

Communication

Job Points Model: An Open Source Tool to Determine the Comparable Worth of Jobs

**Manjari Singh, Jatin Pandey, Shrihari S Sohani,
Jatinder Jha & Biju Varkkey**

Introduction

Comparable worth of jobs is very critical while taking compensation related decisions in any organization. Ascertaining the comparable worth of different jobs having varied levels of responsibility, decision-making, etc. is very challenging for any organization. However, it cannot be ignored if equity and justice has to be maintained to ensure employee trust and engagement. Organizations evaluate the comparable worth of jobs by utilizing tools that are based on methods such as job ranking, job classification, factor comparison and job points. The job point method of evaluation of comparable worth is considered to be one of the most trusted methods as it is devoid of subjectivity.

Manjari Singh & Biju Varkkey are from Indian Institute of Management Ahmedabad. *Jatin Pandey* is from Indian Institute of Management Kozhikode. *Shrihari S Sohani* is from Indian Institute of Management Indore. (Email: sriharis@iimdr.ae.in). *Jatinder Jha* is from XLRI-Xavier School of Management, Jamshedpur.

As part of the mandate for 7th Pay Commission, our mandate was to find comparative worth of jobs at different levels across government, PSUs and the private sector. We developed multiple models to evaluate the comparable worth of jobs and corroborate our assessment. The model we present in this research note, referred to as “Job Points Model”, alludes to one such model. This Model is developed and tested across 40 job roles from all levels of government, PSUs and private organizations. Evaluation of jobs utilizing this model was one of the inputs to our overall assessment of the comparable worth of jobs. We will briefly describe here the model and its sub components. We then provide a brief explanation of the method of its application. Finally, we briefly touch upon how the dimensions and sub dimensions were measured.

Model Description

The model has four main dimensions, namely, expertise, efforts, responsibility

Table 1 Job Points Model

Dimensions of Job Points Model		
Main Dimensions	Sub-dimensions	Maximum Points
Expertise	Explicit Knowledge	18.6
	Tacit Knowledge	7.5
	Specialisation	5.0
Efforts	Physical Activities	5.0
	Cognitive Processes	7.4
	Affective Processes	5.6
	Initiatives	3.7
Responsibility & Accountability	Influence	8.7
	Positional Impact	7.5
	Discretionary Power	4.3
	Beneficiary Relationship	8.1
	Safety & Risk	8.1
Job Setting	Unavoidable Hazards	3.7
	Non Conduciveness of Work Environment	3.1
	Lack of Career/Job Prospects	3.7

Source: Singh et al. (2015) : 17

& accountability, and job setting, which are further divided into sub dimensions. Table 1 provides the detailed sub dimensions of each dimension and the maximum points apportioned to each dimension and sub dimension.

Procedure

The job point method requires rating jobs on objective and subjective parameters. The job description and job specification become the initial sources of objective data for important information regarding a job. The objective parameters like minimum qualification and experience required can be known directly from the job description. The subjective param-

eters like assessment of tacit knowledge require the usage of Delphi method where experts are solicited for their inputs regarding the extent of these parameters. A lower ceiling of the average rating is used for the analysis.

Dimensions & Measurement

In Table 2 we explicate the dimensions, sub dimensions and associated measurements in detail.

The Job Points Model is an effective tool to assess the comparable worth of jobs for intra and inter organizational comparisons. It aids in compensation decision by indicating the salary bands that should be offered for that job role. This

