

WORKFORCE PLANNING PRACTICE

Guide
May 2018

The CIPD is the professional body for HR and people development. The not-for-profit organisation champions better work and working lives and has been setting the benchmark for excellence in people and organisation development for more than 100 years. It has more than 145,000 members across the world, provides thought leadership through independent research on the world of work, and offers professional training and accreditation for those working in HR and learning and development.

cipd.co.uk

IES is an independent, apolitical, international centre of research and consultancy in public employment policy and HR management. It works closely with employers in all sectors, government departments, agencies, professional bodies and associations. IES is a focus of knowledge and practical experience in employment and training policy, the operation of labour markets, and HR planning and development. IES is a not-for-profit organisation.

www.employment-studies.co.uk

Guide

Workforce planning practice

Contents

Introduction	2
An overview of workforce planning	5
Understanding the organisation and its environment	8
Analyse your current and potential workforce	12
Determine future workforce needs	14
Identifying workforce gaps against future needs	19
Actions to address shortages, surpluses or skill mismatches	21
Monitoring progress and evaluation	26
Conclusion	27
References and useful resources	29
Appendix	31

Acknowledgements

This guide was written by Ally Weeks from the CIPD, with Peter Reilly, Wendy Hirsh, Dilys Robinson and Alex Martin from the Institute for Employment Studies.

The authors would like to thank the experts and businesses who gave their time, insights and experience to shaping this guide and enriching the examples it contains. Unless drawn from publications already in the public domain, or with their express permission, individuals and organisations are not named to protect information that may be sensitive.

1 Introduction

World economics, technology, demography and changing social attitudes are constantly influencing how we resource our organisations. The need for the right people, with the right skills, in the right roles, at the right time and at the right cost rings true now more than ever. With concerns over skills shortages, and increasing competition to attract 'talent' to our organisations, considered workforce planning is an imperative that will keep businesses ahead of the curve.

Workforce planning is a business process to align changing organisation needs and people strategy. It doesn't need to be complicated and any necessary complexity can be adjusted to suit the size and maturity of your organisation.

Workforce planning will often be triggered by a specific event and/or a change to the structure of an organisation, such as through a merger, acquisition or a transformational change project. However, a focus on broader workforce planning will be important to your organisation at any given time.

Why now?

Recession and volatile economic conditions in the latter part of the twentieth century had eroded confidence in business planning, and workforce planning along with it. When planning becomes weak, organisations become reactive, and tend to rely on hiring and firing in response to short-run changes in organisational needs, meaning longer-term investment, for example in skills and development, can be neglected.

Meanwhile, globalisation has meant an increased access to talent and services beyond local and even regional pools and, at the same time, exposes organisations to heightened competition for resources.

Another factor that is reshaping the world of work and driving the need for workforce planning is technology. Tech-savvy experts are not exclusively required by technocentric organisations but are in fact sought by all industries. Robotics, algorithms and artificial intelligence are making a significant impact on the work we do and how we do it. More and more, we are seeing new job titles and descriptions for roles that did not exist even a few years ago.

Businesses need greater flexibility and agility to adapt to the rapid pace of change as well as the flexible working opportunities sought by employees. Add to the mix options such as outsourcing, offshoring, part-time working, use of zero-hours contracts or agency workers, and the need for a considered, co-ordinated approach to resourcing becomes evident.

Apart from market fluctuations, changes in the vision, mission or direction of an organisation through mergers or acquisitions, for instance, call for workforce planning. A merger may leave an organisation with a surplus of employees and require decisions about redeployment or redundancy. An acquisition can prompt decisions to be made on when and if the harmonising of contracts is appropriate or a change of culture is required. If relocation is being considered, it will be crucial to understand which of your employees will relocate with you, the costs involved, and to make an assessment of labour market availability of skills in the new location. These are only some examples of the factors precipitating the need for workforce planning.

Figure 1: Some factors contributing to the need for workforce planning**Why does it matter?**

People in charge of organisations, teams or projects have always needed to plan how activities will be accomplished. Such planning involves recruiting, training and deploying the people needed to get the work done. This requires an understanding of the amount of work and how it will be organised. If organisations wait until the moment the work has to be done, the people and skills needed to do it will simply not be there.

Effective and timely workforce planning goes beyond forecasting headcount and can provide agile people solutions to complement the future direction of your business.

A strategic workforce plan will inform good business decisions and yield important data such as hiring ease or difficulty, time to hire, time to productivity, attrition rates and so on, which can help identify risks and contingency actions.

Examples

Inadequate workforce planning can hit headlines for the wrong reasons and cause significant reputational and financial damage. The recruitment of security staff for the 2012 London Olympics was not properly planned and military personnel had to be drafted in on short notice. The service provider's contract penalties amounted to over £80 million.

More recently, poor rota planning for pilots at a budget airline led to the cancellation of over 2,000 flights, with consequent misery for travellers and the potential risk of long-term reputational/brand damage to the airline.

What can it achieve?

Workforce planning can provide insights for organisations to go beyond merely reacting to circumstantial market events. It can offer market and industry intelligence and help organisations to focus on:

- reducing labour costs in favour of workforce deployment and flexibility
- responding to the needs of their customer base
- identifying skills gaps and areas of succession risk
- relevant strategies for talent management and people development
- targeting specific and identified inefficiencies
- employee retention initiatives
- improving the quality of outputs
- improving work-life balance
- recruitment and training responses to changes in the education system.

What is covered in this guide?

This guide sets out the steps to workforce planning for HR professionals and line managers. Examples throughout will show that change and uncertainty make planning especially critical, and that through a structured planning process, organisations can position themselves not merely to survive but to thrive by mapping and securing the workforce resources they need now and for the future.

This guide begins with a look at developing a clear understanding of your organisation and the environment in which it is operating. The focus then moves on to analysing your current workforce followed by a determination of your future workforce needs. The next step will be identifying the gap between the two and then deriving the actions that must be taken to close that gap. Implementing the actions, tracking progress, and making necessary adjustments round out the process.

2 An overview of workforce planning

Strategic vs operational workforce planning

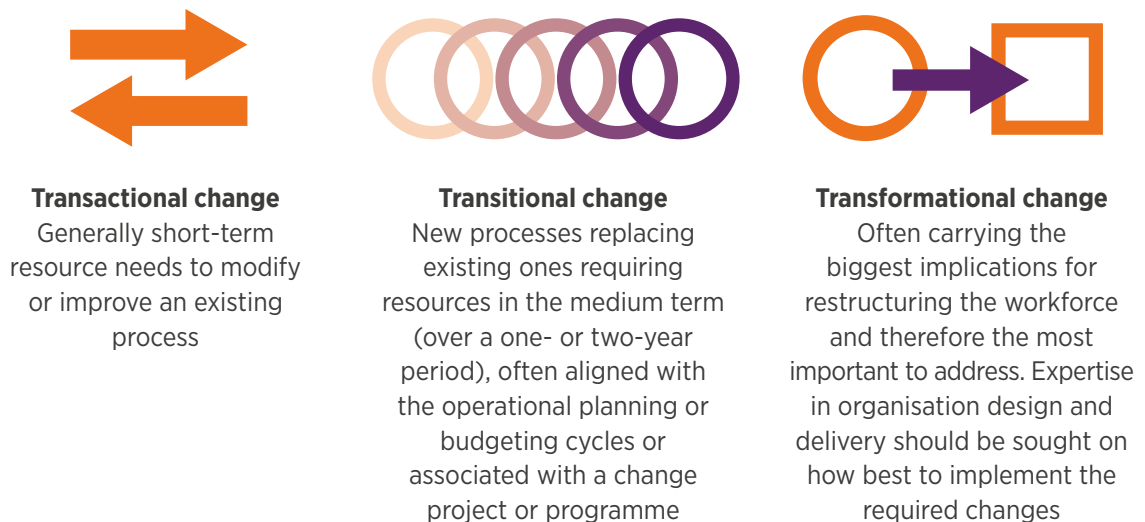
Strategic workforce planning guarantees an alignment to an organisation's business strategy. It is a holistic approach to assessing and analysing the internal business drivers and goals, and external environment developments impacting upon your business. It primarily focuses on identifying critical job roles and families and the strategic capabilities required to meet future goals. It typically has a three- to five-year forecast horizon. Effective and timely quantitative and qualitative data capture will inform potential future risks by predicting possible alternative futures. Actions can then be taken today to mitigate against future workforce risks.

Operational workforce planning has a shorter forecast horizon, typically three to twelve months. The focus is more on identifying skill gaps, numbers of people required to satisfy more immediate needs and mechanical processes such as recruitment or training spend. It is a tool to manage business as usual.

Timeframes for change initiatives

Another important consideration to address is the distinctive issues that occur within different timeframes of change, the type of change involved and over what period of time.

Figure 2: Different timeframes of change



'In many organisations the habitual approach to workforce planning is just a short-term budget and headcount exercise. Attempting to be this granular and precise is not useful when looking longer term, especially when the environment is uncertain.'

Julia Howes, Principal, Mercer

Workforce planning process

Workforce planning is a process of analysing the current workforce, determining future workforce needs, identifying the gap between the workforce you will have available and your future needs, and implementing solutions so that an organisation can accomplish its mission, goals, and strategic plan.

