



JOB DESIGN

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Why does job design matter?

In a knowledge economy, successful workplaces are likely to be those which use and develop the skills, knowledge and creativity of employees at all levels to the fullest possible extent. Employee talent and insight can drive productivity, improvement and innovation, and this is at the heart of the engagement agenda.

Yet job design barely exists in management vocabulary in the UK, though its importance is widely recognised elsewhere in Northern Europe. Job design is a wasted resource in the struggle to improve competitiveness and employee wellbeing. For example the *UK Commission for Skills and Employment* argues that there is a necessary shift in policy focus towards ensuring that skills are effectively used as well as developed in the workplace. This long overdue recognition that many of our workplaces are characterised by a waste of employee talent should place job design as a high priority issue for managers and policymakers alike.

What is Job Design?

All jobs are designed, whether consciously or otherwise. In this sense design is simply the process of deciding what goes in and what stays out. Design is, by its very nature, both *enabling* and *excluding*.

Organisations may seek to divide tasks rationally between different groups of employees in ways that appear to maximise efficiency. Narrowly designed jobs, for example where employees repeat a restricted number of tasks in relatively short cycles, assume high levels of product or service standardisation and high levels of predictability in the business environment. A classic example is that of a garment factory making men's underwear for a retail chain such as Marks and Spencer: the design rarely changes, orders are placed in bulk and sewing operations are typically highly specialised so that the cycle time is often little more than two seconds. The machinist's job is to undertake a single operation in which she is fed a continual stream of work (providing tasks are balanced effectively and there are no bottlenecks); she is deliberately excluded from involvement in other aspects of the garment and from active engagement with other machinists. Such jobs are now rare in Europe; the boredom, stress and repetitive strain injuries associated with them have largely been exported to developing countries.

Although taken from a near-extinct industry, the example clearly illustrates both the sources and the essence of job design. The culture of the industry was created by predominantly male managers who doubted the ability of their female workforce to undertake complex tasks and whose own status was bound up with control. Therefore the common sense approach to organising work was one in which tasks were kept as simple as possible; individual discretion was removed from the performance of tasks as a potential source of error. In consequence planning and problem solving were centralised in ways that often proved highly inefficient and which failed to engage the practical know-how, initiative and commitment of most employees.

Before such industries were exported wholesale from Europe, enlightened manufacturers began to question the received wisdom of traditional approaches to job design. What if the machinist made up the whole garment? What if they planned their own production schedules and were empowered to take responsibility for quality and continuous improvement? The answer was that there were fewer bottlenecks, faster turnaround, less stock, a reduction in faults, lower employee turnover and reduced sickness absence.

In other sectors of course, employee initiative and the ability to work without close supervision are highly cherished: architects, midwives and refuse collectors perform their jobs well because they can make many on-the-spot decisions based on background knowledge and accumulated experience of what works in practice, avoiding delays caused by unnecessary referral to managers or manuals. In the best cases they make time to learn and to reflect on what is working well and what should be changed. This generates steady flows of improvement and innovation. Such employees may also enjoy discretion in scheduling their own work and in controlling its pace, minimising physical strain and psychological stress.

Moreover in exercising discretion employees acquire skills that are transferable, increasing their adaptability and resilience within the organisation and their employability outside it, even in quite different occupations.

To summarise, job design might be represented as follows:

