

Strategic workforce planning – a vital business activity

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Abstract

Purpose – *The purpose of this paper is to make the case for strategic workforce planning and to outline the key steps involved.*

Design/methodology/approach – *The paper begins with a discussion of the cost of redundancies to the economy and argues that much of this could have been reduced with better planning. It goes on to describe the key steps in workforce planning. It looks at practical ways to assess demand and replacement needs and utilise productivity ratios to convert delivery units into human resource requirements. It concludes with a discussion on the supply of resource and examples of actions that can be taken proactively to close foreseen gaps.*

Originality/value – *This paper is based on methodologies developed by the author and applied in practice.*

Keywords Recruitment, Strategy, Productivity, Restructuring, Analytics, Human capital

Paper type Conceptual paper

Background and Introduction

Some years ago, I had a chief executive in the information technology (IT) industry who became horrified at the sums that the company was spending on redundancies and how easily human resource (HR) and line managers conspired together to hand out the company's money. For him, every penny spent this way was a wasted penny that could have been used for other things. He knew, of course, that sometimes a redundancy was inevitable but by insisting that every payment had to be signed off by himself and that questions would be asked as to why this had not been avoided, the number rapidly decreased. Managers started to do much more planning ahead; HR created a retraining pool and the whole company became more disciplined on performance management. Artificially created redundancies to allow longer service people to resign with a package were ended.

The UK has developed a redundancy culture that costs the economy billions. The Chartered Institute of Personnel and Development reported in 2012 that in the four years since 2008, 2.7 million people had been made redundant and EMW, a law firm, estimated the payouts alone to be £18.6 billion over this period. This situation has continued particularly in the public sector since 2012 and added up to £2 billion of public money in 2012/2013. Average payment in the private sector was £8000 and in the public sector was £29000. In one year alone – 2010/2011 – the National Health Service (NHS) paid out £170 million in such payments – an organisation that is chronically short of funds.

It is the nature of economic cycles that downsizing is followed by skill shortages. For the year 2014/2015, the Daily Telegraph reported that £3.3 billion had been spent on hiring agency doctors and nurses in the NHS, many of the former having retired early or taken "redundancy" earlier. The problem of hiring back people caused HM Treasury to issue a paper in January 2015 entitled *Recovery of Public Sector Exit Payments*.

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To what extent could better planning have avoided some at least of this expenditure? Of course many job losses are due to the genuine cessation of particular roles, although nobody knows how much is merely due to "restructuring". How many people could have been retrained or redeployed? "Strategic Workforce Planning" is a discipline that looks ahead and has the potential to see what is coming, or is likely to come, and to take *proactive* action. No responsible person in the public sector in 2008 could say they did not see cuts coming in public expenditure – but how far were they looking ahead?

Workforce planning was originally called manpower planning. This was reflected in the titles of the leading organisations in the field. For instance, the Manpower Society was founded in 1970 to specifically focus on this discipline. It was renamed the HR Society in 2000. The Institute of Manpower Studies (established 1969) was a founder member (along with the then Institute of Personnel Management) and this itself was renamed the Institute of Employment Studies.

Workforce planning in the 1970s and 1980s had a strong orientation towards large, stable jobs-for-life organisations, with many young entrants of different kinds, who moved up a clearly defined hierarchy. This enabled some fairly scientific forecasting. The seminal book of this era was *The Manpower Planning Handbook*, (Bennison and Casson, 1984) and – of its genre – it has hardly been bettered since. It showed how to map career paths, analyse attrition and calculate future replacements by grade. This discipline however later went out of fashion, as the world became more turbulent, as finance functions began to dominate organisations and careers became more flexible. The world moved to being much more reactive. By the early 2000s there were not a lot of opportunities for workforce planners.

At the same time, Dave Ulrich of the University of Michigan galvanised HR into thinking of themselves as "strategic partners". Many still struggle with what this means in practice, but little could be more strategic than ensuring the organisation has "the right people in the right place at the right time with the right skills and the right contract" i.e. has the HRs necessary (whether full time employees or not) to ensure the business plans and objectives can be achieved. This is not a one year "headcount plan", dictated by the budget available. It is an exercise that starts off bypassing financial considerations and seeks to interpret business plans in terms of the numbers and skills, by role, that will be needed to deliver the products and services in the plan. In due course, this will have to be matched with the financial resources available and choices and judgements made, but this is a second stage.