While it is convenient to describe workforce planning as a series of steps, it is equally important to understand that it is an iterative process, not rigidly a linear one.

The main steps in the workforce planning process are covered in detail in the following sections of this guide, but can be summarised as illustrated in Figure 3.

Figure 3: Steps in workforce planning process



Developing the capability for workforce planning

As we embark on the workforce planning process, it's important to understand first how to organise workforce planning, what skills are required, and what type of data needs to be collected in order to allocate responsibilities accordingly.

A. How is workforce planning organised and who does it?

At senior levels, both HR directors and board members should drive the strategic end of the process and set the agenda for workforce change.

Workforce planning needs strong links across an organisation's functions and into strategic planning and finance in particular. Involving some of these other stakeholders in the design of a workforce planning approach will not only be informative but will help with implementation down the line.

Longer-term planning and planning for key groups – such as senior managers – who are treated as a corporate resource tend to take place centrally. The majority of workforce planning, however, takes place in the main business entities – divisions or regions of larger organisations. Corporate functions often do their own planning for all their roles across the organisation. Labour-intensive organisations frequently do their planning for operational employees at local unit level, as this is where employees are recruited, developed and deployed. If in doubt, consider where these decisions are made for a particular workforce group, and that is probably where the planning will work best.

B. What skills are needed to undertake workforce planning?

Ideally those responsible for the process will have specific technical expertise in workforce planning and labour market analysis, but if not, the following skills should be collated:

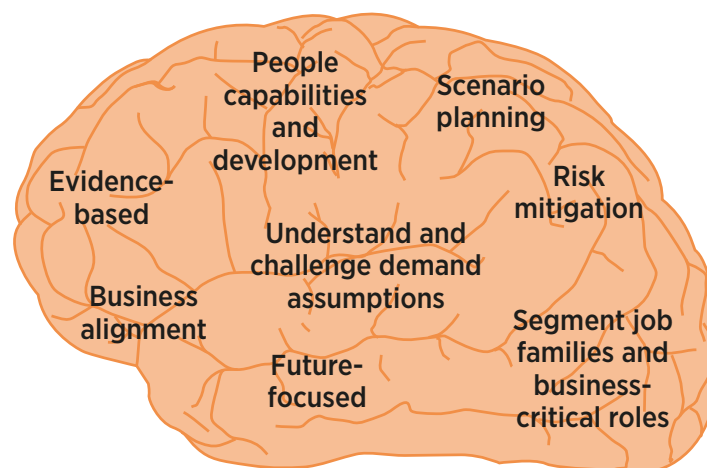
- mastery of internal information sources and knowledge of the external environment and labour market
- good understanding of the business and its strategy
- general analytical skills including data collection (often both quantitative and qualitative), analysis and evaluation
- general advisory/consulting skills including problem diagnosis, problem-solving, communication and project management
- ability to build relationships with leaders and colleagues in HR (including subject experts and business partners).

C. Workforce planning mindset

Workforce planning should not be viewed merely as a process; it is also a mindset, involving habits of thinking and analysis. In this sense, understanding workforce planning and practising even its simplest techniques can help all HR professionals and line managers tackle resourcing issues more effectively.

Line managers, often working with HR, should be the main players in local, functional or divisional workforce planning. Therefore HR's challenge in some cases is to open managers' minds and behaviours to a range of possibilities in what the organisation will have to confront in future forecasting.

Figure 4: Workforce planning mindset



D. Developing relevant data and access

HR analytics enable HR teams and their major stakeholders to measure and report key workforce concepts, such as performance, well-being, productivity, innovation and alignment. This in turn enables more effective evidence-based decisions by strategic business functions. HR analytics can provide a demonstration of the impact that HR policies and processes have on workforce and organisational performance, and can be used to demonstrate return on investment. Some recommendations for developing relevant data include:

- HR working closely with the planning and finance functions to develop consistent data sets
- data is kept over time so that snapshots of workforce composition at the same date each year, for example, can be easily extracted – workforce data relies on keeping information on joiners, leavers and movers in each year
- data errors are automatically checked for, so they can be corrected
- fields used should be clearly defined, especially the fields that locate workforce groups (for example by combining function or job family fields with grade or level)
- business and workforce information systems are constructed in such a way that additional fields can easily be added and data from several fields can be extracted and cross-tabulated with ease.

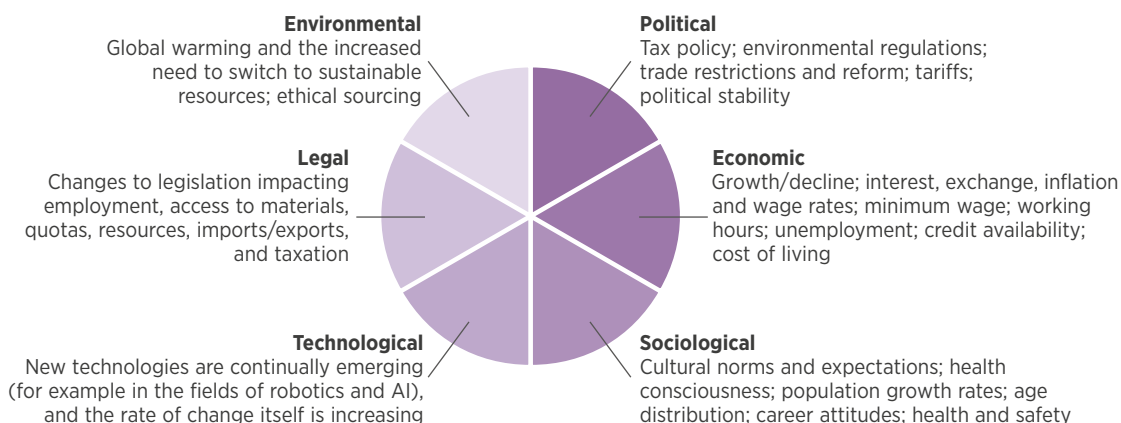
Example

A charity working across multiple countries needed to support senior managers in building local workforce planning into their existing business planning cycle at country level. An initial session was run with a sample of country directors and HR managers to build the workforce planning model. Subsequent sessions were then held to train more HR staff in workforce planning techniques and how to apply them in their context. The workforce planning model was piloted in a few locations before being rolled out to all countries. Keeping the planning approach as simple and relevant as possible was critical. A bespoke workforce planning guide was created, including a standardised reporting format for workforce plans and supporting information. Real examples from the pilot phase were included showing, for example, SWOT, risk and diversity analyses.

3 Understanding the organisation and its environment

Understanding the external environment

Practitioners should have a clear understanding of the external factors impacting their organisations and a PESTLE analysis can provide that insight. A PESTLE analysis is one of the most effective frameworks for understanding the ‘big picture’ in which an organisation operates. It looks at six key factors – political, economic, sociological, technological, legal and environmental.

Figure 5: PESTLE analysis

A PESTLE analysis allows HR and senior managers to assess any risks specific to their industry and organisation, and use that knowledge to inform their decisions. For more on PESTLE analysis and to download a ready-to-use template, refer to the [CIPD's PESTLE analysis factsheet](#).

Understanding your labour markets

A labour market refers both to what the people who might join your organisation to do a certain type of work are currently doing and the geographical area from which they are likely to come. This will include considering key questions about particular workforce groups, especially for critical roles and those where you feel you may have difficulty recruiting.

Questions to consider about your internal labour market

- Where do current staff live who are already doing this work? How far are they travelling? Are there other areas people may be willing to travel from?
- When have you filled jobs recently? What were people doing before and where did they come from?
- When people have left you, where have they gone? That is, to which kinds of employers in which locations?

For some workforce groups you may only need to understand a very local labour market. For others, the market can be regional, national or international.

Questions to consider about the external market

- What are the characteristics of the working population in the relevant labour market area, for example, its age profile, employment patterns (occupational and sectoral) and educational characteristics?
- Who do you compete with for the relevant workforce group? Remember you may not only compete for labour with employers in your own business sector.

Continued on next page

- Are important changes occurring to your labour competitors, for example, is the growth of financial services companies in your labour market increasing demand for high-quality office staff?
- Do your labour competitors offer better terms and conditions of employment than you do? Do you actually lose people to them?
- Is the available population from which you might recruit changing, for example, is it in a profession group that is facing a high volume of retirements nationally over the next few years?
- Are important changes occurring to the education and training system or to numbers of trainees, for example, is this a group which has seen a marked drop in numbers entering training?
- Are there general reports of labour shortages or skills gaps in this labour market? Are they getting worse or better over time?

Examples

Several organisations studied commented on the constrained availability of labour for manual and semi-skilled jobs. It cannot be assumed that labour shortages only occur with highly skilled work.

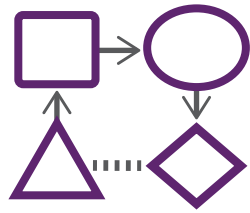
Employers in restaurants and bars experience high turnover (with one employer quoting a figure of 80% per annum). They need front-line staff with the right attitudes as well as the required job skills. Skilled kitchen staff are often hard to find. Competition for skills is often strongest in urban centres, while transport issues can constrain labour availability in rural areas. Other sectors such as retail are competing for similar skills and may offer shorter hours and better pay.

