

## **Chapter 2**

# **Workforce Analytics: The Financial Impact of HRM Activities**

### **CHAPTER LEARNING OBJECTIVES**

Questions this chapter will help managers answer:

1. How can HR measures improve talent-related decisions in organizations?
2. If I want to know how much money employee turnover is costing us each year, what factors should I consider?
3. How do employees' attitudes relate to their engagement at work, customer satisfaction and employee retention?
4. What's the business case for work-life programs?

### **KEY TERMS**

LAMP

Behavior costing

Attitudes

Job satisfaction

Organizational commitment

Absenteeism

Turnover

Work-life program

Return on investment

Criteria

Control group design

## **LINKING WORKER BELIEFS TO INCREASED PRODUCTIVITY AND PROFITABILITY**

- A study by The Gallup Organization identified 12 worker beliefs that play the biggest role in triggering a profitable, productive workplace.
  - ✓ I know what is expected of me at work.
  - ✓ I have the materials and equipment I need to do my work right.
  - ✓ At work I have the opportunity to do what I do best every day.
  - ✓ In the last seven days I have received recognition or praise for doing good work.
  - ✓ My supervisor, or someone at work, seems to care about me as a person.
  - ✓ There is someone at work who encourages my development.
  - ✓ In the last six months, someone at work has talked to me about my progress.
  - ✓ At work, my opinions seem to count.
  - ✓ The mission/purpose of my company makes me feel my job is important.
  - ✓ My fellow employees are committed to doing quality work.
  - ✓ I have a best friend at work.
  - ✓ This last year, I have had opportunities at work to learn and grow.
- Work groups that have these positive attitudes are 50 percent more likely to achieve customer loyalty and 44 percent more likely to produce above-average profitability.

## Challenge Questions

### 1. What kinds of organizational policies might help to support these beliefs?

Organization policies that sponsor employee commitment should be a primary consideration. Such policies as employee job satisfaction, quality work-life programs, employee empowerment, and affirmative action programs should be of primary consideration by management.

### 2. What can a manager do in his or her everyday behavior to encourage these beliefs?

To encourage these beliefs, managers must translate as many of them as possible into action items. For instance:

- ✓ Making sure that employees know what is expected of them at work.
- ✓ Making sure that everyone has the materials and equipment they need to do their work right.
- ✓ Giving every employee the chance to do what they do best, every day.
- ✓ Praising or recognizing employees for doing good work at least once a week.
- ✓ Striving to care about each employee as a person.
- ✓ Encouraging employee development.
- ✓ Discussing their progress with each employee at least every six months.
- ✓ Encouraging and valuing employee opinions.
- ✓ Making sure that each employee feels that his/her job is important.
- ✓ Showing a commitment to quality work.
- ✓ Encouraging camaraderie at work.
- ✓ Finding ways to help employees learn and grow.

### 3. Why is it that work-groups that hold these beliefs are 50 percent more likely to achieve customer loyalty? What might be the link?

Employees who hold these beliefs are likely to be happier with their jobs and therefore more likely to produce quality products and to provide excellent customer service. The link is the high quality of work life and the feeling that they are an important part of the overall organization, not just a robot hired to fill a specific task.

## CHAPTER 2 OUTLINE

### BIG DATA: PROMISES AND PERILS

- We live in a digital age and a smartphone world. Data are more widely available than ever before. To use data wisely, however, decision makers must never lose sight of two paradoxes:
  - Many organizations are drowning in data, but starved for information.
  - Data-driven decisions are evidence-based, yet there is still a great need for informed judgment and intuition.
- Three key features distinguish big data from more traditional approaches to analytics:
  - Volume: the sheer amount of data that businesses can access has accelerated because most information is now in digital format and comes from many different sources.
  - Velocity
  - Variety: sources of data both internal and external to HR and an enterprise.

### THE L-A-M-P MODEL: FOUNDATION FOR WORKFORCE MEASUREMENT

- The letters in LAMP stand for logic, analytics, measures, and process; four critical components of a measurement system that drives strategic change and organizational effectiveness.
- HR measurement systems are only as valuable as the decisions they improve and the organizational effectiveness to which they contribute.

