LECTURE 4: JOB EVALUATION AND WAGES STRUCTURE (PART 1)

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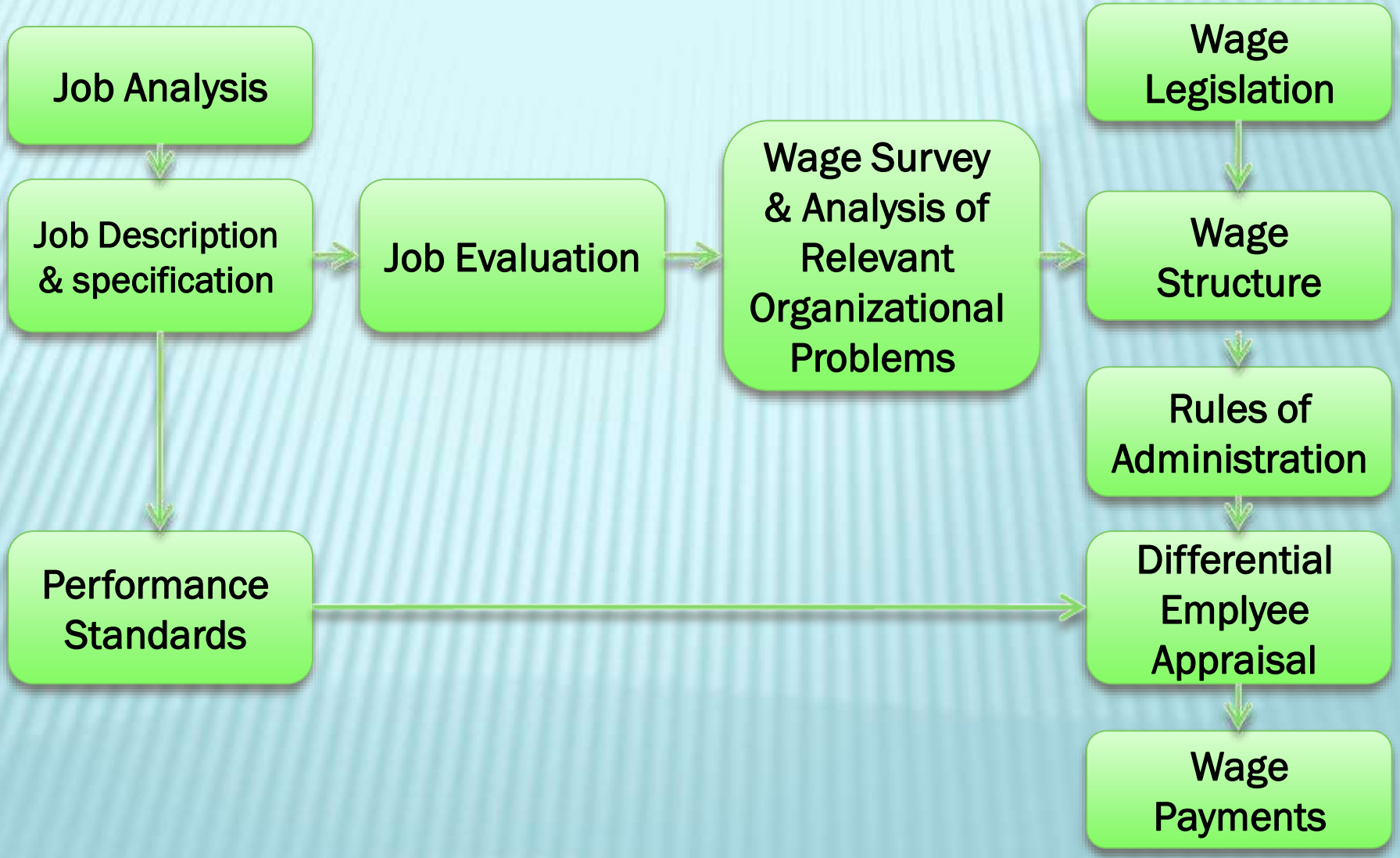
For Students of 1 Master, HRM

Course: Wages and incentives management

LEARNING OBJECTIVES

- To understand the Wage Determination Process
- To understand the job evaluation methods
- To know the Concept of Wage Surveys
- To understand the Preparation of a Wage Structure

WAGE DETERMINATION PROCESS



JOB EVALUATION

JOB EVALUATION DEFINITION

- Job evaluation is a systematic process for defining the relative worth or size of jobs within an organization in order to establish internal relativities.

