

WORKFORCE PLANNING

AN ESSENTIAL ELEMENT OF A REGIONAL ECONOMIC DEVELOPMENT STRATEGY



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It is commonly understood that the factors of production, and hence of economic growth, are land, labour, capital and technology. Perhaps the most important of these is the labour component, for without 'human capital' the other factors cannot be effectively brought together.

Human capital is the stock of knowledge, expertise and abilities of a region's population. It is one of the most important inputs to economic activity because it is crucial to supporting local businesses to be competitive and drive economic growth.

Businesses need access to workers with appropriate skills. Access to human capital is influenced by workforce participation and the mobility of labour. Efforts to improve human capital for a given region may involve encouraging participation by segments of the population that currently have low rates of workforce participation.

Human capital is the most valuable resource in a competitive globalised economy and exists at all levels in the workforce, including entrepreneurs, managers, professionals, skilled workers and semi-skilled workers. Hence a broad definition of 'workforce' should be applied.

THE NEED FOR WORKFORCE PLANNING

The world of work is changing, driven by technology, the expanding knowledge economy and the opportunities and challenges of globalisation. Workforce development – the policies and practices that support people to participate effectively in the workforce and to develop and apply skills in a workplace context – provides the framework for enterprises, industry and the nation to meet this challenge.

Beyond a focus on training, workforce development is about integrating business strategy, work organisation and job design into work practices. Workforce development has far-reaching benefits. It can drive productivity improvements and increase participation by better matching demand for skilled people with

supply across enterprises and industry sectors. This in turn fosters growth and innovation.

WORKFORCE PLANNING AT THE NATIONAL LEVEL

At the Federal level, the Australian Workforce and Productivity Agency (AWPA) consults with industry to develop the National Workforce Development Strategy. The AWPA released a National Workforce Development Strategy in 2010 and 2013 and is currently developing the 2016 strategy. The vision of the strategy is to realise Australia's growth potential through a highly skilled and adaptable workforce, where skills are being used effectively to meet the needs of industry.

The workforce development strategy outlines how Australia can develop its knowledge economy and workforce to meet current and future needs, including by expanding tertiary education and training in concert with a range of skills development and enabling initiatives.

There is a strong emphasis in the strategy on 'demand-led' education to meet industry requirements and pathways to further education, including from school to vocational education and training (VET) and from VET to higher education. There is also an emphasis on flexible training, ensuring the tertiary education system enables career transitions and supports retraining and up-skilling of the workforce. The strategy promotes the development of core skills and the critical importance of literacy, language and numeracy.

Regions can tap into this national framework, including funding programmes, by preparing their own workforce planning strategies at the regional level. The means by which this can be achieved is outlined below.

WORKFORCE PLANNING METHODS

It is important that those who are involved in workforce planning work within the same conceptual framework. This means adopting a common set of

working definitions for key factors, agreeing a common analytical framework and adopting protocols for data collection and management.

The following definitions are adopted to achieve this end:

- **Workforce** – those who are employed. A broad definition is adopted which is inclusive of all labour necessary to start-up, manage and work in business enterprises. Hence the definition includes entrepreneurs, senior management, middle management, professionals, skilled and semi-skilled workers and unskilled workers.
- **Employed** – those who are engaged in the workforce for remuneration including:
 - Full-time employees;
 - Part-time employees;
 - Casual employees (on call); and
 - Entrepreneurs running a business.
- **Employed (Skills Adequate)** – Those who are employed who have skills that meet or exceed the job requirements of business and industry.
- **Employed (Skills Inadequate)** – Those who are employed, who for the time being do not have skills that meet the job requirements.

LABOUR MARKET DEMAND AND SUPPLY-SIDE COMPONENTS

The labour market is best analysed in terms of demand and supply-side factors. The demand side refers to the number of jobs available measured by the number of people employed plus the number of job vacancies.