### FOUR ELEMENTS ARE NECESSARY FOR ENHANCED HUMAN CAPITAL METRICS OF MEASUREMENT:

#### Logic: The “Story” That Connects Numbers and Outcomes

- Logic: to help leaders outside of HR to understand and use the measurement systems to enhance the talent-related decisions they make.

#### Analytics: Drawing Appropriate Conclusions from Data

- Analytics: transforms HR logic and measures into rigorous, relevant insights.

#### Measures: Getting the Numbers Right

- Measures: helps managers “slice and dice” the data in a wide variety of ways (ethnicity, skills, performance, and so on), each manager pursuing his/her own pet theory about employee turnover and why it matters.

### **Process: Creating Actionable Insights**

- Process: to present relatively simple measures and analyses that match the mental models that managers already use. It refers the process of using data to influence key decision makers.
- HR measures can be made more strategic by embedding the measures into a broader framework of logic, analytics, and process that will enable the measures to serve as a force for strategic change. In other words, the LAMP framework can help make measures matter.

### **MORE ON WORKFORCE ANALYTICS**

It is a set of quantitative approaches that answer two simple questions:

1. What do we need to know about our organization and workforce to run the company more effectively?
2. How do we turn that knowledge into action?

## FINANCIAL EFFECTS OF EMPLOYEE ATTITUDES

- **Attitudes** are internal states that focus on particular aspects of, or objects in, the environment. They include three elements:
  - ✓ Cognition
  - ✓ Emotion
  - ✓ Action
- **Job satisfaction** is a multidimensional attitude, made up of attitudes toward pay, promotions, coworkers, supervision, the work itself, and so on.
- **Organizational commitment** is a bond or linking of an individual to the organization that makes it difficult to leave.
- Poor job attitudes lead to lowered productivity and organizational performance.

### Behavior Costing and Employee Attitudes

- The behavior-costing approach to employee attitude valuation is based on the assumption that measures of attitudes are indicators of subsequent employee behaviors.
- These behaviors can be assessed using cost-accounting procedures, and they have economic implications for organizations.

### Measures, Data, and a Causal Model

- In retailing, there is a chain of cause and effect running from employee behavior to customer behavior to profits.
- Employee behavior depends to a large extent on attitude.
- SYSCO created a logical framework on how it creates value from human capital based on the service-profit chain.
  - Effective management practices drive employee satisfaction and engagement.
  - An engaged workforce enables a company to pursue excellence and innovation
  - Excellence and innovation lead to customer satisfaction and long-term profitability and growth.
  - Technology and processes are easy to duplicate, but an engaged workforce is difficult to imitate.

## **COSTING EMPLOYEE ABSENTEEISM**

- In any human resource costing application, it is important to first define exactly what is being measured.
- **Absenteeism** is any failure of an employee to report for, or to remain at, work as scheduled, regardless of reason. The term “as scheduled” excludes vacations, holidays, jury duty, and the like.
- The leading cause of absenteeism is personal illness.
- If workers can vary their work time to fit their personal schedules, if they need not report to a central location, and if they are accountable only in terms of results, then the concept of absenteeism may not have meaning.

### **Analytics and Measures for Employee Absenteeism**

- In the context of absenteeism, analytics refers to formulas and to comparisons to industry averages and adjustments for seasonality.
- Analytics also includes various methodologies, for example, surveys, interviews with employees and supervisors used to identify the causes of absenteeism, and to estimate variation in absenteeism across different segments of employees.
- Measures focus on specific numbers, for example, finding employee pay and benefit numbers, time sampling to determine the lost time associated with managing absenteeism problems.

