There are more Australians in paid work as a share of the population these days than there has been since the colonial era. This proportion has increased steadily since Federation in 1901, as shown in the chart below. Large families and discrimination against married women kept the participation rate low from the Industrial Age up to the mid-1960s. But the youthfulness of the population was also a factor. The average age of the population in 1901 was 22, compared with 37 – and increasing – in 2018. As a result, the nation had trouble getting enough workers in the late 19th century, with a proportion of that era’s workforce aged between 11 and 15, before being prohibited in the Australian Constitution.

Women came back into the workforce in the mid-1960s after an absence of nearly a century. At approximately the same time, greater flexibility was introduced into the workforce in the form of part-time work. The option of working part time was a boon to students, mothers with young children, disabled individuals (temporary or permanent) and the elderly. Today, a third of the workforce operates part time, which is the second highest rate in the developed world after the Netherlands.
Many things are getting better

The nature of work is changing for the better. The average weekly hours worked keeps falling, productivity and wages generally keep rising, and the nation won’t run out of jobs. It won’t run out of workers through ageing, either. Robots won’t create high unemployment. The nature of employment is moving towards rewarding outputs, not inputs (hours and other protocols), altering industrial relations for the better. And old industries are being replaced with new industries – mostly service industries – and mostly with higher wages. Australia is creating far more jobs than it is losing. The fear of running out of jobs is groundless, as the following chart optimistically shows.

Over the five years through September 2017, we created over six times more jobs than we lost: almost 1.2 million new jobs versus a mere 184,200 lost. Yes, we lost over 53,000 jobs in the manufacturing sector. But we created over 286,000 jobs in the health services sector, which paid over 10% more than the lost manufacturing jobs on average. Four out of every five new jobs are in service industries, as is the case in all advanced economies. And while we lost 56,000 jobs in mining, the sector has become more viable and continues to produce nearly half of our exports, either directly or indirectly via processed minerals. The chart below shows the shift to service industries.
What are the prospects for low-skilled workers? Over the five years through September 2017, 204,380 new jobs were created in the nation's three lowest-paid sectors of hospitality, retailing and agriculture. There have always been jobs for low-skilled individuals and this trend will continue into the future, albeit in differing industries.

**Pay rates**

As stated above, there have been a lot of jobs created in the lower paid sectors. In the chart below, we see the mining sector has the highest average wage, with salaries over twice those in the lowest paid sectors of retail, hospitality and agriculture. That said, the pecking order does change over time, albeit slowly.
It is important to value higher and continuing education to raise one’s skill level and income. But, it is also important to be conscious of the changing demand for jobs in various industries. The loss of 56,000 jobs in the mining sector over the past five years is testimony to that.

### Hours of work, robots and AI

Are we working harder and longer these days? No. We are working easier, smarter and less hours each year. Two centuries ago, the average male worked for 65 hours per week for 25 years, and then died. Today, the average male will work 28 hours or less per week for 50 to 60 years, and still have a decade or more of retirement, with the early and later years of working life being part time.

We think we work a much longer week in 2018 than 28 hours, but we don’t. The nominal hours have to be diluted by the two months that we don’t work at all each year, including four weeks of annual leave, two weeks of public holidays, two weeks sick leave and sometimes long service leave. Additionally, the lifetime average hours of work per week has to take into account the part-time hours at the beginning and end of our working lives.
Robots can be a scary thought. However, technology and automation have been around for a long time, aiding workers and citizens, sometimes displacing them into other jobs, but not replacing them in the workforce and community. Surprisingly, the arrival of tractors and fertilisers in the 1930s and post-World War II displaced more jobs in the agriculture sector than goods-producing robots do today, with the sector declining from 15% of the total workforce to less than 3% today.

In many cases, robots are taking away repetitive and boring jobs, freeing workers to get better professions. Technological devices are also aiding society in the form of electronic guardian angels, as we see with heart pacemakers, Cochlear hearing implants, ABS and DSC on cars, and numerous other aids.

Yes, AI is threatening a number of professional, technical and educational jobs. However, productivity has been absent for decades in many of these areas due to the collegiate, partnership, monasterial or guild structures often found in these professions. In many education settings, small class sizes have been chosen over high-quality and higher paid teachers, to the potential detriment of quality, productivity and outcomes. Reforms and AI-assisting or displacing technology will yield better and cheaper outcomes for the business world and communities in these cases. In the United States, online legal services are proving cheaper, more accurate, and are growing at over twice the rate of traditional law practices, as revealed in IBISWorld’s report on the industry.

The nature of work compacts

The most profound change in our working lives is the work arrangements or compacts we will use in this new century. The feudal and indentured systems of the past gave way to the employment system in the Industrial Age of manufacturing and utilities. In the new age of service industries and the digital era (stage II of the ICT revolution), the concept of an employee will fade into history to be replaced by contractualism.

We are moving, or stumbling, towards a B2B compact between businesses and workers, on an individual or group contract basis. Unions – already down to a seventh of the workforce – will be replaced by professional advisers for work contracts in the same way we already use mortgage brokers and financial advisers to help us make the right decisions on financial matters. The union movement seems stuck in an Industrial Age ideology that is antipathetic to millennials and other emerging workers. Millennials now account for 37% of the workforce and are seeking more liberty, flexibility and rewards for outputs. Employer bodies face a similar fate to unions unless they metamorphose into information and advisory supporters, as many are already doing.

The workplace is proving to be a brave new world indeed.