A definition

The main drawback of the description of strategic workforce planning given above is that it implies that workforce planning is an exact science that can produce right answers. This may discourage managers from participating in it because they are conscious of the many uncertainties ahead and are very focused on the current year. However, it is better to be approximately right than exactly wrong – and to understand trends and directions that will require actions in advance. A better definition is:

Workforce planning is the strategic alignment of an organisation's human capital with its business direction. It is a methodical process of analysing the current workforce, determining

future workforce needs, identifying the gap between the present and the future, and implementing solutions so the organisation can accomplish its mission, goals, and objectives. (Minnesota Management and Budget)

Workforce planning needs to be a fully integrated part of the business planning process. It needs to be owned both at divisional level and organisation-wide – only at that level can redundancies be avoided by the overview of skill deficits and surpluses and therefore redeployment or retraining.

The steps involved in the process

Essentially there are four key steps:

1. Workforce demand planning – the goal of this stage is to estimate the demand for different job roles, and specific strategic skills, over chosen time periods of the business plan. It will take account of both internal and external factors.
2. This will give us a gap (which may be positive or negative) between what is needed and what we have now. To this, we must add a calculation of the “replacement need” based on workforce flows.
3. The next stage is to look at the supply available. This may come internally through transfers, trainees or promotions. The balance will be sought externally and we need to assess availability in the market place.
4. As we analyse demand vs supply, this may lead us to take some strategic decisions to ensure the gaps will be closed in the future – or, in the case where the gap is negative, what steps we can take to avoid redundancy.

Organisations will vary in the way they apply these steps. Those with long-term capital planning such as the oil, chemicals and transport industries will have long-term plans. At the other extreme are project-based organisations where the HR needs vary enormously according to projects obtained. In shipbuilding or construction, a project may last as much as five years; in IT or consultancy, it may be as little as two months. The International Olympic Committee provides an excellent guide to the complex workforce planning needs for staging the Games, normally a five-year project. Such organisations need to plan by project, and each group of employees has an expected employment period.

In between are those with typically three to five years strategic plans (the majority), seeking “business as usual” and subject to the winds of the market. Whole industries have shrunk almost beyond trace over the years and new ones have emerged. In contrast to this, most of the public sector often argue that they are subject to the vagaries of political policy and the Treasury and can rarely plan ahead for long. In practice, the bulk of what most of them do continues to stay in place over the years.

Demand and scenario planning

Just as the Finance Director breaks down the financial planning process into budget holders so we need to decide how to break down the workforce. This would normally be

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done by dividing it into "job families". A job family is defined as a group of staff who share similar characteristics, such as:

- Common professional qualifications or training;
- A specialist or scarce skill;
- A similar labour market (this may be dictated by geography); and
- A broadly similar level in the organisation hierarchy.

Unlike budgeting, this does not necessarily follow the current organisational structure – as some job families will span several departments. So a first stage in implementing this process is to set up these job families.

Some experts argue that strategic workforce planning should concentrate only on job families and skills that are mission critical or require long training periods. Certainly, this would be a place to start. But the advantage of taking the complete picture is that it enables potential rebalancing of deficits and surpluses.

A second decision concerns the "unit of human resource". This would normally be defined as "a full time equivalent" – i.e. an employee working for 35 or 37 hours a week, with holiday allowances and perhaps an average sickness/training allowance built in also. The number of full-time equivalent (FTE) that our analysis comes up with will then be converted into different kinds of resource contracts – either as employees or as contractors.

We would expect a full analysis of external factors to be undertaken by the strategic planners in preparing the business plans. This would include looking at sector development and competition, the impact of technology, political and regulatory factors and stakeholder expectations. The future is uncertain, however, and so the techniques of *scenario planning* need to be deployed. Thus, in the public sector, we could look at different levels of imposed cuts or digital investment. In the private sector, we might look at different growth scenarios or new product success. Each scenario can be given a probability and will have both financial and workforce implications.