JOB EVALUATION PROCESS

Job Analysis

- Job descriptions.
- Job specifications.

Job Evaluation

- The actual process of grading, rating or evaluating the job occurs.

Job Pricing

- It involves converting the relative job values into specific monetary values.

JOB DESCRIPTION & SPECIFICATION

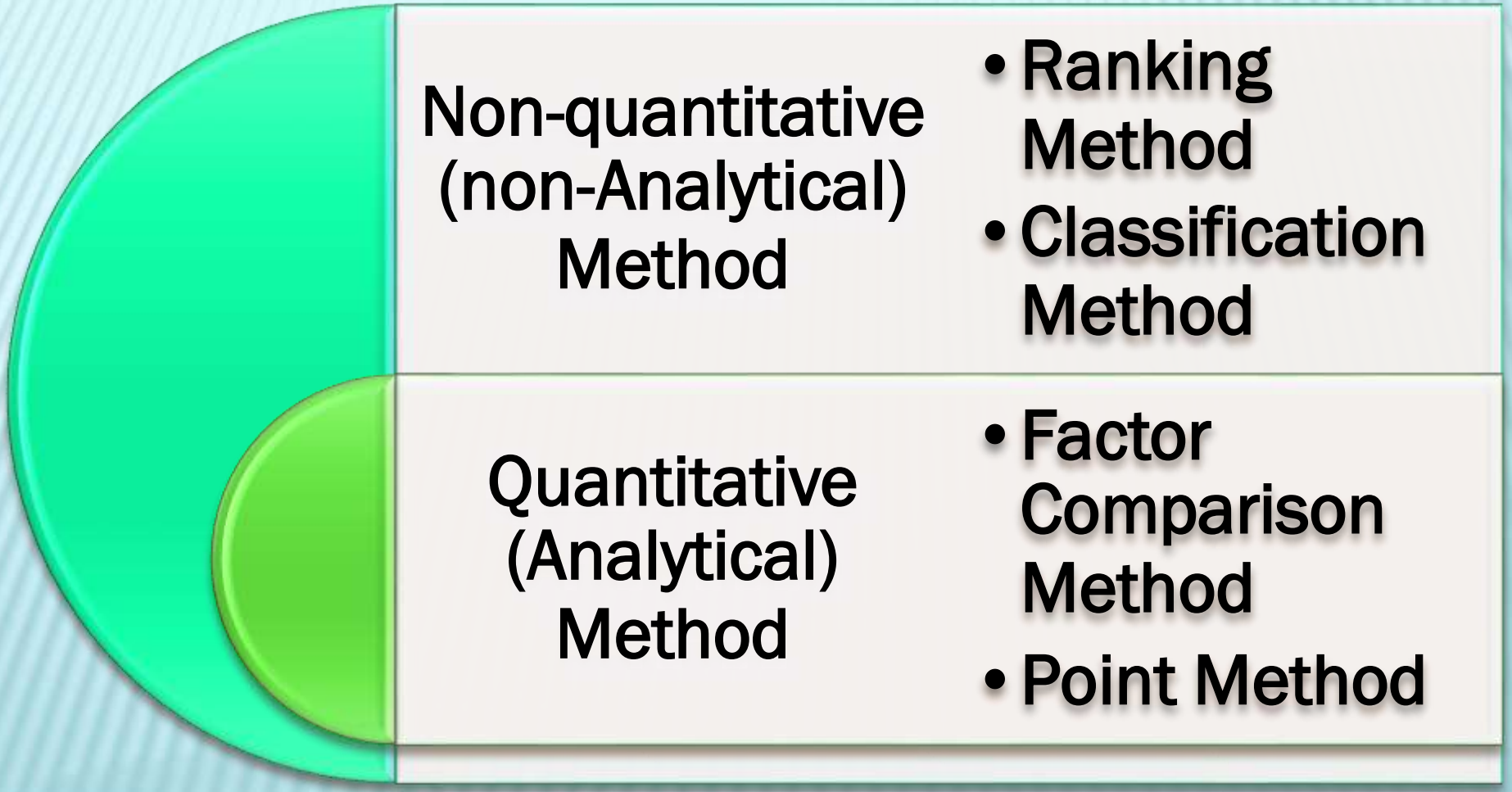
Job descriptions

- describes the duties,
- responsibilities, working conditions
- and inter-relationships between the job as it is and the other jobs with which it is associated.

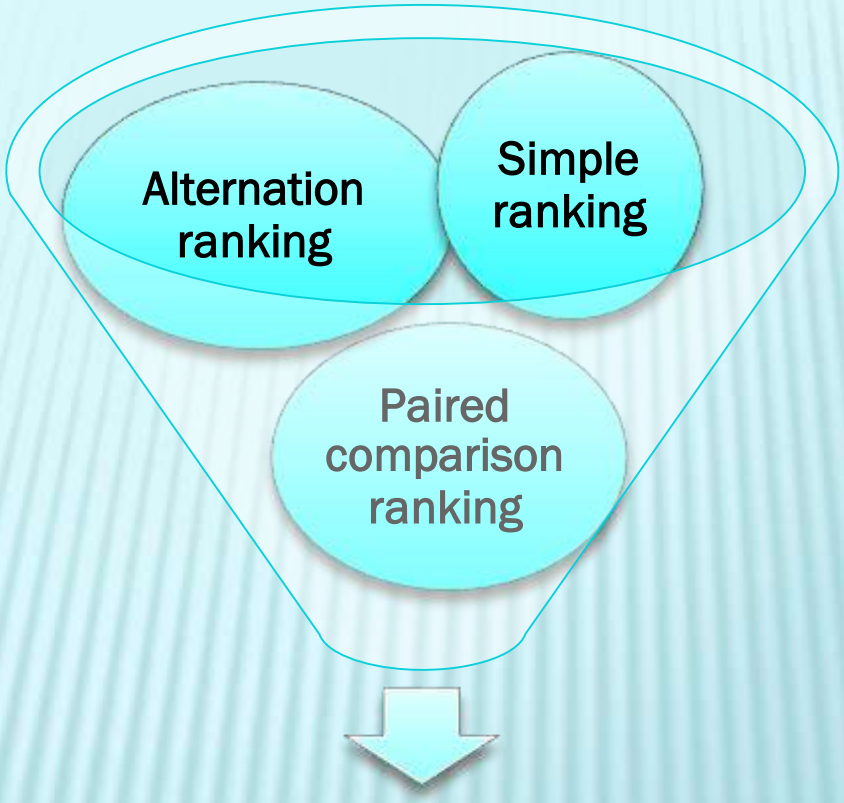
Job specifications

- Analyze details concerning the training,
- Skills,
- Required efforts,
- qualifications,
- Experience,
- and abilities expected of an employee

TRADITIONAL JOB EVALUATION METHODS



RANKING METHOD



SIMPLE RANKING

- Ranking simply involves ordering the job descriptions from highest to lowest based on a predetermined definition of value or contribution.
- Simple ranking requires that evaluators order or rank jobs according to their overall value to the organization.

ALTERNATION RANKING

- Agreement is reached among evaluators on which job is the most valuable, then the least valuable.
- Job evaluators alternate between the next most valued and next-least valued, and so on, until all the jobs have been ordered.

