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Impact of COVID-19 Pandemic on the Future of Work: How to Provide Sustainable Development of Employment Opportunities in New Zealand
Abstract

Purpose
The purpose of this study is to investigate the ‘socio-economic’ impact of the COVID-19 pandemic on the future of work, more specifically during and post-COVID-19, its implications, future predictions and suggested strategies to provide sustainable employment opportunities for everybody.

Design/Methodology/Approach
The study will investigate the application of the 2030 Agenda of the United Nations Sustainable Development Goal 8; “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” in New Zealand. The study will investigate the current situation of the COVID-19 pandemic and its impact on the future of work worldwide and New Zealand in particular during the lockdown, the lessons learned, predictions for the future of work and, finally, suggests strategies for sustainable future employment advocating economic growth for the country.

Findings
The findings will reflect on the lessons learned from the lockdown during the COVID-19 pandemic and its impact on employment by providing theoretical and statistical evidence to assist in providing workable strategies towards UN Sustainable Development Goal 8.

Originality/Value
This study will provide first-hand results discussing lessons absorbed during the outbreak of the COVID-19 pandemic and recovery strategies in New Zealand to assist in the accomplishment of the UN Agenda 2030, Goal 8.

Keywords
Introduction

Technological development, globalisation, aging populations, the emergence of new business models, and evolving worker preferences have contributed to changes in the face of work and labour market requirements globally. The Sustainable Business Council (February 2019) explained that the term ‘Future of Work’ (FoW) is used to describe complex disruptive forces that are interacting over multiple time horizons. They are changing businesses and the nature of our workforces, workplaces, and the way we work. These disruptive forces include:

- the rapid development of technologies such as artificial intelligence and robotics;
- shifting demographics including an aging and increasingly multicultural workforce;
- globalisation, which included the ‘pulls’ of increasingly empowered and connected global customers and global talent markets; and
- the transition to a sustainable, zero carbon economy.

The spread of the Coronavirus pandemic should also be included.

The spread of the Coronavirus pandemic added another dimension of disruption to the future of work as more than 30 million people have lost their jobs globally. As a result, people started thinking critically about their future of work, i.e., obtaining new jobs, new opportunities and work places, their health and other financial realities to secure a more sustainable future in such a volatile labour market.

The study commences by explaining the challenges confronting the future of work situation and the paradigm shift in skills required for the new normal of the labour market. Further analysis of the current situation of the Coronavirus pandemic and its impact on the future of work worldwide, and New Zealand in particular, during the lockdown, the lessons learned, predictions for the future of work and, finally, suggesting strategies for a sustainable future employment advocating economic growth for the country.
Future of Work Concept

Businesses are faced by challenges and opportunities to meet the requirements of the labour market. The challenges are a result of the constant changes and disruptions of the nature of work, exemplified in the shape of automated and augmented new technologies such as artificial intelligence, robotics, platform technologies (e.g., Uber and Airbnb) big data analytics and blockchain. Nevertheless, there are opportunities resulting from the emergence of new jobs and redefining tasks of already existing jobs to meet the advancement of business models. Figure 1 shows the OECD (2019) results that state there is a 70% likelihood of high risk of job automation, and between 50-70% risk of jobs having significant changes.

The World Economic Forum (2018) presented in its Future of Jobs Report 2018 that 89% of US companies planned to adopt big data analytics by 2022. Furthermore, the report states that more than 70% of US companies are arranging to integrate the Internet of Things (IoT), explore web- and app-enabled markets, and take advantage of machine learning and cloud computing. Table 1 below illustrates the projected technology adoption by US companies within the next four years.
A Global Talent Trends study conducted by Mercer (2018) stated that more than half of executives believe that at least 20% of the roles in their organisation will cease to exist by 2022. Therefore, organisations and roles are changing so rapidly that skills requirements are continually in flux.