### Process: Interpreting the Costs of Absenteeism

- There are no industry-specific figures on the costs of employee absenteeism.
- These costs will vary depending on the type of firm, the industry, and the level of employee who is absent.
- The average employee in the United States has about 5.4 unscheduled absences per year.
- The total cost of absenteeism should be calculated both before and after implementing a strategy to reduce absenteeism.
- A question that often arises at this point is, “Are these dollars real? Since supervisors are drawing their salaries anyway, what difference does it make if they have to manage absenteeism problems?”
  - ✓ One way to account for that time, in financial terms, is in terms of total pay to the employee. The idea is to use the value of what employees earn as a proxy for the value of their time.
  - ✓ Total pay, however, is a convenient proxy, but must be used with great caution. In most situations, the costs of employee time simply do not change as a result of their allocation of time. They are paid no matter what they do, as long as it is a legitimate part of their jobs.
  - ✓ The correct concept is the opportunity cost of the lost value that employees would have been creating if they had not been using their time to manage absenteeism problems. That cost is obviously not necessarily equal to the cost of their wages, benefits, and overhead.
  - ✓ It is so difficult to estimate the opportunity cost of employees’ time that it is very common for accounting processes just to recommend multiplying the time by the value of total pay. The important thing to realize is the limits of such calculations, even if they provide a useful proxy.

### COSTING EMPLOYEE TURNOVER

- Organizations need a practical procedure for measuring and analyzing the costs of employee turnover.
- **Turnover** may be defined as any permanent departure of an employee.
- In the U.S., turnover rates vary considerably by industry and economic conditions. Turnover may be functional, where the employee’s departure produces a benefit for the organization, or dysfunctional, where the departing employee is someone the organization would like to retain.
- Controllable turnover is “voluntary”; uncontrollable turnover is “involuntary.”



## **Analytics: Components of Turnover Costs**

- There are three broad categories of costs in the basic turnover costing model:

- ✓ Separation costs

1. Exit interview
2. Administrative functions related to termination
3. Separation pay, if applicable
4. Increased unemployment tax

- ✓ Replacement costs

1. Communicating job availability
2. Pre-employment administrative functions
3. Entrance interview
4. Testing and/or other assessment procedures
5. Staff meetings
6. Travel and moving expenses
7. Post-employment acquisition and dissemination of information
8. Medical examinations

- Training costs

1. Informational literature

- ✓ 2. New employment orientation (on-boarding)

3. Instruction in a formal training program
4. Instruction by employee assignment

Reduced productivity during the learning period is generally not included along with the cost elements instruction in a formal training program and instruction by employee assignment.

## **The Costs of Lost Productivity and Lost Business**

- The costs of lost productivity and lost business in the fully loaded cost of employee turnover can be included, if your organization can tally those costs accurately. Such costs are not easily estimated in many jobs, and that is why they are not routinely included in the cost of turnover. Seven additional cost elements might be included:
  - ✓ The cost of additional overtime to cover the vacancy ( $\text{Wages} + \text{Benefits} \times \text{Number of hours of overtime}$ )
  - ✓ The cost of additional temporary help ( $\text{Wages} + \text{Benefits} \times \text{Hours paid}$ )
  - ✓ Wages and benefits saved due to the vacancy (these are subtracted from the overall tally of turnover costs)

- ✓ The cost of reduced productivity while the new employee is learning the job  
(Wages + Benefits X Length of the learning period X Percentage reduction in productivity)
- ✓ The cost of lost productive time due to low morale of remaining employees  
(estimated as aggregate time lost per day of the work group X Wages + Benefits of a single employee X Number of days)
- ✓ The cost of lost customers, sales, and profits due to the departure (Estimated number of customers X Gross profit lost per customer X Profit margin in percent)
- ✓ Cost of additional (related) employee departures (If one additional employee leaves, the cost equals the total per-person cost of turnover.)

### **The Total Cost of Turnover**

- The sum of the three component costs—separation, replacement, and training—represents the total cost of employee turnover for the period in question.
- The purpose of measuring turnover costs is to improve management decision-making.
- A turnover-reduction strategy might include:
  - ✓ Anticipate who might leave, taking into account the criticality of his or her skill set, and take action to prevent the departure. Providing realistic job previews.
  - ✓ Conducting and following up on employee surveys.
  - ✓ Instituting merit-based rewards to retain high performers.
- The fully loaded cost of turnover includes not just separation and replacement costs, but also:
  - ✓ An exiting employee's lost leads and contacts
  - ✓ The new employee's depressed productivity while learning
  - ✓ The time coworkers spend guiding him/her
- The combined effect of these factors can easily cost 150 percent or more of the departing person's salary.