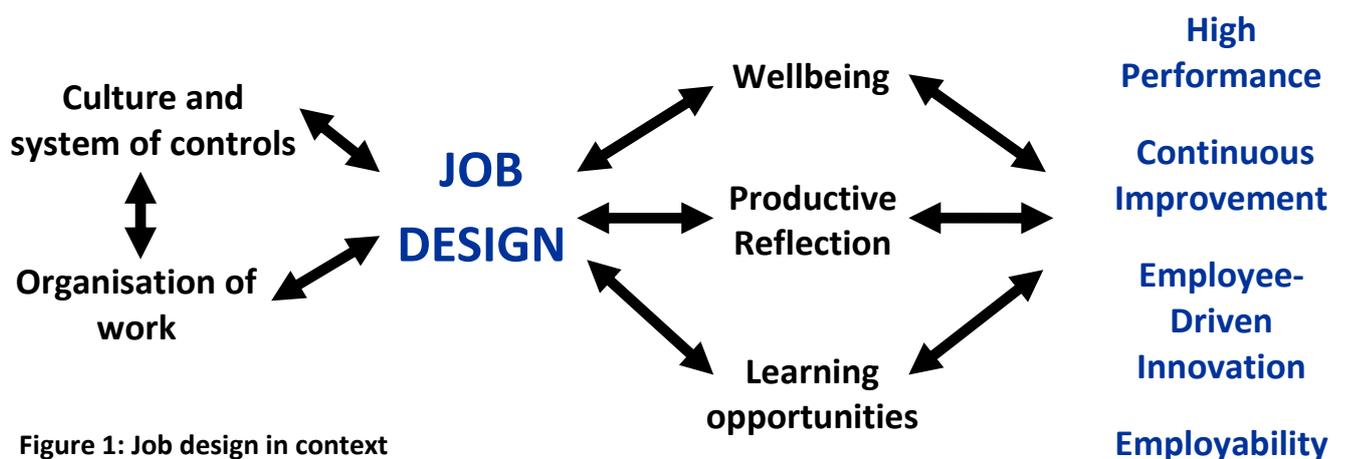


Figure 1: Job design in context

Culture and the system of controls describes the devolution of authority to different layers of the organisation as well as the extent to which trust, knowledge sharing and participation are embedded in its practices and behaviours.

At its most basic level the **organisation of work** describes the distribution of tasks between different departments and work stations, but perhaps more importantly it concerns the quality of interactions between people involved in those different stages. For example in a traditional hospital, patients with a chronic condition would expect parallel appointments over time with different specialists – consultant, dietician, physiotherapist, specialist nurse – who would rarely meet in person. In a multidisciplinary team approach to clinical work organisation you would have access to combinations of specialists at the same time in the same room, allowing for the cross-fertilisation of knowledge, diagnoses and prescriptions. The specialisms are the same in both cases but the nature

of the relationships between the specialists are very different – and research shows that such differences in work organisation leads to different outcomes for patients too.

It will be clear that **job design** is very closely related to work organisation. However it goes further in addressing the demarcations between specialisms. In the hospital example nurses are beginning to take over some of the functions traditionally reserved for doctors, for example in prescribing medicines or undertaking minor surgery. Rigid demarcations are becoming more blurred, allowing many patients a more seamless experience of care.

Job design is a major determinant of quality of working life and **wellbeing**. Narrow and rigid specialisation distances the employee from the whole product or service. This creates the potential for alienation, reducing job satisfaction and limiting responsibility for quality. Specialisation can also limit the potential for interaction with and support from colleagues, and reduces the individual employee's ability to resolve problems. These factors can combine and, especially in a pressurised work environment, act as major sources of stress and illness.

In contrast, broadening job design can lead to enhanced quality of working life and job satisfaction, resolving potential sources of stress through co-operation and problem sharing. Job design that gives employees responsibility for quality and improvement can be a particularly potent driver for engagement. Jobs need to include regular opportunities for **productive reflection** –taking two steps back from the performance of functional tasks to consider what works and what can be improved. Productive reflection needs to take place in different but mutually reinforcing ways - at the level of the individual employee, the functional team, the cross-functional improvement group and the company-wide representative forum.

Productive reflection and co-operation are also an important source of **opportunities for learning**. While not removing the need for employer commitment to the provision of formal training and development, EU research suggests that on-the-job learning can be the most important means of developing individual competence and confidence. For example such learning can take place between specialisms as demarcations between jobs are weakened, from peer review, and from the blame-free analysis of untoward incidents.

In short, broader job design that weakens demarcations and allows for greater co-operation and knowledge sharing:

- leads to higher performance by enabling people to use their full range of knowledge, skill and experience at work;
- creates collaborative spaces to reflect on and improve current practice, and to identify opportunities for innovation;
- provides employees with the transferable skills and confidence that enhance their versatility and resilience within the organisation and their employability in the wider labour market.

