



RESEARCH STUDIES:

THE ECONOMIC AND SOCIAL IMPACT OF COVID-19 ON THE WHOLESALE AND
RETAIL SECTOR.

Final Report

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Executive Summary

This study considers the economic and social impact of COVID-19 on the wholesale and retail sector. These studies focus on understanding sector trends and demand in a changing landscape. The state of the sector is gauged in terms of impact on business, business closures, responses to the pandemic, adoption of technology and the training required thereof to better understand key issues and opportunities.

The top 5 used technologies, as indicated by employers, are:

- Cloud Computing (e.g., Big data processing, storage, backup, remote working) – 56 %
- Cybersecurity (e.g., Hardware, software, or electronic data protection) – 45 %
- Ecommerce (e.g., Omni-channel, social media, mobile channel) – 29 %
- Digitisation (e.g., Omni-channel integration, paperless processes, digital twin) – 21 %
- Advanced Analytics (e.g. Big data, consumer insights, business intelligence, dashboards)- 24%

Whilst the following 4IR technologies were indicated as not being implemented at all:

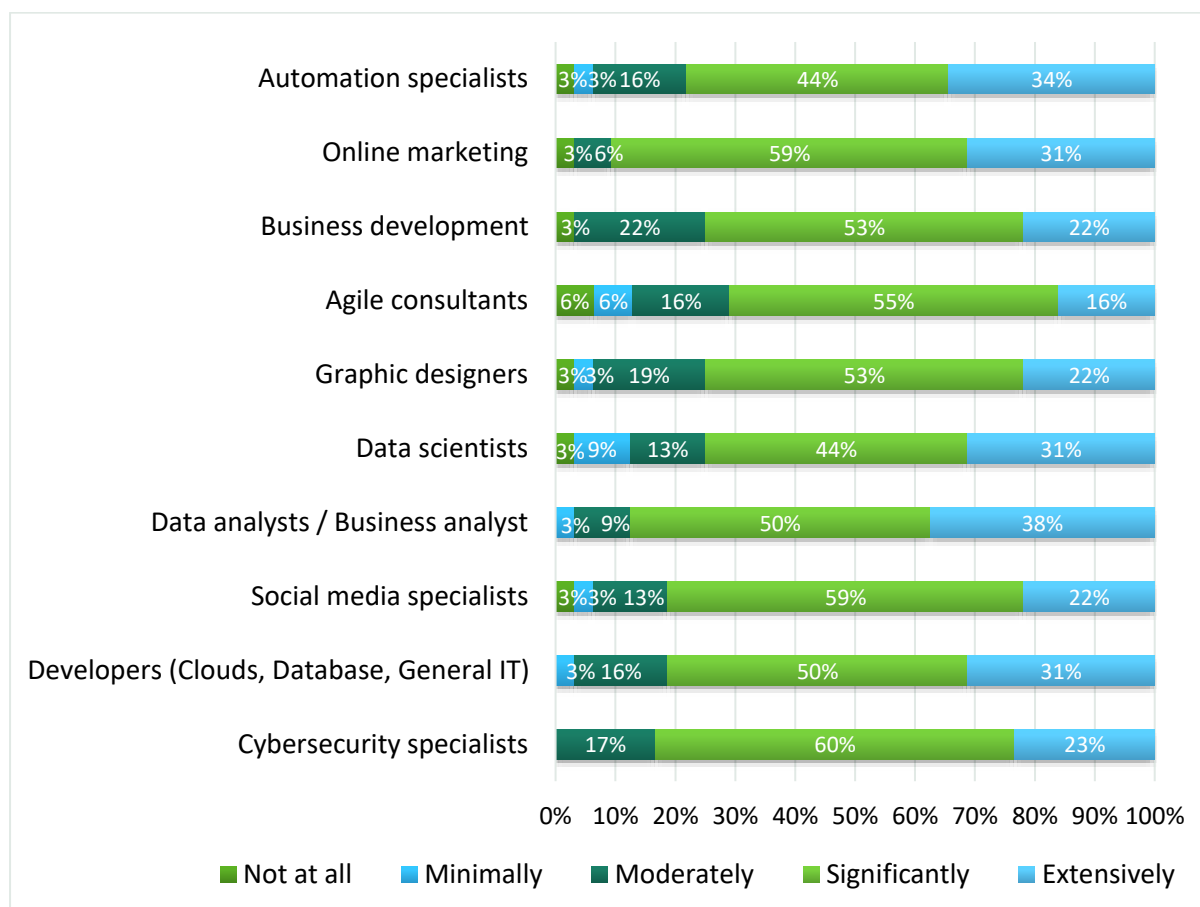
- Automated cashier machines (e.g., Seamless checkout, DIY) - 71 %
- Applied Robotics (e.g., Automation, quality management, always-on operations) - 62 %
- Artificial Intelligence (e.g., Chatbots, outlier detection, process automation, reconciliation) - 59 %
- Virtual Reality (e.g., Product immersion, product experience) - 55 %
- Augmented Reality (e.g. Product immersion, product experience) - 48%

The figure below **Figure 1** indicates that over 70% of respondents indicated that all of these occupations will increase significantly in demand. The top 5 occupations that were highlighted the most were:

- Online Marketing (90.63%)
- Data analysts / business Analyst (87.50%)
- Cybersecurity specialists (83.33%)
- Developers (Clouds, Database, General IT) (81.25%)
- Social media specialists (81.25%)
- Automation specialists (78.13%)

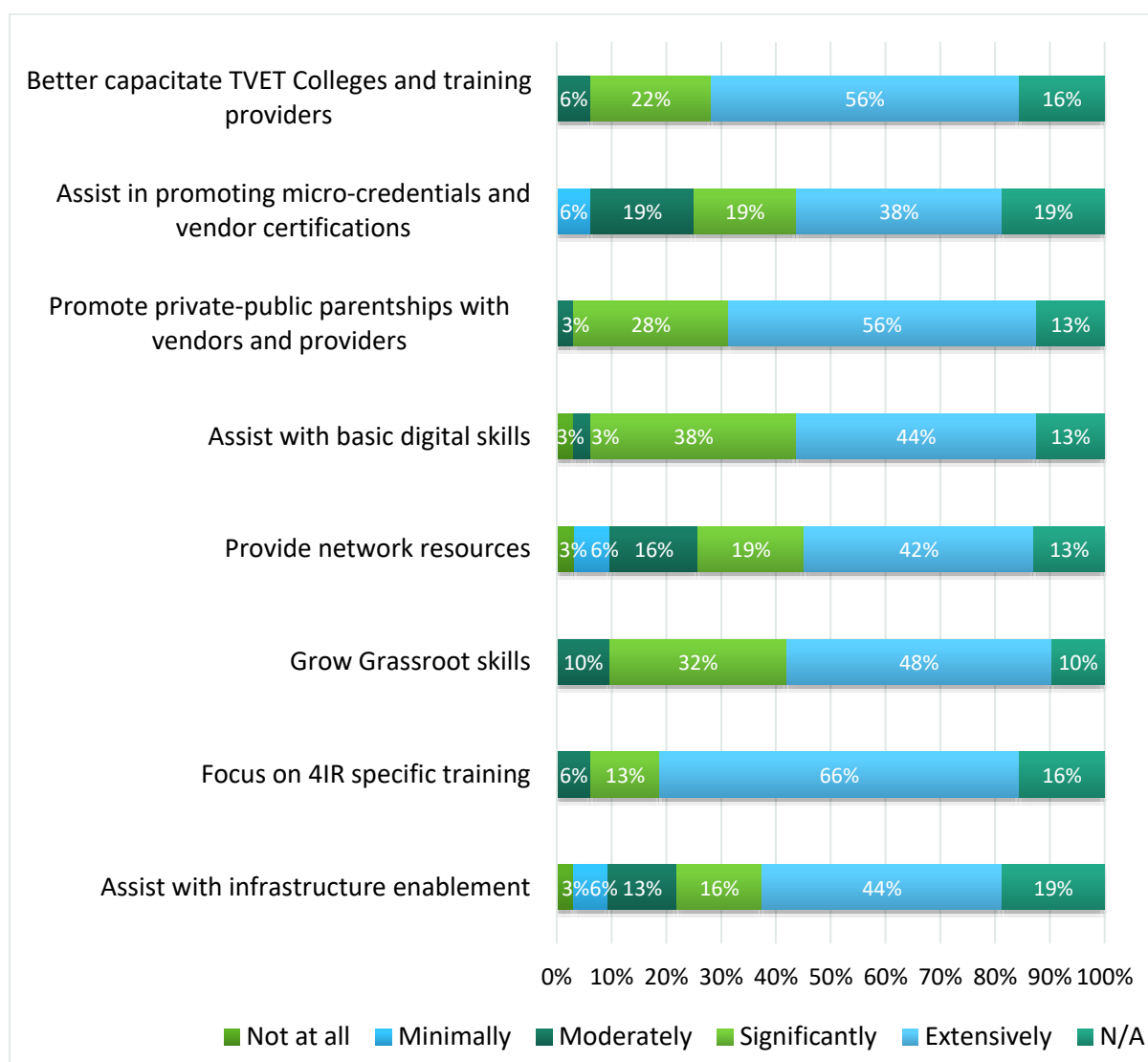
This indicates that there will be a push using social media channels to drive sales while there is a strong demand for professions that are in data analytics, and cyber security.

Figure 1: Extent to Which Occupations Will Increase in Demand



Source: Stakeholder Survey, 2021

Other key areas of SETA interventions that were indicated by respondents would be to: Promote private-public partnerships (84.38%); Vendors and providers (81.25%); Assist with basic digital skills (80.65%); Grow Grassroot skills (78.13%) and to Focus on 4IR specific training (78.13%).

Figure 2: SETA Interventions

Source: Stakeholder Survey, 2021

It was further noted that in order to promote 4IR and emerging technology adoption that the provision of financial or technological tools, funding for data and devices be provided. This is to ease the impact of the COVID-19 pandemic and allow for a faster roll-out of training using fully online eLearning.

"The SETA can assist employers by providing funding for data, devices towards fully online eLearning."

Survey, Employer, 2021.

Additionally, there were some comments made around changing some SETA institutional processes to accommodate more digitally friendly ways of training so that a full digital and online eLearning process can be implemented.

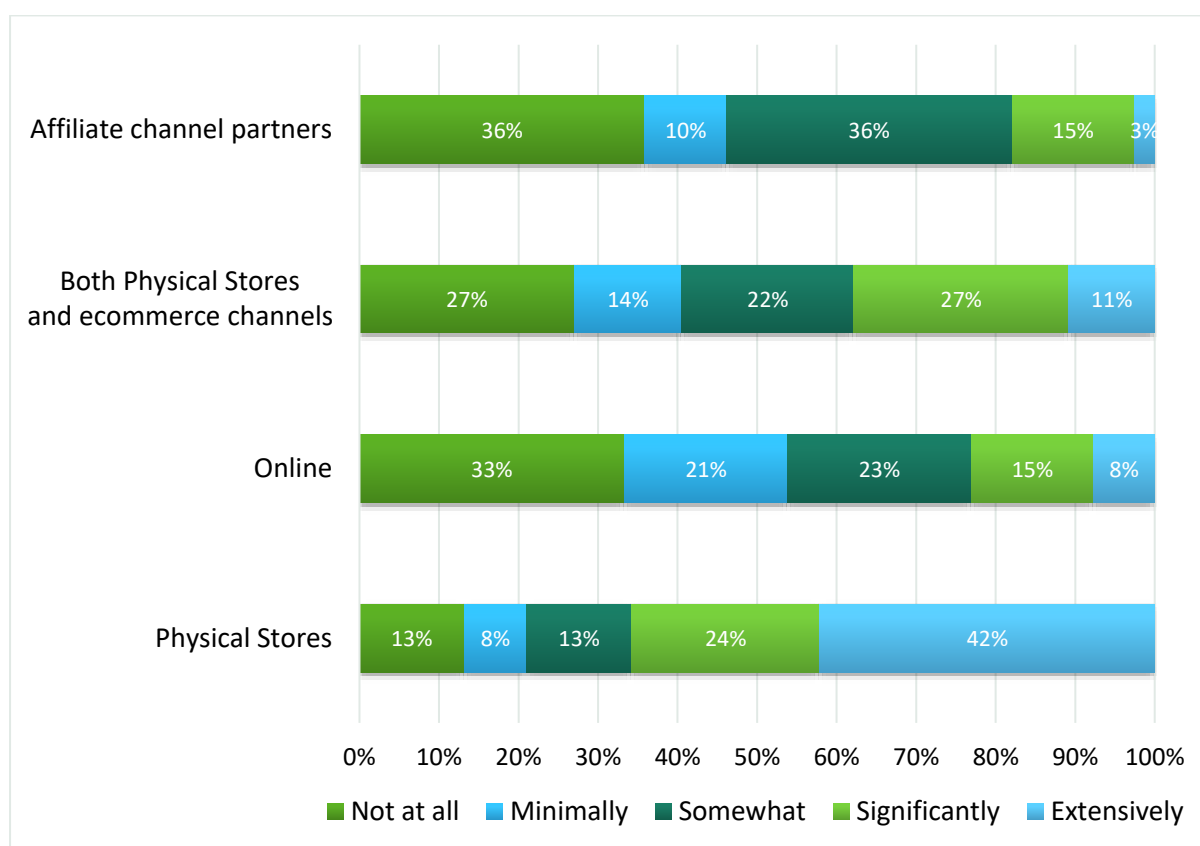
"eLearning policy rigidity is a limitation. There needs to be more support that is extended to eLearning. The institutional rigidity around face-to-face and paper provenance is still a hinderance from embracing online."

Survey, Training Provider, 2021.

The nature of reaching and interacting with customers has changed as more and more customers utilise online eCommerce platforms remaining at a distance due to the pandemic. Retailers' best chance at weathering COVID-19 and the pace of accelerating technological change is to adopt hybrid business models with both physical and online presence.

38% of customers reach businesses through using a hybrid model of Brick-and-mortar with eCommerce channels. While 40% of respondents indicated that they are minimally or not utilising online channels at all.

Figure 3: Current Customer Sources



Source: Stakeholder Survey, 2021

There is also a relationship between technological acceptance, and the events brought about by the pandemic. The pandemic has opened the eyes of many employees and customers to the benefits of using technology and the conveniences thereof i.e., from ordering online to working remotely.

"We have had to accept new tools of the trade and it forced us to adopt to this new normal going forward. We cannot go back to working from home. This has opened our eyes to new possibilities and acceptances".

Survey, Employer, 2021.

Brick-and-mortar will be around for some time as South Africa's Socio-economic factors naturally restrict a large percentage of the population in accessing online channels. This is due to poor infrastructure, high data costs, poor connectivity, and cost of smart devices.

"Brick and Mortar will be around for some time. Low LSM and socio-economic factors hinder the full transition to online which in South Africa is still in its infant stages."

Survey, Employer, 2021.

COVID-19 has had a significant impact, not only in accelerating the adoption of 4IR technologies, but also in forcing business closures. The sub sectors that temporarily closed were the Wholesale Trade and Sale and Repair of Motor Vehicles (25%), Clothing stores (13%) and Cultural and Recreation goods (13%). This speaks to the effects of the lockdowns and impacts on these sub sectors. This also resulted in employers retrenching 1-20% of their staff that were in the motor vehicles sales and repair (25%), clothing stores (19%) and household equipment (13%) industries.

Over the next 6-months, these sub sectors may have planned retrenchments of between 1-20% of the workforce - Supermarkets, Food and beverage, tobacco and household equipment stores are planning to retrench (17%) of their workforce. With the most impact happening within the Sale and Repair of Motor Vehicles and Clothing stores considering in retrenching 50% of their workforce.

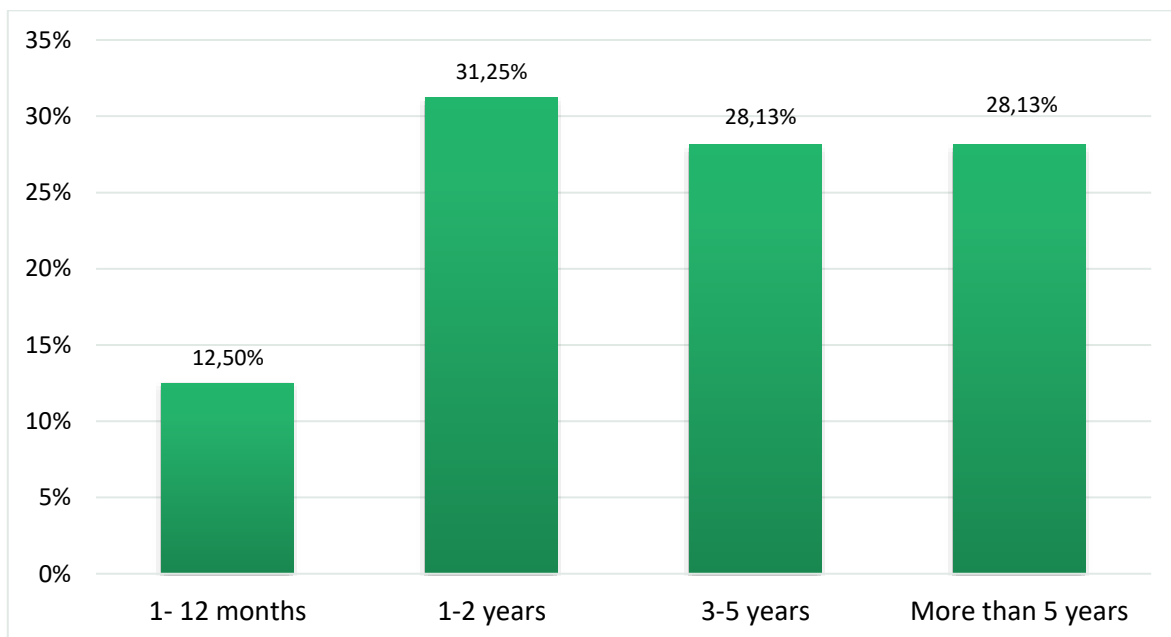
"The W&R sector will take another 2-3 years for economic recover."

Survey, Employer 2021.

At the retail sector level, 59.68% respondents indicated that the W&R sector may take between 1 and 5 years for the sector to recover. In addition to this respondent's outlook over the next 12 months is positive (67.75%)-

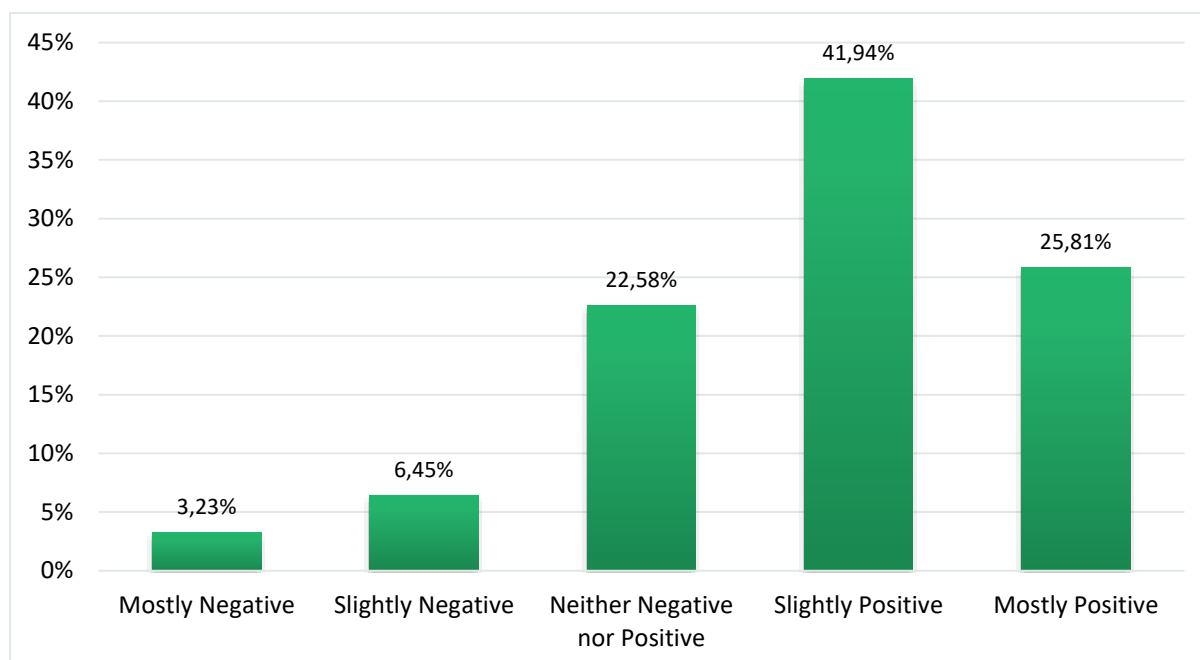
Figure 5.

Figure 4: Expected Sector Recovery time from COVID-19



Source: Stakeholder Survey, 2021

Figure 5: W&R Sector Outlook over the next 12-months



Source: Stakeholder Survey, 2021

Key Findings and Recommendations

The table below presents a summary of the key findings and recommendations that have presented themselves during this Research Project.