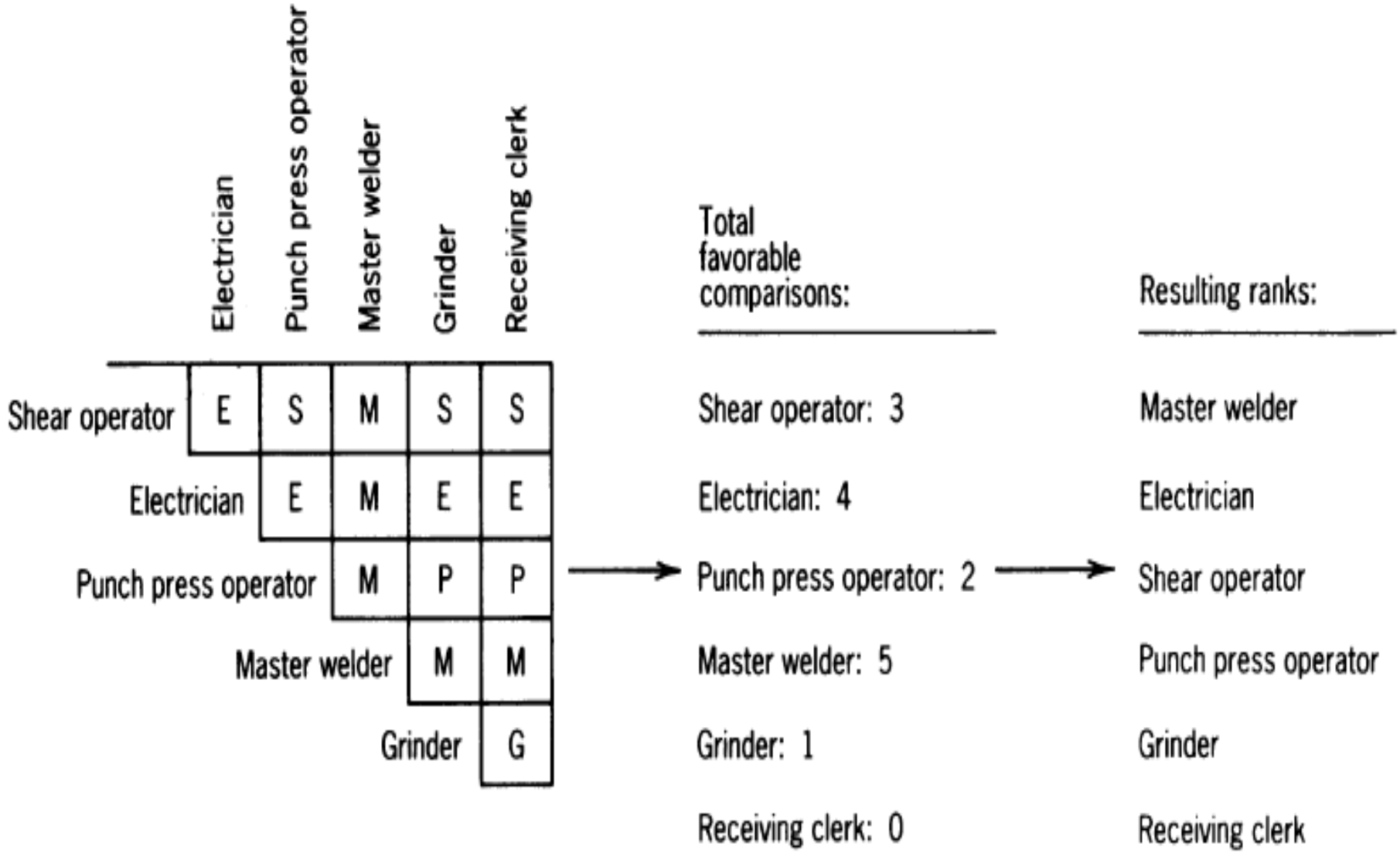
ALTERNATION RANKING EXAMPLE

Jobs		Rank
Number	Title	Most valued
1	Shear operator	Master welder
2	Electrician	Electrician
3	Punch press operator	
4	Master welder	
5	Grinder	
6	Receiving clerk	Receiving clerk
		Least valued