One nationwide restaurant chain observed that parents of teenagers and young adults in affluent areas were not keen on their children taking on this kind of work, even as a part-time option while studying.

Understanding your operating model

An operating model is the combination of roles, skills, structures, processes, assets and technologies that enable any organisation to provide its service or product promises.

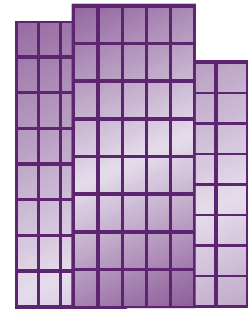
The operating model of an organisation can be split into five categories. A clear understanding of the contributions and needs of each of these will be key to a fit-for-purpose workforce planning process.

Figure 6: Organisational operating model components

Process: effective delivery of process-based activity according to productivity, performance and efficiency



Information systems: the quality and effectiveness of the information systems for delivering value to the organisation



Location and buildings: the geography and dimensions of the buildings and sites used by the organisation



Human capital: the collective capability, knowledge and skills of the people employed by an organisation



Suppliers and partners: effectiveness of activity throughout the supply chain, including performance on price, total cost, service, timelessness, efficiency, and responsiveness

Know your organisational strategy

Knowledge of the organisation's strategy for the future will also be essential to undertake workforce planning. The workforce implications of strategic plans may be explicit, but often need teasing out. Alongside the numerical impact of strategic plans, you should not neglect changes to the skills and competencies of the workforce, and implications for culture and leadership.

Strategic plans also influence the timeframe for workforce planning. In some organisations there are long product cycles while others operate over much shorter periods – some companies will have a mix of timeframes in different divisions, functions or locations. So changes to organisational direction can affect not only the number and kinds of people needed but how far ahead the organisation needs to plan.

Questions to consider to understand organisation strategy

- What are the overall organisation growth or contraction and budgetary constraints?
- What are the planned major introductions or withdrawals of products/ services or moves into different markets?
- What are the planning timeframes, from the longer term (for product lifecycle and highly skilled people who can take many years to develop) to short term (for example in scheduling shifts), or for the annual planning horizon often linked to budgets?

Continued on next page

- What does the organisational structure look like now and what do we want the structure to look like in future?
- What are the upcoming plans to increase productivity, including changes to organisation structure and processes?
- Are there plans to introduce, update or invest in new technology, remembering people remain at the heart of work?
- Are there changes in quality standards and regulatory requirements?
- Will some activities be outsourced or delivered in partnership?

In linking the environment to workforce plans, we need to ask about the likely or possible effects of such factors on workforce numbers, skill requirements, geographical locations, work patterns and contracts of employment.

4 Analyse your current and potential workforce

Workforce segmentation

Having analysed the internal environment of your organisation, you can then use workforce segmentation techniques and processes to identify the knowledge, skills, abilities and other factors required for current and future workforce roles.

There are two approaches to workforce segmentation. The first identifies different types of job families, functions, roles and competencies within the organisation. The second segments roles by value or type of work performed to focus on the most critical roles. This will vary upon the size, sector and industry of your organisation.

A good place to start is to group different job functions into job families where people in these roles share a similar level of competence such as skills, knowledge and capabilities. The benefits include:

- streamlining of your job and pay bands
- improvement to talent management by defining potential measures
- quick evaluation of jobs
- determination of pay structures
- identification of training needs
- clear explanation of roles and responsibilities.

Workforce analytics

It is also important to examine other parameters for such groups, for instance, geographical location or business division (some functions stretch across divisions) as well as the demographic differences within the workforce or contract types with regards to how work is resourced.

In a fast-paced business environment, innovation, agility and resilience are essential for organisations to retain their competitive advantage. Collecting and analysing workforce data can provide organisations with the information they need to increase or develop capability in these areas. A wide range of metrics can be used to analyse your workforce, and a glossary of measures, their definitions and examples are detailed in the [Appendix](#) to this guide.

Workforce analytics is not only about understanding individual measures, but also how factors operate together. For example, how does labour turnover move with your changing age profile, gender mix or use of part-time workers? Analytics are also essential to understanding how productivity may be boosted. For instance, is there correlation between skills investment and improvement in levels of output or quality?

Figure 7: Data relevant to assessing the workforce

Employees in post
<ul style="list-style-type: none"> Individual employee demographic data – gender, age, ethnicity, and other characteristics relevant to inclusivity goals (for example on disability) or regulatory issues (for example on nationality and right to work). People in relation to type of work (function, role, occupation), level (grade, pay level or equivalent), length of service (with organisation), length of service in job and/or grade, organisational work location (division, unit), geographical location (region, country, site or home office – travel-to-work distances and patterns), salary cost. Types of contract – full-/part-time, nature of contract (permanent, fixed-term, temporary, agency staff or contractors, zero-hours staff), working pattern if relevant (actual hours, term-time only, days, shifts). Current gaps between agreed demand and supply – scale and pattern of unfilled vacancies and employee absences, individuals on secondment and shared parental leave – how such temporary gaps are covered (including cost).
Employee movements
<ul style="list-style-type: none"> External recruitment (numbers, types of contract, sources) by job group and entry type (for example trainees). Leavers – voluntary leavers, retirements (and early retirements if special terms offered), voluntary and compulsory redundancies, dismissals. Destinations and reasons for leaving. Patterns of internal movement – a matrix of people moving from each job group into other job groups, or internal moves split between promotions and lateral transfers at the same level, inter-functional/ business-unit transfers separately identified.
Skills, capability and attitudes
<ul style="list-style-type: none"> Factual data on qualifications (usually only highest), licences to practise and other relevant skills (for example languages in international organisations and fluency level). Subjective data on skills, performance (for example ratings), potential (links with succession planning), training needs (from internal studies or personal development plans). Employee sentiment and attitudinal data towards work issues such as job security, satisfaction and potentially intention to leave (for example engagement or staff survey items as well as overall scores).
Talent profile
<ul style="list-style-type: none"> Identify the critical roles by function, skill, knowledge. Identification of high-performers, low-performers. Promotions, identification of development required by individuals and groups.
External labour market information
<ul style="list-style-type: none"> Data on geographical, sectoral and occupational labour markets relevant to where staff come from or might come from in future, for instance, size and demography of potential workforce, employment levels, educational qualifications and flows into work from the education system, attitudinal data on sectors/occupation. Consider competitors for labour: do they offer better terms and conditions than you; do you actually lose people to them? Is the available population from which you might recruit changing, for example, is it in a professional group that is facing a high volume of technological change nationally over the next few years? Data should be collected for each geographical location.

Before comparing the workforce you have with your future people needs, it will be necessary to take account of the likely natural wastage, retirement and other losses or moves from one area of work to another. Obviously if your needs for people are reducing, you will need fewer recruits and may not always fill vacant jobs. So for example, if you are looking two years ahead at business needs, you'll need to consider how many of your current people will still be with you then, when estimating recruitment and development actions needed over that two-year timeframe.

Succession planning also feeds into your understanding of available people supply. If you have succession cover and strong talent pipelines, you can make assumptions about developing these people to meet future needs. If your internal talent pipelines are weak, you are more likely to have to fill key roles externally.

5 Determine future workforce needs

Key dimensions of the 'right' principle

If workforce planning is about getting 'the right people, with the right skills, in the right roles, at the right time and at the right cost', what does this look like in practice? The 'right' principle can be applied when translating organisational strategies into what is required from the future workforce. Companies can adapt the principle by examining the five 'rights' of workforce planning.

Figure 8: Five 'rights' of workforce planning



'You plan to ensure that you have the right human resources to deliver on the business plan and also to avoid redundancies. If you don't address these two challenges, you cost the organisation money, constrain business development and cause individuals unnecessary hardship.'

Andrew Mayo, Professor of Human Capital Management, Middlesex University

Figure 9: Considering the ‘right’ questions

Skills
<ul style="list-style-type: none"> • Do you have the leadership in place to deliver your strategy? • What are the critical capabilities and competencies? • Can you accurately map requisite skills and capabilities to job families and critical roles? This will help identify specific skills gaps. • What skills are required to deliver on future strategy? • What is the impact of digitisation on processes, data storage, people development, recruitment? This can cause decline in some roles and demand for different skills in others.
Size
<ul style="list-style-type: none"> • Is staff workload significantly increasing or decreasing? • Are technologies driving changes to your structure or productivity? This can dramatically impact the number of people you need. • Have you identified roles critical to achieving organisational objectives and are there any challenges in filling these?
Cost
<ul style="list-style-type: none"> • What are your people costs? • Are people costs likely to rise in line with expected revenues? • What are the costs of hiring? • What are the costs of developing capability?
Location
<ul style="list-style-type: none"> • Are people in different job families in the right locations? • If considering relocation, will current employees relocate? Are there sufficient people in that surrounding area to fill any gaps?
Shape
<ul style="list-style-type: none"> • Are your core capabilities strong enough? • Is distribution across job grades in line with requirements? • Does the workforce have the right demographic structure and diversity? • Is there an appropriate balance of operations, innovation, project, development and managerial positions? • Are the lines of business structured effectively?