Table 1: Key Findings and Recommendations

Focus Area		Key Findings	Recommendations
1	Partnerships	<ul style="list-style-type: none"> Various stakeholders have indicated that it would be beneficial to attend conferences and workshops in order to more fully understand the changes being brought about by 4IR and how best to manage these changes Partnerships are key to unlocking the potential of 4IR, skills transfer and know-how. 	<ul style="list-style-type: none"> We acknowledge that the W&RSETA currently arranges stakeholder forums where sector specific updates are provided, and knowledge is shared amongst stakeholders It is suggested that the SETA continues with this good practice It is noted that the SETA cannot effect change within the retail and wholesale sectors by itself, but it can act as the catalyst for stakeholders to connect with each other, learn from each other and share experiences as to how they are managing the impact of the 4IR It is also important for the W&RSETA to partner with other SETAs and formulate a coherent approach in dealing with 4IR related skills as there may be a significant overlap in

	Focus Area	Key Findings	Recommendations
			<p>challenges and opportunities being faced across sectors. This unified approach is likely to be driven by DHET</p> <ul style="list-style-type: none"> • In addition to the above, there may be scope for the SETA to create global partnerships where local businesses can learn from best practice international examples • We further note that the above would further the principle encapsulated in the NSDP, being “Increasing collaboration between the skills system, government and industry”
2	Training at School Level	<ul style="list-style-type: none"> • Stakeholders have indicated that it is best to start 4IR training at school level, as opposed to waiting until an individual enters the job market • To achieve this, school curricula should be designed with what the market may require in the next 3 to 5 to 10 years 	<ul style="list-style-type: none"> • We recommend that the W&RSETA shares its findings with the Department of Basic Education to assist in structuring school curricula to account for job market requirements, insofar as this relates to 4IR requirements.
3	Change Management & EQ Skills	<ul style="list-style-type: none"> • Numerous stakeholders have cited the need for change management practices and EQ building to take place in order to manage the change being brought in by 4IR • The key driver behind this suggestion from stakeholders appears to be that employees will need to buy-in to the concept of 4IR technologies in order to find a space for them to still be productively employed. This will require the acquisition of new skills and the mind-set of working with new technologies as opposed to resisting the change. 	<ul style="list-style-type: none"> • It is advised that in addition to equipping employees with technical skills required to manage 4IR technologies, focus is also given to training employees on change management techniques • In the conferences and workshops mentioned above in focus area 1, change management should also be explored. • EQ is a highly desired skill needed for 4IR. It is advisable that specific attention be given in training employees on how to better understand their colleagues and customer needs through training.
5	More certainty surrounding the impact of 4IR due to COVID-19	<ul style="list-style-type: none"> • Stakeholders consulted were of positive views on the impact that 4IR is likely to have on employment • This acceptance to technological use and change was accelerated by the impact on COVID-19 and the advent of social distancing, working from home and using new technologies in reaching customers. • There is less uncertainty surrounding the impact that 4IR will have on economic growth, with many stakeholders indicating that if businesses can utilise 4IR technologies, this will provide them with the opportunity to grow 	<ul style="list-style-type: none"> • There is a need to educate stakeholders on the employment possibilities that new technologies make available • The W&RSETA should consider undertaking roadshows to schools to educate learners regarding new career paths within the retail and wholesale space
5	Impact of negative external economic factors	<ul style="list-style-type: none"> • South Africa is experiencing a general trend of reduced economic activity. This places all sectors at risk of facing a period of reduced expenditure. The retail and wholesale sectors have already 	<ul style="list-style-type: none"> • The use of 4IR technologies provides opportunities for growth through increasing sales by reaching previously inaccessible markets (through online shopping and drone delivery, for

	Focus Area	Key Findings	Recommendations
		<p>experienced a period of reduced activity and will need to protect themselves going forward</p> <ul style="list-style-type: none"> • 4IR is not likely to decrease jobs but rather makes it possible for more orders and possibilities to be in effect. It stands to reason that this benefit will be fully realised in a growing economy where demand for goods increases. 	<p>example) and also to reduce costs and wastage through more efficient practices</p> <ul style="list-style-type: none"> • Reduced costs do not always need to go hand in hand with a reduced payroll • 4IR provides an opportunity to improve efficiency through, for example, the use of predictive analytics to better predict what stock will be required and when. This is likely to reduce wastage and therefore costs • Promote use of technologies that increase efficiency and reduce costs, e.g. predictive analytics, in order to help protect employers in a difficult economic climate
6	Inadequacy of training programmes	<ul style="list-style-type: none"> • Current training programmes prove inadequate as they have limited focus on responding to 4IR • In addition, programmes tend to take too long to develop, whilst change is rapid • Customer service skills and other soft skills are a growing demand of 4IR, yet lack consistent and up to date articulation in training programmes 	<ul style="list-style-type: none"> • Improve the time it takes to update or develop programmes • Improve the consultative processes for updating or developing courses by accelerating the process to include interested parties • Introduce and/or emphasise unit standards on soft skills. This is expected to improve learners' employability • Whilst programmes are relooked at to include more emphasis on soft skills, short programmes can fill this void
7	Restrictive labour market	<ul style="list-style-type: none"> • Labour unions exert collective power over labour markets. Employers have 4IR capabilities but are not implementing them due to restrictive labour union invent • In order for south African to remain globally and locally competitive, 4IR becomes and inevitability. • Given south Africa socio-economic dilemma a balancing act is needed where by 4IR can play a central role through upskilling and reskilling for the new future economy and for jobs that are yet to be created through transversal skills 	<ul style="list-style-type: none"> • The SETA can assist with highlighting 4IR potential to create new jobs, while preserving national competitiveness through a balanced approach. • The SETA and employer bodies need to have a roundtable discussion as to see how 4IR can be accelerated and driven faster so that an inevitable global digital divide does not occur.
8	eLearning Policy Rigidity	<ul style="list-style-type: none"> • It was cited that ePolicy rigidity has resulted in a slower uptake of eLearning due to strict requirements 	<ul style="list-style-type: none"> • The SETA should streamline digitisation processes in a way that reduces physical paper requirements and moves towards a system of full eLearning

1 Introduction

This report presents the findings and recommendations of the research studies into “The implications of the 4th Industrial Revolution (4IR) towards new jobs in eCommerce, digitisation, and innovation in the Wholesale & Retail Sector (W&R Sector), and an assessment of the economic and social impact of COVID-19 on the W&R Sector” (the “Project” or “Study”) for the Wholesale and Retail Sector Education Training Authority (“W&RSETA” or the “SETA”) conducted by Redflank Solutions (Pty) Ltd (“Redflank”) over the period January 2021 to March 2021.

The report begins with a background analysis of the W&R sector and the project, followed by the research methodology adopted for the study. This is followed by findings from the literature review (secondary research), which focused on defining principles, studying best practices and technologies that other businesses and countries have adopted in order to understand global trends, and to set the background for the research findings. Additionally, the literature review looks at the global socio-economic impacts of COVID-19 on the sector. This section considers international country case studies, looks at how their respective sectors were impacted and outlines the response thereof.

The Literature Review also provides a list of additional literature sources that can be consulted and that were used in the formulation of this report. The topics focus on 4IR, eCommerce, digitisation, innovation, and COVID-19.

In addition to the literature review, primary research is analysed to offer the insights contained in this report. This analysis of data collected is both quantitative and qualitative. The qualitative data is sourced through comments made by employers and training providers through surveys and interviews, whilst quantitative analysis is based on survey results and available statistics that are used to inform the findings in this report. Thereafter this concludes with a presentation of key findings and recommendations thereof.

The following table provides an outline of the sections contained in this document.

Table 2: Document Outline

Section	Contents	Description
1	Introduction	Document purpose, and project description
2	Research Methodology	Methodology to describe the research processes undertaken in order to conduct the Research
3	Literature Review	Literature Review as it relates to 4IR, eCommerce, digitisation and Innovation, as well as COVID-19 actions and responses by national governments and the implications thereof on the sector. This section follows key definitions, contexts and case studies used to inform best practices and insights into the global and local W&R sector
4	W&R Employer Profile	Outlines the profile details of W&R Employers
5	Summary Findings	Dashboards representing the summary findings for both research topics
6-9	Research Findings	Research findings of the study by segmentation <ul style="list-style-type: none"> Detailed Findings: Implications of 4IR on New Jobs in eCommerce, Digitisation, and Innovation Detailed Findings: The Economic and Social Impact of COVID-19 on the Wholesale and Retail Sector Impact of COVID-19 on the Adoption of 4IR Skills and Occupations
10	The National Reconstruction and recovery Plan (RARP)	A description of the RARP and possible avenues for the SETA with the research findings outlining how the sector was affected by COVID-19
11	Key Findings & Recommendations	Key Findings and Recommendations

Section	Contents	Description
12	References	References cited in this report

1.1 Overview of W&RSETA

The Wholesale and Retail Sector Education and Training Authority (“W&RSETA”) was established in 2000 in terms of the Skills Development Act. The public entity aims to facilitate the skills development needs of the Wholesale and Retail (“W&R”) sector through the implementation of learning programmes, disbursement of grants and monitoring of education and training as outlined in the National Skills Development Strategy (“NSDS”) (W&R SETA, 2014).

1.2 Redflank Overview

Redflank is a specialist management consultancy, assisting clients with the delivery of strategy, research, diagnostic, implementation, and assurance projects. The specialist nature of our consultancy relates to the inclusion of deep management consulting and industry expertise in our project teams. Our client base includes private sector companies (e.g., Old Mutual, BMW) as well as public sector organisations (e.g., the DTI, BANKSETA, ETDP SETA).

1.3 Project Background

The W&RSETA has appointed Redflank to conduct research into the implications of the 4th Industrial Revolution towards new jobs in eCommerce, digitisation, and innovation. Redflank was also tasked with conducting research into the economic and social impact of COVID-19 on the W&R Sector.

This report will assist the W&RSETA to stay abreast with the changes and trends in the sector, and plan accordingly. The report also identifies the skills interventions required in response to the research findings.

2 Research Methodology

The research for the project comprised of desk-based research and field research, covering both quantitative and qualitative methodologies. The desk-based research involved the collation and review of relevant documentation as well as consulting publicly available data sources for additional information.

Field research included distributing electronic surveys and conducting interviews. Stakeholders consulted included W&RSETA employers and training providers, amongst others.

2.1 Desk-Based Research Undertaken

The desk-based research included an analysis of multiple sources, including the following, amongst others:

- Online Retailing in South Africa: An Overview
- Global retail trends 2020
- E-Retail in South Africa and the Impact on Skills Development in the South African Retail Sector
- Rethinking the eCommerce opportunity in South Africa- Pivot to digital
- The 2020 South African Digital Customer Experience Report
- The future of work in South Africa Digitisation, productivity and job creation
- The Top 10 Technology Trends in Retail: How Tech Will Transform Shopping In 2020
- 7 post-pandemic technology trends to reshape the future of retail industry
- Digitalization in retailing: Multi-sided platforms as drivers of industry transformation
- The Retail Trends Playbook 2020/2021

In addition to the above-mentioned sources, the desk-based research included a body of literature and research from inside and outside of South Africa. Section 3 provides a detailed reference list of the literature consulted in the production of this report.

2.2 Field Research Undertaken

The study based its findings on data gathered through surveys, interviews and literature review (as detailed in Section 2.1). This included 54 online survey responses and 6 interviews, totalling 60 consultations.

The table below provides an outline of the fieldwork undertaken, which includes the surveys and interviews.

Table 3: Consultations Conducted

Data Collection Method	Stakeholder	Actual Consultations
Surveys	Wholesale / Retail Business (W&R Employer)	54
	Training Provider	
Interviews	Wholesale / Retail Business (W&R Employer)	5
	Training Provider	1
Total		60

The target for surveys and interviews were both not achieved. A large number of stakeholders were not reachable and were possibly fatigued by multiple consultation requests across the various

research projects commissioned by the W&RSETA. This is articulated as a research challenge in section 2.5.

2.2.1 Surveys

It was decided to collect the bulk of the survey data through online surveys. Online surveys were chosen as they offer several advantages over face-to-face or telephonic surveys, namely: lower costs; convenience for respondents; design flexibility; and automation and real time access to results (Gingery, 2011).

Surveys were designed based on the need to obtain specific information needed by the study in order to assess the implication of 4IR and the impact of COVID-19 on the sector. The primary goals of the survey were to gain insights into the extent of the implications of the 4th Industrial Revolution towards new jobs in eCommerce, digitisation, and innovation and the social and economic impact of COVID-19 in the sector, highlight key sector trends and demands in a changing landscape, and understand the impact thereof on employment and growth.

Questions in the survey were predominantly based on a 5-point Likert scale (with 5 denoting the most positive response and 1 indicating the most negative response)¹. The Likert Scale was adopted in order to quantify the adoption, trajectory and potential impacts of 4IR and COVID-19. A number of open-ended questions were also included within the survey in order to give further depth and understanding. This approach was taken in order to obtain an overall view of the adoption, trajectory and potential impacts of 4IR.

Overall, the surveys received 54 responses from wholesale/retail businesses (employers) and training providers.

2.2.2 Interviews

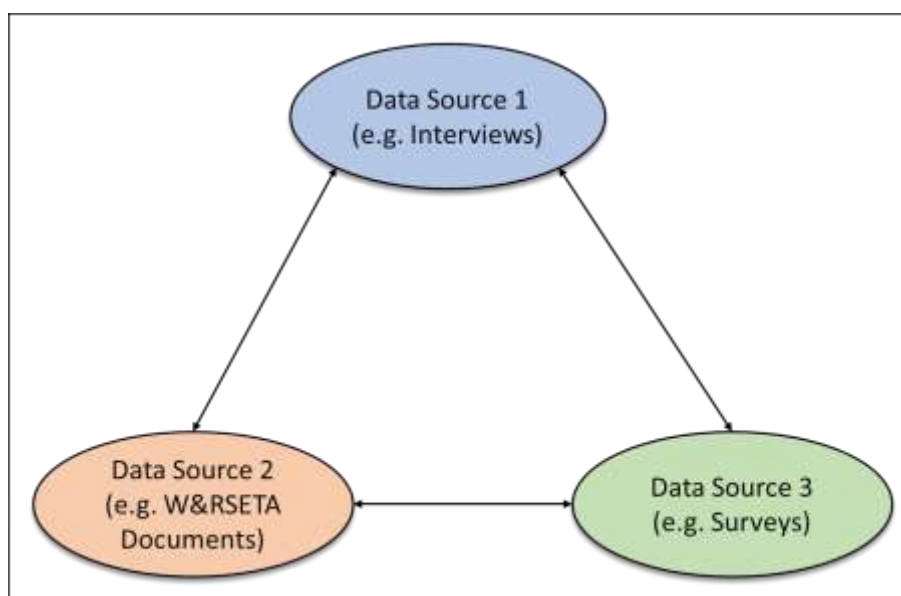
The purpose of the interviews was to generate qualitative data that would lend depth to the quantitative data generated by the surveys. Interview questions were derived from preliminary research and the Terms of Reference. The key stakeholder groups identified for interviews were wholesale/retail employers, training providers and other key stakeholders such as industry associations.

Thus far, 6 interviews have been conducted.

2.3 Data Triangulation

A key aspect of the research approach involved the cross validation and triangulation of results, to ensure robust research findings. The image below describes that information gathered from any data source (for example 1) may be assessed and validated against any other data source (data sources 2 or 3), and vice versa to ensure findings are consistent and valid. Should any discrepancies arise for example a finding in the interview may contradict the findings in surveys, further analysis is performed to determine reasons for the discrepancy. This information enforces the notion that a thorough study is delivered.

¹ The Likert Scale is further explained in section 2.4.



2.4 How to Read and Interpret Survey Results

As explained in section 2.2.1, quantitative results were obtained through surveys. The survey questions were predominantly based on a 5-point Likert scale (with 5 denoting the most positive response and 1 indicating the most negative response). Likert-type or frequency scales use fixed choice response formats and are designed to measure attitudes or opinions (Bowling, 1997). An example of a 5-point Likert scale used in this report is the scale used to measure the extent of a state, ranging from “not at all” the case to “extensively” the case (see below), for instance the extent to which retailer/wholesaler business implemented 4IR technologies. The reason for choosing such a rating system was because responses are easily quantifiable and amenable to computation of some mathematical analysis (LaMarca, 2011).

The extent of a state is measured directly or through assessing agreement/disagreement with

Likert Scales of Extent				
Not at All (1)	Minimally (2)	Somewhat (3)	Significantly (4)	Extensively (5)
Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)

statements, as seen below.

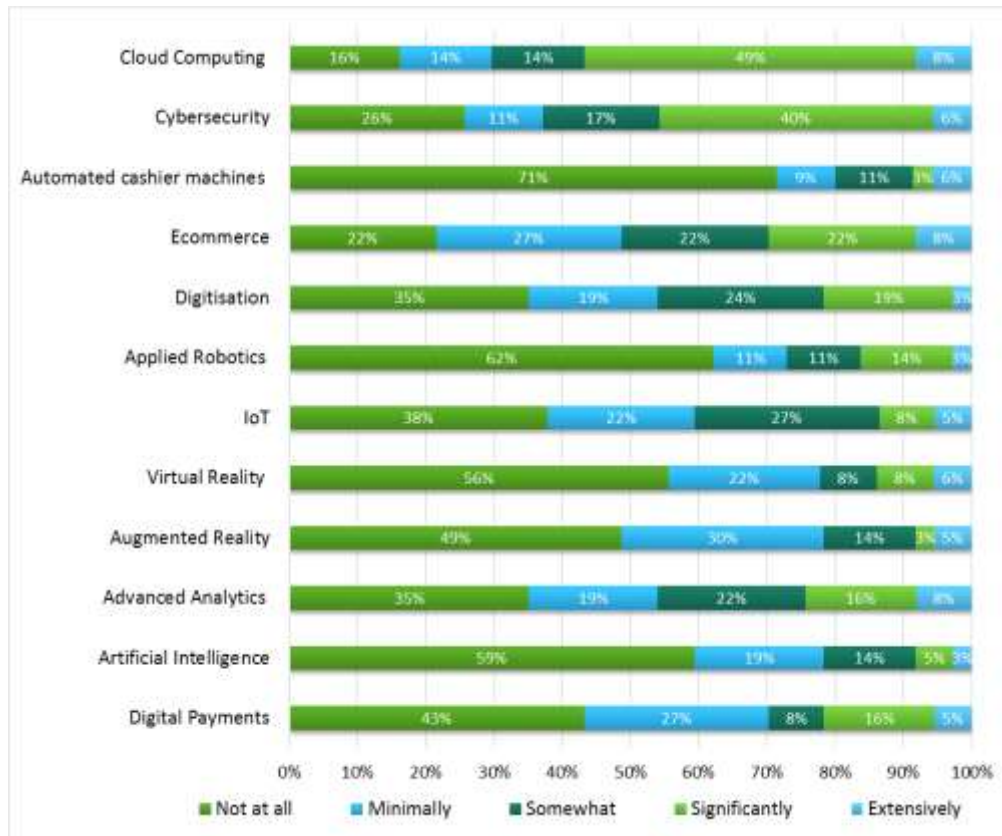
The graphs presented throughout this report measure the percentage of respondents who selected a specific option (1-5) over the total number of respondents for that question. The table below presents an example on how the survey results are analysed:

Figure 6: Illustration-Sample Survey Results

To what extent has your business implemented the following 4IR technologies?											
	Not at all		Minimally		Somewhat		Significantly		Extensively		Total
Digital Payments	43.24%	16	27.03%	10	8.11%	3	16.22%	6	5.41%	2	37
Artificial Intelligence	59.46%	22	18.92%	7	13.51%	5	5.41%	2	2.70%	1	37
Advanced Analytics	35.14%	13	18.92%	7	21.62%	8	16.22%	6	8.11%	3	37
Augmented Reality	48.65%	18	29.73%	11	13.51%	5	2.70%	1	5.41%	2	37
Virtual Reality	55.56%	20	22.22%	8	8.33%	3	8.33%	3	5.56%	2	36
IoT	37.84%	14	21.62%	8	27.03%	10	8.11%	3	5.41%	2	37
Applied Robotics	62.16%	23	10.81%	4	10.81%	4	13.51%	5	2.70%	1	37
Digitisation	35.14%	13	18.92%	7	24.32%	9	18.92%	7	2.70%	1	37
Ecommerce	21.62%	8	27.03%	10	21.62%	8	21.62%	8	8.11%	3	37
Automated cashier machines	71.43%	25	8.57%	3	11.43%	4	2.86%	1	5.71%	2	35
Cybersecurity	25.71%	9	11.43%	4	17.14%	6	40.00%	14	5.71%	2	35
Cloud Computing	16.22%	6	13.51%	5	13.51%	5	48.65%	18	8.11%	3	37

It may be noted from the above that 16 businesses indicated that they have not implemented Digital Payments at all. Overall, 37 businesses responded to this question, with particular regards to Digital Payments. Therefore, the extent to which Digital Payments have not been implemented is 43.24% (=16/37). Conversely, Digital Payments are used to varying extents, by 57% of businesses.

The results above would then be presented graphically as follows:

Figure 7: Illustration-Sample Graph

2.5 Research Challenges

During the data collection phase of the project, four major challenges that hampered the data collection process were encountered. Although these issues were overcome by adapting the research design, it is worth noting these to inform the research approach in future.