This has been reiterated by research directed by the World Economic Forum (January 2019) stating that companies are facing a significant global challenge of mismatch between supply and demand of talent with the skills required, i.e., there are barriers to the successful integration of the latest technologies in their business models due to skill gaps in the local labour market (60%), skill gaps in leadership (46%), skill gaps in the global labour market (36%), and lack of flexibility in hiring and firing (29%). The following Table 2 provides the predicted top ten workforce skills requirements by 2022.

### Table 1: Planned technology adoption by US companies within the next four years

<table>
<thead>
<tr>
<th>Share of companies surveyed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>User and entity big data analytics</td>
<td>89%</td>
</tr>
<tr>
<td>Internet of Things</td>
<td>80%</td>
</tr>
<tr>
<td>App- and web-enabled markets</td>
<td>76%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>75%</td>
</tr>
<tr>
<td>Cloud computing</td>
<td>71%</td>
</tr>
<tr>
<td>Augmented and virtual reality</td>
<td>66%</td>
</tr>
<tr>
<td>Encryption</td>
<td>60%</td>
</tr>
<tr>
<td>Digital trade</td>
<td>57%</td>
</tr>
<tr>
<td>Wearable electronics</td>
<td>56%</td>
</tr>
<tr>
<td>New materials</td>
<td>55%</td>
</tr>
<tr>
<td>Distributed ledger (blockchain)</td>
<td>52%</td>
</tr>
<tr>
<td>3D printing</td>
<td>47%</td>
</tr>
<tr>
<td>Stationary robots</td>
<td>44%</td>
</tr>
<tr>
<td>Autonomous transport</td>
<td>43%</td>
</tr>
<tr>
<td>Quantum computing</td>
<td>41%</td>
</tr>
<tr>
<td>Non-humanoid land robots</td>
<td>38%</td>
</tr>
<tr>
<td>Humanoid robots</td>
<td>25%</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>25%</td>
</tr>
<tr>
<td>Aerial and underwater robotics</td>
<td>22%</td>
</tr>
</tbody>
</table>

*Source: The World Economic Forum, 2018*
A global survey conducted by the research company Gartner (April 2020) with 317 CFOs and business finance leaders found that 74% plan to move their previously on-site workforce to permanently remote positions post-COVID-19. Some of the factors driving this change are the cost-saving benefits of working from home, reduction of both on-site technology expenses and reduced costs in real estate expenses for office space.

A study carried out by online recruitment platform FlexJobs (2020) found that employees benefit from working remotely by saving as much as $4,000 a year from commuting, office meals, and other miscellaneous expenses. Further research by the Sustainable Business Council (February 2019) found that working from home can boost employee productivity, improve work/life balance, foster better mental health, and reduce pollution from commuters.

Accordingly, these financial gains, together with the minimum disruption leading to higher productivity levels and staff wellbeing, are a great encouragement for companies to keep this style of working remotely, even after the pandemic ceases.

### Table 2: A Comparison of the Changing Demands of the Workforce Skills by 2022

<table>
<thead>
<tr>
<th>Growing Skills by 2022</th>
<th>Declining Skills by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analytical thinking and innovation</td>
<td>1. Manual dexterity, endurance and precision</td>
</tr>
<tr>
<td>2. Active learning and learning strategies</td>
<td>2. Memory, verbal, auditory and spatial abilities</td>
</tr>
<tr>
<td>3. Creativity, originality and initiative</td>
<td>3. Management of financial, material resources</td>
</tr>
<tr>
<td>4. Technology design and programming</td>
<td>4. Technology installation and maintenance</td>
</tr>
<tr>
<td>5. Critical thinking and analysis</td>
<td>5. Reading, writing, maths and active listening</td>
</tr>
<tr>
<td>7. Leadership and social influence</td>
<td>7. Quality control and safety awareness</td>
</tr>
<tr>
<td>8. Emotional intelligence</td>
<td>8. Coordination and time management</td>
</tr>
<tr>
<td>10. Systems analysis and evaluation</td>
<td>10. Technology use, monitoring and control</td>
</tr>
</tbody>
</table>

Source: Adapted from World Economic Forum, 2018
New Zealand is one of the lucky countries that took swift action in combating the spread of COVID-19; nevertheless, this had an effect on its socio-economic status. This section will explain how the country managed to control the spread of the Coronavirus, what measures the government took, and how it assisted businesses and individuals to deal with the total lockdown and keep people staying home.