### **FINANCIAL EFFECTS OF WORK-LIFE PROGRAMS**

- "Work-life" recognizes that employees at every level in an organization face personal or family issues that can affect their performance on the job.
- A work-life program includes any employer-sponsored benefit or working condition that helps an employee balance work and non-work demands.
- At a general level, work-life programs span five broad areas:
  - ✓ Child and dependent care benefits

- ✓ Flexible working conditions
- ✓ Leave options
- ✓ Information services and HR policies
- ✓ Organizational cultural issues

### **The Logic of Work-Life Programs**

- There are consequences, both behavioral and financial, to decisions to offer/not to offer, one or more work-life programs.
- If an organization chooses not to offer such programs, there may be negative consequences including heightened stress, more burnout, a higher likelihood of mistakes, and more refusals of promotions by employees already feeling the strain of pressures for balance between their work and non-work lives.
- Assuming an organization does offer work-life programs, the financial and nonfinancial effects of the programs depend on several factors including the range, scope, cost, and quality of the programs, support for the programs from managers and supervisors, and the extent and quality of communications about them to employees.
- If those conditions are met, it is reasonable to expect improvements in talent management, human-capital outcomes, and financial, operational, and business outcomes.

### **Analytics and Measures: Connecting Work-Life Programs and Outcomes**

- For purposes of illustration, we will consider the financial effects of only three possible work-life interventions: child care, elder care, and flexible work arrangements.
- **Dependent Care**
  - Citigroup owns or participates in 12 child-care centers in the United States. Employees pay about half the cost to use Citigroup facilities managed by Bright Horizons Family Solutions or at non-Citigroup back-up centers. In two follow-up studies, Citigroup found the following:
    - ■ A 51 percent reduction in turnover among center users compared to non-center users
    - ■ An 18 percent reduction in absenteeism
    - ■ A 98 percent retention rate of top performers
- **Flexible Work Arrangements**
  - ✓ The financial and nonfinancial effects that have been reported for these key outcomes: talent management and human-capital outcomes which affect cost and performance, leading to financial, operational, and business outcomes.

- **Talent Management**

- ✓ IBM's global work-life survey demonstrated that flexibility is an important aspect of employees' decision to stay with the company.
  - Work-life balance-of which flexibility is a significant component-is the second leading reason for potentially leaving IBM, behind compensation and benefits.
  - Conversely, employees with higher work-life balance scores reported significantly greater job satisfaction and were much more likely to agree with the statement "I would not leave IBM."
  - In the Corporate Finance organization, 94 percent of all managers reported positive impacts of flexible work options on the company's "ability to retain talented professionals."
  - In light of these findings showing the strong link between flexibility and retention, IBM actively promotes flexibility as a strategy for retaining key talent.

- **Human-Capital Outcomes—Employee Commitment**

- ✓ At Deloitte & Touche, one employee-survey item asked whether employees agreed with the statement "My manager grants me enough flexibility to meet my personal/family responsibilities." Those who agreed that they have access to flexibility scored 32 percent higher in commitment than those who believed they did not have access to flexibility.
- ✓ AstraZeneca found that commitment scores were 28 percent higher for employees who said they had the flexibility they needed, compared to employees who did not have the flexibility they needed.

- **Financial Performance, Operational and Business Outcomes—Client Service**

- ✓ Concern for quality and continuity of customer service is a concern raised about whether flexibility can work in a customer-focused organization.
- ✓ GlaxoSmithKline surveyed customers as part of the evaluation of its flexibility pilot program. 89 percent of customers said they had not seen any disruption in service, 98 percent said their inquiries had been answered in a timely manner, and 87 percent said they would not have any issues with the program becoming a permanent work schedule.
- ✓ Such studies make it possible to reframe the discussion and to position flexibility not as a "perk," employee-friendly benefit, or advocacy cause, but as a powerful business tool that can enhance talent management, improve important human capital outcomes, and boost financial and operational performance.