Research Challenge		Response to Challenge
1	Inaccurate Stakeholder Information and Unavailability of Stakeholder Contact Details	<ul style="list-style-type: none"> With regard to the contact details being either incorrect or not available at all, the project team undertook

Research Challenge		Response to Challenge
	The databases containing employer and training provider contact details had invalid contact details, resulting in unsuccessful attempts to contact some stakeholders. This may be attributed to contact details such as email addresses being deactivated after some time, for instance if an employee exits an organisation. It is recommended that the SETA regularly updates its contact databases.	<p>additional research to find these contact details, where they were publicly available, or through the project team's own networks</p> <ul style="list-style-type: none"> Regional managers were asked to put the project team in touch with the relevant stakeholders
2	<p>Stakeholder Unavailability/Unwillingness to Participate in Study</p> <p>Some stakeholders, weary of participating in research, were unwilling to participate in any more studies. Multiple SETA commissioned research studies were undertaken concurrently, with more studies having taken place in the past year and more possibly to come. Respondents tended not to respond if they had already been approached by other researchers in a short space of time.</p>	<ul style="list-style-type: none"> To overcome the unwillingness of stakeholders to engage with the project team, additional stakeholders were contacted in order to increase the response rate When stakeholders were contacted, engagements were kept as brief as possible, ensuring that necessary information was sourced whilst adopting sound Client Relationship Management principles
3	<p>Stakeholders confirming, but not attending interviews</p> <p>Some stakeholders agreed to participate in the interviews but were not present at the agreed-upon time. Furthermore, these stakeholders would no longer respond to follow-up emails.</p>	<ul style="list-style-type: none"> Follow-up emails were sent to stakeholders to reschedule interviews If no response was received within a specified timeframe, these stakeholders were replaced
4	<p>Stakeholder consultation restrictions on confidential information</p> <p>Certain stakeholders indicated that their particular use of technology is confidential and they were therefore not at liberty to divulge what they deemed to be company secrets. We recommend that a non-disclosure statement or agreement (NDA) be included in the engagement letters to assure stakeholders that their responses will be kept anonymous, which will give them a level of comfort when participating in consultations.</p>	<ul style="list-style-type: none"> The consultations required careful wording so as not to have any stakeholders withdrawing from the interactions The questions were also framed in a more general tone, not getting into specifics of the particular company that the stakeholder represented

3 Literature Review

The literature review approach involved conducting case studies which analysed 4IR, digitisation, eCommerce and innovation topics within the international wholesale and retail sector. Technology has transformed the world into a global marketplace - hence local businesses in the W&R sector compete on a global basis. This section will therefore provide an overview of how 4IR technologies are being implemented and the implications thereof.

Furthermore, this section will also be providing insights by way of case studies from both developed and emerging countries, that outline the impact of COVID-19 on their W&R sectors.

This Report documents the findings from the Literature Review, in particular:

- Review of literature which provides input into the case studies, detailing the impact of 4IR, eCommerce, innovation, and digitisation on occupations in the W&R Sector (Section **Error! Reference source not found.**).
- Review of literature which provides input into country case studies, detailing the implications of COVID-19 for the W&R Sector (Section 3.1).
- Review of literature expected to provide additional context and input into the Research Report and the engagement of stakeholder consultations (Section 3.2).

3.1 COVID-19 – Country Case Study Analysis

Retailers across the world have experienced a significant shock to both supply and demand on an unprecedented scale due to COVID-19, compounded by government measures which restricted the movement of people and goods. Certain governments imposed unilateral export controls on specific goods to protect domestic supply, while others reduced tariffs to encourage trade. Meanwhile, tighter border controls slowed the ability for goods to seamlessly transit through countries. While these measures were temporary, the impact across supply chain networks could cause longer-term distortions (Alvarez and Marsal, 2020).

A common theme regarding policy responses by the OECD (2020) indicates that the impact of the COVID-19 crisis on the retail sector is varied and depends on the combined effect of three characteristics.

1. The effect of social distancing measures on individual retail businesses depends on whether they are deemed essential or non-essential goods.

For example, in the United States, while the sales of clothing retailers dropped by 89.3% in April 2020 year-on-year, the sales of grocery stores increased by 13.2% according to the Census Bureau (OECD, 2020).

In the EU, while the sales of non-food products dropped by 23.8% in April 2020 year-on-year, the sales of food, beverages and tobacco increased by 1.2% according to Eurostat (OECD, 2020).

2. Lockdowns and social distancing measures affect retailers with physical stores more than online retailers and may ultimately accelerate the ongoing shift from brick-and-mortar to online retailing.

For example, in France, Nielsen reports that the market share of eCommerce rapidly increased to almost 10% of total consumer goods sales during the confinement period, compared to less than 6% in 2019 (OECD, 2020).

In the UK, the Office for National Statistics reports that the proportion of retail expenses spent online increased from 19.1% in April 2019 to 30.7% in April 2020, reaching a record high (OECD, 2020).

3. The sector is characterised by the coexistence of businesses with strikingly different abilities to weather the crisis, linked to different liquidity positions and access to outside finance.

Keeping the above in mind, the use of international case studies will draw our attention to the social and economic effects of COVID-19 on the W&R Sector.

3.1.1 UK – Developed Nation Response & Impact

The first COVID-19 cases recorded in the UK were in late January 2020 and the UK now has the world's fourth-highest death rate per hundred thousand population (Pandemic, 2021). The UK's current statistics (February 2020) show 3.99 million cases with over 114,000 total deaths (Google Stats, 2021).

In March 2020, the UK government imposed a stay-at-home order, dubbed "Stay Home, Protect the NHS, Save Lives", banning all non-essential travel and closing most gathering places.

The first few weeks of the pandemic resulted in long queues and vacant shelves in supermarkets. Headlines about panic buying and hoarding generated a sense of crisis around retailing. But as would be seen, these images and headlines masked a much more complex set of effects, both initially and over time.

Retailing is one of the largest sectors of the UK economy, with 306,000 shops employing 2.9 million people and with a pre-COVID-19 annual sales volume of £394 billion. The sector takes about 33% of household spending.

Figure 8: UK Macro Stats



Macroeconomics

U.K. Forecasts	2017	2018	2019	2020F	2021F
Real GDP growth (% change, annual)	1.9	1.3	1.4	-6.5	4.0
Inflation rate, average consumer prices (% change, annual)	2.7	2.5	1.8	1.2	1.5
Unemployment rate (%)	4.4	4.1	3.8	4.8	4.4

Advanced Economies GDP (% change)	2.5	2.2	1.7	-6.1	4.5
Advanced Economies Inflation rate, average consumer prices (% change, YoY)	1.7	2.0	1.4	0.5	1.5
Advanced Economies Unemployment rate (%)	5.6	5.1	4.8	8.3	7.2

Source: (Alvarez and Marsal, 2020)

Retail Sector

COVID-19 resulted in UK retail sales falling by 18.1% in April 2020, marking the biggest decline in history. A recent study suggests that half of UK retailers could be wiped out if coronavirus continues, reporting that 27% of retail workers across 6,150 businesses were temporarily being laid off.

Additionally, the UK's reliance on the EU should not go unnoticed. While domestic production of food in the U.K. accounts for around 60% of consumption, three-quarters of food imports currently originate in the E.U. Likewise, the E.U. accounts for a significant proportion of U.K. imports for electricals (47%), health and beauty (69%), apparel (39%), DIY and gardening (61%) and furniture (48%) (Alvarez and Marsal, 2020).

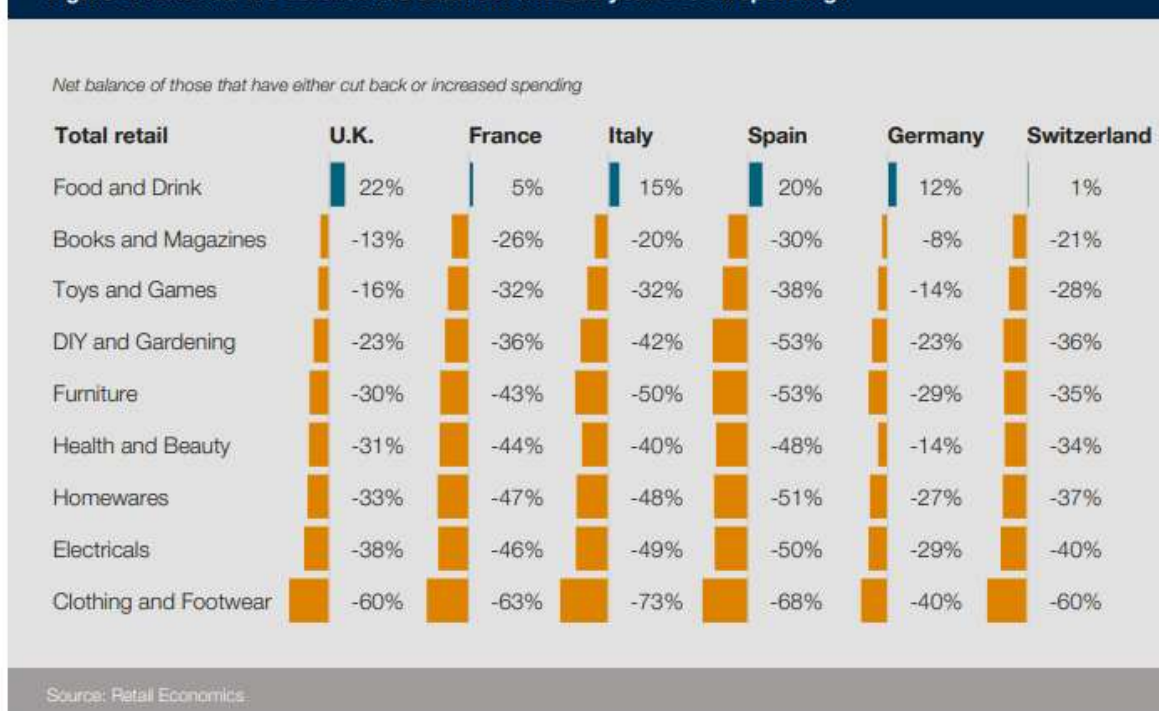
Brexit and its effects will still be felt during the pandemic as nearly half of all U.K. eCommerce and omnichannel retailers are not adequately prepared for the end of the Brexit transition period (Retail Customer Experience, 2020).

UK retailers are also expecting to see a change in consumer behaviour in 2021. 43% expect their UK customers to shop with more UK-based brands. As a result, 35% have said they will focus on building a UK customer base (Global News Wire, 2020).

Key findings from a PFS Survey signal that (Retail Customer Experience, 2020):

- Four-fifths (79%) admit they will be impacted by any cross-border effects of Brexit.
- Two-thirds (67%) of respondents believe Brexit could cause an order backlog in the first quarter of 2021.
- More than half (56%) say these delays would be related to sending goods to customers in the EU from the U.K.
- Two-thirds (67%) believe they will feel an impact when importing products from EU suppliers.

Figure 9: UK & EU Spending Habits

Figure 4. How has the coronavirus situation affected your overall spending?

Source: (Alvarez and Marsal, 2020)

Food retailing saw a massive increase in demand immediately before and during lockdown, and sales rocketed in this early period. Some of this increase was a transference of sales from the closed food service and hospitality sectors, as people were working and eating mainly at home caused short-term shocks to some supply chains as demand peaks outstripped supply systems, including for flour, pasta, yeast, some tinned goods and, perhaps more bizarrely, toilet paper (Kantar, 2020).

While food retailing saw demand increase, non-food retailing (having been defined as non-essential retailing) was closed unless these businesses had an online presence. Primark, for example, went from monthly sales of £650 million to zero. Some retailers struggled to operate internet sales and home delivery due to initial concerns about safe operation of their warehouses and distribution centres.

Many other smaller non-food retailers had no option but to shut down. Store closures, both temporary and permanent, have impacts on employment in retailing. Shedding labour (which typically comprises young, female and part-time categories of employees) and the use of temporary lay-off schemes were immediate responses, although in food retailing, additional (often temporary) workers were needed to meet increased operational requirements and demand. Food retail workers were recognised as 'key workers' for their role in keeping food supply systems operating.

Local stores and local convenience retailers (often independents and cooperatives) did very well as travel restrictions under lockdown encouraged local dependency and a sense of community. Stores in city centres where visitors and workers were absent were much more badly affected.

Due to the restrictions, there was a major effort by food retailers (and many non-food retailers) to expand the scale of their internet operations. Home delivery and 'click and collect' booking slots (plus some products) had become scarce or unavailable, as people shopped from home in lockdown. Major retailers expanded such services, with Tesco doubling their home delivery slots over a period of a month. Local stores and community groups added home delivery to their operations, and smaller retailers (and wholesalers and producers) opened an online offer.

In non-food, Amazon and other established online retailers, expanded sales further and online sales grew quickly to compensate for closed stores and the lack of physical customers. Online sales have been the major beneficiary of the shift of channel.

As lockdown has eased, retailing has opened up again, but slowly, carefully and differentially. Non-food retailing had re-opened, but it is dependent in many places on 'foot traffic' from residents, visitors and workers. With restrictions on tourism and hospitality, as well as continued working from home, sales impacts are often quite specific to locations.

Two particular dimensions of the pre-existing restructuring have been exacerbated by the pandemic. First, the growth of internet and online retailing during the pandemic is marked and reinforces a shift already underway.

Second, the costs of retailing from large units in city and town centres have outweighed the returns for many over a number of years. The pandemic has reinforced this (despite a year-long rates holiday for retail from March), with visitor and commuter numbers to many cities and larger towns having fallen and out-of-town retail centres being perceived as easier and possibly safer to access. Thus, despite overall sales recovery, there are concerns about the future of retailing in city and larger town centres.

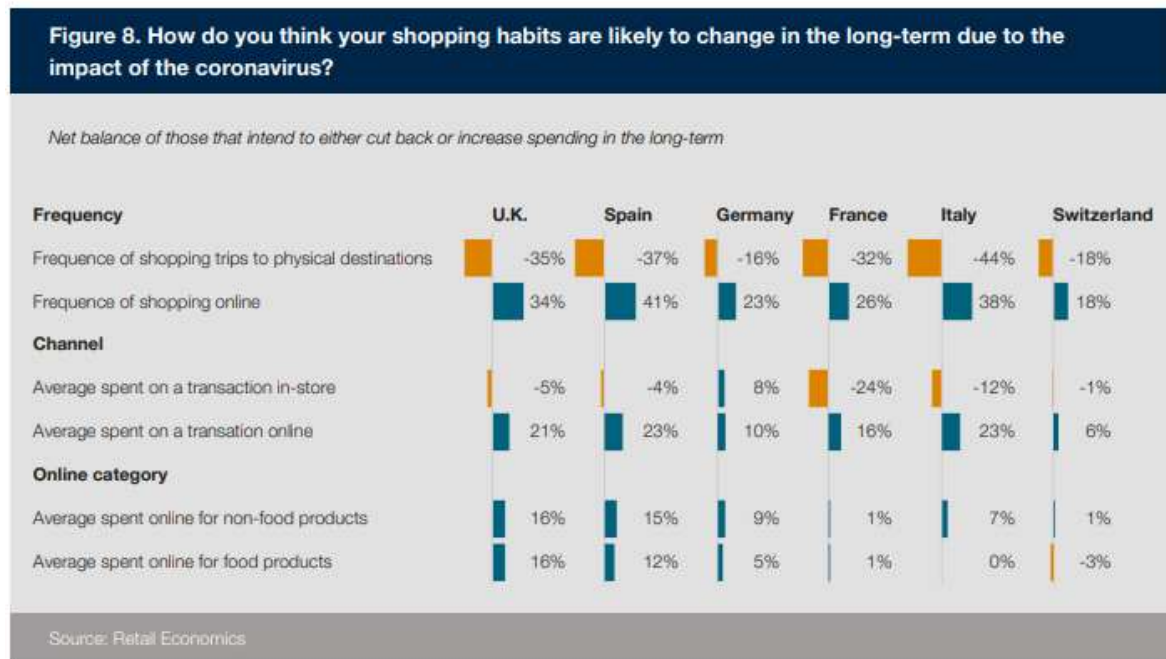
These impacts have led to a constant stream of headlines around the 'death of the high street' and a retail sector in crisis. These trends pre-dated the pandemic, but they have also been exacerbated by it with store closures by national chains, and the associated job losses are likely to continue.

Almost half (45%) of consumers have now purchased an item online that they had only ever previously purchased in-store, since the outbreak. This has exposed them to new customer journeys (Retail Customer Experience, 2020). Online is expected to account for 9.3% of total grocery spending in 2020, up from 7.8% in 2019, as retailers ramp up capacity for picking, packing and distribution (Retail Customer Experience, 2020).

Apparel was the hardest hit sector, given lockdown and social distancing measures significantly undermine demand for new outfits leading to excess levels of stock which will be heavily discounted.

Electrical retailers have benefited significantly from remote working (software, hardware, laptops etc.) and home schooling which has to increased uptake of educational products and budget laptops.

Homewares and furniture retailers have seen sales tumble in the immediate aftermath of the lockdown. The Furniture and Flooring sector fell significantly in April (-77.9%) and May (-64.7%) while Homewares also plunged in April (-42.2%) before showing signs of improvement in May (-15.8%).

Figure 10: UK & EU Shopping Habits

Note: Net balance of those that intend to either cut back or increase spending in the long-term.

Source: (Alvarez and Marsal, 2020)

It is inevitable that the UK retail sector will emerge from the crisis in a very different form.

3.1.2 Italy - Developed Nation Response & Impact

Italy's first COVID-19 cases occurred on the 30 January when two COVID-19 positive Chinese tourists entered the northern part of Italy (Pharmaceutical Tech, 2020). Italy was the first country to have the highest number of coronavirus cases in Europe as well as outside China. Italy's current statistics (February 2020) show 2.67 million cases with over 92,000 total deaths (Google Stats, 2021).

Italy was one of the first nations in Europe to decree the lockdown on February 26, 2020 for some regions of Northern Italy. On 11 March 2020 the whole of Italy went into lockdown curbing social interactions and non-essential services. Food and pharmacies remained open.

The Italian National Institute of Statistics (ISTAT) expects the Italian economy to contract 8.9 percent in 2020 before growing 4.0 percent in 2021. The growth target for 2020 is in line with ISTAT's previous estimate.

Figure 11: Italy Macro Stats

Macroeconomics

Italy Forecasts	2017	2018	2019	2020F	2021F
Real GDP growth (% change, annual)	1.7	0.8	0.3	-9.1	4.8
Inflation rate, average consumer prices (% change, annual)	1.3	1.2	0.6	0.2	0.7
Unemployment rate (%)	11.3	10.6	10	12.7	10.5

Advanced Economies GDP (% change)	2.5	2.2	1.7	-6.1	4.5
Advanced Economies Inflation rate, average consumer prices (% change, YoY)	1.7	2	1.4	0.5	1.5
Advanced Economies Unemployment rate (%)	5.6	5.1	4.8	8.3	7.2

Source: (Alvarez and Marsal, 2020)

Retail Industry

Similar to the UK, Italian consumers appeared to fear running out of food and toilet paper, prompting a wave of stockpiling and panic-buying. Between the 9th to the 15th of March Italy's grocery sector reported a sales increase of 16.4 per cent (Retail Gazette, 2020).

During its nationwide lockdown in 2020, Italy experienced a significant growth in retail sales value, if compared with the average values of the previous year. Consumers in the southern regions appeared the most eager to buy provisions. During the lockdown week, the retail sales value in the south of Italy grew by 28.4 per cent.

At the reopening of shops, retail trade suffered greatly both due to the loss of sales due to the closure, and to the contraction in the spending capacity of families due to the decrease in income cause by layoffs of many workers.

Italy increased the pay premium for retail workers by either paying a bonus directly by introducing a EUR 500/month bonus for workers who kept operating in COVID-19 affected areas. Since retail workers are at a high risk of infection, which tends to decrease labour supply because of the fear of contamination. The Italian government extended the scheme to allocate EUR 100 to all workers physically present on the job (income ceiling applies) (OECD, 2020).

From an FMCG industry perspective, retailers have been feeling the pressure more than most. Struggling to restock shelves as consumer demand hits record levels, managing increasingly stretched supply chains and adhering to social distancing and sanitising protocols. In Italy FMCG growth was around 1.7%, and supermarkets represented more than half of all consumer spending, with just 10% in the 30,000 or so smaller stores here. At just 1%, online shopping was small compared to other markets like France and the UK.

Martucci (2020), cites other changes in Italian consumer behaviours. Shopper loyalty is much less important in the COVID-19 era. Smaller and local stores are winning as shoppers heed warnings not to travel too far and shop closer to home, while out of town hypermarkets are losing out due to ongoing restrictions. This has led to a 41% increase in convenience store visits, while discount stores are also seeing a boost in visits, perhaps because of personal financial concerns in difficult times. Shopping basket sizes have also increased 69%, as shoppers look to make their shop last. Basket composition has also changed; full of essentials like eggs, milk, and pasta, up by 20-40%, and still growing, as well as items for home baking, like yeast and flour.

Italy is a world leader in fashion, and as such it is no surprise that the industry has been hit hard by the recent lockdown — even online. In April 2020, Italian fashion retailers experienced a slow but steady recovery, from a 40% drop in eCommerce fashion orders across Italian brands in the past two months. Since the very end of March 2020, data reveals a steady climb upward of 18%, with a good amount of spend going toward handbags and trainers. As consumer confidence grows, there is a steady recovery in the Italian fashion market. Brands that would have sold in-store are also switching online, with eCommerce orders back on the rise (Retail Customer Experience, 2020).

Categories which witnessed the highest growth in online sales were grocery, which saw a growth of 56 per cent and computers and telecommunications equipment, which saw a 26-percent increase compared to September 2020, and home appliances and audio-visual equipment, which increased by 18.6 percent (Xinhua, 2020).