The total number of confirmed and probable cases of COVID-19 to date is 1,553; refer to Figure 2 illustrating the spread of the COVID-19 around the country. As you can see, Figure 2 demonstrates that most of the cases have recovered (i.e., the green colour). As of 19 July 2020, there were 75 cases that were identified at the border as New Zealand opened its borders for returning New Zealanders from overseas. There were also 25 cases in managed and controlled facilities. There were no COVID-19 cases in hospitals (Ministry of Health, 19 July 2020).

![Figure 2: The spread of COVID-19 in New Zealand by District Health Board Information](source: Ministry of Health (17 July 2020).)
The spread of COVID-19 led to a rapid shift in working from home and relying on remote work tools to keep some businesses running. Teams had to collaborate, operate and communicate virtually through the power of technology. All countries all over the globe are looking forward to the end of this pandemic and preparing for the resumption of their businesses and returning to normal life.

It has been estimated that 25-30% of the workforce will be working-from-home multiple days a week by the end of 2021 (Lister, 2020).

Accordingly, the New Zealand Government developed the four Alert Levels to combat the spread of COVID-19, as explained below.

Level 4 Alert – Lockdown: announced by our Prime Minister to start at midnight on Wednesday 25 March 2020 for four weeks, then extended for a few more days. Only essential workers were permitted to leave home and go to work. Other people could go out, but only for essentials, e.g., food and visiting their GP. This lockdown created lots of disruption for businesses who either had to shut down or ask their employees to work from home or provide services online, e.g., schools, universities, and some government departments.

In New Zealand the tourism industry was hit the most as it directly and indirectly employs almost 400,000 people, i.e., just over 14% of the workforce. After just three months of coronavirus and travel restrictions, New Zealanders lost nearly 130,000 jobs in the aviation industry. Further announcements mentioned that 1,300 cabin crew were laid off at Air New Zealand.

The figures keep growing as the days and months go by. Those figures were to demonstrate the trend and where the job market is heading due to the spread of the COVID-19 pandemic.

Level 3 Alert – Restrict: New Zealand moved to this level on 27 April 2020. The difference here was that, socially, people could increase their bubble but still keep social distancing. This level was for two weeks and extended for a few more days to prepare for moving to the next level; this was dependent on the decrease of coronavirus cases in the country and making sure there was no community transmission happening.

Level 2 Alert – Reduce: This level started gradually on 14 May 2020 for some business to start opening. On 18 May 2020 some schools opened, and by 21 May 2020 the remaining businesses opened. All were adhering to social distancing rules with no more than 10 people meeting together at a time.

Level 1 Alert – Prepare: New Zealand declared moving to Level 1 on Monday 8 June 2020 after 17 days with no new cases of COVID-19 in the country. In order to boost the economy, the airport was opened for kiwis to return home; this introduced new cases of Coronavirus to the country. Therefore, the government allocated hotels to be used, free of charge, for 14 days isolation for travellers arriving in New Zealand. The government is also providing free COVID-19 tests on their 3rd day and 14th day from arrival in New Zealand.

There are further discussions about opening our bubble with other countries, e.g., a pacific bubble, and there are negotiations to open up with Australia and other countries.
The Sustainable Development Goals were developed by the United Nations as a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone everywhere. The 2030 Agenda for Sustainable Development was set out as a 15-year plan to achieve those Goals. This paper will discuss only UN Sustainable Development Goal 8: “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (UN, 2020).

This section will discuss how the New Zealand Government is working to provide sustainable development of employment in the country. It aims to achieve that by applying UN Sustainable Development Goal 8 during the phase of combating and future recovery from the Coronavirus pandemic (COVID-19).

