

Job Design, Change and Technology In Relation To Job Evaluation – A Reflective View

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Abstract

This paper intends to focus on the important issues and questions related to job design in the context of job evaluation. In particular: can job design be influenced by the work culture of an organization? What are the main situations that call for job design and / or redesign? How / when does job design interact and deal with the changes in job content? How does job design seek to combine the dynamic nature of work in a high-technology society? How do change, technological development and growth in an organization's size, affect job demand / job content, the organization's pay system and the job holder? How does job design itself demonstrate that it is a dynamic process, a task-focused process designed to make sure that jobs are structured / restructured / reorganized / right sized (including downsizing) to fit a task rather than the task performer (i.e. where the job-holder is (recruited) to fit the job, but not vice versa). In so doing, can job design make an organization's performance more effective and more efficient, and if so how? Can the combination of job design and job evaluation processes accentuate job evaluation flexibility and responsiveness? Here lies the challenge. For job evaluation must be able to be adaptable, responsive and capable of satisfying all the new developments that result from job design or redesign, rather than for it to be seen as a rigid or inflexible system.

Key Words: Job design, job content, change, technology, enrichment, enlargement, continuous fluctuations, job evaluation, adaptability, responsiveness, work culture.

1.0 Introduction

How job content and job design are influenced by work ideology and practice (with examples from the American, Canadian and Japanese work cultures)

Most jobs entail a variety of responsibilities, particularly where organizations are different in the nature of their work and objectives. **Therefore**, it is not always easy to determine **how** individual tasks should be distributed and assigned (or allocated) among employees **and whether** a particular job is to be carried out by one, or more than one, person. Each organization has its own vision, approach and strategy in dealing with this concern. For example, traditionally, **production workers in North American factories** are not authorised to repair any machine they work on, should it malfunction. This applies irrespective of the cause (e.g. whether it be due to a faulty product, natural wear and tear, accidental misuse or sabotage).

Instead, workers have to leave the repair work to specialists employed specifically for this purpose by the organization. Nor is this approach confined to North America. It is common elsewhere and particularly throughout **most** of the developing countries. Should a worker take it upon her/himself to rectify the problem s/he may find her/himself the subject of a disciplinary hearing which could range from a formal warning through to criminal proceedings.

By contrast, Japanese production workers are often expected to repair breakdowns themselves (see for this Milgrom & Roberts, 1992). To this end they will be trained to fix or repair the more common faults and breakdowns likely to occur, rather than call in the specialist. This kind of work technique also reflects the elements of the Japanese production stereotype which is 'flexibility', in addition to the 'quality control' and 'minimum waste'. **However, since the 1980s, in North America and some parts of Europe** (e.g. Britain and Sweden) there has been a noticeable tendency by some larger industries (and particularly the modern automobile industries) to adopt what is referred to as a *work teams principle*. This is now seen by many as an essential element of effective work management and performance and is a reflection of the Japanese Kaizen and production system in relation to job design (see Pratton, et al., 1999).

1.1 How the Japanese kaizen approach encourages workers to be creative and innovative, with the worker doing two jobs every day

According to Japanese kaizen culture (commitment of organizations to continuous development), the worker on the production line is the real expert who does the job day-in, day-out.

This requires the worker to know more about the causes of problems and their solutions rather than for him to call and wait for the expert / qualified engineer, who is sitting in an office, to fix the defect (see Marcouse, I., et al., 2005). Hence, Kaizen emphasizes problem-awareness and provides clues for identifying problems. It is thus a problem-solving process (see Imai, M., 1986). At this point Kaizen can be seen to act as a counter-balancing force in the continuous struggle necessary to maintain and improve all aspects of the self and the organization (Silbiger, S., 1996). It is the product of a philosophy which is deeply embodied in the Japanese daily life and work of their business organizations (Drucker, 1995; also Heller & Hindle, 1998).

In broader terms, according to the Kaizen Institute, a **Japanese worker has two jobs to do**. The first is to do his / her daily work, the second is to search for ways of ameliorating and enhancing it. To this end the Japanese management of an organization is based upon the premise that both manager and employees must have a very clear understanding of their job, and, what they **actually** do as opposed to what they **should** do. Both sides should have a sense or vision of the intended outcome (and hence the consequences) of their particular task. Hence the manager works closely with the employees to plan and implement changes for the benefit of every one (see Tiernan, S., et al., 1996). In this way **learning** and improvement are **a permanent features** of successful work organization according to Japanese philosophy of Kaizen (see Johnson, G., et al., 1999). **In all cases**, job design (as explained below) has to describe the job holder's position in the hierarchy – taking in consideration the latest changes.