According to the Retail Gazette (2020), Italians spend on average €116.60 per online order, which is lower than the European average of €129.10. Prior to the pandemic, Italians ordered online 1.9 times a month, ordering 5.4 products per order, but have ordered 2.9 more products on average. Interestingly, 37 per cent of Italian consumers would buy more products online instead of in a physical store after the COVID-19 pandemic (Retail Gazette, 2020).

Martucci (2020), mentions that there are also greater numbers going online and the use of services like click and collect to avoid queuing at supermarkets. In Italy, higher growth figures for click and collect suggest that retailers are finding it easier to scale up this side of their business rather than develop new infrastructure for home deliveries. It is expected that people will be maintaining habits they have adopted during the crisis. Retailers will need to identify those ‘sticky’ behaviours that are a genuine shift in consumer behaviour (Martucci, 2020).

3.1.3 Brazil - Emerging Nation Response & Impact

Brazil’s first COVID-19 case was recorded in on February 21, 2020 in Sao Paulo (Governo Federal, 2020). Brazil’s current statistics (February 2021) show 9.66 million cases with over 235,000 total deaths (Google Stats, 2021).

The Brazilian health authorities reacted by implementing measures such as isolation, quarantine, and temporary restrictions on entering and leaving the country. The projections for the growth of Brazil’s GDP in 2020 were around 2%, already signalling a weak expansion even before COVID-19. More than 40% of Brazil’s workforce is employed in the informal sector (IBGE, 2020). Consequently, the effects of prolonged quarantine are devastating (Surico & Galeotti, 2020).

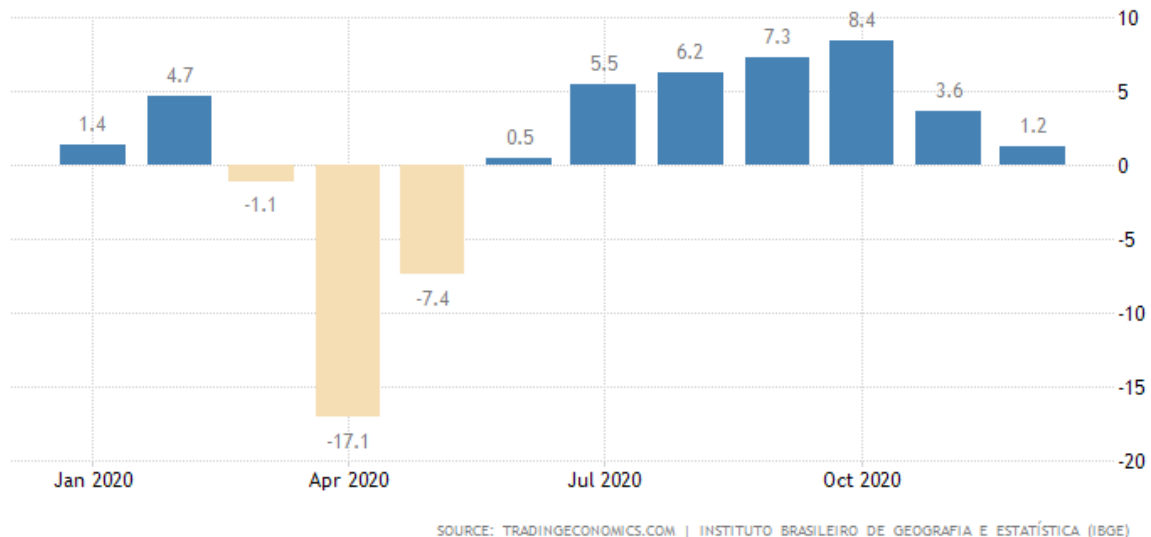
Many COVID-19 fatalities were buried in mass graves as the pandemic rippled across the country (NZ Herald, 2020).

Retail Industry

According to the Brazilian Supermarket Association (Associação Brasileira de Supermercados), or ABRAS, the Brazilian retail food industry represented approximately 5.2% of Brazil’s GDP in 2018, and the food retail industry in Brazil had gross revenues of approximately R\$356 billion in 2018 (Gpari, 2019). The retail sector is also one of the largest employers in Brazil with nearly 14,500 convenience stores, approximately 5,300 discount stores, over 1,220 hypermarkets and more than 8,300 supermarkets (PwC, 2015).

The deflated retail sales index registered a drop of almost eight percent in comparison to the same month of the previous year. This was the fifth consecutive month in which the performance of the Brazilian retail sector improved after the initial impact of the COVID-19 outbreak. In April, it had registered a decrease of 17.1 percent (Statista, 2020).

Figure 12: Retail Sales YoY Brazil



Source: (Trading Economics, 2020)

In April 2020, the Brazilian Federal Government worked together with private banks, investment funds and the BNDES (National Bank for Economic and Social Development) a relief plan of at least R\$ 48 billion to large companies affected by the COVID such as Airlines, energy companies and large retailers (KPMG, 2020).

The retail sector recovered in the second half of last year, after declining 3.2 percent in the first half due to the COVID-19 pandemic. According to the IBGE, the drop in sales in December was a direct result of the government ending its emergency relief for the poor amid the pandemic, as well as inflation.

In 2020, eight of 14 categories of goods saw an increase in sales, led by furniture (11.9 percent), construction material (10.8 percent) and household appliances (10 percent). Items that saw sales drop included books, newspapers, magazines, and stationery (30.6 percent); textiles, clothing and footwear (22.7 percent); and vehicles, motorcycles, and auto parts (13.7 percent) (Xinhua, 2021).

Complementing its burgeoning young population, Brazil is also the world's fourth largest market for cell phones with 78 out of 100 inhabitants 3G/4G subscribers, 129 million internet subscribers and 24 million accessing broadband internet, it has strong potential for eCommerce (PwC, 2015).

Brazilian eCommerce has risen by 56.8% in the first five months of 2020 from a year earlier, reaching 105.6 billion reais (\$20.50 billion) in sales revenue, as more consumers have shifted to online shopping during the coronavirus pandemic (Reuters, 2021). The number of online orders grew by 65,7% in the same comparison, mostly driven by three categories: cosmetics and perfumes, furniture, and electronics. Brazil's eCommerce growth was also boosted as smaller merchants and traditional brick-and-mortar retailers have pushed to boost their own online sales; the survey showed. Major eCommerce firms such as MercadoLibre and Amazon.com have been investing to bolster their logistics infrastructure in the Northeast of Brazil in a push to expedite deliveries and challenge local retailers such as Magazine Luiza, B2W Companhia Digital and Via Varejo (Reuters, 2021).

Currently, changes in face-to-face interactions mean that businesses have shifted toward online shopping and delivery, investments in omnichannel marketing, and the digitalisation of sales.

However, in the longer term, other aspects related to the interaction with customers are expected to emerge. For example, companies will need to encourage stores to accept digital payments, guarantee hygiene measures, rethink the provision of food, and experiment with new ideas for clothing outlets (Bretas, 2020). Sales are now back above pre-pandemic levels from February 2020, but in the first eight months of 2020 the sector is still down 5.0%, and the overall sales volume index is still 4% below its August 2012 peak (Reuters, 2020).

While major retail chains have been quick to adjust to the challenges brought by COVID-19, smaller retailers are struggling to keep operations going given Brazil's ongoing socio-economic and COVID-19 impacts (Reuters, 2020).

3.1.4 New Zealand – Success Story

New Zealand's early success in controlling COVID-19 has been described as "crushing the curve". By 2 July 2020, New Zealand had recorded 1,180 confirmed cases with 22 deaths since the first case on 28 February. The country's strategy was based on speedy testing, contact tracing and isolation, while rigorously adhering to public health guidance (WHO, 2020).

New Zealand began introducing disease prevention measures within three days after WHO declared the coronavirus outbreak a public health emergency of international concern on 30 January 2020. New Zealand's strategy to 'go early and go hard' taking a precautionary approach on 26 March 2020, apart from essential workers, the entire country was required to self-quarantine at home. The government was aware of the economic costs in implementing this strategy (WHO, 2020).

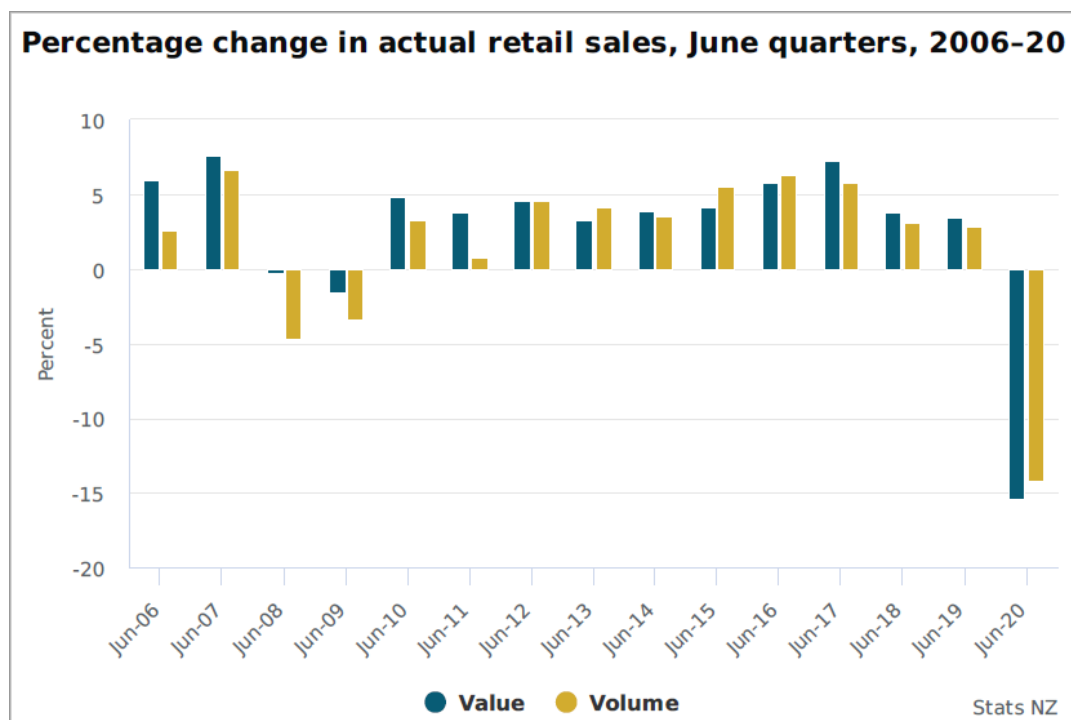
Some of its success in stemming the virus was due to clear and regular public communication. New Zealand certainly benefited from being a high-income, island country with an advanced health system (WHO, 2020). The country also took steps to cushion the economic blow with the government pledged NZ\$62 billion (\$44 billion) of fiscal support to help revive domestic demand and protect jobs, while the central bank had slashed interest rates and embarked on quantitative easing and term lending programs to further drive down borrowing costs (Fortune, 2020).

New Zealand's lockdown was one of the strictest in the world. The government ordered all schools, public venues, and non-essential businesses, restricting group and public recreational activities with an exception for "essential personal movement," such as buying groceries or essential medicines. This was also backed by strong inbound foreign travel restrictions as well as abundant testing and tracing practices (Parker, 2020).

Retail Industry:

New Zealand's retail sector has a turnover of \$57.8bn per annum comprises of an estimated 27,000 businesses. The sector employs around 220,000 workers. Retailers are one of the largest constituents of commercial tenants, providing a significant source of income to private landlords, real estate syndicates and some of New Zealand's largest pension funds (PwC, 2020).

The initial economic shock saw retail sales values fall by a historic 15 percent in the June 2020 quarter during the COVID-19 lockdown. This was the biggest drop on record in figures going back 25 years (StatsNZ, 2020).

Figure 13: Retail Sales YoY New Zealand

Source: (StatsNZ, 2020).

The containment of COVID-19 led to a sharp ‘bounce-back’ growth, in what is known as a V-shaped recovery and ended the year with an overall economic expansion of 0.4%, better than the predicted 1.7% contraction. Unemployment also dropped to 4.9% in December 2020, down from a peak COVID-19 effected rate of 5.3% in September (Fortune, 2020).

The V-shaped economic rebound is vindication of the COVID-19 ‘elimination’ strategy New Zealand has pursued, as it has underpinned a strong economic recovery from what has been an unprecedented shock (Fortune, 2020). The third-quarter expansion was driven by construction and services industries, in particular retailing, accommodation, and restaurants.

In retail, COVID-19 had a polarising impact on different retail segments with in-store winners included supermarkets and pharmacies, which experienced increasing waves of panic/preparation purchasing (6.7% YoY rise in the four weeks ending 8 March, 14.9% and 57.4% in the weeks ending 15 and 22 March respectively). This was closely followed by fresh meat, fruit and vegetables and other specialised food stores (3.1%, 7.8% and 47.9% respectively) (McGrathNicol, 2020).

Before lockdown commenced McGrathNicol (2020) cites that, New Zealand stocked up for a month of drinking, with Liquor stores sales up almost 500% year on year, while also preparing for a month of working from home, renovating, or entertaining the household with:

- Homeware, building and garden supply retailers experiencing a 261.3% year on year rise;
- Appliance, computer, and other recreational supply retailers experiencing a 101.7% year on year rise; and
- Other core retailers (which includes stationery stores) experiencing a 67.8% rise.

A PwC Retail Sector Survey (2020), indicated that online grocery shopping activity before COVID-19 had 9% of consumers shopping for groceries exclusively online. Online grocery shopping activity after the COVID-19 outbreak shows that 63% are buying more groceries online/ by phone than before social distancing. In future, 86% are likely to continue to shop online/by phone when social distancing measures are removed (PwC, 2020).

The Warehouse Group (eCommerce platform) reported that year-to-date (July 2020) online sales were up nearly 55%, making up 11.8% of its total sales compared with 7.8% a year ago (PwC, 2020).

As we return to the 'new normal' online retailing has gained popularity due to its convenience and home delivery service. New Zealand managed to halt COVID-19 while bolstering the economy towards recovery with the retailing sector remaining robust.

3.2 Findings from other Literature

The table below summarises key information relating to relevant literature to inform the Research Reports. The table indicates the key themes identified of each piece of literature and provides a short summary of the literature.

Table 4: Initial Literature Review Themes

Theme	Description
COVID-19 Economic and Social Impact (COVID-19)	The assessment of the economic and social impact of COVID-19 on the W&R Sector.

Table 5: Initial Literature Review Summary

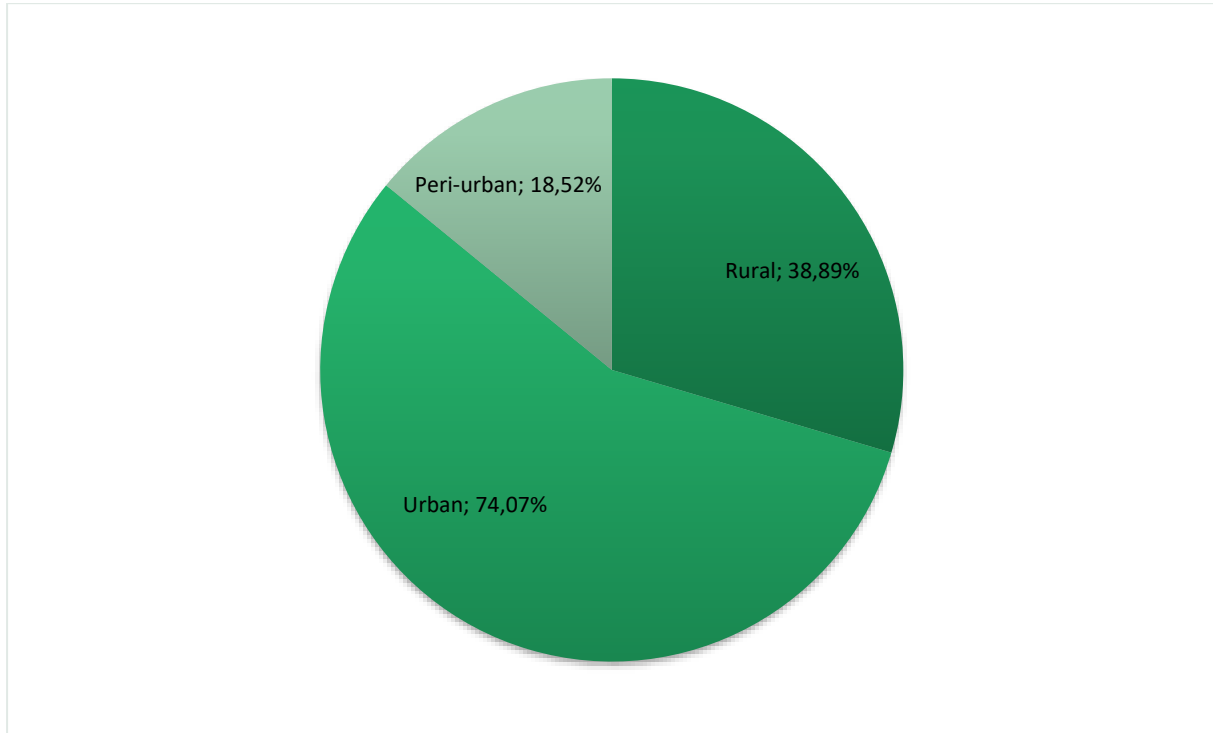
Source		Summary	Key Theme	COVID-19 Economic and Social Impact (COVID-19)
3	<i>Global retail trends 2020</i> (KPMG, 2020)	COVID-19 has accelerated key fundamental trends that were already influencing the sector: business model evolution, the value of purpose, the ruthless focus on reducing cost and the increased power of the consumer. Rather than stop these trends in their tracks, the recent shifts in retail fundamentals have made these trends even more acute and urgent. This report highlights the four key trends that — we believe — every retail executive should be watching as they rebuild their business towards the new reality.	Trends COVID-19	✓
6	<i>The 2020 South African Digital Customer Experience Report</i> (Rogerwilco, 2020)	The 2020 South African Digital Customer Experience (CX) report is the second major study undertaken by digitally-driven marketing and advertising agency, Rogerwilco, market research company interspersing 2 000 consumers, with their feedback and commentary from senior marketing practitioners and business leaders across a range of industries. With the survey being conducted during the COVID-19 pandemic, the report also draws out interesting behavioural changes that took place under lockdown and postulates as to whether these will endure.	eCommerce Digitisation COVID-19	✓
9	<i>7 post-pandemic technology trends to reshape the future of retail industry</i> (Mobi Dev, 2020)	Digital transformation reshapes shopping, online experiences, and even customer expectations of physical stores. The COVID-19 outbreak changed not only our every-day life but also the way of doing business. But by turning the world upside down, it also brought many technological innovations. This article describes seven tech trends that may extremely reshape the future of the retail industry over the next few years.	eCommerce Innovation Digitisation COVID-19	✓
12	<i>How COVID-19 has affected South African Grocery Retail Consumer Sentiment</i> (Deloitte, 2020)	This report aims to provide insights for retailers, fast moving consumer goods (FMCG) producers, and supply chain companies on how to navigate the current retail environment and to gear up for the gradual reopening of South Africa's economy. Brands covered in this study include Checkers, Pick n Pay, Shoprite, Spar and Woolworths.	COVID-19 Impacts & Sentiment	✓
13	<i>Industry Pulse Report: Retail</i> (EY, 2020)	COVID-19 is having a significant impact on product demand and sales channel preferences through denaturing consumer behaviour. Consumers spend more time at home, are faced with deflated social lives and restricted mobility, heightened health concerns and financial insecurity (despite some savings from foregone spending). The impact of COVID-19 on consumer demand in Cyprus is depicted below by segment and sales channels, accompanied by retailers' outlook.	COVID-19 Impacts & Sentiment - International	✓

	Source	Summary	Key Theme	COVID-19 Economic and Social Impact (COVID-19)
14	<i>Impact of COVID-10 on the Finance and operations of China's Retailing and the Industry Outlook</i> (Deloitte, 2020)	This survey presents an accurate snapshot and comprehensive overview of responses to retailers current operational and financial circumstances in light of the pandemic.	COVID-19 Impacts & Sentiment - International	✓
15	<i>Retail, Wholesale & eCommerce: Sector trends and current challenges</i> (KPMG, 2020)	This commentary by KPMG Cyprus outlines insights into a COVID-19 impacted W&R Sector including the implications for eCommerce.	COVID-19 Impacts & Sentiment - International E-Commerce	✓
16	<i>THE SHAPE OF RETAIL- Consumers and the new normal</i> (Alvarez and Marsal, 2020)	This report explores how the COVID-19 crisis is impacting consumer behaviour, measuring the attitudes of over 6,000 consumers across six European countries. It identifies similarities and differences in consumer sentiment, emerging trends, impact to retailers, and offers a glimpse into the future. For retailers and brands seeking valuable insight into how the impact of the crisis is unfolding across Europe, this research helps provide valuable consumer-led guidance and insight for action.	COVID-19 Impacts & Sentiment - International	✓
17	<i>COVID-19 and Retail: A Macy's Case study</i> (Moody's Analytics, 2020)	This brief analysis will focus on retail properties around the nation that have Macy's as a tenant and are therefore impacted directly. We will identify which places appear to be at greatest risk. A full custom analysis for specific property types and geographic markets is available as a service for clients of Moody's Analytics REIS.	COVID-19 Impacts & Sentiment - International Case Study	✓
18	<i>COVID-19 and social distancing impact on Retail Customer Experience</i> (KPMG, 2020)	Report presenting the new retail customer experience given COVID-19 and eCommerce.	COVID-19 Impacts & Sentiment - eCommerce	✓
19	<i>COVID-19: Implications for retail sector</i> (Labour Research Service, 2020)	This literature presents a series of online articles that cover various topics related to the implications and impact COVI-19 has had on the South African retail sector.	COVID-19 Impacts & Sentiment - Local	✓

4 W&R Employer Profile

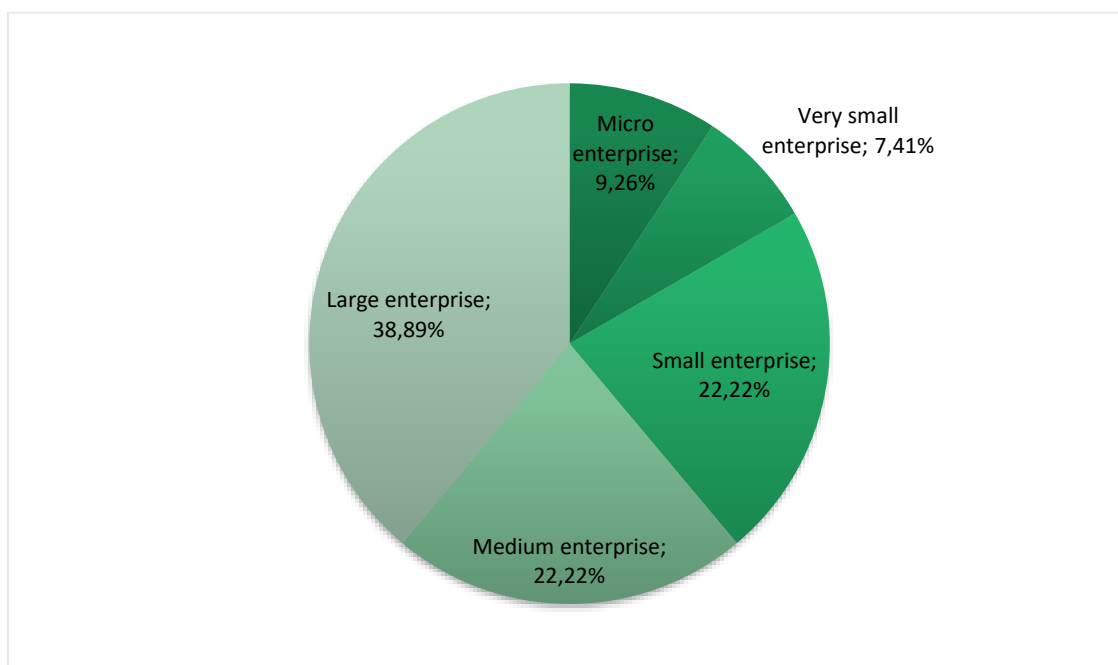
Figure 14 illustrates the geographical markets of survey respondents. 74% of respondents mainly serve urban areas, whilst 39% serve rural areas and 19% serve peri-urban areas.