Earlier conceptions of job design were more linear than that represented in Figure 1, representing it as the function of culture and work organisation while determining a number of outcomes. However it is more helpful to see job design as a reflexive process which can shape and be shaped by employees and the wider organisational context. Indeed there are workplace cases where the direction of influence on the Figure flows principally from right to left, using workforce knowledge and creativity as a bargaining resource for greater autonomy and trust. Critically its interdependence

with culture, control systems and work organisation means that job design cannot be addressed in isolation.

Some conceptual underpinnings

Karasek's Demand-Control model provides a valuable starting point in considering job design. This is summarised in Figure 2:

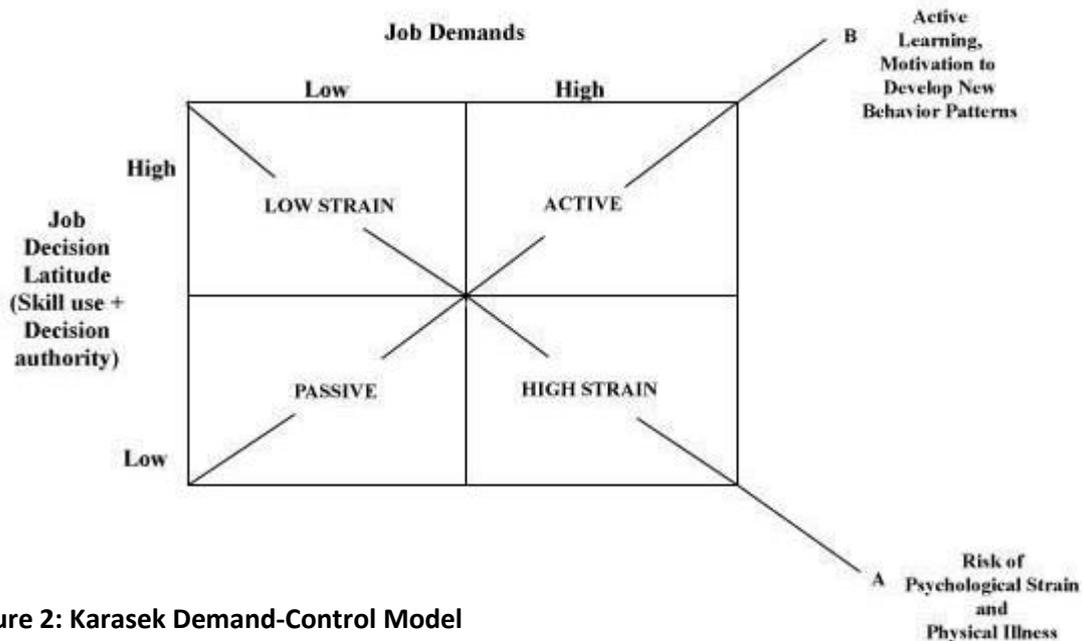


Figure 2: Karasek Demand-Control Model

Karasek argues that the greatest risk to physical and mental health is experienced by workers facing high psychological workload demands or pressures combined with low control or decision latitude in meeting those demands. It is not the presence of problems that causes stress risks but the inability to solve them, and it is from solving problems that employees learn. The model also shows that learning opportunities are few where job demands are low and there is limited scope for taking decisions.

Job demands are defined by questions such as "working very fast," "working very hard," and not "enough time to get the job done." Job decision latitude is defined in terms of ability to use skills on the job and the decision-making authority available to the worker. Subsequently the model has been expanded to include the beneficial effects of workplace social support.

Critically Karasek emphasises the interaction between demand and control as a stressor rather than individual perceptions or "person-environment fit." In short, job design either reinforces or ameliorates those factors in the work environment that limit the ability of the employee to deal with high demand. The need is therefore to create 'challenging jobs' which combine high demands with sufficient scope for decision-making.

Although developed as a means of understanding workplace stress and illness, Karasek's model also points to the potential for convergence between well-being and high performance. It continues to be highly influential in shaping understanding amongst practitioners and policymakers of the scope for "win-win" approaches to work.

