adequate enough to determine potential workforce shortages at the county and/or state level:
- Physicians
- Dentists
- Advanced Practice Registered Nurses (APRNs)
- Physician Assistants (PAs)
- Registered Nurses (RNs)
- Licensed Practical Nurses (LPNs)
- Nurse Aides (NAs)
- Optometrists
- Mental Health Providers (MHPs) including:
  - Psychologists
  - Licensed Clinical Social Workers (LCSWs)
  - Licensed Professional Counselors (LPCs)
  - Marriage & Family Therapists (MFTs)
  - Alcohol & Drug Counselors (ADCs)
The current need for additional Registered Nurses (RNs) across the state is 5,635 FTEs, representing a 12% increase in the total RN workforce. The need is pronounced across the southern border and in the northeastern corner of the state.

**Rural Kentucky RN Need – 2012**

Scott, Carter and Anderson counties have the largest need among all rural counties.

This cluster of rural counties in the northeast has a large collective need for additional RNs.

Many contiguous rural counties across the bottom of the state show a strong need for more RNs.
KHBE: Sample Recommendations

Enhancing the overall supply of Workforce + Reduce demand through more efficient use of productive workforce time

Supply Recommendation Examples:

- **Legislation/Policy**: Address potential J-1 Visa shortages through State and/or Federal lobbying
- **Compensation/Benefits**: Provide additional reimbursement / salary benefits to encourage attraction and retention
- **Education**: Develop a business case for MD/OD class size expansions

Demand Recommendation Examples:

- **Process Efficiency**: Develop training programs that support more efficient sharing of responsibility between physicians and mid-levels
- **Technology**: Pilot new or enhanced uses of TeleHealth technologies in rural areas
- **Career Pathing**: Create learning opportunities for current workforce to transition into higher value roles
Quick Recap: Key Takeaways

- Strategic workforce planning is a proactive step in an effective Talent Management strategy. It may take several years to implement.
- Workforce Planning and Workforce Analytics are closely related and both required for success.
- Workforce Planning & Analytics can help you understand your future talent needs and many types of talent gaps.
- Organizations can not only mitigate costs of unpleasant surprises but sometimes eliminate them all together.
- Mature organizations are able to leverage Workforce Planning & Analytics to partner with Strategic Planning.