USEFUL TOOLS TO MEASURE ROI

On these pages are sample calculators from Cornell University's Linking Economic Development and Child Care Research Project[1] to estimate absenteeism, turnover, cost-benefit analysis, break-even cost, and payback.

Employers can adapt both the market and company input assumptions within to calculate the costs for their own employees and investments.

Absenteeism Calculator

Of Company A's survey respondents with children under the age of 13 (483), 34.64 percent report missing one to three full workdays in the past three months due to childcare conflicts. National statistics indicate that an average employee with children misses eight to nine days of work each year due to childcare issues. Assuming these employees miss an average total of eight full days a year, the estimated absenteeism cost for 35 percent of the 483 respondents is $282,276.

THE FOLLOWING ASSUMPTIONS WERE USED

- Average salary (exempt): $70,000
- Average salary (non-exempt): $33,000
- 59 percent of population is exempt; 41 percent are non-exempt

CALCULATION

- 8 days of pay per exempt employee ($70,000) = $2,153.84
- 8 days of pay per non-exempt employee ($33,000) = $1,015.38
- 34.64 percent of 483 employees = 167 employees
- 99 exempt employees x $2,153.84 = $213,230.16
- 68 non-exempt employees x $1,015,38 = $69,045.00

TOTAL COST

$282,276 for the 167 survey respondents above (who report missing one to three work days per quarter due to childcare conflicts). Since the sample conducted in the survey is representative of all Company A's employees, the absenteeism costs of 34.64 percent of the entire employee population with childcare responsibilities is $3.4 million.

1 Karen Shellenback, "Child Care & Parent Productivity: Making the Business Case," Linking Economic Development & Child Care Research Project, Cornell University Department of City and Regional Planning, 2004.

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Turnover Calculator

Of 2,727 respondents of an employer survey conducted at Company B, 42.4 percent report actively looking for or considering a more flexible job at a different company to manage work and personal life. Assuming one-third of those looking or considering looking leave Company B, the estimated replacement cost of work/life turnover for these survey respondents is about $22 million.

THE FOLLOWING ASSUMPTIONS WERE USED

- Average salary (exempt): $50,000
- Average salary (non-exempt): $28,000
- 70 percent of population is exempt; 30 percent are non-exempt

CALCULATION

- 42.4 percent of 2,727 employees = 1,156 employees
- 33 percent of the 1,156 employees actually leave = 382 employees
- Replacement cost per exempt employee ($50,000 x 1.5)1 = $75,000
- Replacement cost per non-exempt employee ($28,000 x 0.75) = $21,000
- 267 separated exempt employees x $75,000 = $20,025,000
- 115 separated non-exempt employees x $21,000 = $2,415,000

TOTAL REPLACEMENT COST

About $22 million, out of a payroll of over $118 million

Multiple studies found replacement costs to be one and a half times the annual salary of an exempt employee and three-quarters of the wages of non-exempt employees. Other studies argue that for exempt employees, replacement costs could be as high as 250 percent.

Karen Shellenback, "Child Care & Parent Productivity: Making the Business Case," Linking Economic Development & Child Care Research Project, Cornell University Department of City and Regional Planning, 2004.

FOUR WAYS TO ASSESS FINANCIAL RETURN[2]

Once the costs of the problem are known, an employer can calculate the benefits of any childcare intervention. Four methods companies have used to calculate return are as follows:

COST/BENEFIT ANALYSIS

$$\text{Cost/ Benefit Analysis} = \text{Savings or Profits (Direct and Indirect)} - \text{Costs (Direct + Indirect)}$$

This formula does not measure relative return on investment, but instead measures overall profitability. Although this calculation can be complex, it is most accurate when all appropriate direct and indirect costs and savings are included.

BREAK EVEN POINT

$$\text{Break Even Point} = \frac{\text{Fixed Costs}}{\text{Cost Savings per Unit}}$$

This formula helps one understand the usage rate needed in order to re-coup costs.

Example: Fixed annual costs to operate an On-site Corporate Child Care Center with large Infant Care component = $800,000 per year. Cost savings (average retention savings for a new parent based on average turnover costs per exempt professional = $40,000 salary x 1.5 [Phillips and Reisman, 1992] = $60,000.)

Formula Example: $800,000/$60,000 = Must retain 13.3 new parents per year to re-coup costs.

ROI (RETURN ON INVESTMENT)

$$\text{ROI} = \frac{\text{Change in Operating Revenue}}{\text{Investment in Programs}}$$

or

$$\frac{\text{Total Benefits - Total Costs}}{\text{Total Costs}}$$

This formula compares the relative profitability of a program with the investment required to implement and maintain it.

Example: Change in Operating Revenue ($500,000) of a Back-up Child Care Center after investment of School-Age Summer Camp component ($200,000).

Formula Example: $500,000/$200,000 = Return of 2.5 (Positive ROI)

Return of $2.50 for every $1 invested.

PAYBACK

$$\text{Payback} = \frac{\text{Net Initial Investment}}{\text{Expected Net Annual Related Profits and/or Savings}}$$

This formula measures how long it will take to re-coup an investment.

Example: Initial investment costs to build an On-Site Corporate Child Care Center = $800,000. Net Annual Savings = $570,000. (Net annual savings can come from decreased employee absenteeism and/or turnover costs, increased productivity, savings from consolidating child program administration, and possibly other outcome variables.)

Formula Example: $800,000/$570,000 = 1.4 Years

2 Karen Shellenback, "Child Care & Parent Productivity: Making the Business Case," Linking Economic Development & Child Care Research Project, Cornell University Department of City and Regional Planning, 2004.