### **Cautions in Making the Business Case for Work-Life Programs**

- Senior leaders have to buy into the logic that underlies the adoption of work-life programs.
- A three pronged strategy for buy-in includes:
  - Making the business case through data and research
  - Offer to train managers on flexible workplace approach issues
  - Utilize surveys and focus groups

### **FINANCIAL EFFECTS OF COLLABORATING AND SHARING KNOWLEDGE**

- Global competition and the rapidly changing financial environment are driving the need to innovate constantly and effectively
- An increasingly important part of competitive advantage is the ability to develop and share insights

### **ANSWERS TO DISCUSSION QUESTIONS**

#### **2-1: What are the key elements of the LAMP model? What does each contribute?**

The letters LAMP stand for logic, analytics, measures, and process. These four critical components drive strategic change and organizational effectiveness. Logic connects numbers and outcomes. Analytics help to draw appropriate conclusions from data. Measures help us get the numbers right so we can make strategically sound decisions. Process helps to create actions that influence key decision makers.

#### **2-2: Given positive financial returns from high-performance work practices, why don't more firms implement them?**

There are several possibilities. First, these work practices require a considerable degree of sophistication and a well-trained workforce (e.g., a team-based culture). Not all organizations meet these criteria. Second, most of these work practices are expensive (e.g., developing valid staffing procedures), and not all organizations have the resources. Last, the evidence is not clear that all organizations should even want to adopt these practices.

HR practices should “fit” the business strategy of the firm (cost, quality, innovation, or speed). Some of these “high performance work practices” seem better suited to certain strategies than to others. Examples include: a) the idea that a firm should invest considerable amounts in employee training is inconsistent with a cost strategy, b) the idea that a firm should use pay-for-performance is at odds with most TQM philosophies, and c) employee involvement in decision making may not be possible when pursuing a strategy of speed.

#### **2-3: Why is management interested in the financial effects of employee attitudes?**

There is a direct link assumed between employee attitudes and behavior. Managers assume that employees who are dissatisfied will tend to be absent or late more frequently, quit more often, and place less emphasis on customer satisfaction. Research and behavior costing reveal this assumption is valid.

**2-4: Discuss three controllable and three uncontrollable costs associated with absenteeism.**

Some types of costs are controllable through prudent HR decisions, while other costs are beyond the control of the organization. For example, if an employee is missing work due to family or caregiver obligations, or because of morning traffic jams, the cost may be controllable by introducing flexible work hours. On the other hand, absenteeism due to illness, death, and jury duty are uncontrollable. Unless, of course, the illness is caused by some factor with the work environment, such as poor ventilation and hazardous fumes.

**2-5: Why should efforts to reduce turnover focus only on controllable costs?**

Because uncontrollable costs are exactly that—uncontrollable. Any effort to try to reduce them is a waste of valuable resources that could be better used trying to reduce controllable costs.

**2-6: In making the business case for work-family programs, what points would you emphasize?**

Because no one set of facts and figures makes sense for all firms, the answer to this question should be based on a specific situation. In a general sense, however, it would be good to point out that:

- A program like onsite child care can reduce employee absenteeism and voluntary turnover by more than 20 percent.
- More experienced employees are moving into the role of caregiver, which will force many to miss work or to quite their jobs.
- Employees are twice as likely to report burnout and stress in companies that do not offer work-life programs.
- Implementing work-life programs has a positive effect on company stock prices.

**2-7: What might be some examples of jobs or business models where increasing (or decreasing) turnover makes sound business sense?**

Even in a firm with a low turnover rate, say, 4 per cent per year, it could be extremely costly if those who left were members of pivotal talent pools in mission-critical jobs, high performers, and difficult to replace. More generally, *reducing* employee turnover tends to have the largest effects on organizational success under three conditions:

- Turn over costs are high and reducing turnover can save those costs.