PAIRED COMPARISON RANKING

- It involves comparing all possible pairs of jobs under study. A simple way to do paired comparison is to set up a matrix.
- Some evidence suggests that the alternation ranking and paired comparison methods are more reliable (produce similar results more consistently) than simple ranking.

PAIRED COMPARISON RANKING EXAMPLE



CLASSIFICATION METHOD

- Create a set of job categories and sort jobs into them.
- Each category is defined by a *class description*.
- The categories should be conceived such that jobs that fall into the same category are more similar to each other than to any jobs in other categories.
- Then, for pay purposes, jobs are treated equally within each category and are treated differently across categories.

CLASSIFICATION METHOD

- The class descriptions should be detailed enough to differentiate jobs but general enough to make it fairly easy to slot jobs.
- Job classes can be made more concrete by anchoring them with benchmark jobs.
- For a job to be used as a benchmark, it must be commonly known, relatively stable in content, and perceived to be paid fairly.
- The appropriate number of job classes depends on the diversity of jobs and on promotion paths.

FACTOR COMPARISON METHOD

- *Conduct Job Analysis*
- *Select Benchmark Jobs*
- *Rank Benchmark Jobs on Each Factor*
- *Allocate Benchmark Wages across Factors*
- *Compare Factor and Wage-Allocation Ranks*
- *Construct Job Comparison Scale*
- *Apply the Scale*

CONDUCT JOB ANALYSIS

- It requires that jobs be analyzed and described in terms of the compensable factors used in the plan.
- The originators of the method, Benge et al. (1941), prescribed five factors: mental requirements, skill requirements, physical factors, responsibility, and working conditions.
- They considered these factors to be universal (applicable to all jobs in all organizations) but allowed some latitude in the specific definition of each factor among organizations.

SELECT BENCHMARK JOBS

- Benchmark jobs (also called key jobs) serve as reference points.

RANK BENCHMARK JOBS ON EACH FACTOR

	Mental Requiremes	Experience/ Skills	Physical Factors	Supervision	Other Responsibilities
A. Punch press operator	6	6	2	4	4
B. Parts attendant	5	4	3	6	1
C. Riveter	4	2	1	1	3
D. Truck operator	3	1	6	5	6
E. Machine operator	2	3	4	2	5
F. Parts inspector	1	5	5	3	2

This approach differs from the straight ranking plan in that each job is ranked on each factor rather than as a whole job.

ALLOCATE BENCHMARK WAGES ACROSS FACTORS

Benchmark jobs	Current wage rate ($ / hr)		Mental Requirements $		Experience/ Skills $	Physical Factors $	Supervision $	Other Responsibilities $
A. Punch press operator	5.80	=	0.80	+	0.80 +	2.40 +	1.10 +	0.70
B. Parts attendant	9.60	=	2.15	+	2.35 +	1.90 +	0.60 +	2.60
C. Riveter	13.30	=	2.50	+	3.10 +	2.45 +	4.50 +	0.75
D. Truck operator	8.50	=	3.40	+	3.20 +	0.60 +	0.80 +	0.50
E.Machine operator	11.80	=	3.60	+	2.90 +	1.75 +	2.90 +	0.65
F. Parts inspector	11.40	=	4.50	+	2.20 +	1.20 +	2.50 +	1.10

RANKINGS THE WAGE ALLOCATED TO EACH COMPENSABLE FACTOR.