Methods for estimating workforce requirements

There are a wide range of methods for estimating workforce requirements and the approaches used will very much depend on the size and nature of your organisation:

- **Asking:** simply asking managers and department heads what they think will be needed and when is always a sensible starting point.
- **Budget-based:** using cost per employee to work out how many people you can afford to employ if the budget for an area of work has already been set. Easy to use for annual planning in support functions, for example, but it does not challenge how resources are being allocated or link to levels of activity.

- **Ratios:** proportion of employees to activity levels or of one group of employees to another. Works well in stable circumstances, where employee demand moves in line with activity levels.
- **Benchmarking:** looks at ratios or costs in other organisations or between parts of the same organisation. It can stimulate questions but does not necessarily represent good practice or take account of different work contexts.
- **Extrapolating trends:** for example, forecasting based on past increases in productivity, assuming these trends continue into the future. A good method to use for longer product/service cycles and where technology is not changing too rapidly.
- **Forecasting:** based on more sophisticated models, taking into account a range of factors including variations in demand across the year. This is helpful for broad-brush planning, but is only as good as the assumptions put into the model.
- **Workflow analysis:** based on a detailed analysis of the activities taken for each task. This activity is useful if your organisation is undergoing transformational change where the roles, responsibilities and capability requirements of individuals/job families are likely to change.
- **Defining job families:** employees working in positions belonging to the same job family require little training to perform one another's jobs. Therefore, job functions within the same job family require similar competencies, such as knowledge, skills and capabilities (see workforce segmentation).
- **Zero-base demand estimation:** estimates the workforce you might ideally need rather than based on what you have now, informed by a mix of the methods above. Organisations are often so blinkered by their historical job design, staffing patterns and numbers that they avoid the need to change these assumptions. Zero-base approaches can help to unlock new thinking about work design, productivity and flexibility.
- **Scenario planning:** tackles uncertainty directly by looking further ahead at alternative views of the future. It is useful in assessing the risks of different organisation futures, but cannot predict what will happen. We look at scenario planning in more detail below.

These methods have different strengths and weaknesses and may suit different workforce groups or circumstances. They can also be used in combination. Most organisations need a handle on understanding workforce costs, but should not simply extrapolate costs without considering possible changes in work methods and productivity.

Example

A housing and social care provider uses fairly standard approaches to workforce planning in its support services (finance, administration and so on), where resourcing does not need to be considered too far ahead. But with staffing levels in care homes, it takes a much more intensive planning approach on both short- and longer-term timeframes.

Demand is calculated home by home in real time, based on the residents they have. The organisation uses overall employee/resident ratios to set 'budgeted hours' for care staff in each home. These estimates are then modified in real time by taking account of the degree of dependency of each resident – that is, how much care they need. The layout of the home can affect staffing too, as some buildings are more efficient to work in than others. Strategic goals for the proportion of qualified front-line employees inform the mix of staff employed, exceeding regulatory requirements.

A. Scenario planning

The frequency, scale and unpredictability of organisational change has led many organisations to abandon longer-term workforce planning because it appears too inflexible and too conservative in its assumptions about the future. When faced with very uncertain environments, some large corporations – notably Shell operating in the very turbulent petrochemical sector – developed scenario-based business planning as a way of addressing high levels of uncertainty head on. The ideas behind scenario planning can be used in workforce planning to show how different futures may affect sourcing of people requirements to needs.

The factors (or drivers) of the future are used to construct a series of internally consistent pictures of alternative futures – these are called scenarios. External commentaries and experts often inform views about the external environment; factors are explored in terms of their importance to the business and the degree of uncertainty attached to them.

Managers are not forced to choose between scenarios, but rather prompted to identify the differences between them, including in their implications for workforce requirements and the ease with which those requirements can be met. Business plans, including workforce plans, can be tested against different scenarios, to establish where workforce decisions would need to diverge depending on what happens.

The understanding gained from scenario planning can support the kind of contingency and adaptive workforce planning actions. To get the best from scenario planning, it is important to look at fundamentally different views of the future, not just a plus or minus 10% variation in business targets.

‘We tend to extrapolate forecasts from recent trends. In times of uncertainty, things become more chaotic. So you have to dig deep into every assumption, try to identify any scenarios and risks that can be foreseen, and decide on the principles that will help you navigate your way through.’

Paul Sparrow, Professor, Lancaster University

‘How do we deal with an uncertain future other than by hiding our heads in the sand or putting the future in the too difficult tray? We can use scenarios to avoid surprises and to get a handle of the implications of what we can’t be sure of.’

Andrew Mayo, Professor of Human Capital Management, Middlesex University

Figure 10: Typical process for scenario planning



Sample best- and worst-case scenarios

For a commercial bank that has recently added internet banking to its portfolio and is considering a digital-only platform:

Scenario 1	Scenario 2	Scenario 3
Customers embrace the digital age and disruptions – internet banking is the norm	Customers are reticent to embrace the digital-only banking solution and want a blended approach – the option of attending a branch to discuss financial options	New entrants enter the market. Big businesses that already have large databases and market a few specific banking products extremely well

If growth is an important driving force and the bank is considering expansion into another market:

Do we have the in-house capability to redeploy expertise to that new account/function?	Is the best course of action to acquire a business that already has this expertise?	Would a partnership be the best course of action?
----------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	---------------------------------------------------

B. Contingency planning

One practical way of planning for the risks highlighted in various scenarios is to estimate the possible seriousness of a risk and its likelihood. This analysis helps to identify which risks to plan for and which can be given lesser priority. For instance, a marketing or advertising business is likely to consider: what if we lose our largest client and consequently a big revenue stream? Can we afford to keep our existing workforce? Can we redeploy the affected workforce to another project to replace lost revenue stream?

C. Adaptive planning

Planning can be designed to adapt to changing circumstances, but it must be built into how plans are used from the outset. It combines the discipline of planning with the reality of ‘feeling your way forward’. Organisations make selected changes that they can implement quickly, accepting the risk that not all will prove successful. For example, if a retail business experiences a drop in sales, an adaptive IT system can automatically adapt the staff roster to suit the dip in sales and request additional staff when business picks up.

‘There are dangers in only looking at the short term and hoping to react to change. But there are also dangers with long-term planning that can get us into analysis paralysis. We need adaptive approaches to planning that can help us close the gap between long-term scenarios and practical actions we need to be taking now.’

Linda Holbeche, Director, The Holbeche Partnership

Qualitative assessment

When assessing the skills or capability of the workforce to get to the five ‘rights’, we are moving from numbers into judgements. It is useful to think about whether a particular skill or skill change is about:

- generic skills, knowledge or behaviours relevant to all employees
- technical, professional or job-specific requirements, applying only to some job groups
- changing skill or behaviour needs particular to those in managerial roles
- technology taking over or changing the requirements of a role.

'A workforce plan should define the organisational capabilities needed with enough precision to be meaningful. For example, simply identifying the need for "digital capability" is too broad to be useful. Once capabilities are clearer you can link these with key kinds of jobs, culture/behaviour and technical skills/experience requirements.'

Julia Howes, Principal, Mercer

One of the most reliable indicators of the current capability of a workforce group can be external feedback from customers and suppliers, internal data on quality, and managers' views on whether the employees they have (and the kinds of people they have been recruiting) can do the job effectively. Performance data can sometimes be informative, but performance ratings are not necessarily reliable indicators of skill levels.

Changes in workforce productivity should be considered alongside the people capability required by the organisation, reflected in how work will be organised and the skills, knowledge and experience needed by groups in the organisation.

'More attention needs to be given to productivity. There are measurement challenges in a service economy, but productivity is too often measured only in volume terms (the number of widgets produced) rather than more informative measures of output such as customer satisfaction, customer retention, innovation, and revenue per full-time equivalent employee.'

Julia Howes, Principal, Mercer

For instance in knowledge-based industries, productivity measures and return on investment may be longer term and connected to ongoing learning and developmental opportunities. This will need to be factored into the workforce plan.

6 Identifying workforce gaps against future needs

The information you have obtained on your current and available workforce as well as your future requirements will help you identify the gaps you need to address. These include:

- gaps where the likely availability of people is lower than the needs, so more staff need to be brought in or developed
- negative gaps where there are more people in certain groups than needed, so you may need to consider retrenchment or redeployment
- gaps in skills but not in numbers. Training or re-skilling might be able to address these kinds of gaps, but you may also need to shift the kind of workforce you are employing over time.

This kind of gap analysis can then help to identify action areas as follows:

- **'Business-as-usual'** action areas where recruitment, staff development and redeployment will be needed to keep additional needs in line with emerging changes in business requirements. It is helpful here to make a note of changes to skills needs which influence the more bottom-up process of individual development planning. It is also important to take account of estimates of likely losses when assessing likely gaps between available workforce and future needs.

