Designing pay level essay

Publicly Available Data In the United States, the Bureau of Labor Statistics (BLESS) is the major source of publicly available compensation (cash, bonus, and benefits but not stock ownership) data. The BLESS publishes extensive information on various occupations (very broadly defined-? e. G. , professional, executive, sales, and administrative support are the disgorges for white-collar occupations) in different geographic areas. According to the BLESS, administrative support in Birmingham, Alabama, pays $12. 48 an hour in the private sector and $13. 78 in government.

In Iowa City, the comparable rates are $12. 38 and $17. 98. Public sector employers use BLESS data more often than do private sector employers-? especially those in Iowa! While some private firms may track the rate of change in BLESS data as a cross-check on other surveys, the data are often not specific enough to be used alone. Tailoring analysis to specific industry segments, select companies, and specific Job content is not feasible. Word of Mouse” Once upon a time (about 15 years ago) individual employees had a hard time comparing their salaries to others’.

Information was gathered haphazardly, via word of mouth. Today, a click of the mouse makes a wealth of data available to everyone. Employees are comparing their compensation to data from the BLESS or Salary. Com or specification’s Web sites. This ease of access means that managers must be able to explain (defend?) the salaries paid to employees compared to those a mouse click away. Whole Foods confronted this issue via an “ open book” list of last year’s pay of al employees. Unfortunately, the quality of much salary data on the Web is highly data were collected, what pay forms are included, and so on.

Most are based on information volunteered by site users. Some popular Web sites even misuse the cost- of-living index when making geographic salary comparisons. On the other hand, Salary. Com includes a compensation glossary, identifies where the site’s information comes from, and explains what the statistics mean. Put in programmer for Birmingham, Alabama, and you will be asked to choose from 37 Job descriptions. Exhibit 8. 5 shows the Salary. Mom results for Just three of those programmer Jobs, both at the national level and in Birmingham.

By comparison, all programmer positions are included in a single category in the BLESS survey, making it all but impossible to get a good match. Many Surveys (But Few That Are Validated) Opinions about the value of consultant surveys are rampant; research is not. Do Hay, Mercer, Towers Perrine, Redford, and Clark Consulting surveys yield significantly different results? The fact that companies typically use three or more surveys (for all job types) suggests that different surveys do, in fact, imply different pay levels. Many firms select one survey as their primary source and use others to cross-check or the results.

Some employers routinely combine the results of several surveys and weight each survey in this composite according to somebody Judgment of the quality of the data reported. No systematic study of the effects of differences in market definition, participating firms, types of data collected, quality of data, analysis performed, and/ or results is available. Issues of sample design and statistical inference are seldom considered. For staffing decisions, employment test designers port the test’s performance against a set of standards (reliability, validity, etc.).

Job evaluation’s reliability and validity (or lack of) has been much studied and debated. Yet for market surveys and analysis, similar standards do not exist. Without reliability and validity metrics, survey data is open to challenge. SURVEY LEVELING A general guideline is to select as few employers and Jobs as necessary to accomplish the purpose. The more complex the survey, the less likely other employers will participate. There are several approaches to selecting Jobs for inclusion. Benchmark- Job Approach Benchmark Jobs have stable Job content, are common across different employers, and include sizable numbers of employees.

If the purpose of the survey is to price the entire structure, then benchmark Jobs can be selected to include the entire Job structure-? all key functions and all levels, Just as in Job evaluation. In Exhibit 8. 6 , the more heavily shaded Jobs in the structures are benchmark Jobs. Benchmark Jobs are chosen from as many levels in each of these structures as can be matched with the descriptions of the benchmark Jobs that are included in the survey. Exhibit 8. Indicates that about one in three organizations are able to match over 80 percent of Jobs to salary survey Jobs, with the remaining organizations report less success in matching.