Figure 14: Geographical market type



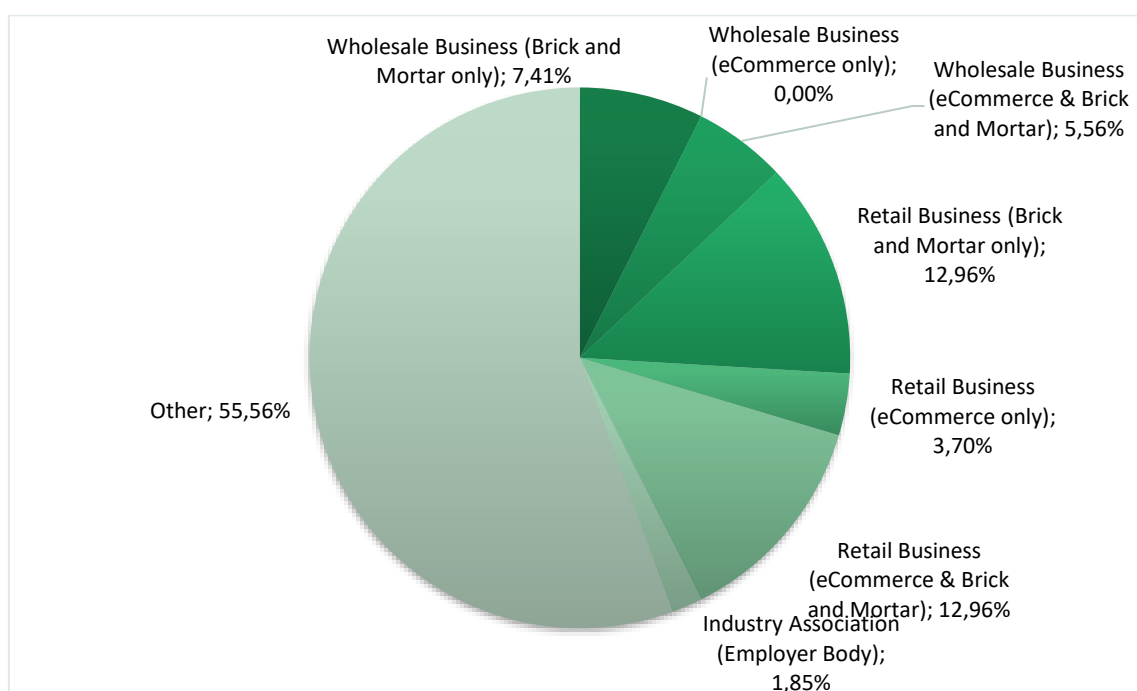
Source: Stakeholder Survey, 2021

Figure 15 below illustrates the organisational size by number of employees. This provides insight into the resources and capabilities of these organisations and how each segment size responded. 39% of the respondents were large enterprises while 52% were small and medium enterprises (SME). There is also a small number of micro enterprises, with 9% of survey respondents indicating that they employ 5 or less people.

Figure 15: Organisation Size

Source: Stakeholder Survey, 2021

Figure 16 illustrates the respondents organisation by type. Of the respondents, 4% were eCommerce-only retail businesses, while 13% were Brick-and-mortar-only retail businesses. A further 7% were Brick-and-mortar-only wholesale businesses and none were eCommerce-only wholesale business. Respondents that comprised of both Brick-and-mortar, as well as eCommerce, i.e., respondents with a “hybrid model”, were 13% in retail and 6% in wholesale. Additionally, 2% of respondents were from industry associations and 56% of respondents are classified as ‘other’, which includes training providers, retail and fuel, retail of new and used motor vehicles, and importers, amongst others.

Figure 16: By Type of Organisation

Source: Stakeholder Survey, 2021

5 Summary Findings

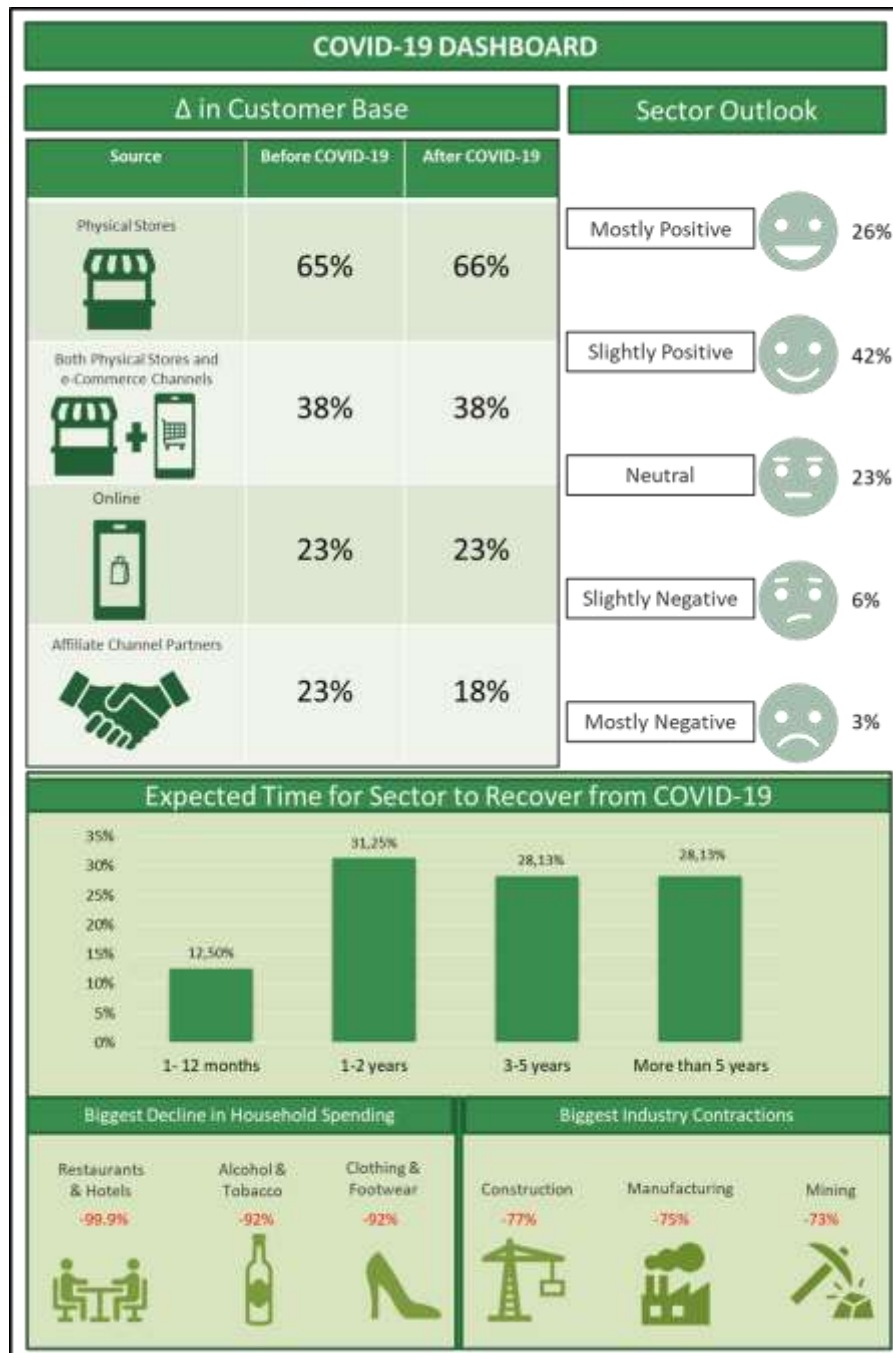
The COVID-19 pandemic swept across the globe with devastating effect - many lost their lives and others lost their livelihoods. The global response to stop the viral spread was to 'lock down' countries, or to confine civilians to their homes through social isolation, with hopes of stemming the tide of infections. The magnitude of such disruption can only be compared to that caused by World War II (Ruy, et al., 2020).

The pandemic has brought economies to a standstill, and the W&R Sector was not immune to the impacts that such a drastic closure of the economy has created. The retail sector has considerable exposure to the potential impacts of the virus. From dependencies on Chinese manufacturing, complex global supply chains and distribution networks, and in the case of many retailers - a reliance on a large workforce and a direct interface with customers. These factors expose the sector to a unique set of circumstances (AON, 2020).

Globally and locally, the retail sector operates as a gateway to consumers from upstream sectors, accounts for almost 5% of GDP, and employs about 1 in 12 workers. COVID-19 has dramatically disrupted the sector, with the impact differing massively between brick-and-mortar versus online shops, essential versus non-essential stores, and small versus large retailers (OECD, 2020).

COVID-19 had also presented unique opportunities for technology adoption – it has sped up the rate of technological use and acceptance. COVID-19 has changed the way we interact, work and live. Undoubtedly, COVID-19 has also been an accelerator for change with many realising the opportunities that technology can unlock.

The below dashboard summarises some key findings visually from the report and consultations.



Over the next 6-months, the following sub sectors may have planned retrenchments of between 1-20% of their workforce –

- Supermarkets,
- Food and beverage,
- Tobacco and
- Household equipment.

With the most impact happening within the Sale and Repair of Motor Vehicles and Clothing stores considering retrenching 50% of their workforce.

“The W&R sector will take another 2-3 years for economic recover.”

Survey, Employer 2021.

- **Recovery time**

At the retail sector level, 59% of respondents indicated that the W&R sector may take between 1 and 5 years for the sector to recover. However, the outlook for sector is largely optimistic. This may be dependant on successful rollout of vaccines though.

- **Consumer behaviour changes**

Respondents to the survey did not indicate a perceptible change regarding the source of their customer base from pre to post COVID (from brick-and-mortar to online). This shift may be too early to witness.

Important to note is that the customer experience is evolving to the lower age groups. The Alpha generation will move towards responsible and sustainable businesses. They will demand better interaction at a younger age with open communication channels and constant customer interactions. This demographic will support businesses that they believe to be responsible and sustainable. This generation may place more and more pressure on brands and businesses to transform. They will also be digitally native, requiring digital and technology-rich interactions. Thus, providing a holistic customer experience will become an essential component of any business and will be a requirement to tap into this up-and-coming market segment in the years to come.

6 Detailed Findings: The Economic and Social Impact of COVID-19 on the Wholesale and Retail Sector

The following section considers the findings from the field work conducted (consultations and survey) on the impact that COVID-19 has had on employers in the W&R Sector. This section also seeks to highlight areas in which the SETA can assist.

6.1 COVID-19 Overview

The global pandemic caused by the coronavirus, COVID-19 officially named “severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2),” has disrupted the lives of most people on the planet. The magnitude of such disruption can only be compared to that caused by World War II (Ruy, et al., 2020).

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South Africa is no exception with the W&R sector historically being the third largest contributor to South Africa’s GDP (Brand South Africa, 2018).

In this section we will understand what COVID-19 is, what it has done economically and socially in the South African context taking the W&R Sector into account. We further examine some country case studies on how the pandemic had impacted the W&R Sector economically and socially.

6.1.1 COVID-19 Transmission and Impact

The COVID-19 virus originated from China where the virus was most likely transmitted to humans through an animal host or frozen wildlife products. The World Health Organisation (WHO) led an investigation and found that it is “extremely unlikely” it came from a laboratory leak (Bloomberg, 2021).

The WHO (2019) confirms the initial timeline starting in December 2019 with the Wuhan Municipal Health Commission, China, reporting a cluster of cases of pneumonia in Wuhan, Hubei Province. A novel coronavirus was eventually identified. The first international case took place on the 13 January 2020 with officials confirming a case of COVID-19 in Thailand, the first recorded case outside of China (WHO, 2019).

South Africa’s first case was recorded on March 5, 2020 by the National Institute for Communicable Diseases, who confirmed that a suspected case of COVID-19 had tested positive. The patient was a 38-year-old male who travelled to Italy with his wife. They were part of a group of 10 people, and they arrived back in South Africa on March 1, 2020. The first death to have occurred from the disease was reported on 27 March 2020 (NICD, 2020).

Worldometers.info (2021), a live global COVID-19 tracking tool shows global numbers of over 120 million total global cases with 2,6 million deaths, as of 15 March 2021. South Africa's statistics show 1.5 million cases with over 51,000 total deaths, as of 15 March 2021.

The first waves of COVID-19 globally were associated with health issues and the second one with economic issues (Ruy, et al., 2020).

6.2 South African Context

South Africa was already in an economic recession prior to the pandemic due to structurally weak government finances, ongoing electricity shortages, lacklustre industry growth and diminishing business and consumer confidence (Euromonitor, 2020).

Despite a young population, South Africa is particularly vulnerable to COVID-19 due to high levels of poverty, unemployment, and a large immunocompromised population due to high incidences of HIV and tuberculosis. The unfortunate combination of poor economic performance combined with the pandemic contributed to a sovereign rating downgrade below investment grade a day after the lockdown was imposed (Euromonitor, 2020).

South Africa's first case was recorded on March 5, 2020 with the first death to have occurred on 27 March 2020 (NICD, 2020). South Africa's current statistics (March 2021) show 1.5 million cases with over 51,000 total deaths.

The impact of COVID-19 has had social and economic effects leading to nation-wide lockdowns and the shutting down of enterprises and livelihoods. No sectors remain untouched. COVID-19 is still with us, nearing a 12-month mark since its first case in the country. Faced with rising unemployment and uncertainty about the future, South African households are tightening their spending which makes it difficult for retailers to draw in customers.

Retail Sector

The wholesale and retail sector were not immune to the lockdowns or its impact on consumers' disposable income. The W&R sector is an integral part of South Africa's economy. It is the third largest contributor to South Africa's GDP (Brand South Africa, 2018). In 2019, the sector employed 3.2 million people, which was approximately 21% of the total active labour force (W&RSETA, 2019). This means that 1 in 5 people worked in wholesale and retail trade.

In the first quarter of 2020, the W&R sector had already seen a contraction of 1.2% due to a decline in economic activity (STATS SA, 2020).

On the 26th of March 2020, South Africa entered Lockdown Level 5, as per the risk adjusted strategy. This imposed severe restrictions on economic activity and personal movement. Amongst these restrictions were the prohibition of sales of hardware, components and supplies required by any qualified tradespersons other than for the sole purpose of emergency repairs at residential homes; limited ranges of clothing being sold; and, most controversially, the ban on the sale of liquor and tobacco.

As a result of the lockdown imposed, the consumer goods industry in South Africa is facing severe disruption. Essential goods have been affected least, while industries with a high level of exposure to discretionary spending, defined as "non-essential" by the government have been dealt a more severe blow. The economy was re-started with several emergency economic stimulus packages to soften the economic blow.

The sector saw a spike in food sales, but the longer-term impact of the crisis may have an adverse effect on food retailers. Rapid store expansion and the ongoing formalisation of the market have resulted in relatively high levels of concentration, and the sector is led by a handful of very large retail companies. Competition has increased dramatically as the grocery market has matured. The lines between traditional retail and wholesale channels are blurred, and the larger players have substantial

procurement, central warehousing, and distribution divisions. The traditional wholesale and fresh produce markets are being eclipsed by the retail trade as larger farmers supply directly to supermarkets and smaller and informal traders make more use of the leading grocery companies for their supply. Supermarkets have expanded into less central areas and local convenience stores. While panic buying has subsided, overall demand for food remains elevated. There has also been a massive increase in demand for online shopping services (Global News Wire, 2020).

COVID-19 drew attention to eCommerce platforms as South Africans refrain from being in public spaces. South Africa's largest online shopping platform Takealot, which had estimated sales of around one billion rand (\$57.9 million) per month between January and March, recently reported a surge in demand. The Mr. Price Group saw online sales grow by 75 percent during the pandemic. Africa's largest retail group Shoprite extended its online grocery delivery service (Arab News, 2021).

Owing to limited Internet access and high data prices, online sales still only account for a fraction of South African spending. (Arab News, 2021). Retailers will need to balance how they reach their main target income groups to avoid "throwing away money" on digital (Arab News, 2021).

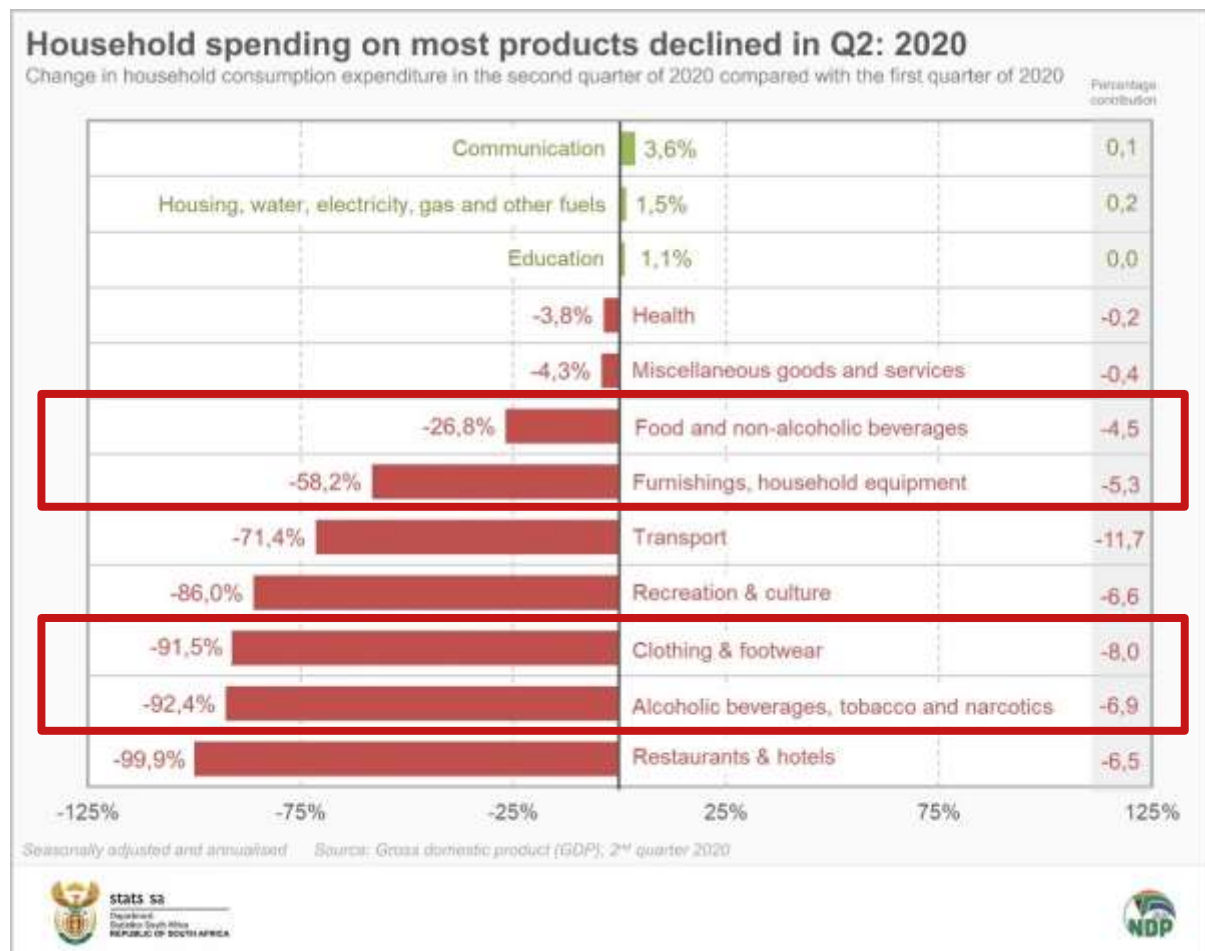
Business Insider (2021) reported that Brick-and-mortar stores are finding difficulty upkeeping sanitation and measures to curb super spreader events. The labour department says wholesalers and retailers are some of the biggest transgressors when it comes to COVID-19 safety and health practices. This will surely be another reason why COVID-19 will fast-track the need for digital transformation in retail, highlighting the necessity to operate and serve customers differently. Retailers need to adjust how they approach customer experience, employees, supply chain and category management, as well as hygiene (Deloitte, 2020).