Table 2 Dimension, Sub dimension & Measurement

Dimension	Sub dimension and Measurement
<p>Expertise Effective and efficient performance of any job warrants certain level of expertise from the performer of the job. Competencies required in terms of the skills and knowledge form the basis of expertise requirements of the job. The competency based expertise is thus divided into the following.</p>	<p><i>Explicit Knowledge/Competencies Measurement:</i></p> <p>The qualification, certifications, experience, subject knowledge, analytical skills, equipment-handling skills, IT knowledge, and medical standard are good indicators of the explicit knowledge and competencies required for job. Educational qualification is graded as follows Below G8-10=0.5 / G10 pass or ITI=1 / G12 pass or Intermediate or Diploma =1.5 / 3 years graduate program=2 / Master in Arts, Commerce etc.=2.5 / 4 years graduate program (B.E. or B.Tech)/ Master in science=3 / MBBS degree in medicine or surgery=3.5 / Master in Engineering=4 / Masters degree in medicine or surgery=4.5 / Doctorate or super specialization=5 Additional Qualification: None =0 / Easy=1 / Medium=2 / Hard=3 Experience: 0-1=0 / 1-3=1 / 3-5=2 / 5-10=3 / 10-15=4 / 15+=5 Medical standard: Limited=0 / Low=1 / High=2 Subject Knowledge: Very Basic=1 / Basic=2 / Intermediate=3 / Advanced = 4 / Highly Advanced=5 Equipment Handling Skill: Limited=0 / Low=1 / Medium=2 / High=3 Analytical Skill: Limited=0 / Low=1 / Medium=2 / High=3 IT Knowledge: None=0 / Office processing=1 / Advanced office processing=2 / Platform software packages=3 / Programming=4 Unlike explicit knowledge tacit knowledge is difficult to capture and the individual brings in much of the required competencies in this component. It has been measured through requirement of experiential learning, interpersonal and information processing skills.</p> <p><i>Tacit Knowledge/Competencies Measurement:</i></p> <p>Experiential learning: Not required=0 / Somewhat required or Desired=1 / Required but negotiable and trainable and short term=2 / Strictly required and short term=3 / Required but negotiable and trainable and long term=4 / Strictly required and long term=5 Interpersonal skill - Number of individuals; Interaction; Dominance: L/L/D=0 / L/L/ND=L/H/D=1 / L/H/ND=H/L/D=2 / H/L/ND=H/H/D=3 / H/H/ND=4 Expertise - Tacit Knowledge - Information processing - Volume; Complexity: L/L=0 / H/L=1 / L/H=2 / H/H=3</p> <p><i>Specialisation</i></p> <p>This sub dimension denotes the possession of certain specialized skills. These skills are assessed based on the scarcity of the individuals possessing that skill (i.e., labor market supply) and the cost involved (resources in terms of monetary and non-monetary like time) in acquiring those skills. Cost of specialization: Very low=0 / Low=1 / Medium=2 / High=3 / Very high=4. Scarcity in labor market: Very low=0 / Low=1 / Medium=2 / High=3 / Very high=4</p>

Efforts	<p>Efforts recognizes the physical, cognitive and affective demand of the job. Varying proportions of the three are demanded by different jobs. Different job requires different combination of physical activities, cognitive processes, affective processes, and initiatives. The job point model takes as input the minimum amount of effort that would be required to perform a job. If a particular job requires higher level of efforts than it would translate to more points on this dimension and hence would increase the comparable worth of the job.</p>	<p><i>Physical Activities</i></p> <p>This component deals with the requirement of physical effort for the performance of the job and includes operating equipment that require physical effort, movements and activities.</p> <p><i>Measurement:</i> Physical Strain: Very low=0 / Low=1 / Medium=2 / High=3 / Very high=4 Equipment Handling Physical Strain: Very low=0 / Low=1 / Medium=2 / High=3 / Very high=4</p> <p><i>Cognitive Processes</i></p> <p>This sub dimension deals with the mental effort required for an extended period of time to do the job and the complexity of mental tasks involved in the job tasks. Application of cognitive faculties in terms of thinking required to do a job is also accounted.</p> <p><i>Measurement:</i> Mental Strain: Limited=0 / Low=1 / Medium=2 / High=3 / Very High=4. Complexity of mental task: Very Easy=0 / Easy=1 / Moderate=2 / Difficult=3 / Very Difficult=4 Thinking required: Limited=0 / Low=1 / Medium=2 / High=3 / Very High=4</p> <p><i>Affective Processes</i></p> <p>With the rise in service sector and customer facing roles, affective work requirements have garnered attention. The requirements for this skill include self-regulation, empathy and social skills.</p> <p><i>Measurement:</i> Self-regulation/monitoring/ internal motivation: Limited=0/ Low=1 / Medium=2 / High=3. Social Skills including approachability & team work: Limited=0 / Low=1 / Medium=2 / High=3 Empathy: Limited=0 / Low=1 / Medium=2 / High=3</p> <p><i>Initiatives</i></p> <p>Frequency and quality of initiatives that a job holder needs to take is an important facet that dictates the worth of the job. The quality is judged on usefulness, novelty and ingenuity of the idea.</p> <p><i>Measurement:</i> Frequency of initiatives: Limited=0 / Low=1 / Moderate=2 / High=3. Quality of initiatives: Limited=0 / Low=1 / Moderate=2 / High=3</p>
Responsibility & Accountability	<p>This dimension measures the obligation to a job task and answerability of the performance of that task.</p>	<p><i>Influence</i></p> <p>The level of the job in the organizational hierarchy, the span of control, the intra and inter-unit coordination, and the responsibility for physical infra structure reflect the influence of that job in the organization.</p> <p><i>Measurement:</i> Hierarchy (level): Low=0 / Mid=1 / Senior=2 / Top=3. Span of Control - Number of reportees (direct & indirect) None=0 / 1-5=1 / 5-20=2 / 20-50=3</p>