- Workforce groups where recruitment, retention or both present **resourcing challenges** and alternative resourcing options may therefore need to be considered. These gaps may cover all jobs in a particular group or they may apply especially to some locations or teams.
- Workforce groups and/or parts of the business where **workforce reductions** may be necessary and which must be well managed.
- Change in the business strategy could lead to **radical change in people and skills needs**. Strategy change may be the result of competitive pressures, a new approach to product manufacturing or marketing, caused by emerging technology or the desire to reduce costs (as in offshoring).
- In extreme cases, resourcing difficulties may challenge the overall business strategy or prompt major areas of work for **relocation or outsourcing**. A combination of skills shortages, together with labour costs and different rates of market growth, may also drive companies to rebalance their global footprint towards different markets.

Examples

Rapid technological change can drive radical workforce supply solutions. When the process of surveying and map-making both turned digital in the same period of time, a map-production business committed to completely reskilling the people who collected field data and also retrained the long-established craft print workforce into new digital ways of working. This was a major undertaking but judged to be a more viable and cost-effective option than shedding hundreds of people and then trying to recruit digital skills, which were in short supply.

A car manufacturer offers interesting work and a very attractive employer brand but its location is not very close to other employers needing similar skills and is in a market where top-end engineering skills are always hard to recruit and retain. It plans carefully for a mix of apprentice and graduate entrants each year, using work placements to help its selection. The two different groups bring different strengths, with apprentices being more likely to have strong ties to the local area and so less likely to leave in the first few years.

Summarising gaps and action areas

Pull together the work from these planning processes into a list of gaps and potential actions. Doing this for each main workforce group will reveal differences as well as similarities. This, in effect, is the workforce plan.

Table 1 shows a sample summary using a row for each main workforce group and columns recording both issues and action areas. Such a grid can be used in a small department or a large division, function or geographical region. One grid could cover everyone in a small firm. The timeframe for planning also needs to be clear and a simple grid can indicate both short-term and longer-term issues and actions.

Action areas can be drawn up to reflect the different business and labour market scenarios discussed in earlier chapters. Some action areas may be contingent on events that are not yet certain, as we explore below.

Table 1: Summarising action areas, by workforce group

Workforce group	Future staffing need	Current workforce	Resourcing issues, risks, gaps	Priority actions/options to mitigate risks
Marketing specialists	Numbers steady over planning period	<ul style="list-style-type: none"> At least three will retire over next three years but voluntary turnover also expected to rise Lack of good mid-career successors Labour market extremely tight 	<ul style="list-style-type: none"> Need at least 10 new people over next 3 years Significant risk of inability to recruit Need to 'grow our own' more 	<ul style="list-style-type: none"> Support initial professional training for one or two people per year (start Year 2) Accelerate development of less experienced professionals — aiming for three or four a year
Call centre operatives	Need more staff capable of dealing with difficult customers – current job role does not acknowledge this sufficiently	Already have a group of long-serving, experienced staff who could extend their technical and interpersonal skills	To date recruitment not a problem, but 15% of recruits have come from other countries. Could be an issue should immigration policy change	<ul style="list-style-type: none"> Explore a higher-level job dealing with the most difficult customers – would need a more structured approach to bringing on talent Explore knowledge transfer routes, for example coaching and mentoring by internal experts for internal staff Moving some call centre work to other locations or recruiting from customer services in other sectors Investigate using customer service apprenticeships
Senior leaders	Increasing need to lead people through a period of uncertainty	<ul style="list-style-type: none"> Some will not like culture change and leave Some high-performers lower down the organisation 	Danger taking too long to raise our game as short-term talent pool weak	<ul style="list-style-type: none"> Selective head-hunting, not necessarily from own sector Development for existing senior managers on engaging employees Targeted development for junior managers who could progress quickly

The same logic can be used to create a higher-level, and therefore less detailed, corporate workforce plan. It can serve a more strategic purpose of alerting senior managers and HR managers to the most important actions and to areas of significant risk. At this level, the plan could be part of a wider workforce or business strategy.

Separately from these planning documents it is also helpful to record – perhaps as appendices to such documents – some of the key data you have collected. This will make it easier to track changes and provide useful baseline data for colleagues.

7 Actions to address shortages, surpluses or skill mismatches

Steps for an action plan

Having identified the needs gaps and action areas, the next stage is to determine the specific actions needed to close those gaps and to design structured ways to carry out the relevant activities.

This will form your action plan. There are three key steps:

- A** Select the most critical gaps.
- B** Identify potential actions.
- C** Prioritise actions.

Actions to address shortages, surpluses or skill mismatches

A. Critical gaps – planning for flexibility

Gap analysis can uncover different actions relevant to different scenarios or varying paces of change. You may also need to plan for greater flexibility, especially to help in responding to uncertainty.

- **Functional flexibility** across a range of tasks can be increased through recruitment, training, job design, deployment and reward mechanisms, for example through multi-skilling and job rotation.
- **Numerical flexibility** is provided by contracts of employment that flex the numbers employed, for example temporary, seasonal, ‘gig economy’ employment, agency or outsourced staffing. It is important to ensure people are employed on the right type of contract so your organisation has the flexibility it needs but also as there will be pay and benefit obligations, employment law and taxation implications to consider.
- **Temporal flexibility** is flexibility in regards to working time, its organisation or duration, for example part-time, overtime, shift work, annual hours.
- **Talent flexibility** can come via alternative educational pathways to provide varied sources of talent supply with different characteristics. Encourage continuous professional development throughout the organisation and create opportunities for skills and knowledge development via secondments, projects, sprints, deployment, and so on.
- **Adaptive flexibility** or increasing change-readiness in the workforce entails having managers who pay attention to the development of the individuals in their teams. Involving employees in change management keeps them in touch with changing business needs, so when they are asked to adjust this does not come as a surprise and they understand why change is being made.

‘In uncertain times we need to develop the ability of the workforce to cope with change. It helps employees understand change if they can see first-hand what’s happening in the business, have a wider range of work opportunities over time and be more involved in decision-making.’

Linda Holbeche, Director, The Holbeche Partnership

Example

One hotel set out to increase its agility in responding to customer needs by adopting a flat (three-layer) structure and a flexible staffing model with multi-skilled staff. Success requires having flexible and intelligent staff who understand the logic of the model and can use their own initiative. This has led the company to hire people for good cultural fit, rather than for defined job vacancies, on the basis that it will find a place for them in its adaptable structure and then develop the skills they need.

An engineering company wants its broad population of engineers (about a third of its total workforce) to remain flexible and confident to master new types of work. To this end, it employs a two-pronged approach. It identifies a small proportion of ‘high potential’ engineers for accelerated development, and also invests in the continuous skill and career development of all its engineers, exposing them to developmental assignments to maintain their flexibility and engagement. The company’s engineering leaders firmly believe that sound theoretical understanding can be applied to many different design challenges in varied products and market segments.

B. Identify potential actions

In the context of workforce planning, recruitment and training will often be front of mind. Methods may be based on what has been done before, or they may include trialling alternative sources of talent supply. What is also needed are better ways of designing work or organisational structures so that people and their skills are used more effectively. Sometimes actions will be about more radical changes in how work is delivered, for example through contracting out or working with partner organisations either for business reasons (cost or quality) or for reasons of inability to secure the necessary skills.

Build, buy, borrow strategy mix

Management guru David Ulrich's 'build versus buy versus borrow' resourcing approach is about whether an organisation prefers to develop skills internally ('build') and fill jobs by movement within the workforce, or via recruitment from outside the organisation ('buy') or from a contingent labour supply ('borrow'). The choice depends in part on the internal and external supply of the skills needed, but is also affected by whether the organisation has the capacity and commitment to train people internally.

Figure 11: Build, buy or borrow



While each organisation must decide whether providing such opportunities is part of its ethos and employer proposition, as well as whether investment in home-grown talent will return a competitive advantage, 'build' generally has a positive effect on retention by creating internal opportunities for existing employees. For job roles seen as 'critical' to an organisation, build strategies are usually required.

'Buy', or recruitment, brings advantages too, in terms of fresh ideas and practices developed elsewhere.

With the rise of the 'gig economy' in recent years, there are added options to 'borrow' contingent labour, which can be beneficial when there is an urgent need to temporarily boost capability.

By planning for a strategic mix, organisations can look to optimise employee costs, flexibility and effectiveness for the long term.

Example

A fast food restaurant chain has focused increasingly on growing its own staff and widening its recruitment pool at the bottom, to challenge the business and bring in new ideas. Managers are being educated to think more about resourcing risks such as skills shortages and the ageing workforce. The company offers employees more flexibility, such as through flexible working and accommodating personal constraints on certain days or shift times. This is all part of focusing on staff and fostering the right workplace environment. Some segments now being attracted into the business are more interested in a longer-term career, further emphasising the importance of internal development. The build/buy/borrow choice can lead to other choices about how to meet the needs of different kinds of employees and how to attract and retain them.

To back-fill or not to back-fill?

When an employee leaves, there is frequently a reaction to either replace like for like or to redistribute work among existing staff. Whether your organisation is in a state of growth or contraction would of course influence that reaction. However, if the workforce is changing significantly, this will likely need a bigger rethink. Where technological change is also a factor, skill requirements will invariably change as well.

It may be necessary to have people to do different work with different skills, to look for talent in different places, replace for example a full-time role with a part-time one, or to undertake a significant retraining of your workforce.