The next section will look at how the W&R sector was impacted, what measures were put in place and how jobs, W&RSETA levies and the future of the sector may look like.

6.2.1 Economic and Social Impact

As nations grappled with the impact of the virus, factory closures throughout international markets had a ripple effect across an expansive supply chain network, quickly leading to disruption across the world. This impacted international trade, investment, consumer spending and slowing global economic growth.

The figure below shows the change in household consumption expenditure in the second quarter of 2020 compared with the first quarter of 2020.

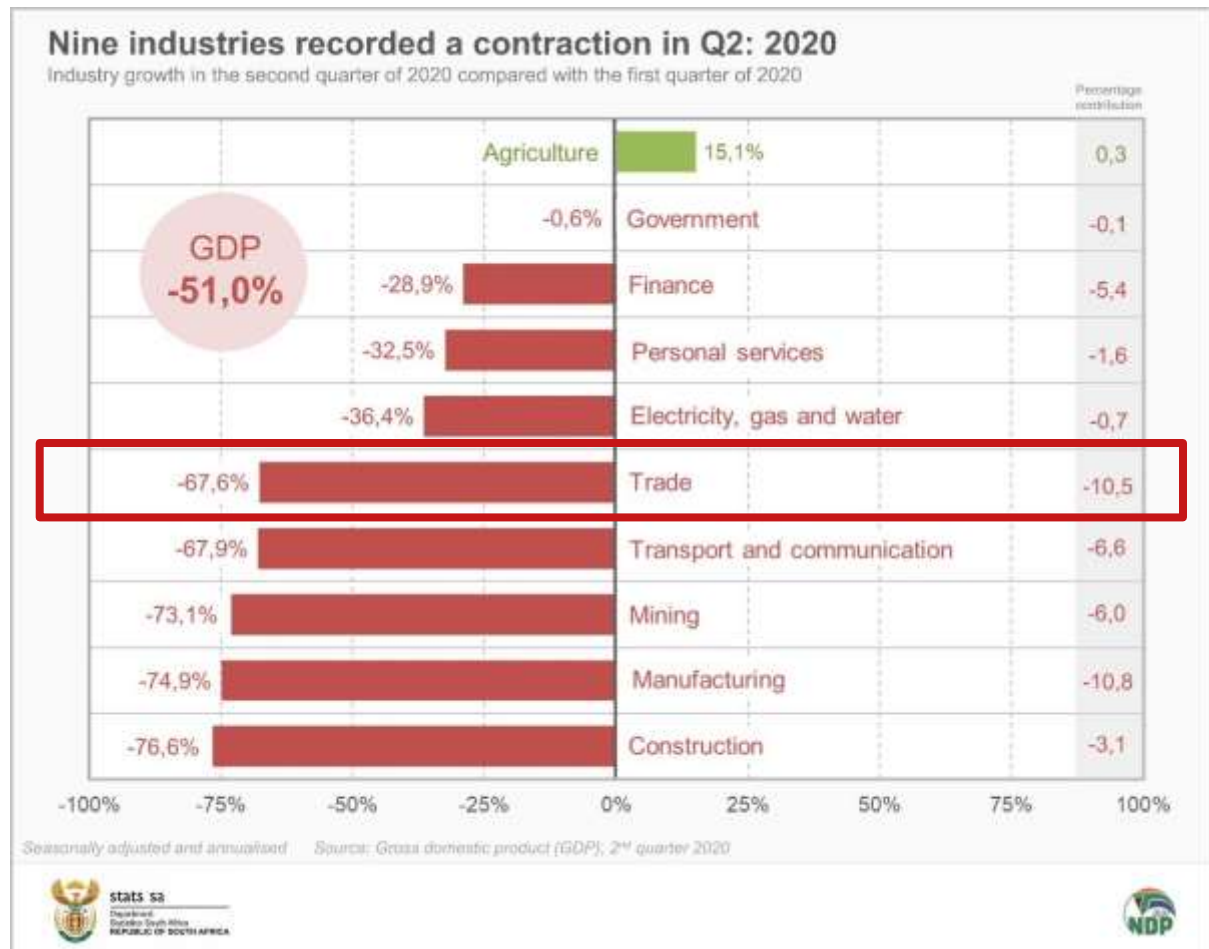


There was a general decrease in household consumption expenditure. Food and non-alcoholic beverages sales decreased by 26.8%. Furnishings and household equipment sales decreased by 58.2%. Most notably, the sale of clothing and footwear and the sale of alcoholic beverages, tobacco and narcotics grinded to a halt, with decreases of 91.5% and 92.4% respectively.

In the month of April alone (excluding the 30th), SARS under-recovered R664 million on beer sales, almost R300 million on wine sales, R400 million on spirits and R400 million on cigarettes. This resulted in a sin tax revenue loss of over R1,7 billion. Concerns were also voiced about the potential rise in illegal trade as a result of the ban on legal sales (The Daily Maverick, 2020).

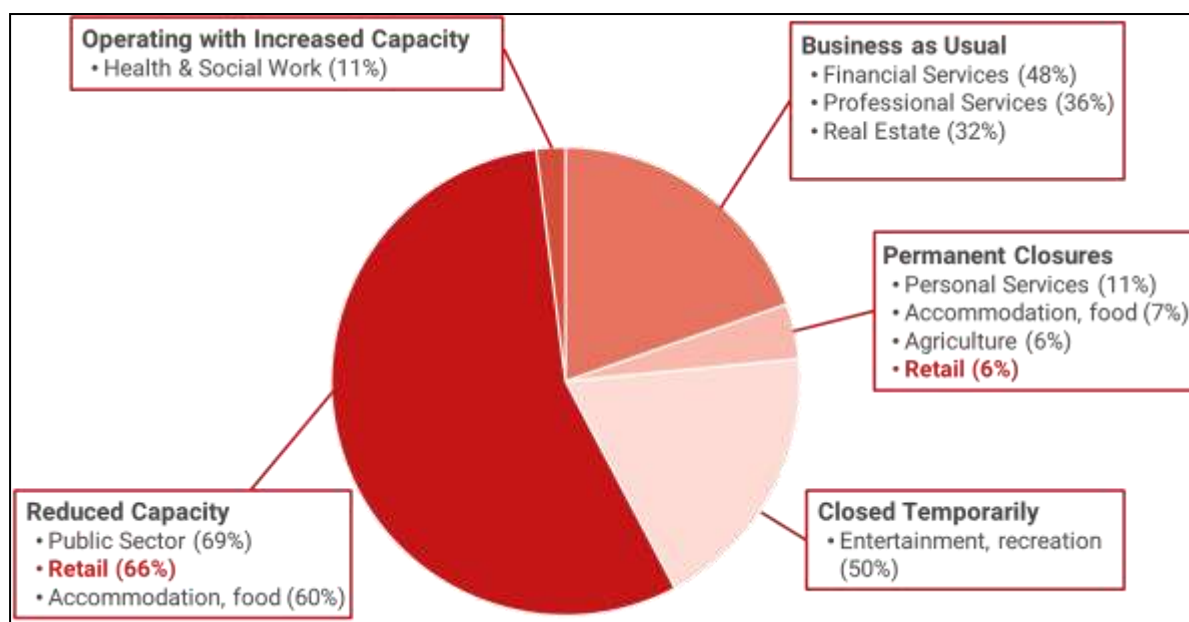
In May, South Africa moved to Lockdown Level 4, which saw the reintroduction of the sale of hot cooked food (only for home delivery); winter clothing, bedding and heating; stationery and educational books; and personal ICT equipment including computers, mobile telephones and other home office equipment. While transactions increased during May, the overall results were dire.

In the second quarter of 2020, it was estimated that between 192,000 and 373,000 jobs were lost in the trade sector (STATS SA, 2020). The figure below shows industry growth in the second quarter of 2020 compared with the first quarter of 2020.



In total, South Africa's GDP shrunk by 51% in the second quarter of 2020. Negative growths were observed across all industries, with the exception of agriculture which saw growth due to favourable climate conditions. Trade, which encompasses the wholesale and retail sector, suffered a contraction of 67.6%.

The following figure indicates the operational status for enterprises during COVID-19, as per the BeyondCOVID Business Impact Survey findings (conducted by Redflank), which obtained results from over 3,100 enterprises throughout South Africa. 66% of retail enterprises had reported operating at reduced capacity, with 6% of retail enterprises having shut down permanently.



Source: BeyondCOVID Business Impact Survey

The table below provides an overview of the impact of COVID-19 on retail firms and the average impact on firms across various sectors. The current impact of COVID-19 is illustrated through the percentage of firms that have experienced a drop in revenue, the percentage of firms that have had to retrench staff and the percentage of firms which currently have more than 20% of their workforce operating from home.

The table also provides a view of the impact that COVID-19 is expected to have on businesses going forward. This view is illustrated through the percentage of firms that have planned retrenchments in the next 6 months, the percentage of firms that require at least 6 months funding over the next 12 months to be able to continue operating and the percentage of firms that are expecting more than 20% of their workforce to continue operating from home on a permanent basis.

Sector	Current Situation			Outlook		
	Firms with a Drop in Revenue	Firms that have Retrenched Staff	Firms with > 20% of Staff Working from Home Currently	Firms that have planned retrenchments in the next 6 months	Firms needing at least 6 months funding over next 12 months	Firms expecting > 20% of Staff to Work from Home Permanently
Average Across Sectors	75%	43%	51%	25%	19%	44%
Retail	83%	32%	31%	22%	25%	30%

Source: BeyondCOVID Business Impact Survey

A higher percentage of retail firms (83%) experienced a drop in revenue compared to the national average of firms (75%). Nearly 1 in 3 retail businesses (32%) have retrenched staff members. Only 31% of retail firms (compared to the national average of 51% of firms) stated that more than 20% of their staff were working from home, and similarly, only 30% of retail firms believed that more than 20% of

staff could work from home permanently in future. This may be attributable to the importance of the human element in the retail sector.

South Africa has had no restrictions on retail trade since Lockdown Level 2 on the 18th of August (except for restricted trading hours on alcohol), and there has been a re-uptake in economic activity, with wholesale and retail sales increasing month-on-month during Q2. Wholesale sales saw seasonally adjusted 3-month increases of 5.6% in July, 19.3% in August, and 26.5% in September. Retail sales saw seasonally adjusted 3-month increases of 8.1% in July, 16.7% in August, and 23.7% in September. (Statista, 2020).

Despite this increased economic activity, findings from the BeyondCOVID Business Impact Survey indicate that the retail sector is still not out of the water, with an anticipated 213,175 job losses for SMMEs within the sector – the highest amongst all sectors. This can be seen in the table below, which shows forecasted job losses for SMMEs per sector.

Source: BeyondCOVID Business Impact Survey

Accommodation and food services	141,523
Admin & support services (e.g. travel agencies, security, collections)	23,985
Agriculture, forestry and fishing	27,995
Arts, entertainment and recreation	35,174
Construction	89,875
Education	51,997
Financial services	43,608
Health and social work	28,251
Information technology	69,205
Manufacturing	102,229
Mining	7,149
Personal and other services	91,943
Professional and technical activities (e.g. legal, accounting, engineering)	50,650
Real estate	28,593
Retail	213,175
Telecommunications	4,390
Transportation	35,009
Utilities	37,377

The advent of COVID-19 has fast-tracked the adoption of 4IR enabling technology, as well as a focus on eCommerce and digitisation towards reaching their ‘socially distant’ marketplaces.

Socially, consumers have reduced their ‘touchpoints’ and frequency of attending closed and crowded Brick-and-mortar locations. Their consumption patterns have changed as well as the way in which the W&R sector interacts with their customers (new channel and omni-channel integration).

The nature of customers is also changing moving from Baby boomers and Generation X to the Millennial/Generation Y and Generation Z consumers are set to become the dominant consumer group, and now account for 40% of consumers. Generation Y is generally taken to comprise those born between the early 1980s and mid-1990s, while the succeeding Generation Z were born between the mid-1990s and early 2010s.

More than 63% of Millennials spend at least six hours a day on their phones and, according to Social Media Week, check their phones 157 times a day. However, Generation Z still prefers to make the actual purchase in a brick-and-mortar store. But because they understand technology, they expect their retailer to be using it effectively to understand their needs and deliver the right experience; if their expectations are not met, they will move right along – and they rarely give a second chance (Bizcommunity, 2020).

6.3 Sector Economic and Social Impact

The sector economic and social impact will consider how the sector was impacted from a financial and economic standpoint while considering how their operations and channels were affected. The section also considers how consumer behaviour and spending impacted businesses.

6.3.1 Economic Impact

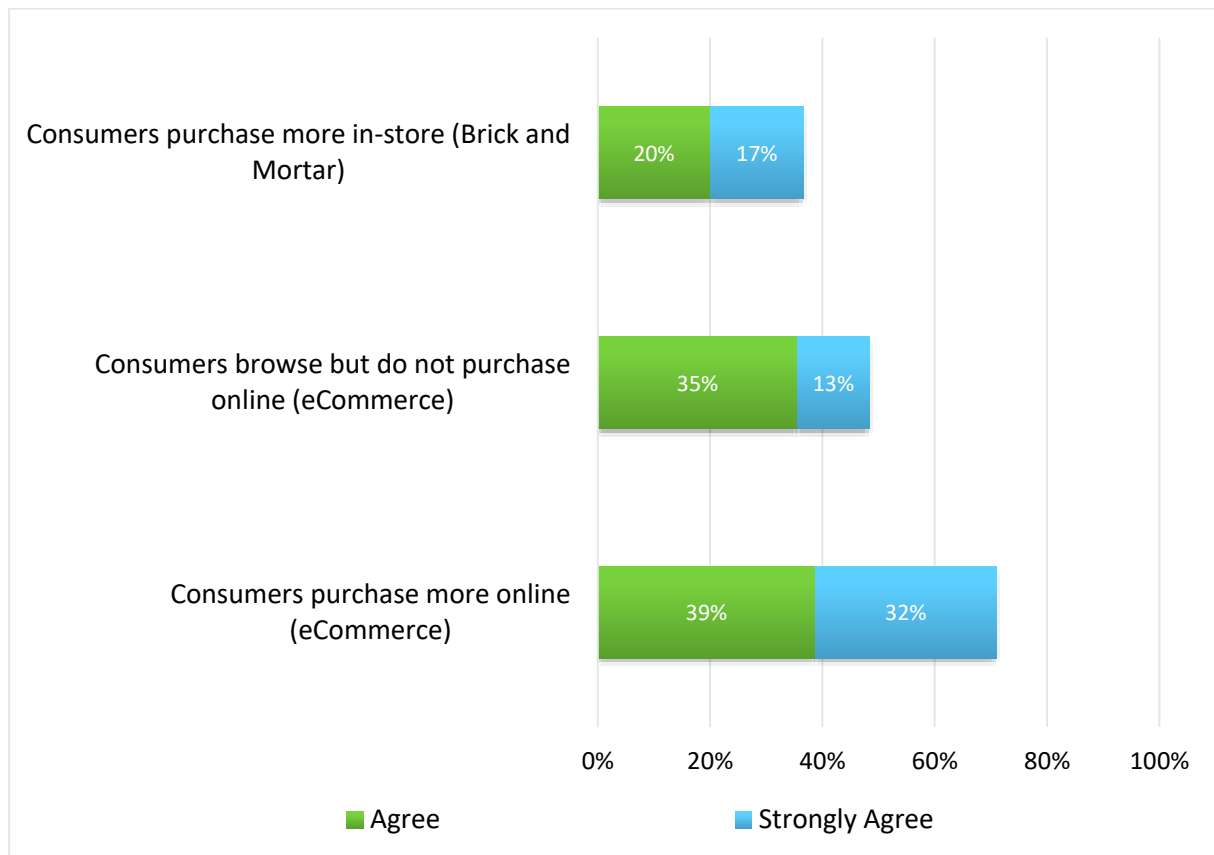
The economic impact will outline how businesses were impacted and how customer-facing or front-end functions changed due to COVID-19. This section focuses on feedback from consultations and survey respondents.

6.3.1.1 Impact on Businesses

COVID-19 had a varied impact on different sectors. This section will focus on how W&R Employers were impacted by the pandemic and depict change in business operations, interactions and business capacity.

The pandemic shifted consumers' disposable income as it changed the way they shop and spend on items. Initially, there was panic buying of essentials and restrictions on certain items. Consumers also turned to new methods of shopping in order to reduce their physical interaction in public spaces.

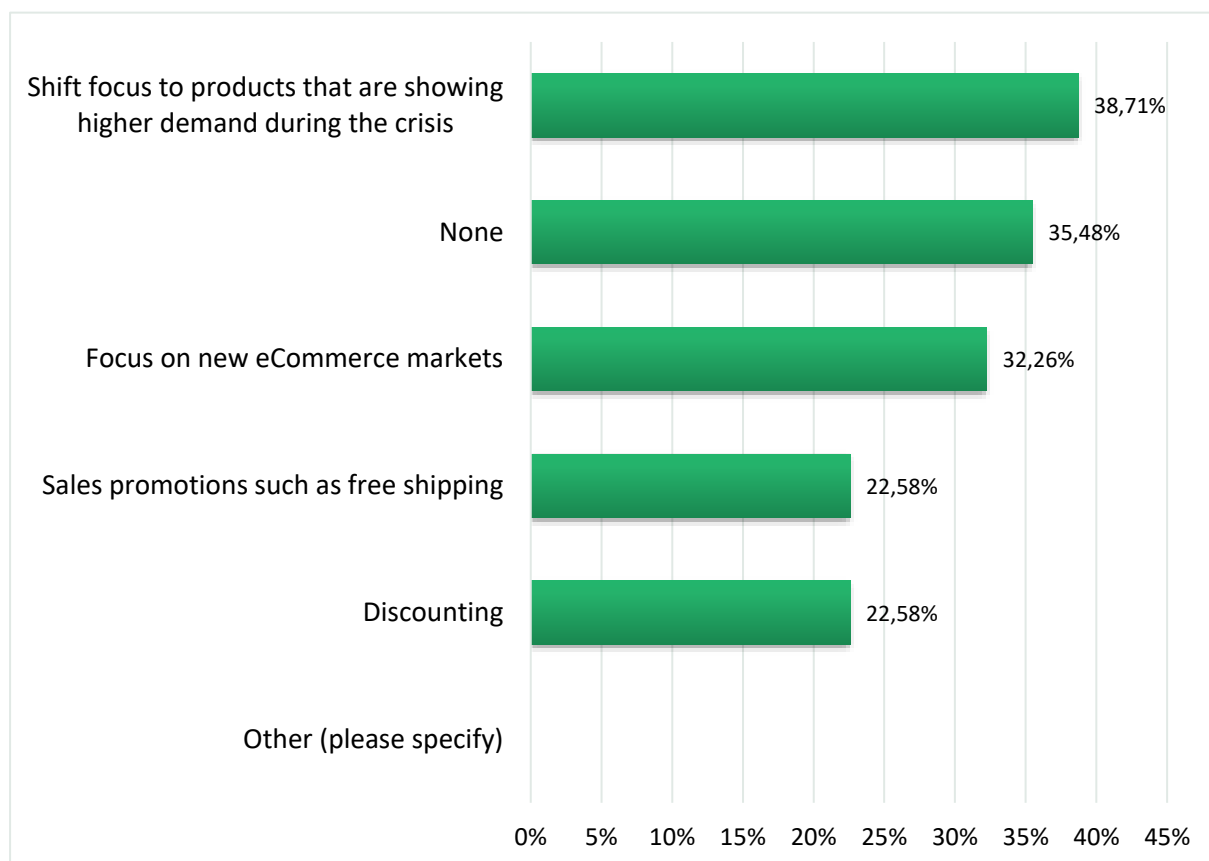
Figure 17 indicates that survey respondents agreed that COVID-19 made consumers purchase more online through eCommerce (70.97%). Whilst 36.67% indicated that they were unsure of whether consumers purchased more in-store.