- Those leaving are much more valuable than their replacements.
- There is great uncertainty about the availability or quality of replacements.

Conversely, *increasing* employee turnover tends to have the largest effects on organizational success under the opposite conditions:

- Turnover costs are low and reducing turnover saves little.
- Those leaving are much less valuable than their replacements.
- There is certainty about the availability or quality of the replacements.

**2-8: How would you answer the question, “Is employee turnover good or bad for an organization?”**

Many people assume that a low rate of employee turnover is good, and the lower the better. It depends on where in an organization the turnover happens (in a pivotal talent pool or not), on whether the employee who leaves is a good or poor performer, and on how easy it is to replace him or her.

**2-9: If you wanted to quantify the financial effects of collaboration and sharing knowledge in a hospital, how might you proceed?**

Personal reflection question.

**2-10: As a recruiter, your boss says to you, “Don’t worry about not filling that position. We’re saving money.” Under what circumstances might it be more costly not to fill an open position?**

Personal reflection question.

**2-11: Why don’t more dads take paternity leave, even when their employers offer it.**

It can often be the case that the culture of the organization does not support or encourage fathers to take leave for the birth or placement of a child, even though the policies allow for the benefit.

**CASE 2-1: ABSENTEEISM AT ONO, INC.**

ONO is a small auto supply company with 11 employees and two supervisors. Owner Fred Donofrio has asked his senior supervisor, Cal Jenson, to report how much absenteeism is costing the company and what can and should be done about it. There are enough data given in the case to allow students to follow the text method for calculating the cost of absenteeism at ONO.

**Case Questions**

1. **What figure will Cal Jenson report to Fred Donofrio for the amount that absenteeism cost ONO last year?**

Following the method in the text, there are three categories of costs associated with absenteeism:

a. Compensation lost to absent employees

Salary and benefits amount to \$27.93 (\$21 salary + \$6.93 benefits) per hour for employees. Since 539 hours were lost to absenteeism last year, the total cost here is:

$$\$27.93 \times 539 = \$15,054.27$$

b. Supervisory compensation lost in managing problems of absenteeism

Salary and benefits amount to \$37.24 (\$28 salary + 9.24 benefits) per hour for supervisors. Since 1.5 supervisory hours were lost per day of employee absenteeism (and there were 67.375 days absent), the total cost here is:

$$\$37.24 \times 1.5 \times 67.375 = \$3,763.57$$

c. Other incidental costs

\$3,100 in cost to bring in temporary labor

The total costs of absenteeism last year are the sum of a, b, and c above, or \$21,917.81.

**2. Is absenteeism a serious problem at ONO? Why or why not?**

The \$21,917.81 figure for total absenteeism costs equates to \$1,992.53 per employee (21,917.81 / the 11 employees we are studying) Note: It is common for students to divide the total cost by 13 rather than 11 because they include the two supervisors. The supervisors should not be included when determining the absenteeism cost of the employees they supervise.

Further, it represents 8.8% of ONO's net profits ( 5.8% of profits before taxes). Therefore, absenteeism does indeed appear to be a serious problem.

**3. What recommendations for action could Cal Jenson make to Fred Donofrio?**

Cal must recognize that at least some of the absenteeism is unavoidable (e.g., serious medical problems) and hence the costs involved are uncontrollable. For that absenteeism which is controllable, ONO could consider one of two basic approaches. A "tighter control" approach could be instituted whereby employees would need to present medical verification for illnesses of more than one day or those occurring on Mondays or Fridays. The number of paid sick-leave days could be reduced, and absent employees forced to use annual leave in its place.



An alternate approach would be to reward employees for coming to work. Rewards could be in many different forms, from simple praise and recognition to lottery schemes for which employees would need good attendance to participate. Also, the use of “well pay” could be considered. In studying the use of any of these approaches, ONO knows exactly how much it can afford to spend to reduce absenteeism (i.e., up to \$13,199.44 to reduce absenteeism to zero), and therefore can make its final decision with some knowledge of an estimate of the cost-benefit payoff associated with the final choice.