I believe that the New Zealand Government is working in alignment with the framework released by the United Nations in April 2020 for the immediate socio-economic response to COVID-19. The following are the five streams of work of the socio-economic response framework:

1. ensuring that essential health services are still available and protecting health systems;
2. helping people cope with adversity, through social protection and basic services;
3. protecting jobs, supporting small and medium-sized enterprises, and informal sector workers through economic response and recovery programmes;
4. guiding the necessary surge in fiscal and financial stimulus to make macroeconomic policies work for the most vulnerable, and strengthening multilateral and regional responses; and
5. promoting social cohesion and investing in community-led resilience and response systems.
Table 3 provides examples of New Zealand Government actions in applying the five streams of work in response to the socio-economic situation in the country resulting from COVID-19.

### Table 3: New Zealand Government’s response to COVID-19

<table>
<thead>
<tr>
<th>UN Stream of Work</th>
<th>NZ Government Socio-Economic Response</th>
</tr>
</thead>
</table>
| 1. Ensuring that essential health services are still available and protecting health systems | **Successes:**  
  - The development of the Alert Levels system with the aim of eliminating COVID-19 from the country and stopping any community transmission.  
  - Closing international and national travel to contain the spread of COVID-19  
  - Quick development of Helpline for community to report (0800 358 5453 (+64 9 358 5453 for international SIMs)) any concerns re: COVID-19 cases and/or to take the required test.  
  - Health services (e.g., GP, mental health) were open during the lockdown to provide services to the community.  
  - Developed new protocols and procedures for hospital entrances to control the spread of COVID-19 in the community  
  - Following sanitisation regimes recommended by WHO.  
  - NZ Ministry of Health publishing the procedure for assessment and testing of COVID-19 during the lockdown.  
**Challenges:**  
- Some individuals not following the lockdown rules, jeopardising their safety and others.  
- Shortage of Personal Protective Requirement (PPE) gear. |
| 1. Helping people cope with adversity, through social protection and basic services | To alleviate the economic pressures and prevent people from losing their homes, the NZ Government provided the following support to landlords and tenants:  
  - **Extended timeframes for tenants to remedy a breach of lease:** The minimum statutory period for a tenant to remedy any failure to pay rent will be extended from 10 working days to 30 working days.  
  - **Extended timeframes for mortgagors to remedy mortgage defaults:** The minimum statutory period for a mortgagor to remedy defaults under its mortgage will be extended from 20 working days to 40 working days.  
  - **Residential rent freeze and tenancy termination restrictions:** A freeze on rent increase for six months. Tenancies may not |
be terminated during the lockdown period, unless the parties agree. However, tenants may still terminate their tenancy as normal if they wish.

- **Supermarkets and essential businesses** (e.g., trains and bus services for essential workers) were operating during the lockdown to provide basic services to the community.

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<table>
<thead>
<tr>
<th>UN Stream of Work</th>
<th>NZ Government Socio-Economic Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Protecting jobs, supporting small and medium-sized enterprises, and informal sector workers through economic response and recovery programmes</td>
<td>Support for Small and Medium Sized Enterprises (SMEs)</td>
</tr>
<tr>
<td></td>
<td><strong>Business Finance Guarantee Scheme:</strong> This scheme offers $6.25 billion in loans to New Zealand businesses with annual revenue between $250,000 and $80 million to help with their cashflow and operating expenses.</td>
</tr>
<tr>
<td></td>
<td><strong>Tax relief for SMEs:</strong> Announced on 15 April 2020. The aim is to increase business cashflow. Inland Revenue will have the discretion to extend taxation due dates and timeframes (for example, for filing or returns).</td>
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<tr>
<td></td>
<td><strong>Regional Business Partner (RBP) Network Support:</strong> The RBP Network has been given additional government funds to support SMEs through COVID-19.</td>
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<tr>
<td></td>
<td><strong>Support for Employers and Employees</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Wage Subsidy Scheme:</strong> This scheme supports employers affected by COVID-19, so that they can continue to pay their employees, even if they are unable to work. Support is available to all businesses (including the self-employed, contractors and sole traders), registered charities, incorporated societies and post-settlement governance entities, that have had a 30% drop in revenue attributable to COVID-19. The scheme will pay $585.80 per week for full-time employees and $350.00 per week for part-time employees.</td>
</tr>
<tr>
<td></td>
<td><strong>Essential Workers Leave Scheme:</strong> This scheme provides ‘essential workers’ who take leave from work to comply with public health guidance with an income at the same rates as the Wage Subsidy Scheme. The subsidy covers a four-week time period, with the option for organisations to re-apply for those same workers after four weeks, if necessary.</td>
</tr>
<tr>
<td></td>
<td><strong>Redeployment of workers:</strong> On 20 March 2020, the Government allocated $100 million</td>
</tr>
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</table>
### UN Stream of Work