Figure 17: Consumer Behaviour due to COVID-19

Source: Stakeholder Survey, 2021

Figure 18 indicates the changes survey respondents had to implement in order to drive demand during COVID-19 due to shifting consumer priorities and disposable income caused by COVID-19. Survey respondents indicated that they increased advertising (45.16%) and shifted to providing essential goods and services demanded during the pandemic (38.71%). Whilst 35.48% did not change their business activities to drive demand during the pandemic.

Figure 18: Activities Businesses Engaged in to Drive Demand During COVID-19



Source: Stakeholder Survey, 2021

6.3.1.2 Front-end Impact

The front-end impact considers the W&R businesses' customer facing business channels. This considers how COVID-19 had impacted the distribution and communication channels in sourcing and reaching customers.

From the consultations, respondents mentioned that relationship management was always key to their business through face-to-face contact.

"Our preference is for physical over digital contact with customers – and we have found through the experience that a lot of what was only done physically can be done reasonably efficiently via digital means."

Survey, Employer, 2021.

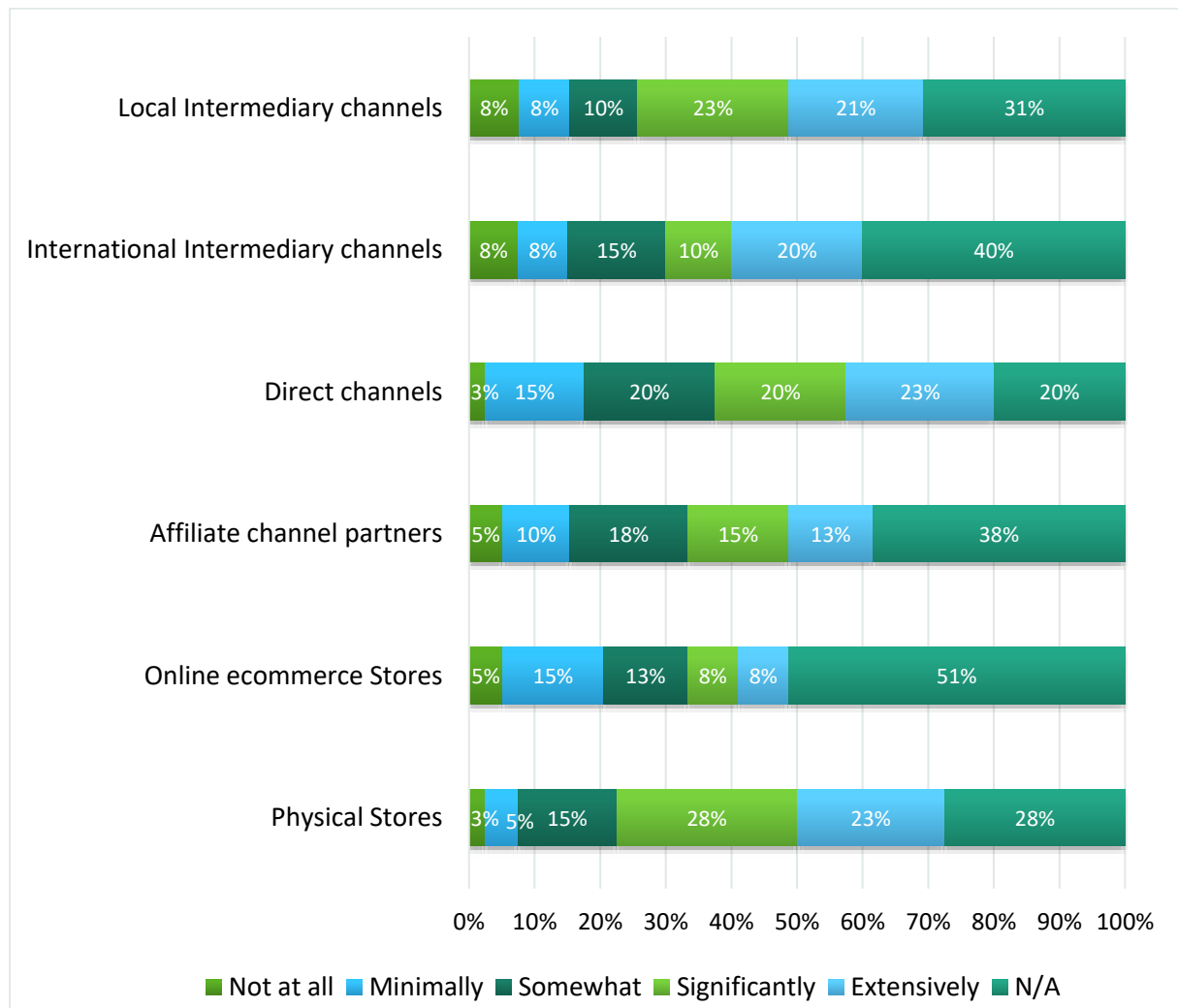
COVID-19 tempered with the appetite of the customer to accept using digital methods. However, it was noted that some will simply move suppliers based on personal face-to-face interactions. Businesses needed to adapt to serving and reaching customers in new ways during the pandemic. Some examples were using rotating teams when working remotely. However, this impacted service levels to customers negatively. The biggest impact for some was the massive reductions in economic activity in traditional customer base, negatively impacting real interactions with customers. Therefore, the pandemic made many business reconsiders how they interact and reach their target markets.

“COVID-19 is forcing us to consider non-traditional target customer bases”.

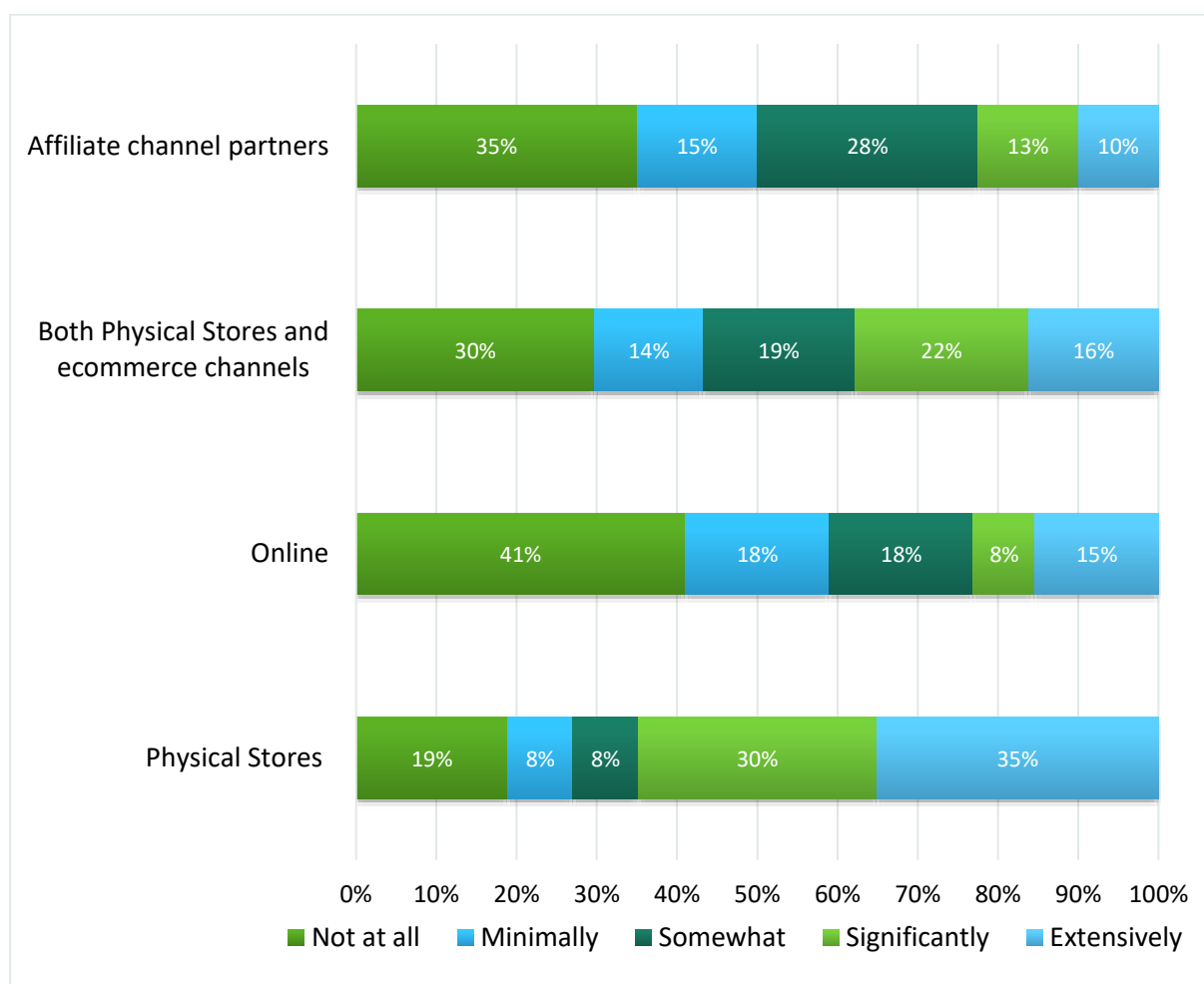
Survey, Employer, 2021.

50% of respondents cited that physical stores as a customer channel were impacted extensively by COVID-19 - **Figure 19**. Additionally, direct channels (42.50%) and locally intermediary (43.59%) channels were also disrupted. The least disrupted was online eCommerce stores, which were 80% unaffected. 65% of the respondents also mentioned that their source of customers was mainly from physical stores while 23% was from online sources before COVID-19 - **Figure 20**.

Figure 19: Distribution Channels Impacted by COVID-19



Source: Stakeholder Survey, 2021

Figure 20: Customer Sources before COVID-19

Source: Stakeholder Survey, 2021

6.3.2 Socio-economic Impact

The socio-economic impact considers the effects of COVID-19 on the wholesale and retail employers and employees. This also considers wider socio-economic ramifications around which sub sectors were impacted, the operational capacity of retail business the number of jobs lost and how long the sector will take to recover.

The COVID-19 pandemic impact was varied on certain wholesale and retail sub sectors with the automotive, clothing and alcoholic beverage industries being hit the hardest. This was due to the lockdowns constraining consumer spending during these periods.

The severity of the lockdowns should not be underestimated. A W&R stakeholder drew attention to the varied and non-uniform impact on the sector:

"The impact on our Food business has been dire. Our business income and profitability were decimated from the start of the first lockdown."

Survey, Employer, 2021.

From the consultation it was noted that the impact on staff was varied. The higher levels had to take earnings sacrifices to keep the business viable; whilst at the lower levels there was a reshuffle of

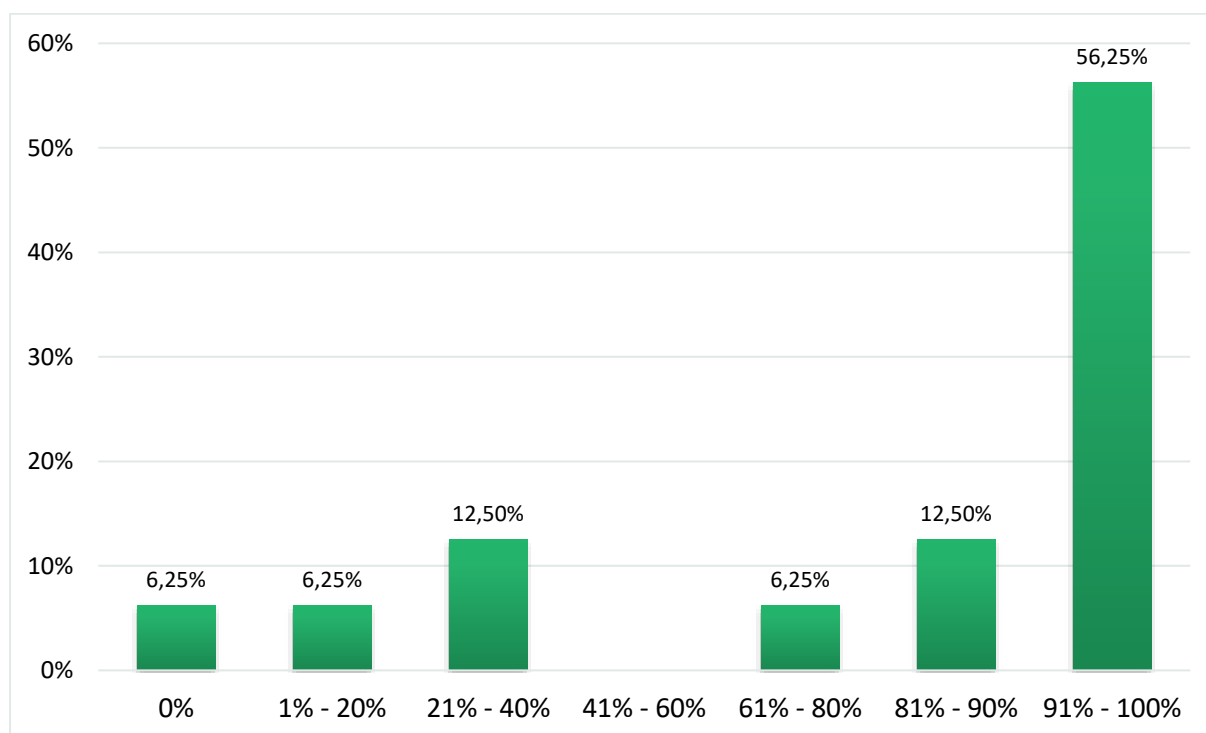
financiering to keep staff financially unimpacted – but that is not indefinitely sustainable. There is still a concern that keeping businesses afloat may soon lead to near future retrenchments, as business will not have enough and exhaust the ability to paddle and stay afloat.

“Because we service a niche area (foodservice), and because restaurants, hotels and similar establishments were heavily impacted by the lockdowns, we suffered dramatic consequences and continue to experience the same”.

Survey, Employer, 2021.

56.25% of survey respondents indicated that they are fully operational (between 91-100% operational) while less than 25% of respondents are operating at less than 40%, as demonstrated by **Figure 21**.

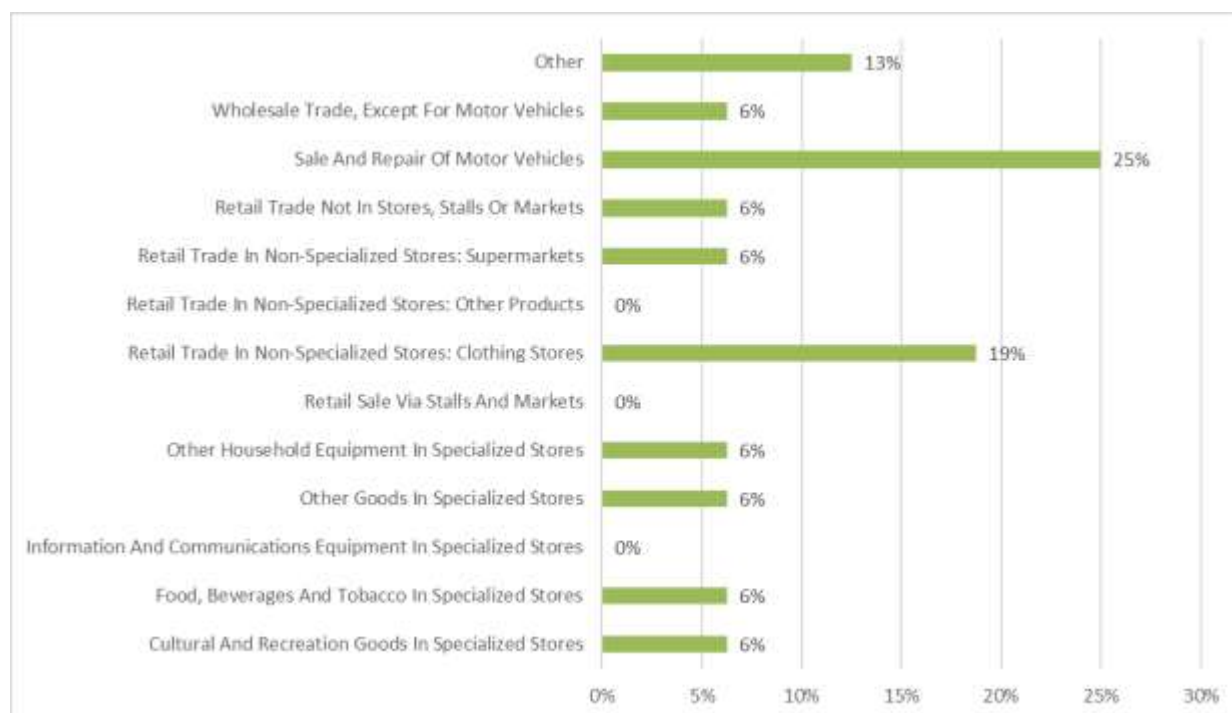
Figure 21: Percentage of Stores Currently Fully Operational



Source: Stakeholder Survey, 2021

The BeyondCOVID survey respondents indicated that at the sub-sector level, that 25% of respondents saw a minimal to significant decrease in the availability of their products and services specifically in the Sale and Repair of Motor Vehicles subsector. 19% of respondents saw a minimal decrease in the availability of goods and services they require to operate were classified as operating in Non-Specialized Clothing Stores subsector seen in **Figure 22**.

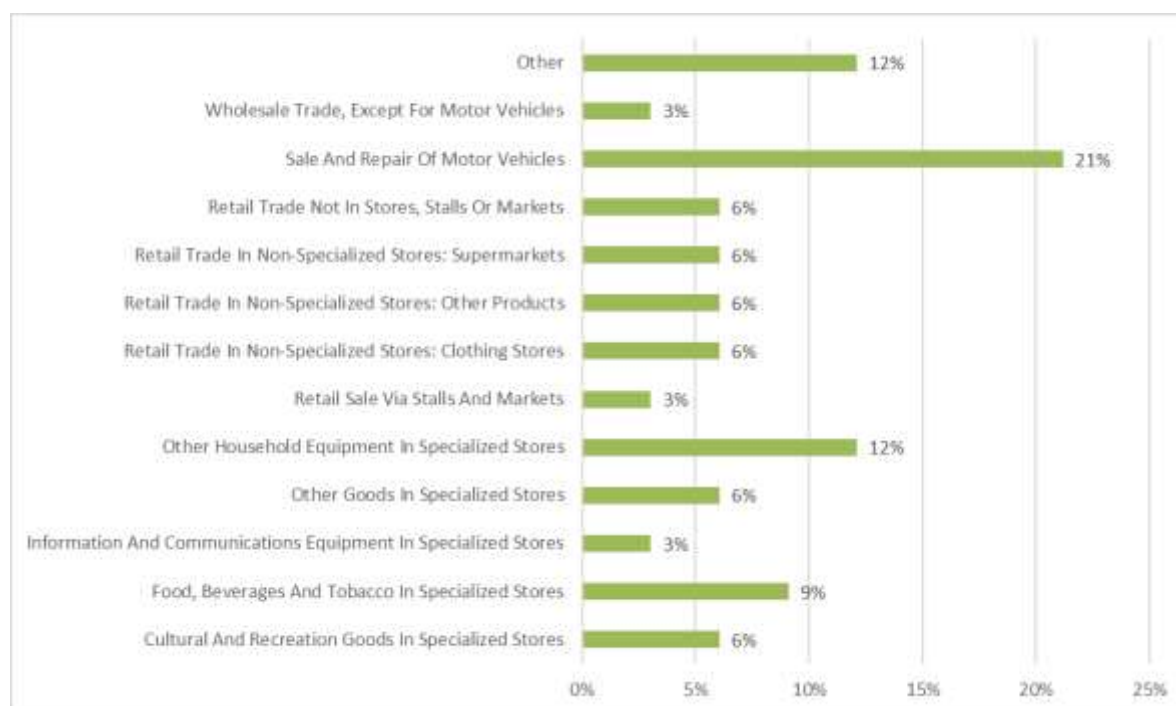
Figure 22: Significant Decrease in The Availability of Products and Services Sub Sector



Source: BeyondCOVID Survey, 2021

Additionally, the BeyondCOVID survey indicate the impact of COVID-19 on the operational capacity of the Retail sub sectors. **Figure 23** indicated the most impacted sub sectors that are operating under reduced capacity was the Sale and repair of motor vehicles (21%), household equipment specialised stores (12%) and food beverage and tobacco specialised stores (9%).