The degree of match between the surveys benchmark Jobs and each company’s benchmark Jobs is assessed by various means. The Hay Group, for example, has installed the same Job evaluation plan in many companies that participate in its surveys. Consequently, Jobs in different organizations can be compared on their Job evaluation points and the distribution of points among the compensable factors. Other surveys simply ask participants to

check the degree of alee, etc.). A good survey will include this information in its results.

A consultant friend insists that when the compensation manager of a company changes, the Job matches change, too. Low-High Approach If an organization is using skill-competency-based structures or generic Job descriptions, it may not have benchmark Jobs to match with Jobs at competitors who use a traditional Job-based approach. Market data must be converted to fit the skill or competency structure. The simplest way to do this is to identify the lowest- and highest-paid benchmark Jobs for the relevant skills in the relevant market and to use he wages for these Jobs as anchors for the skill-based structures.

Work at various levels within the structure can then be slotted between the anchors. For example, if the entry market rate for operator A is $12 per hour and the rate for a team leader is $42 per hour, then the rate for operator B can be somewhere between $12 and $42 per hour. The usefulness of this approach depends on how well the extreme benchmark Jobs match the organization’s work and whether they really do tap the entire range of skills. Hanging a pay system on two pieces of market data raises the stakes on the accuracy of those data.

Benchmark Conversion/Survey Leveling In cases where the content (e. G. , Job description) of an organization’s Jobs does not sufficiently match that of Jobs in the salary survey, an effort can be made to quantify the difference via benchmark conversion. If an organization uses Job evaluation, then its Job evaluation system can be applied to the survey Jobs. The magnitude of

difference between Job evaluation points for internal Jobs and survey jobs provides an estimate of their relative value and thus guidance for adjusting the market data. (Again, a Judgment. ORGANIZATION DATA Three basic types of data typically are requested: (1) information about the organization, (2) information about the total compensation system, and (3) specific pay data on each incumbent in the Jobs under study. Exhibit 8. 8 lists the basic data elements and the logic for including them. No survey includes all the data that will be discussed. Rather, the data collected depend on the purpose of the survey and the Jobs and skills included. Organization Data This information reflects the similarities and differences among organizations in the survey.

Surveys of executive and upper-level positions include financial and reporting relationships data, since compensation for these Jobs is more directly related to the organization's financial performance. Typically, financial data are simply used to group firms by size, expressed in terms of sales or revenues, rather than to analyze competitors' performance. These data are used descriptively to report pay levels and mix by company size. The competitors' data have not been used to compare competitors' productivity (revenues to compensation) or labor costs.

But this is changing. The increased gathering of " competitive intelligence" is changing the type of organization data collected and the way it gets used. Metrics of organization performance such as turnover and revenues are being collected. Some surveys such as Clark and Redford collect turnover data. Other outcomes such as earnings per share, market share, customer

satisfaction, employee pay satisfaction, and recruiting available sources (e. G. , Google Financial, Thompson Financial).

Examples include metrics on organization success (revenues, net income, customer satisfaction), turnover (voluntary quit rates), and recruiting (yield ratios). Total Compensation Data Information on all types of pay forms is required to assess the total pay package and competitors' practices. The list shown in Exhibit 8. 8 reveals the range of forms that old be included in each company's definition of total compensation. As a practical matter, it can be hard to include all the pay forms. Too much detail on benefits, such as medical coverage deductibles and flexible work schedules, can make a survey too cumbersome.

Alternatives range from a brief description of a benchmark benefit package to including only the most expensive and variable benefits to an estimate of total benefit expenses as a percentage of total labor costs. Three alternatives-? base pay, total cash (base, profit sharing, bonuses), and total compensation (total cash plus unifies and perquisites)-? are the most commonly used measures of compensation. Exhibit 8. 9 draws the distinction between these three alternatives and highlights the usefulness and limitations of each. Exhibit 8. 0 shows some results of conducting a pay survey that includes these three measures on a sample of engineers. A: Base pay. This is the amount of cash the competitors decided each Job and incumbent is worth. A company might use this information for its initial observations of how " good" the data appear to fit a range of Jobs. The market line A is based on base pay. B: Total cash. This is base plus bonus-? line B in the exhibit. Total cash measures reveal competitors' use of

performance-based cash payments. C: Total compensation. This includes total cash plus stock options and benefits.