Diversity and inclusion

Interest in increasing workforce diversity can influence planning choices and now extends to beyond the well-established demographics of gender, race and disability. Organisations facing uncertain times may be more likely to succeed if they vary their workforce by age, gender, social and educational background and previous experience.

Sample actions to consider

The following shows a wide range of types of action to prompt your thinking.

Sample actions applicable to one or more workforce groups

- Adjust organisation and job design to make better use of people or reduce cost, for example, by shifting 'skill mix' of higher-skilled to lower-skilled people within the same kind of work, using technology to replace some labour activity, multi-skilling and more flexible deployment.
- Change contractual arrangements to find different people or increase flexibility, for example, fixed-term contracts, temporary or zero-hours working, agency working/outsourcing.
- Reduce the need for recruitment by improving retention, such as through better management, rewards, career structure, engagement.
- Reduce employee numbers if demand is falling, for example, voluntary severance and outplacement.
- Shift the mix between 'buy', 'build' and 'borrow' resourcing.
- Revise existing recruitment processes, repositioning the employer brand and improving its employee value proposition.

Continued on next page

- Widen workforce supply, such as by appealing to different demographic groups including the older workforce, maternity leave returners, people living in different locations (including different countries).
- Build or strengthen internal talent pipelines through upskilling, talent management and succession planning, career structures and advice for employees, internal development programmes for those with potential and interest in progression, mapping career paths, including employees in under-represented groups.
- Increase movement across the organisation from surplus to shortage areas by redeployment, often accompanied by retraining.
- Build or strengthen alternative routes into work through apprenticeships, graduate recruitment, initiatives with schools to increase longer-term supply of skills.
- Invest in new technology, or explore introduction of automated functions.

C. Prioritise actions

In this crucial step, the analysis should be summarised to help determine priority action areas, before embarking on specific resourcing and development activities. These link back to offsetting risk – effort being most needed where the business risk of inappropriate resourcing is greatest.

It may be necessary to revisit assumptions about your buy/build/borrow strategies once it becomes clear that meeting people resourcing goals could be challenging. Table 2 shows a simple way of how workforce requirements for different groups can be set out.

Table 2: How will capabilities and/or workforce groups be resourced?

	Capability/Group A	Capability/Group B	Capability/Group C	Capability/Group D
Recruit				
Develop				
Outsource				
Relocate				
Redeploy				
Use contingent workers				
Restructure work				
Find new labour source				
Collaborate with others				
Automate				

8 Monitoring progress and evaluation

Workforce planning and its application should be followed up with monitoring and evaluation, to ensure actions are being taken and gauging if those actions are having the desired effect. A checklist could include:

- ☐ Have we done what we said we would do?
- ☐ Are the planned actions still relevant in the changing business and labour market context?
- ☐ What has been happening to the size, shape and composition of the workforce? How is this connecting to regular reporting of workforce data?
- ☐ Is checking (automated or manual) built into data capture to ensure accuracy and data quality?
- ☐ What has been the impact of our investment in specific interventions, for example, workforce development?

Responding to change

Workforce plans should be reviewed by management teams on a regular basis – certainly more than once a year. Some organisations include a people review component in regular business reviews, often at divisional or unit/function level. These reviews are partly there to see if the planned actions are taking place, but also to check that the plans themselves are still relevant. Many organisations have turned to using people analytic dashboards to display key targets visually.

The HR function, often through HR business partners, needs to stay in touch regularly with local management teams to check progress and respond to any important changes, whether internal or external. Managers will appreciate and benefit from briefing on the possible impact and risks associated with external changes in employment law, tax regimes and so on.

Critical issues to monitor and report on include:

- Staff in post and costs (salary plus additional payments) by workforce group – remember to include temporary and agency staff, and the costs of these, as well as permanent employees.
- Whether actual staffing is on track against requirements. Unfilled vacancies and/or time to fill vacancies are useful indicators of the supply/demand balance.
- Changes in employee composition, especially if increasing diversity is part of the business agenda.
- Workforce flows – starters/leavers (especially voluntary employee turnover) compared with the same period in previous years for each main workforce group. Intelligence from exit interviews or employee surveys on why people leave. Changing retirement patterns may be important to understand too.
- Upcoming workforce risks not previously identified (for example, succession concerns following a surprise resignation, areas of concern from employee attitude or engagement surveys).

Example

A local authority reduced its workforce very significantly over several years as an unavoidable response to deep budget cuts. The reductions were largely achieved through voluntary severance and early retirement. The workforce planning team used two snapshots of simple workforce data three years apart – before and after the rapid reductions – to check whether the use of voluntary severance was retaining an appropriate skill mix for the future.

The analysis used broad job families and levels of work by directorate, also identifying casual staff as well as permanent employees and differentiating between full-time and part-time employees. Demographic data was examined by age, length of service, gender, ethnicity and disability. The changes over the period were identified in terms of ‘net losses’ by category – allowing for the patterns of new recruits as well as those who had left. The analysis highlighted that reductions had not adversely affected diversity but that the pipeline of young people needed higher priority, especially into shortage skill areas such as social care.

Consider the psychological contract

The outcomes of workforce planning can also affect the psychological contract with employees (what the organisation offers the workforce and expects from them and vice versa), as well as how you attract, communicate with and deploy your workforce. The specifics of the psychological contract might vary over time and with different people. For instance, job security may no longer be the main offer – and indeed some individuals may not desire it – so organisations might offer and leverage the employability of their workforce instead. In practice, the employer brand can be seen as an attempt to define the psychological contract with individuals so as to help in recruiting and retaining talent by clearly defining how people are valued.

9 Conclusion

Evolving your own approach

As with so many aspects of business management and HR activity, it is better to make a start than endlessly defer or become trapped in analysis paralysis. Begin simple workforce planning by talking to managers about where the organisation is going and their resourcing concerns. Help them investigate what is going on and what might work better. If things feel very uncertain, work with managers to develop some simple scenarios to find out where actions may need to be contingent on unfolding events.

Remember, workforce planning is not a prescriptive process nor intended as an exact science. It’s about improving business performance and reducing organisational risk by narrowing the gap between a business having the people it really needs and who it actually has.

‘People are a business’s most important asset’ is a well-worn catchphrase, but one that is nonetheless true. ‘The right people, with the right skills, in the right roles, at the right time

and the right cost' is what will ultimately deliver the right results for an organisation. By taking a proactive, methodical approach to workforce planning, HR practitioners play a critical role in helping businesses understand where the risks and opportunities are going to come from and how they can ensure they have the resources they need to respond successfully to whatever scenario lies ahead.

Figure 12: Top tips for workforce planning

Start with the organisation strategy and the external factors that might affect the organisation; use scenario planning to explore possible futures and identify risks.

Organise workforce planning to suit your organisation, for example: what is best done centrally and what needs to be done locally, what by HR and what by managers and leaders at different levels? Clearly communicate responsibilities for workforce planning.

Ensure that whoever is tasked with workforce planning has the know-how they need. Asking the right kinds of questions is a very good start. Access is also needed to relevant data, people in the organisation who understand the issues, and decision-makers who are the customers for workforce planning.

Develop simple but reliable and relevant data about organisation activity and the workforce, with data fields classified and reported in a consistent manner.

Focus workforce planning activities on the real resourcing risks. These tend to arise in workforce groups that are key to organisational performance – such as critical roles and roles that are hard to recruit for or take a long time to train for.

Plan for workforce requirement and availability in terms of skills as well as numbers, so you can identify and address current and upcoming skills gaps.

Plan for a stronger emphasis on growing skills internally and increasing the flexibility and resilience of existing employees; this mitigates the risk of not being able to find skills externally.

Remember to look at how you will replace leavers from a job group (including those who move to other jobs internally), not only to fill new roles. Planning for necessary workforce reductions is as important as planning for growth.

Consider planning on varied timeframes for different purposes – not just the normal annual cycle but short-term workforce deployment and longer-term strategic workforce planning. Workforce plans can also run alongside specific organisation change programmes.

Use analysis to turn data into useful management information and insights, addressing real business problems and informing decisions.

Use it to help managers surface and share their assumptions and understanding, to identify options and agree on actions that better align the workforce with organisation needs. A workforce planning mindset creates the habit of challenging assumptions and looking for relevant information to inform employment decisions.

Ensure workforce plans link to practical action in the recruitment, development and deployment of people, and where appropriate in work design, reward and so on.

10 References and useful resources

BALARAM, B., WARDEN, J. and WALLACE-STEPHENS, F. (2017) *Good gigs: a fairer future for the UK's gig economy*. London: RSA.

BEAMES, C. (2014) *How to avoid the 12 deadly traps of workforce strategic planning*. Melbourne: Advanced Workforce Strategies.

BOSTON CONSULTING GROUP. (2010) *Creating people advantage 2010: how companies can adapt their HR practices for volatile times*. Boston: Boston Consulting Group.

ISO 30409. (2016) *Human resource management – workforce planning*. Geneva: International Organization for Standardization.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT. (2015) *SWOT analysis*. Factsheet. London: CIPD.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT. (2017) *Human capital analytics and reporting: exploring theory and evidence*. London: CIPD.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT. (2017) *PESTLE analysis*. Factsheet. London: CIPD.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT. (2017) *Resourcing and talent planning survey*. London: CIPD.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT. (2018) *Labour market outlook*. London: CIPD.