A strategic plan is not much help to the workforce planner if all it contains is a set of qualitative aspirations, with no numbers. Ideally it will specify, preferably under different scenarios, the number of products and services to be delivered year by year. It is often the second level plans – at divisional or department level – that will provide the necessary detail. At this level, plans will take account of new systems, organisational structure change, productivity improvements, role changes and so on. The challenge then is how to translate all this into units of HR.

We start with "*front line*" people directly related to delivery – such as manufacturing operators, service workers, installation engineers, salespeople and so on - and their typical resourcing ratios – usually referred to as *productivity* ratios, as they compare output with input. We have historical data available on these ratios but may also want to do some benchmarking, especially on standard industry wide comparators. We may therefore set new targets on productivity as a result or progressive improvement from period to period.

Some examples of these ratios would be:

- Nurses per ten occupied hospital beds;
- Policemen per 1,000 population;
- Sales people per £100 K target;
- Operators per shift per assembly line;
- Labour hours to produce a car;
- Call centre operators per 100 customers or 100 sales calls;
- Sales assistants per square metre of retail store; and
- Lecturers per 100 students.

In some cases, a composite crew is defined per item of operational equipment e.g:

- Per aircraft, train or ship;
- Per drilling rig;
- Per public library; and
- Per chain style restaurant.

Front-line employees then require *direct support*. They need supervision and management, technical and quality support, planners and monitors. For example, for every ten front-line people, what kind of support is needed and how much? These become job family: job family ratios and form part of our planning data. Here are some examples:

- Workers per supervisor;
- Technical support engineers per salesperson;
- Technicians per ten lecturers; and
- Schedulers per 100 operators.

Finally, we have "*second line support*" people – overheads such as finance, IT, HR, public relation, legal and senior management. As small groups, they may be evaluated and planned for individually. Many will be determined as a ratio to all employees (this is common in HR). Others such as IT will have a base level of support related to the number of systems or desk users, plus separately evaluated projects.

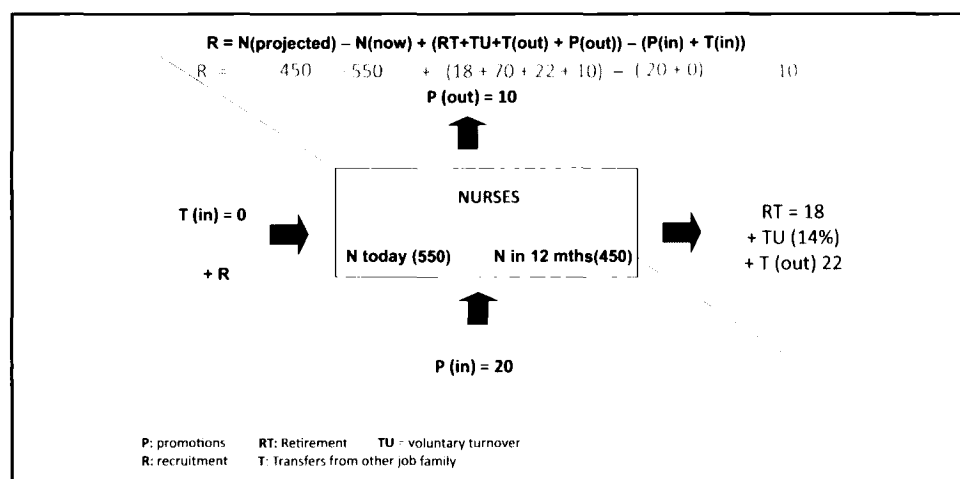
The ratios used above are very likely to be derived from history or current practice. It is the job of the workforce planner to bring in benchmark data, conduct workshops on process redesign or discussions around "in a greenfield organisation what would you do?". These discussions or workshops may result in two plans – the "practical" and the "ideal". Over a five-year period, with setting the "ideal" as a target our workforce plan may take on a different shape.