		Mental Requirement $ $		Experience/Skills $		Physical Factors $		Supervision $		Other Responsibilities $	
Benchmark jobs		$	Rank	$	Rank	$	Rank	$	Rank	$	Rank
A. Punch press operator		0.80	6	0.80	6	2.40	2	1.10	4	0.70	4
B. Parts attendant		2.15	5	2.35	4	1.90	3	0.60	6	2.60	1
C. Riveter		2.50	4	3.10	2	2.45	1	4.50	1	0.75	3
D. Truck operator		3.40	3	3.20	1	0.60	6	0.80	5	0.50	6
E. Machine operator		3.60	2	2.90	3	1.75	4	2.90	2	0.65	5
F. Parts inspector		4.50	1	2.20	5	1.20	5	2.50	3	1.50	2

COMPARE FACTOR AND WAGE-ALLOCATION RANKS

- The two rankings are judgments based on comparisons of compensable factors and wage distributions.
- They agree when each benchmark is assigned the same location in both ranks.
- If there is disagreement, the rationale for the wage allocations and factor rankings is reexamined.
- The comparison of the two rankings is simply a cross-checking of judgments.
- If agreement cannot be achieved, then the job is no longer considered a benchmark and is removed.

CONSTRUCT JOB COMPARISON SCALE

$ Value	Mental requirements	Experience/ skills	Physical demands	Supervision	Other responsibilities
.00					
.20			Truck operator	Parts attendant	Truck operator
.40					Machine operator
.60					Punch press operator
.80	Punch press operator	Punch press operator		Truck operator	Riveter
1.00			STOCKER		STOCKER
.20	STOCKER		Parts inspector	Punch press operator	Parts inspector
.40				STOCKER	
.60			Machine operator	Parts inspector	
.80			Parts attendant		
2.00	Parts attendant	Parts inspector			
.20		Parts attendant			
.40			Punch press operator		
.60	Riveter		Riveter		
.80		STOCKER			Parts attendant
3.00		Machine operator		Machine operator	
.20		Riveter			
.40	Truck operator	Truck operator			
.60	Machine operator				
.80					
4.00					
.20					
.40	Parts inspector			Riveter	
.60					
.80					
5.00					

APPLY THE SCALE

- The job-comparison scale is the mechanism used to evaluate the remaining jobs.
- All the nonbenchmark jobs are now slotted into the scales under each factor at the dollar value thought to be appropriate.
- This is done by comparing the factors in the job descriptions of nonbenchmark jobs with the factors in the reference points.
- The final worth of each job is derived from a summation of the dollars allocated to the job across all compensable factors.

POINT METHOD

- *Conduct Job Analysis*
- *Choose Compensable Factors*
- *Establish Factor Scales*
- *Establish Factor Weights*
- *Evaluate Jobs*

COMPENSABLE FACTORS CHARACTERISTICS

- *Work Related*

BUSINESS RELATED

- Consistent with the organization's culture and values, its business directions, and the nature of the work.

COMPENSABLE FACTORS CHARACTERISTICS

- *Acceptable to the Parties*

DISCRIMINABLE

- The ability to differentiate among jobs.
- Each factor must be unique from other factors.
- Factor definitions must also possess clarity of terminology.

CHOOSE COMPENSABLE FACTORS

- There are two basic ways to select and define factors: Adapt factors from an existing standard plan or custom design a plan.
- Although a wide variety of factors are used in conventional, standard plans, they tend to fall into four generic groups: skills required, effort required, responsibility, and working conditions. These four were used originally in the National Electrical Manufacturers Association (NEMA) plan in the 1930s and are also included in the Equal Pay Act (1963) to define equal work.
- The Hay System is perhaps the most widely used (Milkovich and Newman, 1993). The three Hay factors are know-how, problem solving, and accountability.

CHOOSE COMPENSABLE FACTORS

- In terms of the optimal number of factors, it is generally recommended to stay below 10 in order to avoid dilution of effect, information overload, and factor redundancy. Five to 7 factors are usually a manageable number. With regard to the number of total points to be allocated across the factors, most firms choose either 500 or 1000 points.