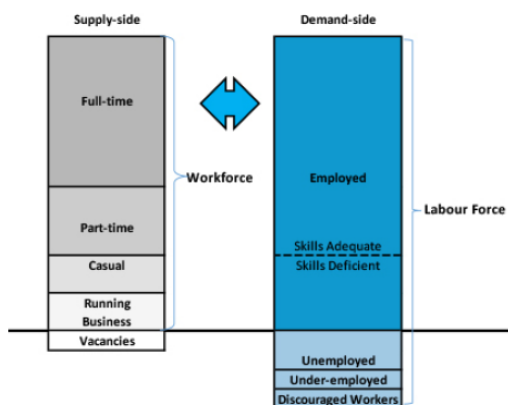
The supply-side of the equation refers to the number of persons in the labour force plus those under-employed plus discouraged workers. Key components include the following:

- **Labour force** – those who are in the workforce (employed) plus those who are unemployed and actively seeking work plus those who are under-employed.
- **Unemployed** – those who wish to be in the workforce (employed) but are not.
- **Under-employed** – those who are seeking, and are qualified for, a more advanced position in the workforce.
- **Discouraged Workers** – those who desire to be employed but do not join the labour force due to an expectation that job-seeking will be futile.

- **Labour Force Participation Rate** – the number of those in the labour force as a proportion of the eligible population age 15 years and over.

These concepts are illustrated in Figure 1, which shows how the demand and supply-sides of the labour market relate to one another.

Figure 1. A Conceptual Illustration of the Labour Market



Source: SC Lennon & Associates Pty Ltd

WORKFORCE PLANNING OBJECTIVES AND FUNCTIONS

The objectives of workforce planning are to:

- Identify the workforce that is required to start-up, manage, grow and sustain dynamic business enterprises that are competitive;
- Minimise vacancies consistent with natural turnover in the workforce;
- Minimise the level of unemployment (to say 4% structural), under-employment and the number of discouraged workers; and
- Ensure the skills base of the whole labour force matches the needs of industry.

Workforce planning is about:

- Giving effect to economic development strategies;
- Predicting the future workforce needs of industry; and
- Developing strategies to ensure the labour force can satisfy the workforce needs of industry sectors.

Strategies are developed in the areas of:

- General education delivery;
- Vocational training programmes;
- Education and training support (scholarships, loans, cadetships, internships and apprenticeships); and
- Labour market regulation (remuneration and conditions).

Figure 2.A Conceptual Illustration of Workforce Planning Strategy Themes



Source: SC Lennon & Associates Pty Ltd

In carrying out these functions, it is necessary to undertake labour market analysis at two discrete levels. These levels may be termed:

- ‘Macro-level’ workforce planning; and
- ‘Micro-level’ workforce planning.

In each area of workforce planning, data collection, compilation, analysis and dissemination plays a central role.

‘MACRO’ LEVEL DATA ANALYSIS

Macro-level labour market analysis must encompass the whole economy, given the inter-relationships that exist between sectors. Analysing sectors in isolation will inevitably lead to confusion, including double-counting in the database.

It is essential that a ‘model’ of the economy is applied to ensure that all flows between enterprises operating in the local or regional economy are accounted for. Economic models simulate the relationships between key variables in the economy to estimate and forecast changes in output and employment. They use mathematical equations to represent flows and behavioural factors.

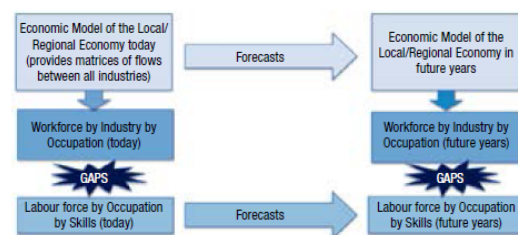
The models are required when undertaking project or programme impact analyses and forecasting, and are fundamental to measuring the economic benefits in a cost-benefit analysis.

Economic modelling is based on input-output tables to simulate flows between industry sectors. Data is derived from a range of sources, including:

- National accounts;
- Census;
- Business surveys;
- Trade data;
- Household expenditure survey data;
- Consumer price index and import price index;
- Balance of payments; and
- Economic input-output surveys.

Modelling of a regional economy and its workforce requirements is integrated with labour force analysis in the manner illustrated in Figure 3.