DAVIES, G. and ROLFE, H. (2017) *Facing the future: tackling post-Brexit labour and skills shortages*. London: Chartered Institute of Personnel and Development/NIESR.

DEPARTMENT FOR EDUCATION. (2017) *Further education and skills in England*. October 2017. London: Department for Education.

DEPARTMENT FOR EDUCATION. (2017) *FE data library: apprenticeships*. London: Department for Education.

EDUCATION AND SKILLS FUNDING AGENCY. (2017) *Employer guide to apprenticeships*. London: Education and Skills Funding Agency.

GUENOLE, N., FERRAR, J. and FEINZIG, S. (2017) *The power of people: learn how successful organizations use workforce analytics to improve business performance*. London: Pearson Education.

HIRSH, W. and REILLY, P. (1998) Cycling proficiency. *People Management*. 9 July.

HIRSH, W. and TYLER, E. (2017) *Talent management: learning across sectors*. London: Leadership Foundation for Higher Education.

HOLBECHE, L. (2015) *The agile organization*. London: Kogan Page.

HR SOCIETY. (2013) *The complete guide to workforce planning*. Reading: The HR Society.

IES/PPMA. (2013) *The business-workforce dialogue: a framework of questions to support planning in a time of change*. Brighton: Institute for Employment Studies.

KPMG. (2013) *People are the real numbers: HR analytics has come of age*. London: KPMG.

- KWAKKEL, J.H. and PRUYT, E. (2013) Exploratory modeling and analysis: an approach for model-based foresight under deep uncertainty. *Technological Forecasting and Social Change*. Vol 80, No 3. pp419–43.
- MERCER. (2017) *Mercer workforce monitor*. August 2017 update. London: Mercer.
- POLLARD, E., HIRSH, W., WILLIAMS, M., BUZZEO, J., MARVELL, J., TASSINARI, A. et al. (2013) *Understanding employers' graduate recruitment and selection practices*. London: Department for Business, Innovation and Skills.
- REILLY, P. (1996) *Human resource planning: an introduction*. Report 312. Brighton: Institute for Employment Studies.
- REILLY, P. (2015) *Workforce planning: a framework for thinking about your own approach*. HR Essentials 2. Brighton: Institute for Employment Studies.
- ROBINSON, D. and HIRSH, W. (2008) *Workforce planning guide*. Brighton: Institute for Employment Studies.
- ROUSSEAU, D.M. and BARENDT, E.G.R. (2011) *Becoming an evidence-based HR practitioner*. *Human Resources Management Journal*. Vol 21, No 3. pp221–35.
- SPARROW, P.R. (2018) Macro talent management in the UK. In: VAIMAN, V., SCHULER, R., SPARROW, P.R. and COLLINGS, D. (eds) *Macro talent management: a global perspective*. London: Routledge.
- TAYLOR, M., MARSH, G., NICOL, D. and BROADBENT, P. (2017) *Good work: the Taylor review of modern working practices*. London: Department for Business, Energy and Industrial Strategy.
- ULRICH, D. (2013) *How to use the 6Bs and OD for action planning*. Cincinnati: Human Capital Institute.

11 Appendix

Common analysis measures used in workforce planning

Workforce planning

This describes the continual alignment of needs and priorities of the organisation with those of its workforce to ensure it can meet its legislative, regulatory, service and production requirements as well as its organisational objectives. Workforce planning includes the management of flows into and out of the organisation, and planning for changes in personnel in roles of key importance:

- **Average time in current management position.** The average time that managers and executives have been in their current positions, for example:

Total time in position for managers / Total number of managers

- **Average time to promotion.** The average time an individual is in role before progress to a more senior position, for example:

Total time for progression upwards / Number of promotions

- **Career path ratio.** A measure of the ratio of promotions against sideways moves (transfers), to show the breadth of capability and illustrate alternative development opportunities to promotion, for example:

$$\text{Total promotions} / (\text{Total promotions} + \text{total transfers})$$

- **High-performer turnover rate.** The rate at which the organisation is losing talented employees, for example:

$$\text{Total high-performer terminations} / \text{Average high-performer headcount}$$

- **Minimum strength time.** Measures minimum time in post for managers in global key roles.
- **Progress against targets.** A measure of the number of management trainees recruited against agreed local targets.
- **Succession planning depth.** A measure of the percentage of key roles that have a succession pool of one or two unique candidates, for example:

$$\text{Key roles with 2 successors in play} / \text{Total number of key roles}$$

- **Succession roles.** The number of roles identified for succession with succession individuals allocated.
- **Successors in place.** A measure for the number of planned successors for global key roles, for example:

$$\text{Number of planned successors} / \text{Pivotal roles}$$

- **Talent management index.** An index of defined talent measures by the organisation that describes key aspects of the talent management process from across the entire employee lifecycle. This would comprise a combination of select key metrics, weighted by importance and impact to the organisation. The metrics describe the performance of individuals against role-based objectives and targets, including operational and behavioural aspects.

Workforce performance and productivity

This measures overall performance against defined key performance indicators for individuals and roles, for example, percentage of targets met:

- **Actual productivity.** Measures real efficiency of production, for example:

$$\text{Actual output} / \text{Resources consumed}$$

- **Behavioural performance.** Measures the performance of individuals in line with defined behaviours set by the organisation, for example:

$$\% \text{ of employees demonstrating compliance with organisational values and behaviours}$$

- **Effectiveness.** Measures the utilisation of resources in order to achieve the desired result, for example:

$$\text{Actual output} / \text{Expected output} \times 100\%$$

- **Efficiency.** Measures the achievement of either maximum useful output from the resources devoted to an activity, or the required output from the minimum resource input, for example:

$$\text{Actual resource used} / \text{Budgeted resource} \times 100\%$$

- **Expected productivity.** This is the forecasting of potential/desired productive effort, for example:

$\text{Expected output} / \text{Resources expected to be consumed}$

- **Labour utilisation.** A measure of how employees are assigned tasks and the efficiency at which they are able to deliver against their tasked objectives – this could address availability or performance of employees.
- **Overall labour effectiveness.** Measures the utilisation, performance, and quality of the workforce and its impact on productivity, for example:
 - Availability = Time operators are working productively / Time scheduled x 100%
 - Performance = Actual output from operators / Expected output (or labour standard) x 100%
 - Quality = Saleable parts / Total parts produced x 100%
 - Overall labour effectiveness = Availability x Performance x Quality
- **Per-unit full-time equivalents.** This is a measure of how many full-time employees (FTEs) are required to fulfil a unit of work, for example:

$\text{Number of FTEs} / \text{Units produced}$

- **Stakeholder satisfaction.** A measure of stakeholder warmth/engagement with the organisation and an indicator of the quality of relationships with key stakeholders, for example:
 - % of stakeholders reporting positive experience with employees
 - % of stakeholders reporting that objectives were met to the desired level or standard
- **Volume of work completed.** Measures the completion of work against defined targets.

Workforce costs

This can be described as the sum of all costs associated with the workforce, including pay and benefits:

- **Employer costs.** Taxes and insurances mandated by law and regulation.
- **Total compensation.** All direct and indirect compensation received during a specified time period.
- **Total workforce cost.** Total compensation cost + benefits cost + other workforce costs.

Organisational performance

This is an analysis of an organisation's performance as compared with goals and objectives. Within corporate organisations, three primary outcomes are analysed: financial performance, market performance and shareholder value performance (in some cases, production capacity performance may be analysed):

- **Average response/customer service time.** The average time it takes to complete the desired service for the customer/client, for example:

$\text{Total time serving customer} / \text{Total number of customers}$

- **Compound annual growth rate.** A measure of the annual growth of investments.
- **Coverage.** Number of customers/clients served, often by geography, business unit, and so on, for example:

$\text{Number of customers in a specified region}$

- **Customer/user service.** Customer/user satisfaction can be measured using a predefined survey.