2.0 Implications of job design process

Job design is a process for shaping and forming the content of the job to a certain formula through an integrated operation of the tasks, duties and responsibilities, as well as the knowledge and skills required for doing the job. Inevitably, this requires having a suitable and effective communications strategy in place that will enhance functional relationships through both vertical and horizontal pathways (of communication). Such a strategy should satisfy the needs of both the employer and the employee. That is not to say that some decisions (and hence the communication process that delivers notification of those decisions) will **not be unpalatable**. It is unrealistic, for example, to expect an employee to welcome any decision that puts her/his job at risk. Nonetheless there are better and worse ways of having this brought to one's attention and a good communications strategy will at least demonstrate the intention to deliver such information in a sensitive and professional manner.

It therefore follows that job design will, at various times, include operations necessitating the addition, reduction, separation or the splitting off and merging of tasks. Some tasks will be easier or simpler; others will be more complex and difficult. Grouping, whether at the level of individuals or professions, will also be reshaped in a process of reassigning, relocating and regrouping. Any new work design will have an obvious impact (both directly and indirectly) with respect to the work content. **That is to say that job design can be seen as a process of** determining the specific tasks to be performed, the procedures or methods to be used and how the job relates to work in an organization in order to attain effectiveness and efficiency in performing those jobs. Furthermore, its process maximises the intrinsic motivation that job design provides. [See for example 'a job design experiment' mentioned in Torrington & Hall, 1991: 435].

3.0 As science and technology are progressing, jobs will go through continuous fluctuations

In this context, science and technology have helped business to become more efficient and effective in many different ways. They affect, if not determine, in many respects, the nature of work organization. One effect of technological advance and science upon organizations is rightsizing (often used interchangeably with such terms as reorganizing, rationalizing or restructuring). All are used to describe organizational change that may also include the need to downsize [see Tyson, (ed.), 1997; Robbins and Coulter, 1999]. The modern business will undergo more and more radical restructuring because change [or as Rees (2001: 5) calls it '*continuous fluctuation*' or '*expected turbulence*'] is an ever present phenomenon to which business of all kinds are forced to respond to if they want to stay in the market with a better chance to survive and flourish (Proctor, 2002). In other words, businesses should not only know about these changes and developments, but also be ready for them. Hence, management will increasingly have to make a deep and careful study of the size of an organization in relation to its markets, technology, objectives and strategy. Indeed, this is a difficult and risky decision to make and it is here that, in the real world, the optimum size rarely fits the ego of management. Consequently, as Drucker (1992: 16-8) puts it, neither of the contrasting terms '*big is better*' and '*small is beautiful*' make much sense, since ideally, size will follow function. It is a co-relationship between the technological change and the organization's size and objectives.

4.0 The relentless changes and the marketplace reality

A well-designed job evaluation should bear this in mind and respond to such changes, not least through continual periodical reviews, but because the world in which we live is “*a world of shortening product life cycles*” (Tidd *et al.*, 2001: 4). Currently, the marketplace reality is going through rapid development and relentless change that necessitate the job evaluation process to be able to deal with new changes that affect both job nature and content. The successful business will be alive to this process of replacing one product with a new and better-developed version before its competitors do. An observer can easily notice the product variety that has proliferated to a bewildering degree within the last two decades or so. An interesting example on this trend can be seen with Seiko who, alone, markets 3000 (three thousand) different watches; and with Philips sells more than 800 (eight hundred) colour TV models (see details in Steven L. Goldman *et al.*, 1995). From this it is evident that the job evaluation scheme that embraces this philosophy will increase the company’s chance of success.

To this end, Changes in Technology may have a manifold impact at different levels – whether the jobs are in public or private organizations. The impact of these changes upon the job content is not limited to the area of remuneration and compensation (where job evaluation also finds it has a place and a role to play) but also extends to organizational structure, employee satisfaction and development, status and productivity. It is important to note that changes in job content can be seen whenever work is redesigned, particularly when the reengineering business process is attempted (see Turban, E., *et al.* 1996). Yet, a re-evaluation process does not necessarily mean that all features or elements of a job have been (or need to be) changed. In practice, many aspects of the job (content) may well remain the same. Changes in technology and the growth of organizations affect both jobholders and payment systems. Some jobs will disappear, others will get some changes in any or all of their requirements or specifications, while the remaining jobs may be unaffected by these changes. Here the challenge is for the job evaluation process to be flexible, adaptable, responsive and capable of satisfying all these new developments, rather than to be seen as rigid or inflexible in its approach.

5.0 Job enrichment and job enlargement

In the modern work organization, the concern of job enrichment is a complementary aspect of job evaluation. Enriching jobs (both in this context and in simple terms) means changing a job’s essentials in an attempt to improve task efficiency and employee empowerment. It is a process of introducing motivators into the job situation. Therefore, any effort that makes work more rewarding or satisfying through adding and / or developing further meaningful tasks to an employee’s job is called ‘job enrichment’ (see Pinder, 1998; DeCenzo and Robbins, 1999; Robbins and Coulter, 1999; Stafford, 1992; Milkovich and Boudreau, 1988; Torrington, *et al.*, 1991; Fearn, 1992; Quible, 2001; Bohlander, *et al.*, 2001; and Krajewski and Ritzman, 1999; Kreitner, 2001; Certo, 2003:;). In broad terms it is a technique for changing work design and experience in order to enhance employee need satisfaction and to ameliorate work motivation and performance levels (Huczynski and Buchanan, 1991). It refers to the vertical expansion of job planning, control and related responsibilities – i.e. increasing the depth of a job. However, **Job enrichment**, as a method of motivation, was seen by Herzberg as **giving people the opportunity** to use their ability.