Figure 3. Workforce Planning at the Macro Level



Source: SC Lennon & Associates Pty Ltd

Analysis and forecasting at the macro-level enables workforce planning strategies to be developed in the following areas:

- Giving effect to economic development strategies for the region and identifying workforce needs for industry sectors.
- Identifying the existing and future gaps between workforce needs and labour force supply and competencies.
- Enabling the labour force to have the skills and capabilities to meet identified needs.
- Policies on education, training, scholarships and related student support and labour market regulation.
- Creating a well-educated labour force in the areas that are relevant to industry sector needs, without being prescriptive. There is an emphasis on adaptability and flexibility, recognising the trend to multiple careers and lifelong learning.

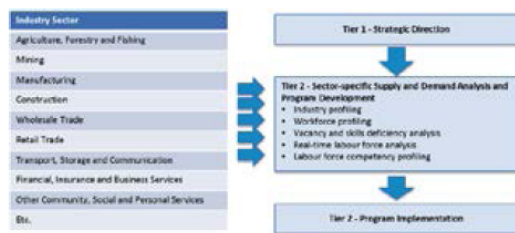
Analysis and forecasting at the macro-level informs priorities for planning at the micro-level.

‘MICRO’ LEVEL DATA ANALYSIS

Micro-level labour market analysis is undertaken on a sector-by-sector basis. It is based on data collection on the workforce needs of industry and on detailed analysis of the labour force. Hence the main tasks are industry profiling, workforce profiling and labour market analysis and competency profiling.

The objective of the analysis is to inform policy and program development for each industry sector. The conceptual framework for micro-level workforce planning is represented in Figure 4.

Figure 4. Workforce Planning at the Micro Level



Source: SC Lennon & Associates Pty Ltd

Analysis and forecasting at the micro-level enables workforce planning strategies to be developed in the following areas:

- Curriculum design to ensure education services equip students for careers that are relevant to future industry needs. This does not underestimate the value of a general education.
- Curriculum design to ensure vocational training is directly relevant to industry needs.
- Student support policies and programs such as those relating to scholarships, loans and internships that are tailored to equipping students for careers that are relevant to future industry requirements.
- Specific purpose programs to assess the competencies of the regional workforce and the immediate needs of industry with a view to better matching labour supply and demand. This might be achieved through initiatives such as 'jobs fairs' where business operators and job-seekers are brought together. At such events data can be collected on the labour market supply and demand-sides and areas of mismatch can be identified and addressed.

COLLABORATION IS KEY

Unlike macro-level analysis, which is essentially a technical exercise, micro-level data analysis must be undertaken in a collaborative framework. This requires that all stakeholders are included in the process. Generally, this involves industry representatives, relevant government agencies, educators and trainers (government and private) peak bodies, employee representatives and job seekers.

The role of the collaboration process includes:

- Obtaining the best data, information and advice on the nature of industry requirements and the current capabilities of the workforce (those who are

employed) – including vacancies and areas where skills fall short of requirements.

- Obtaining the best data, information and advice on the nature of the labour force (those who are employed and those who wish to be employed), including competencies and underutilised human resources.
- Documenting the nature and extent of current, proposed and potential programs in the areas of education, training, student support and labour market regulation.
- Ongoing monitoring and review of outcomes and adequacy of policies and programs.

To facilitate the required level of collaboration, appropriate governance structures must be in place and reliable, quality data and information must be available and it must be shared.

In a local context this may be achieved by economic development practitioners working in collaboration with education and training institutions and industry leaders to integrate the workforce planning processes outlined above into the regional economic development strategy process.

THE ULTIMATE OUTCOME – ECONOMIC DEVELOPMENT

Workforce planning is essential for facilitating improvements in a region's human capital, which can enhance the innovative and productive capacity of the local workforce.

Developing a skilled and educated workforce assists with building a region's resilience. With transferable and adaptable skills, individuals can pursue a wider range of employment opportunities and adapt to new processes and technologies, enhancing productivity and improving living standards. An appropriately skilled workforce can also help regions take advantage of new opportunities for growth and make a region more attractive to prospective investment. This all translates into positive economic development outcomes.

ABOUT THE AUTHORS

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