to help redeploy workers negatively affected by the economic impact of COVID-19. For example, Gisborne-Tairāwhiti will receive approximately $28 million to support the redeployment of forestry workers into activities including roading, conservation and retraining.

### NZ Government Socio-Economic Response

4. Guiding the necessary surge in fiscal and financial stimulus to make macroeconomic policies work for the most vulnerable, and strengthening multilateral and regional responses

NZ Government provided support to various industries to strengthen their response to the impact of COVID-19. The following are some of those initiatives.

**Support to the Health Sector**
- **Supported by a $500 million Health Package:**
  The first $235 million allocated is aimed at scaling up public communications relating to COVID-19, testing and tracing cases, and ensuring continuity of care in the community.
- **$30 million support for GPs and Pharmacies:**
  A 15 million general practice response payment aimed to support general practices with workload from testing patients and the costs incurred in moving to virtual consultations. The other $15 million is a support payment for all community pharmacy service providers to help with the increased workload and for the way they are moving into a virtual working environment alongside general practice.

**Support for General Business:**
- **Mortgage Holiday Scheme:** Retail banks have agreed a six-month principal and interest payment holiday for small business customers and mortgage holders whose incomes have been negatively affected by COVID-19.
- **Tax relief measures:** On 25 March 2020, Parliament passed the COVID-19 Response (Taxation and Social Assistance Urgent Measures) Act 2020. This reinstates depreciation deductions for commercial and industrial buildings; increases the threshold for first year low-value asset write offs; and increases the threshold for paying provisional tax.
- **Temporary changes to the Companies Act 1993.** These changes include: a ‘safe harbour’ for directors’ insolvency duties; allowing non-trading businesses to hibernate debts; allowing e-signatures; extended filing deadlines from the Registrar of Companies; and relief for entities not in compliance with their constitutions due to COVID-19.
### UN Stream of Work | NZ Government Socio-Economic Response

**Support for Exporters and Importers**

- **Air Freight Support Package**: New Zealand Trade and Enterprise (NZTE) and the Ministry of Transport (MoT) are working with Air New Zealand and air freight operators to ensure that air freight capacity is available on New Zealand’s key routes for at least the next six months. The Government will provide variable top-up funding (of up to $50,000 per return flight) for international air freight movements to make sure the flights are financially viable.
- NZTE has launched a $4 million **Export Business Continuity Service** in partnership with PwC and Deloitte, which will provide its export customers with access to one-on-one professional services to help them manage the impacts of COVID-19 on their businesses.
- NZTE has launched a new online platform, **NZ Marketplace**, that allows New Zealand businesses to connect with each other.
- **Tariff concessions on imports of COVID-19 related products**: Tariffs on all medical and hygiene imports needed for the COVID-19 response have been temporarily removed.

### 5. Promoting social cohesion and investing in community-led resilience and response systems

The New Zealand Government provided $27 million support for NGOs and community groups providing essential social services as follows: $16 million to reinforce existing essential social sector services delivered by NGOs so they can continue to support individuals, families, whānau and communities at risk through uncertain circumstances and respond to increased demand.