Total compensation reflects the total overall value of the employee (performance, experience, skills, etc.) plus the value of the work itself. It is no surprise that for all seven Jobs, total compensation is higher than base pay alone or base plus bonus. However, the variability and magnitude of the difference may be a surprise: from $7, 842 (34 percent) for the Job of technician A, to $244, 103. 38 (182 percent) for the Job of manager 3. Base pay is, on average, only 35 percent of total compensation for the manager as in this survey. So the measure of compensation is an important decision.

Misinterpreting competitors' pay practices can lead to costly misprinting of pay levels and structures. VERIFY DATA A common first step is to check the accuracy of the Job matches, and then check for anomalies (I. E. , an employer whose data are substantially out of line from data of others), age of data, and the nature of the organizations (e. G. , industry, size-? State Farm Insurance versus Google). Exhibit 8. 11 is an excerpt from the survey used to prepare Exhibit 8. 12 . The survey was conducted at the behest of Fastest, a small start-up familiar to many readers.

While there were a number of Jobs included in the survey, we use information for Just one Job-? engineer I-? to illustrate. As you can see, surveys do not make light reading. However, they contain a wealth of information. To extract that information, step through the portal … To being the Fastest analyst.. Part A of the survey contains the description of the survey Job. If the company Job is similar but not identical, some companies

use the benchmark conversion/survey leveling approach; that is, they multiply the survey data by some factor that the analyst Judges to be the difference between the company Job and the survey Job.

Leveling is another example of Judgment entering survey analysis. It clearly leaves the objectivity of the decisions open to challenge. Anomalies Part B of the survey shows actual engineer 1 salaries. Perusal of salary data gives the analyst a sense of the quality of the data and helps identify any areas for additional consideration. For example, Part B of Exhibit 8. 11 shows that no engineer 1 at company 1 receives stock options, and five receive no bonuses. The bonuses range from $500 to $4, 000. (Because there are 585 engineer Is in this survey, we have not included all their salary information. Individual-level data provide a wealth of information about specific practices. Understanding minimums, maximums, and what percent actually receive bonuses and/or options is essential. Unfortunately, many surveys provide only summary information such as company averages. Part C of Exhibit 8. 11 provides company data. Again, the first step is to look for anomalies: 1 . Does any one company dominate? If so (I. E. , company 57), a separate analysis of the largest company’s data will isolate that employer’s pay practices and clarify the nature of its influence. . Do all employers show similar patterns? Probably not. In our survey, base pay at company 1 ranges from $36, 500 to $79, 000 for a single job. This raises the possibility that this company might use broad bands. While seven of the companies have a bonus-to-base-pay ratio of around 2 to 3 percent, company 15 pays an average bonus of $8, 254 for a bonus-to-base ratio of over 6 percent. 3. Outliers? Company 51 gives one of its engineers options valued at $74, 453

on top of base pay. An analyst may consider dropping a company with such an atypical pay practice.

The question is, What difference will it make if certain companies are dropped? What difference will it make if they are included? The best way to answer questions on anomalies is to do an analysis of them alone. They may have deliberately differentiated themselves with pay as part of their strategy. Learning more about competitors that differentiate can offer valuable insights. Combining outliers' pay data with their financial may reveal that the most successful competitors also use larger bonuses for their engineers. Part D at the bottom of Exhibit 8. 1 contains summary data: five different measures of base pay, cash, and total compensation, as well as the percent of engineers who receive bonuses and options. The data suggest that most of Fascist's competitors use bonuses but are less likely to use options for this particular Job. Summary data help abstract the survey information into a smaller number of measures for further statistical analysis. Statistics help Fastest get from pages of raw data (Exhibit 8. 11) to graphs of actual salaries (Exhibit 8. 12) and from there to a market line that reflects its competitive pay policy.