<i>Positional Impact</i>	<p>/ 50+=4Coordination: Limited=0 ; Department=1; Unit=2; Organization=3; Inter-organization=4Responsibility for Physical Infrastructure/Equipment/ Material - Cost; scarcity: L/L=0 - H/L=1 -L/H=2 - H/H=3</p> <p>The positional impact can be seen in terms of the scope of impact that the outcome of execution in a particular job would create. It also pertains to the criticality of decisions taken by the person performing the job. With respect to certain jobs, this dimension will also include saving/rescuing people during the course of the job, in situations that are life threatening.</p>
<i>Measurement:</i>	<p>Scope of impact: Limited=0 / Departmental=1 / Organizational=2 / Societal=3 / National=4Criticality of decision Very Low=0 / Low=1 / Medium =2 / High=3 / Very high=4. Handling life threatening situation: Extremely Low=0/ Low= 1/ Medium=2 / High=3 / Very High= 4</p>
<i>Discretionary Power</i>	<p>The execution of certain job roles require the job-holder to take certain decisions that involve outlay of financial and non-financial resources, which this sub-dimension takes into account.</p>
<i>Measurement:</i>	<p>Budgetary financial powers: 1L=0 / 1L to 5L=1 / 5L to 10L=2 / 10L to 20L=3 / &gt;20L=4. Discretionary power (non-financial)Limited=0/ Low=1 / Medium=2/ High=3</p>
<i>Beneficiary/ Customer Relationship</i>	<p>The relationship of individuals performing the job with the beneficiaries of their work is covered in this sub-dimension. In the business environment, internal and external customers would replace the term 'beneficiary'. The level and importance of the customers'/ beneficiaries reflect the significance of the job. The criticality of the job is also reflected by the number of customers'/ beneficiaries an individual interacts with during the course of the performance of the job, duration time for which the work of the job holder will impact the beneficiaries, and the need to sustain long term relationship with the beneficiaries.</p>
<i>Measurement:</i>	<p>Level/importance of customers: L/L = 0 / L/M=M/L=1 / L/H=H/L=2 / M/M=3 / H/M=M/H=4 / H/H=5. Number of customers'/ beneficiaries Limited=0 / Few=1 / Some=2 / Several=3 / Many=4 .Long term impact No=0 / Yes=1Duration of relationship Limited=0 /Short term=1 /Medium=2 /Long term=3</p>
<i>Safety & Risk</i>	<p>This sub-dimension reflects on the role of the job-holder in ensuring safety of life of others and safety and risks of physical infrastructure. This sub-dimension also includes the monetary risks taken by the individual performing the job. This sub dimension also includes the risks that is posed to the reputation and wellbeing of individuals and also to that of their organizations.</p>
<i>Measurement:</i>	<p>Safety of Life (others): Very Low=0 / Low=1 / Medium=2 / High=3/ Very High=4Risk (monetary): None=0 / Low=1 / Medium=2 / High=3Risk (Reputation/ Future business): Limited=0 / Low=1 / Medium=2 / High=3 Physical infrastructure/Equipment/Material: None=0/ Low=1 / Medium=2 / High=3</p>

Job Setting	<p>The value of a job is also influenced by its setting and conditions of work. Favorable or adverse setting should be suitably accounted in calculation of comparable worth of a job.</p> <p><i>Unavoidable Hazards</i> <i>Measurement:</i> None=0 / Low=1 / Medium=2 / High=3</p> <p><i>Non Conducive Work Environment</i> <i>Measurement:</i> Physical; social: L/L=0 / L/H=H/L=1 / H/H=2. Distance to amenities: None=0 / Low=1 / Medium=2 / High=3</p> <p><i>Lack of Career/ Job Prospects</i> <i>Measurement:</i> Career path for each job role indicates the growth to different roles with passage of time and gain of competency. Lack of potential career progression is thus taken into account in this dimension. Job-holders are also concerned about their job security, particularly during economic recession. Lack of Job Security: None=0 / Low=1 / Medium=2 / High=3. Lack of career prospects: Very Low=0 / Low=1 / Medium=2 / High=3</p>
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instrument has been tested for existing job roles in different organizations and sectors and the results have been supportive of the model. Our corroboration studies utilizing other frameworks that are proposed in literature lend support to the validity to our model.

Reference

Singh, M., Varkkey, B., Maheshwari, S. K., Agarwal, P., Sohani, S. S., Pandey, J. & Jha, J. (2015), A Study for Comparing Salaries/Emoluments in the Government Sector vis-à-vis Central Public Sector Undertakings/Private Sector in India (Study Commissioned by the Seventh Central Pay Commission constituted by the Government of India).