Hacker, a German psychologist, approaches the issue from a different but potentially complementary perspective arguing that work tasks need to be “complete” and form an integrated whole if they are to provide the basis for rewarding jobs and employee wellbeing:

1. The task must comprise a coherent combination of preparation, organisation, control, correction and communication. Feedback is also important.
2. The task should demand different levels of cognitive or mental effort at defined intervals (thinking before execution, thinking during execution, routine actions).

A task can be regarded as complete only if it meets both these criteria. Hacker’s research shows that incomplete tasks result in low levels of wellbeing, poor mental health, low job satisfaction and lack of motivation as a consequence of stress and insufficient learning opportunities. “Complete” jobs should therefore be the target of good job design, both in the interests of employees and of the performance of their organisations.

The principle dimensions of job design

Karasek and Hacker offer important insights into the evaluation and improvement of job design. In countries such as Denmark and The Netherlands, prevention of job related stress has been an important part of “work environment” legislation since at least the early 1990s. Job design has therefore achieved a much higher profile. For example TNO (the Dutch national research organisation) developed the *WEBA Model* from the work of Karasek and Hacker as a practical resource to help practitioners introduce better job design - in part to support compliance with the legislation but more broadly to promote convergence between high performance and high quality of working life.

Drawing on such sources, and reflecting the author’s experience in adapting them to the UK context, the principle dimensions of job design can be summarised under seven headings:

1. Is the job a complete job?

A job is occupationally complete if it contains a logical and coherent sequence of preparatory, executive and supportive tasks, offering clear opportunities for problem solving, learning and self regulation, thereby leading to stress reduction. This requires the removal of traditional assumptions about the need to separate conceptual and manual tasks.

The worker should therefore enjoy some control over the planning of the process, the way in which the task is performed, and the setting and completion of targets. Some autonomy should be demonstrated over the method of working in terms of speed, method, sequence, the working environment. External factors on which the job depends such as the supply of materials should be open to negotiation by the worker. Job roles should also be extended to include support tasks such as routine maintenance, but should also provide discretion to call in specialist assistance as appropriate.

2. Does it contain sufficient organising tasks?

Workers should be able to assume responsibility for day-to-day decisions about planning and work methods through co-operation and communication with others. Systematic opportunities should exist for problem solving through horizontal contact with peers.

3. Are there sufficient non-short cycled tasks?

Short cycle times offer limited possibilities for autonomy and can induce stress and repetitive strain injury.

4. Is there a balanced distribution of easy and difficult tasks?

When work consists solely of simple tasks, opportunities for learning are limited. However work can be excessively difficult if its execution requires frequent pauses to consider methods. The level of stress, fatigue or recuperation associated with each part of the cycle should balance out across the cycle as a whole.

5. Do the operators have sufficient autonomy?

The ability of the worker to adapt to changing demands, circumstances and opportunities is an essential prerequisite for learning and stress reduction. The job should contain demonstrable opportunities for productive reflection including analysis, problem solving and innovation.

6. Are there sufficient opportunities for contacts?

A high frequency of contact is required to support problem solving, learning and innovation, and may take the form of ad hoc co-operation, formal or incidental discourse, and social contacts outside the work sphere. Employees at all levels should be able to instigate vertical or horizontal communication.

Strong social networks developing within the workplace are also an indication of high levels of cohesion and trust.

7. Is sufficient information available?

A pattern of “distributed intelligence” is required in which knowledge and expertise are widely shared or readily accessible by individuals throughout the organisation. This requires a minimum of demarcation in terms of the “ownership” of information within the enterprise. In addition, feedback is required to enable workers to assess the quality and effectiveness of their own work.

Few restrictions should therefore exist on access to information, and each worker should be empowered to source relevant information. Operatives should also receive feedback which is accurate, prompt and delivered in a way which encourages learning.

What should managers do?

The evidence is clear that job design plays an important role not just in engagement but in critical measures such as productivity, quality, innovation and wellbeing.

The seven job design indicators outlined above can provide a starting point for self assessment, and for inclusive dialogue and reflection involving teams, line managers, HR and union representatives.

Sources

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