- **Cycle time.** The time it takes for a process to be completed, for example:

$$\text{Total time for processes} / \text{Total number of processes undertaken}$$

- **Earnings before interest and tax (EBIT).** A non-GAAP (Generally Accepted Accounting Principles) measure of operating profit. This measure does not include tax burden or capital structure.

$$\begin{aligned} &\text{Revenue} - \text{operating expenses} \\ &\quad \text{or} \\ &\text{Net income} + \text{interest} + \text{taxes} \end{aligned}$$

- **Earnings before interest, taxes, depreciation and amortisation (EBITDA).** A non-GAAP measure of profitability, which can be used to compare companies and industries from the external/investor perspective. This measure is best used in combination with other financial performance measures.

$$\text{EBITDA} = \text{Revenue} - \text{expenses (excluding tax, interest, depreciation and amortisation)}$$

- **Market capitalisation.** Measures the market value of a company's outstanding shares, and an indicator of company size:

$$\text{Stock price} \times \text{total number of shares outstanding}$$

- **Organisation effectiveness.** This measures the extent to which the service provided meets the objectives and/or expectations of the organisation and/or a customer.
- **Organisational efficiency.** This measures how well the organisation is using its resources to meet its strategic objectives. This includes both its financial and human resources.
- **Quality.** The proportion of service provided without error:
 - the proportion of services provided without a complaint or the ratio of complaints to total services provided
 - the proportion of services provided at a specified standard
 - the proportion of services provided with compliments from customers.
- **Return on equity.** A measure of a corporation's profitability. This reveals how efficient an organisation is at making profit:

$$\text{Profit} / \text{Amount of equity (investment)}$$

- **Share performance.** Measures the value of company shares, and therefore the value of the organisation. Share performance can include measures such as:

- **Earnings per share.** A measure of company profit. This shows the amount of money being made per share, but does not include information about expenses:

$$\text{Earnings per share} = (\text{Profit} - \text{dividends}) / \text{Number of outstanding shares}$$

- **Price to earnings ratio.** A measure which compares the current price of the company with its per share earnings:

$$\text{Price per share} / \text{Earnings per share}$$

Regulatory compliance

This is defined as an organisation's adherence to laws, regulations, guidelines and

specifications relevant to its human capital. Violations of compliance regulations often result in legal punishment, including fines. Organisations operating in different sectors and geographical regions may need to adhere (and measure their adherence) to different regulatory frameworks:

- **Competence compliance.** Professional competence required to practise, for example, professions such as law or medicine requiring a licence to operate.
- **Critical people risk.** In high-stress environments, measures regarding behavioural risks can help to monitor behaviour of individuals against predefined values (included as part of the broader culture category).
- **Departmental ratios.** These may include gender ratios at senior leadership level.
- **Employee profile.** Measures could include factors such as age, gender, race, sexuality, for example:

% of employees between 18 and 25

- **Headcount.** This is typically the number of employees.
- **Health and safety measures.** Number of incidents required to be reported under statute, for instance, reporting of injuries, diseases and dangerous occurrences, for example:

Number of serious incidents in a given year

- **Leadership diversity.** For example, percentage of LGBT employees in senior/leadership positions.
- **Modes of employment.** For example, 45:1 full-time to part-time labour split.
- **Workforce composition and diversity.** This describes the makeup of an organisation's workforce, which includes basic demographic measures and measures of diversity.

Organisation design and development

This describes the planned and systematic approach to enabling sustained organisation performance through the involvement of its people. Organisational design and development activities include organisational redesign and restructuring, organisation strategic alignment, and job design:

- **Evaluation of organisation development activity.** A measure of the impact of organisation development investment, including through return on investment, and additional programme key performance indicators, for example:

Measurement of the change / Uplift in specified KPIs following development activities

- **Goal consensus/conflict.** A measure of consensus and conflict between organisational goals and priorities and individual objectives. It is a measure of co-operation between teams and departments, for example:

Number of goals in conflict vs Number of goals in consensus

- **Management ratio/span of control.** Measures the ratio of subordinates per manager; it is a measure of management depth and breadth, for example:

Total management and non-management population / Total management population with direct reports

- **Strategic delivery.** Measures the number of strategic priorities delivered within the stated timescale as a measure of organisational effectiveness, for example:

Number of priorities delivered / Number of priorities outstanding

Leadership ability

Leadership ability is the capacity to establish direction, influence, and align others towards a common aim, to motivate and commit them to action, and make them responsible for their performance. It is a mix of skills and knowledge, applied with authentic behaviour and attitude, which enables individuals to lead others towards a stated objective or goal:

- **Development plan impact.** A measure of the success rate for achieving agreed development plans for progression managers, for example:

$$\text{Number of development plan objectives completed to good quality} / \text{Number of development plan objectives set}$$
- **Executive stability ratio.** A measure of the ratio of executives with less than three years' experience set against the number of executives with more than three years' experience.
- **Leadership bench strength.** Measures the number of leaders trained to a defined standard who are exhibiting required behaviours.
- **Leadership review process measures.** Measures defined by the organisation to assess the quality of the leadership process, for example, measurement of the quality and outcomes of projects.
- **Quality of leadership.** An assessment through performance management processes including 360 assessment, for example:

$$\% \text{ of leaders achieving the defined high leadership grade}$$
- **Talent distribution.** A measure of where identified talented individuals are deployed in pivotal roles; or the proportion of top managers in pivotal roles, or global key roles, as defined by the organisation's HR and talent development strategy, for example:

$$\text{Number of defined top managers} / \text{Total number of key roles}$$

Learning and development

Learning and development is the process that builds the workforce capabilities, skills or competencies required to ensure a sustainable, successful organisation:

- **Capability development.** A measure of increases in job-related capabilities, for example:

$$\text{Change in number of capabilities} / \text{Person}$$
- **Hours' training received.** Hours' or days' training per person over a given time period, for example:

$$\text{Number of training days} / \text{Employees in given time period}$$
- **Improvement in desired behaviours.** Measures whether employees are behaving in the desired way alongside the required values of the organisation, for example:

$$\% \text{ of employees reporting improvement in operation with desired behaviours}$$
- **Improvement in knowledge.** A measure of the impact of training on the knowledge of individuals. This is also a measure of training effectiveness, for example:

$$\% \text{ of employees demonstrating an improved understanding of the topic being trained}$$
- **Return on investment.** Measures the benefits that are realised as a result of investment in learning and development programmes, for example:

$$(\text{Realised benefits} - \text{costs}) / \text{Costs} \times 100\%$$

- **Distribution of qualifications in the workforce.** Measure taking into account which employees hold qualifications and where in the organisation these are distributed, for example:

Number of employees with graduate degree qualification or above

- **Technical qualifications.** This is a measure of the technical capability available to the organisation for mobilisation, for example:

Project management trained managers / Total number of managers

Attraction and recruitment

This initial stage of the employee lifecycle provides the business with important data as to the incoming skills and talent available to the business:

- **Cost per hire.** The total cost of recruiting and onboarding a new employee, for example:

$\text{Recruitment costs} / (\text{Compensation cost} + \text{benefit cost})$

- **Employer brand warmth.** A measure of the employer brand, important for attracting new talent to the organisation, for example:

% of new recruits joining organisation as a result of targeted role advertisements

- **Rate of retention of new starters.** Measures the percentage of new starters retained over a given timeframe. It is particularly useful in service industries with traditionally high levels of employee turnover, for example:

$\text{Number of new starters leaving within 6 months} / \text{Total number of new starters}$

- **Recruitment effectiveness.** Measures the satisfaction of hiring managers with the recruitment process and its outcome, for example:

- % satisfaction with hired employee
- % satisfaction with hiring process.

- **Stability index.** Indicates the retention rate of experienced employees. Like turnover rates, this can be used across an organisation as a whole or for a particular part of it. The usual calculation for the stability index is:

$\text{Number of staff with service of one year or more} / \text{Total number of staff in post one year ago} \times 100\%$

- **Talent identification.** Measures the development of people in priority talent segments, for example:

% of identified talented individuals per department or team

- **Time to competence.** The time it takes new recruits to reach an adequate level of capability to complete their role.

- **Time to fill (average).** The time taken to fill an open position, for example:

$\text{Total days taken to fill a role} / \text{Number of successful new hires}$

- **Turnover (annual).** A measure of the rate of employees leaving the organisation over a one-year period:

$\text{Total number of leavers over period} / \text{Average total number employed over period} \times 100\%$

Engagement and well-being

Engagement and well-being involves a workplace approach resulting in the right conditions for all employees of an organisation to give their best each day, committed to their organisation's goals and values, motivated to contribute to organisational success, with an enhanced sense of their own well-being, and the well-being of others:

- **Absenteeism rate.** A measure of number of incidences when employees fail to report for work when scheduled to do so. This can also be measured and reported by job category or by performance category, for example:

Number of days lost in specific period / Total number of staff working days available
in the period

- **Commitment.** A measure of people responding that they have high levels of commitment, satisfaction and recognition, for example:

% positive opinion survey responses

- **Employee assistance service usage rate.** Number of incidents reported during a defined period to the employee assistance line, for example:

Number of assistance issues per month

- **Engagement index score.** An index score of the responses to questions exploring aspects of their employment that may impact on their engagement. These can often include organisation purpose, team relationships, inclusion and fair treatment, relationship with manager, relationship with work, and quality of development opportunities; for example, an engagement index may indicate employees are 70% engaged.

- **Ill-health retirements.** Measures the number of retirements due to issues relating to ill mental or physical health, as a result of work.

- **Mental health well-being rate.** Days lost due to incidences of low mental well-being, for example:

Number of days lost per year

- **Quality of support from employee assistance service.** Measures the quality of the employee assistance service as perceived by the employee, for example:

- % satisfaction with support received
- % likelihood of recommending the service to a colleague.

- **Voluntary resignations.** The number of voluntary resignations as a result of dissatisfaction with and/or health standards and work.



CIPD

Chartered Institute of Personnel and Development
151 The Broadway London SW19 1JQ United Kingdom
T +44 (0)20 8612 6200 **F** +44 (0)20 8612 6201
E cipd@cipd.co.uk **W** cipd.co.uk

Incorporated by Royal Charter
Registered as a charity in England and Wales (1079797)
Scotland (SC045154) and Ireland (20100827)

Issued: May 2018 Reference: 7719 © CIPD