FREQUENCY DISTRIBUTION covered in basic statistics classes, a number of Web sites are probably more fun. Our favorite lets us click anywhere we want on a graph to see how adding that new data mint (the mouse click) changes a regression line. A useful first step in our analysis is to look at a frequency distribution of the pay rates. Frequency Distribution Exhibit 8. 12 shows two frequency distributions created from the data in the Exhibit 8. 11

survey. The top one shows the distribution of the base wages for the 585 engineer Is in increments of $1 , OHO.

The second one shows the total compensation for 719 engineer as in increments of $10, 000. (The wide range of dollars-? from under $90, 000 to over the reason that many surveys switch to logs of dollars for higher-level positions. Frequency distributions help visualize information and may highlight anomalies. For example, the base wage above $79, 000 may be considered an outlier. Is this a unique person? Or an error in reporting the data? A phone call (or e-mail) to the survey provider may answer the question. Shapes of frequency distributions can vary.

Unusual shapes may reflect problems with Job matches, widely dispersed pay rates, or employers with widely divergent pay policies. If the data look reasonable at this point, one wag has suggested that it is probably the result of two large errors that offset one another. Central Tendency A measure of central tendency reduces a large amount of data into a single number. Exhibit 8. 13 defines commonly used measures. The distinction between “ mean” and “ weighted mean” is important. If only company averages are reported in the survey, a mean may be calculated by adding each company’s base wage and dividing by the number of companies.

While use of the mean is common, it may not accurately reflect actual labor market conditions, since the base wage of the largest employer is given the same weight as that of the smallest employer. Weighted mean is calculated y adding the base wages for all 585 engineers in the survey and then dividing by 585 ($46, 085). A weighted mean gives equal weight to each

individual employee’s wage. Variation The distribution of rates around a measure of central tendency is called variation. The two frequency distributions in Exhibit 8. 12 show very different patterns of variation.

Variation tells us how the rates are spread out in the market. Standard Deviation is probably the most common statistical measure of variation, although its use in salary surveys is rare. Quartiles and percentiles are more common measures in salary survey analysis. Recall that someone’s policy was “ to be in the 75th percentile nationally. ” This means that 75 percent of all pay rates are at or below that point and 25 percent are above . Quartiles (25th and 75th percentiles) are often used to set pay ranges. MARKET PAY LINE Look again at Exhibit 8. 10.

It shows the results of the Fastest analyst’s decisions on which salary survey Jobs to include that are Judged to closely match internal benchmark Jobs (the seven Jobs on the x [horizontal] axis), which companies to include, and which measures of pay to use. For each of the compensation metrics, a line has been drawn connecting the pay for the seven Jobs. Jobs are ordered on the horizontal axis according to their position (I. E. , number of Job evaluation points) in the internal structure. Thus, the line trends upward to create a market line. A market market rates paid by competitors (market survey) on the vertical axis.

It summarizes the distribution of going rates paid by competitors in the market. A market line may be drawn freehand by connecting the data points, as was done in Exhibit 8. 10, or statistical techniques such as regression analysis may be used. Regression generates a straight line that best fits the

data by minimizing the variance around the line. Exhibit 8. 5 shows the regression lines that use the pay survey data in Exhibit 8. 10 as the dependent variable(s) and the Job evaluation points of matched Fastest Jobs as the independent variable. Compare the data tables in Exhibit 8. 10 and Exhibit 8. 15. Exhibit 8. 0 shows the market rates for survey Jobs. Exhibit 8. 15 shows the Job evaluation points for the Fastest Jobs that match these survey Jobs plus the regression's statistical " prediction" of each pay measure for each Job. The actual base pay for the survey Job Tech A is $22, 989 (Exhibit 8. 10); the " predicted" base pay for the Job is $23, 058 (Exhibit 8. 15). In Exhibit 8. 16, we focus in on he regression results that use base pay from the survey as the dependent variable. The diamonds are the actual results of the survey and the solid line is the regression result. Regression smoothes large amounts of data while minimizing variations.