Job enlargement, on the other hand, **refers to** the horizontal expansion of a job – i.e. increasing and widening the scope of a job or job area (job tasks). Therefore, the key difference between the two terms lies in their control and responsibility factors, which then requires a re-evaluation of the jobs affected. **In short**, regardless of the motives and advantages of having vertical expansion or job enrichment and the horizontal expansion or job enlargement, in all cases the job content / job demand / job requirements or job specifications will be affected – and as a consequence, job design and evaluation (or re-evaluation) will follow. From here both job enrichment and job enlargement can be seen as effective tools that compliment **job design** rather than an alternative approach **to it**.

6.0 Other situations that may call for job design and redesign

Job design can **also** occur when an organization is hit by inter-related internal and external factors such as a bad economy / recession / lost profits and redundancy. Under these circumstances management may be forced to consider downsizing and redesigning the jobs (see Alan Downs, 2003), a case whereby **job evaluation needs to be flexible and responsive enough to deal with the situation at hand**. Where downsizing and redesign leads to the laying off of some of its workforce there will be a need to consult the legal constraints that apply to ensure that all the accommodating procedures are lawful.

7.0 How and when job evaluation deals with changes in job content?

Job evaluation must be flexible enough to deal with the effects that result in, or are associated with, the changes in technology or technological developments that influence the content of the job and its required duties, skills, responsibilities with respect to effort and working conditions. Yet job evaluation CANNOT consider these changes and developments unless and until these changes have physically occurred and been quoted in the job description. This is because one of the facts of job evaluation is to evaluate the actual / present job, i.e. job as it is now – not as it will be. Consequently, job evaluation needs to be able to interact with the job design in order to evaluate / re-evaluate both the introduction of any new job and / or any new changes or additions required of already existing jobs. Yet, Changes in job content may result in or create some problems or conflicts, notably in the short term. Causal examples may be resistance to change in general and to changes in roles at various levels of the organization in particular. Given time, just for the sake of argument, such resistance will often prove to be temporary and it is only then that the true value of these changes can begin to be evaluated. It is therefore important to ride out the storm and not be too hasty in concluding that such changes are of little, no or even negative benefit.

However, at this point, it may be quite appropriate to mention that job evaluation, in its simplest term, refers to a systematic assessment technique designed for holding thorough job comparisons to establish a hierarchy of job differentials, job relativities, and job grading accordingly, to achieve (internal) equitable pay / pay consistency; it is to create a situation of input – output balance with a fair wage for a fair work – focusing on job content / job demand / job requirements / job specifications. It therefore provides a rational basis for an equitable pay system, without which wage grievances and inequities are unavoidable. [See Thomason (1), 1976: 274; Thomason, 1968; Thomason, 1980; British Institute of Management (BIM), 1970; Thakur and Gill, 1976; Elizur, 1980; ACAS, 1982; Pritchard and Murlis, 1992; Armstrong, et al., 2003; Armstrong, 2007]. Hence job evaluation as a procedural aid is a very useful means for pay determination that can be used towards establishing a wage and salary structure.

8.0 Summary

Job design is integral to an organization's overall operational philosophy, policy and procedure. It sets both the range and limits of workforce boundaries and determines the degree of flexibility that may be appropriately accommodated. The degree to which this is achieved will consequently determine the efficacy of the organization's workforce in relation to its output. The purpose of job design is to serve both the organization's needs whilst motivating the worker. Quite simply it is there to create better coordination between the worker's skills and his work. By definition, job-design must be task-orientated and should be capable of ensuring that each job meets the ever-present challenge of change. To this end, job design must not consider each task in isolation and as a separate component of each job. Instead it must consider each task as an inter-active component of the whole job and meet the needs of the task in relation to other tasks.

Similarly, it is the job that is under scrutiny here, not the person(s) who carry out that job. This is because job design is an impersonal process residing within the domain of job evaluation. In short, job design combines the dynamic nature of work in a high-technology society. The ceaseless movement of change and development demands that employers get those jobs that need it, to be redesigned if the above challenge is to be successfully met. Moreover, through evaluation and re-evaluation, job design must be capable of measuring the outcomes it has introduced. This in turn will determine just how far this process has amplified the breadth and depth of employees' work. To conclude, job design is a comprehensive process of identifying, analysing and arranging job tasks for the purpose of re-creating it in either a modified or even a new form.

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