Adding in replacement needs

The above analysis helps us to understand the different needs for job families at various points in the future. Life is however dynamic and meanwhile individuals join and leave the job family. We need to predict the replacement requirements, and to do this, we need some good data and some judgement about the extent to which the past predicts the future. We may take some deliberate actions to change these flows depending on the result of the analysis. Figure 1 shows the different types of flow in and out and can be used to calculate "R" – the recruitment or "redeployment" need for a specified period.

In this example, although we are reducing the establishment by 100 over the period, the calculation shows a need only for ten to be redeployed, and we may decide to allow a slightly higher end of year figure so that time will take care of this number.

Figure 1 Modelling workforce flows



Supply analysis

Before we examine the sources of supply, we need to translate our demand for FTE's into "real" people. That will depend on our chosen mix of contracts. Figure 2 shows an example of how a total demand figure may be broken down.

Our recruitment plan will be based on actual employees. First, we see what can be sourced internally. This requires us to assess the potential of people – to be promoted or to retrain – and this is often not done well. So-called "high potentials" may be identified, but there are different kinds of potential. Internal sources will therefore include:

- Transfers from another job family, with or without retraining;
- Promotions from lower grades; and
- Maturing trainees.

We will have taken account of these when doing the manpower flow model. External sourcing depends on availability, and it is an increasing problem in the UK to find a number of scarce skills in the labour market, both currently and as we look ahead to the future. We may find we are left with gaps.

Figure 2 Translating FTEs' to employees

Software production		FTE Equivalent						
Job family	FTE's	Full time	Overtime	Part time ave 0.6	Job shares at 0.5	Agency/temps	Consultants	Outsourced
Project Managers = People employed	10 10	10 10	0	0	0	0	0	0
Designers = People employed	42 52	20 20	3	12 20	6 12	0	1	0
Programmers = People employed	114 68	58 58	10	0 0	5 10	41	0	0
Technical authors = People employed	11 1	1 1	0	0	0	10	0	0
Admin/IT support = People employed	24 20	7 7	3	4 7	3 6	2	0	5

Proactive actions to close predicted gaps

This systematic planning process enables organisations to take proactive action to fill these gaps ahead of time. Here are just a few examples of such actions:

- *Sourcing from abroad:* According to the Guardian, one in four nurses is recruited expensively from abroad due to a shortage in the UK.
- *Increasing the number of trainees:* Too often, the number of trainees is dictated by current financial constraints, yet they are not being hired for today's needs but those of tomorrow. According to Dr Peter Carter, chief executive of the Nursing College, 30,000 people in the UK who wanted to train as nurses had been turned away from courses last year, because too few places were funded.
- *Working with universities and colleges to create special skills courses:* Back in 2008 – National Grid forecast a shortage of power system engineers (amongst other roles) due partly to a peak in retirements. They worked with the University of Warwick to train future employees they had selected from schools directly – a four-year process.
- *Changing career and training paths:* Deutsche Bahn forecast a need for new types of signalmen and had a bottleneck in their traditional career structure. They needed to source these from within or risk industrial strife. By creating an alternative structure, they were able to accelerate training for sufficient individuals to meet the need.
- *Changing HR policies and practices:* To enhance attractiveness as an employer, retain more staff, provide more employee-centred flexibility such as progressive retirement – the National Grid reviewed all of these.
- *Adjusting the mix of employees vs contractors:* This is not necessarily desirable and would be a short-term action. It is, currently, causing considerable additional cost in the NHS, but also in the oil exploration industry, there is a global shortage of petrotechnical professionals and it is to the advantage of individuals to go freelance. Maersk Oil of Denmark is working hard to provide more attractive benefits and career options to encourage employees to join and stay.

Summary

All these initiatives result from the discipline of workforce planning. Turbulence and uncertainty are not an excuse for not doing it. Without it, organisations will find themselves firefighting and merely reactive. They will also waste money unnecessarily as we have seen. A strategic workforce planning process is not expensive to run in systems and resources, but there is a people investment in the initial design of the process. This may take a year to do with a lot of dialogue with managers and planners. Once in place, it can be revised periodically. The dream goal would be no redundancies and no vacancies or shortages of needed skills at any time. It is a goal worth aiming for, even though it is unlikely to be achieved in full, as every stakeholder in an organisation will benefit.

Further reading

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