- $6 million funding for Disability Community Participation providers to put in place appropriate health mitigations for the current group orientated services and provide support for disabled people in lockdown.
- $4.8 million to provide community grants or fund innovative community-led solutions to support local resilience.

Furthermore, the government has spent $67 million of emergency relief funding in the past two months to help struggling foreign nationals stranded in New Zealand as a result of the COVID-19 crisis.
Summary of Findings

The New Zealand Government has endeavoured to apply the UN Sustainable Development Goal 8 to five streams of work in the socio-economic response framework. This has been illustrated in its allocation of over $52 million to be spent on measures to alleviate the impact of COVID-19 on businesses, community and for long term support for the country's economic recovery. The schemes and measures announced are aimed at keeping businesses afloat and employees to keep their jobs. Those schemes were in the shape of subsidies and loans, and the relaxation of compulsory obligations, as demonstrated in Table 3 above.

Even though the New Zealand Government intervened to help businesses and employees, there have still been several challenges affecting the workforce in New Zealand:

- Some business did not give their employees the wage subsidy that they took from the government. Accordingly, they are under investigation.
- The unemployment rate in New Zealand is rising. The unemployment rate rose to 4.2% in the March 2020 quarter, up from 4.0% in the previous quarter (Statistics NZ, 6 May 2020).
- Employees faced technical challenges due to the transformation to working from home, i.e., the need for reskilling and upskilling.
- Many organisations announced insolvency and all their employees lost their jobs in various industries e.g., aviation industry, agricultural & food, construction, tourism, leisure and hospitality, retail, and NZ magazine publications (e.g., Woman's Day, New Zealand Woman's Weekly, and The Australian Women's Weekly NZ, Your Home & Garden, the NZ Listener, and Air New Zealand’s magazine Kia Ora).
Suggestions for Future Work Opportunities

In order to achieve the full benefits of the sustainable development of employment in the country during the phase of recovery from COVID-19, the NZ Government and all stakeholders need to collaborate to transition smoothly from the current state to the new normal phase. The following are more specific suggestions towards achieving these goals:

- organisations should work on strengthening their work from home policies, i.e., introduce a hybrid approach for the workplace culture for both types of employees, those who want to work from home and others who prefer to work in the office;
- organisations should be more flexible and versatile in accommodating employees working as contractors or on small projects;
- entrepreneurial spirit will be required for businesses post-coronavirus pandemic, i.e., fast flow of ideas and ingenuity to figure things out and make things happen. This kind of culture will help create opportunities for new jobs and career development;
- organisations should become less competitive and more collaborative in their approach, e.g., companies sharing engineering information to manufacture critical medical supplies;
- streamline organisational processes for speedy response to any crisis, i.e., speed in response to people’s needs and reduced bureaucracy. This system should continue post-COVID-19, i.e., during the recovery phase;
- promote work culture changes to fit the new normal of the future of work, i.e., becoming more flexible, more diverse, having a higher level of tolerance and understanding of employees’ circumstances, having empathetic teammates, more effective and appropriate leadership, and more support for employees’ emotional and mental health;
- reskilling and upskilling employees to fill gaps resulting from the mismatch between the supply and demand of talent and required future workforce skills.
References


Biography

Siham El-Kafafi has wide industry and consultancy experience in the medical, manufacturing and service industry, in addition to being an academic for the past 21 years. Her teaching experience plays a leadership role in the creation of high-quality student experience in a wide range of business courses. Siham worked in various universities in New Zealand and overseas before running her own business, Arrows Research Consultancy Limited, since June 2014. Siham holds a PhD in management, a Masters’ in Education, a Masters of Public Administration, and of English Literature with Honours. Siham has over 100 publications in journal articles, book chapters and conference proceedings, in addition to being on the editorial boards for various national and international journals, and on the board of examiners and award committees.