ESTABLISH FACTOR SCALES

- Belcher (1974) suggests the following criteria for determining degrees:
- 1. Limit to the number necessary to distinguish among jobs.
- 2. Use understandable terminology.
- 3. Anchor degree definition with benchmark job titles.
- 4. Make it apparent how the degree applies to the job.

I. Knowledge

This factor measures the knowledge or equivalent training required to perform the position duties.

First Degree

Use of reading and writing, adding and subtracting of whole numbers; following of instructions; use of fixed gauges, direct reading instruments and similar devices; where interpretation is not required.

Second Degree

Use of addition, subtraction, multiplication, and division of numbers including decimals and fractions; simple use of formulas, charts, tables, drawings, specifications, schedules, wiring diagrams; use of adjustable measuring instruments; checking of reports, forms, records and comparable data; where interpretation is required.

Third Degree

Use of mathematics together with the use of complicated drawings, specifications, charts, tables; various types of precision measuring instruments. Equivalent to 1 to 3 years applied trades training in a particular or specialized occupation.

Fourth Degree

Use of advanced trades mathematics, together with the use of complicated drawings, specifications, charts, tables, handbook formulas; all varieties of precision measuring instruments. Equivalent to complete accredited apprenticeship in a recognized trade, craft, or occupation; or equivalent to a 2- year technical college education.

Fifth Degree

Use of higher mathematics involved in the application of engineering principles and the performance of related practical operations, together with a comprehensive knowledge of the theories and practices of mechanical, electrical, chemical, civil or like engineering field. Equivalent to complete 4 years of technical college or university education

Some plans employ 2D grids to define degrees. For example, in the Hay plan, degrees of the factor know-how are described by four levels of managerial know-how (limited, related, diverse, and comprehensive) and eight levels of technical know-how (ranging from professional mastery through elementary vocational). An evaluator may select among at least 32 (4 * 8) different combinations of managerial and technical know-how to evaluate a job.

ESTABLISH FACTOR WEIGHTS

- different weights reflect differences in importance attached to each factor by the employer.

COMMITTEE JUDGMENT

- a standing compensation committee or a team of employees is asked to allocate 100% of value among the factors. Some structured decision process such as Delphi or other nominal group technique may be used to facilitate consensus.

STATISTICAL ANALYSIS.

- It typically utilizes multiple regression analysis. The criterion is usually the pay rate for benchmark jobs, and the predictors are the jobs' degree levels on each of the factors.

METHODS OF ESTABLISH FACTOR WEIGHTS

EVALUATE JOBS

- To translate weights and factor scales into actual job points, the maximum number of points to be used in the system is first divided among the factors according to their weights.
- The points for each factor are then attached to that factor's scale.
- Each job's relative value, and hence its location in the pay structure, is determined by the total points assigned to it. A job's total point value is the sum of the numerical values for each degree of compensable factor that the job possesses.

For example, if a factor is weighted 20% in a 500- point system, then a total of 100 points is assigned to this factor; and if there are five degrees on the factor, then each degree is worth 20 points.

EVALUATE JOBS EXAMPLE

TABLE 5 The Point Method of Job Evaluation: Factors, Weights, and Degrees

(3) Weights	(1) Factors	(2) Degrees				
40%	Skills required	1	2	3	4	5
30%	Effort required	1	2	3	4	5
20%	Responsibility	1	2	3	4	5
10%	Working conditions	1	2	3	4	5

the above example, skills required carries a greater weight (40% of the total points) for this employer than does working conditions (10% of the total points). Thus, a job's 240 total points may result from two degrees of skills required (2 * 40 = 80), three each of effort required (3 * 30 = 90) and responsibility (3 * 20 = 60), and one of working conditions (1 *10 = 10); (80 + 90 + 60 + 10 = 240).

THANK YOU FOR YOUR ATTENTION