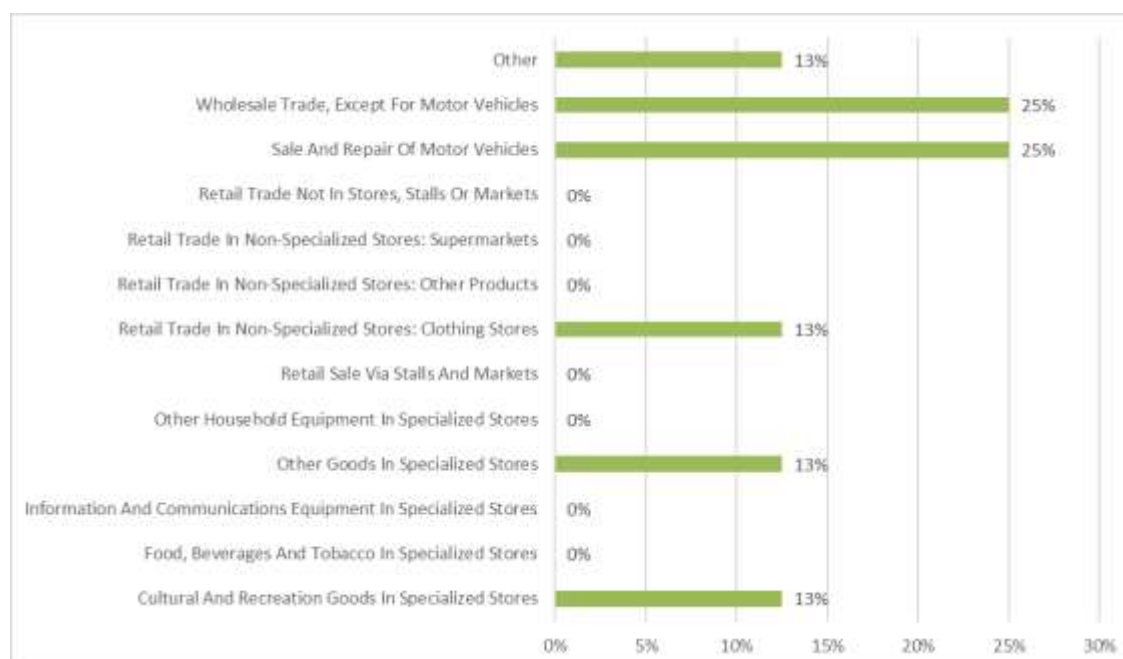
Figure 23: Sub Sectors Operating Under Reduced Capacity



Source: BeyondCOVID Survey, 2021

In **Figure 24**, the sub sectors that temporarily closed where the wholesale trade & sale and repair of motor vehicles (25%), clothing stores (13%) and cultural and recreation goods (13%). This speaks to the effects of the lockdowns and impacts on these sub sectors.

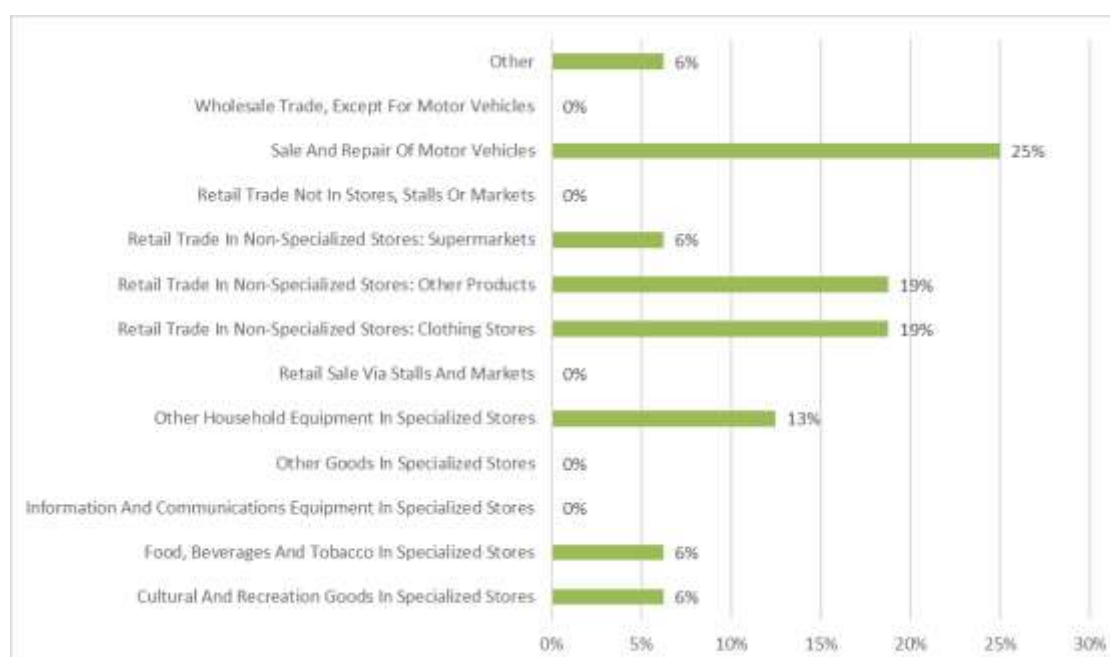
Figure 24: Sub Sectors that Temporarily Closed



Source: BeyondCOVID Survey, 2021

The below figure indicates that employers that retrenched 10-20% of their staff were motor vehicles sales and repair (25%), clothing stores (19%) and household equipment (13%). This is also an indication of the impact from COVID-19 and the lockdown events.

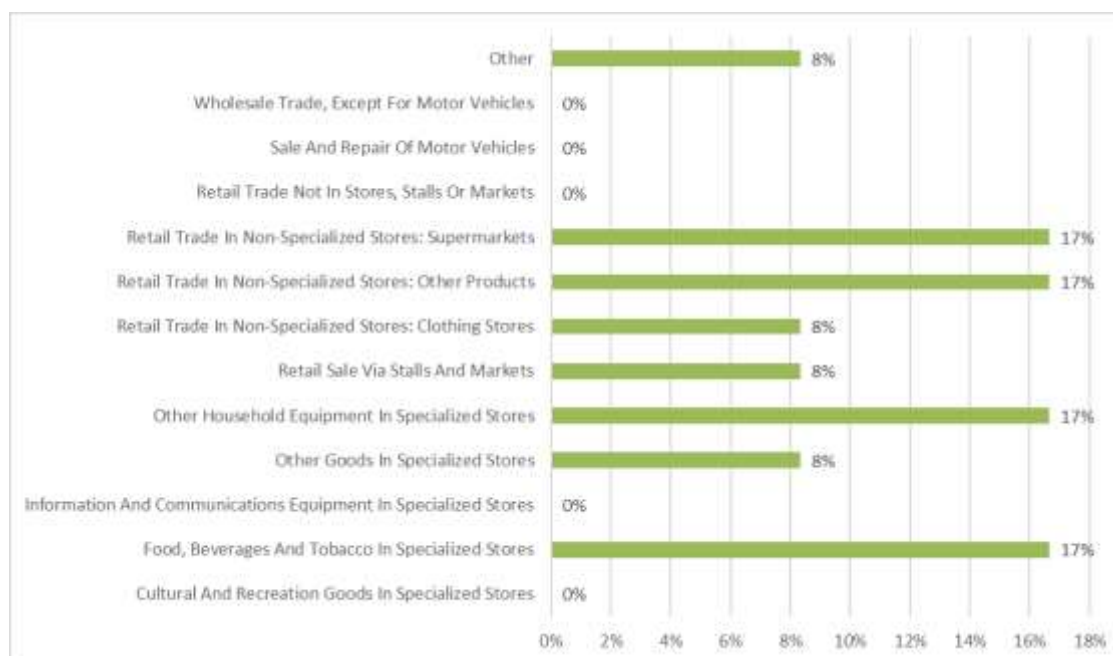
Figure 25: Staff retrenchments



Source: BeyondCOVID Survey, 2021

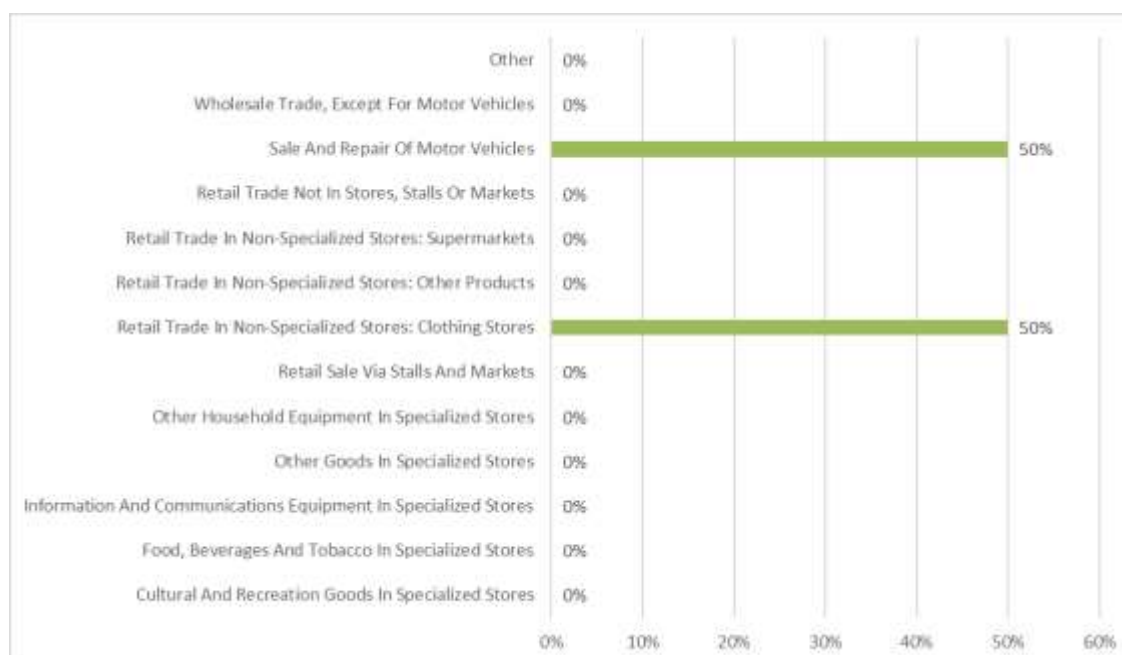
The BeyondCOVID Survey respondents also indicated that over the next 6-months, these sub sectors may have planned retrenchments of between 1-20% of the workforce - **Figure 26**. Supermarkets, Food and beverage and tobacco and household equipment stores are planning to retrench (17%) of their workforce. The sale and repair of motor vehicles and clothing stores are considering retrenching 50% of their workforce, seen in **Figure 27**.

Figure 26: Planned retrenchments over next 6 months:



Source: BeyondCOVID Survey, 2021

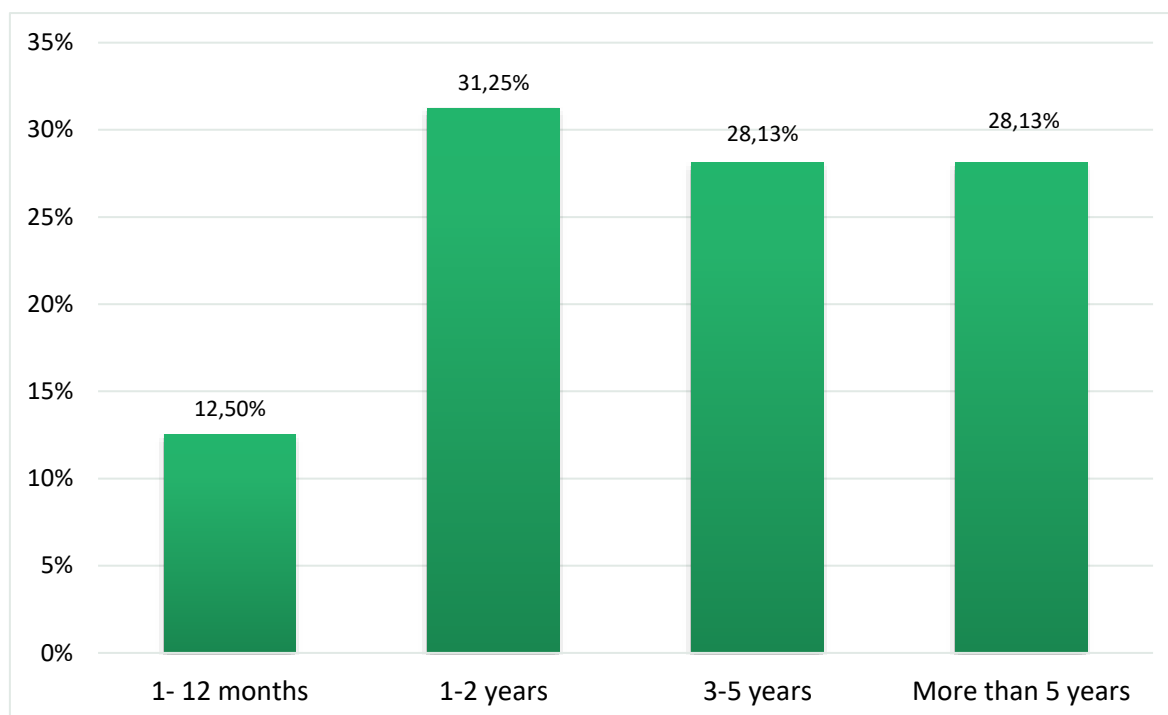
Figure 27: Planned retrenchments over next 6 months: (51-80% of workforce)



Source: BeyondCOVID Survey, 2021

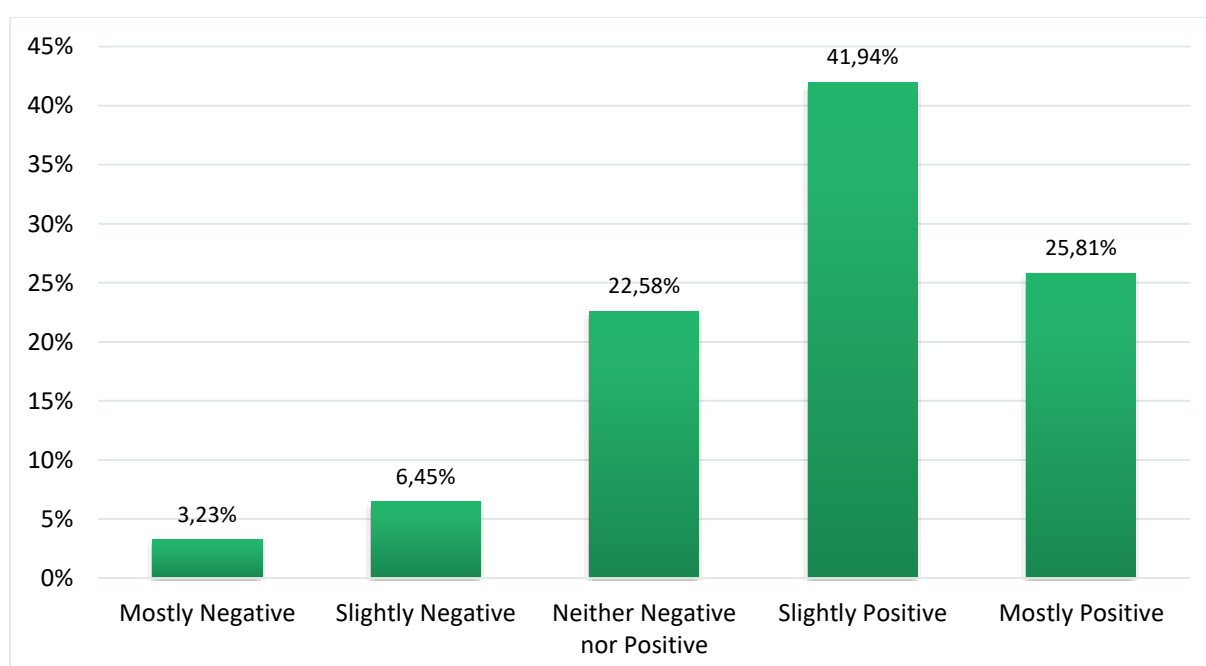
Figure 28 indicates that 31.25% of survey respondents believe that the sector will take 1-2 years to recover whilst 59.68% believe it will take between 1 and 5 years. In addition to this, most respondents' outlook over the next 12 months is positive (67.75%) - **Figure 29**.

Figure 28: Expected Sector Recovery time from COVID-19



Source: Stakeholder Survey, 2021

Figure 29: W&R Sector Outlook over the next 12-months



Source: Stakeholder Survey, 2021

From the consultations, respondents believe that there will still be a general and sustained negativity due to a large number of their customers' businesses having failed (permanently); and due to larger numbers still fighting permanent business failure at present. The effective mobilisation of vaccines will aid in the recovery and sentiment of the sector and broader economy.

"If the vaccination programmes are successful and can be rolled out efficiently, then an optimistic recovery period would probably be three years."

Survey, Employer, 2021.

6.3.3 Interventions by the SETA

This section focuses on possible interventions that the SETA can provide to bolster 4IR adoption, taking into account feedback from the field-work consultations.

"The SETA can assist in co-investing in the development of technically skilled talent. Areas such as the digital marketing space, processing and analysis of big data and in the training and learning and development arenas (content development as well as skills in the use of technology in learning and development)."

Survey, Employer, 2021.

From the consultations, it was noted that in order to promote 4IR and emerging technology adoption and provide assistance to ease the impact of the COVID-19 pandemic, the SETA should assist with funding for data and devices. This will allow for a faster roll-out of training using fully online eLearning.

"The SETA can assist employers and provide funding for data, devices towards fully online eLearning."

Survey, Employer, 2021.

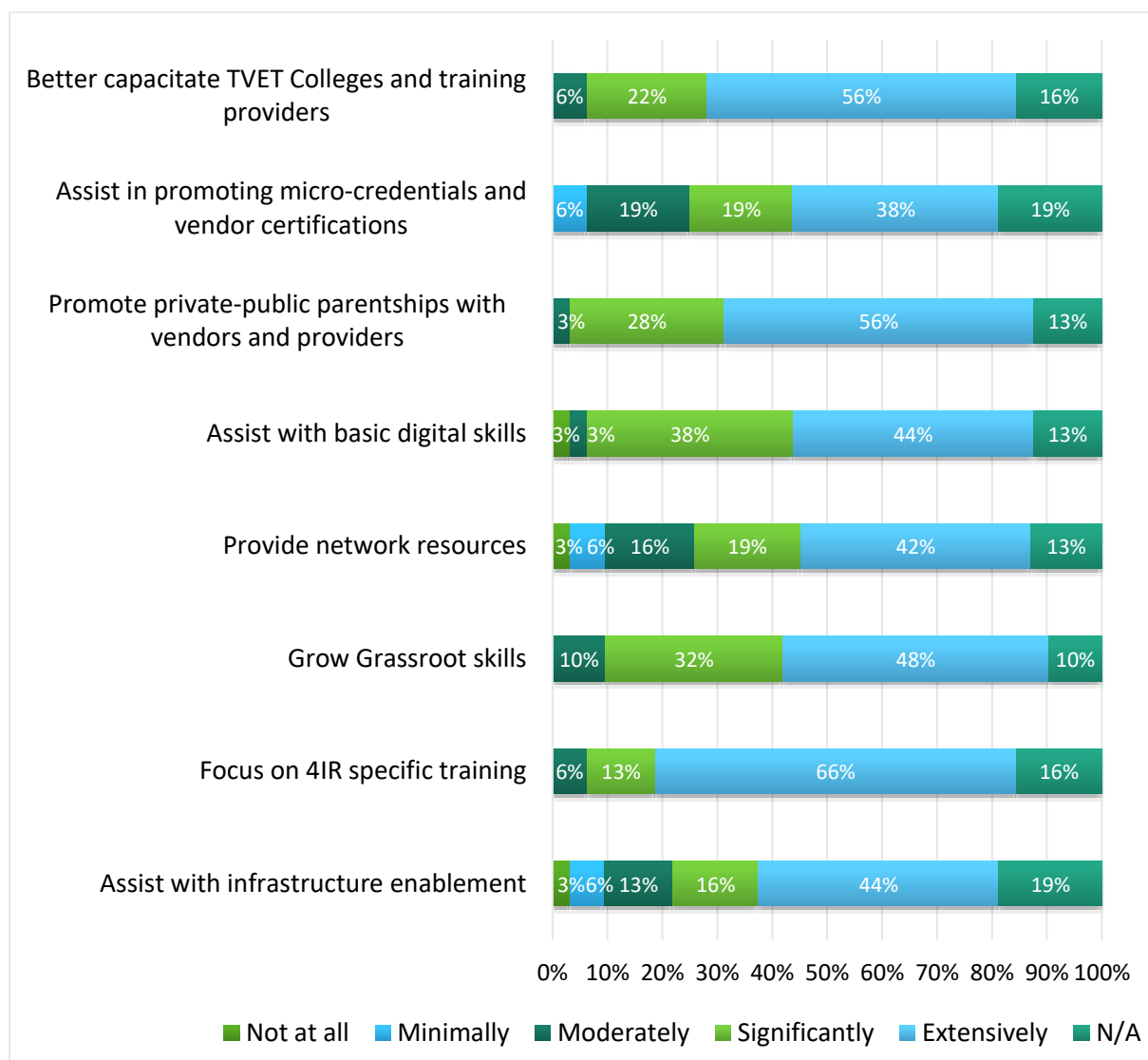
Additionally, there were some comments made around changing some SETA institutional processes to accommodate more digitally friendly ways of training so that a full digital and online eLearning process can be implemented.

"eLearning policy rigidity is a limitation. There needs to be more support that is extended to eLearning. The institutional rigidity around face-to-face and paper provenance is still a hinderance from embracing online."

Survey, Training Provider, 2021.

Figure 30 indicates the areas in which W&R stakeholders would like significant and extensive assistance and involvement from the SETA. There are the top 5 areas:

- Promote private-public parentships with (84.38%)
- Vendors and providers (81.25%)
- Assist with basic digital skills (80.65%)
- Grow Grassroot skills (78.13%)
- Focus on 4IR specific training (78.13%)

Figure 30: SETA Interventions

Source: Stakeholder Survey, 2021

7 Impact of COVID-19 on Adoption of 4IR

In a 'post-COVID world', the retail sector will look very different – irrespective of country or region. The nuances of these changes will be geographically specific and complex in their implementation.

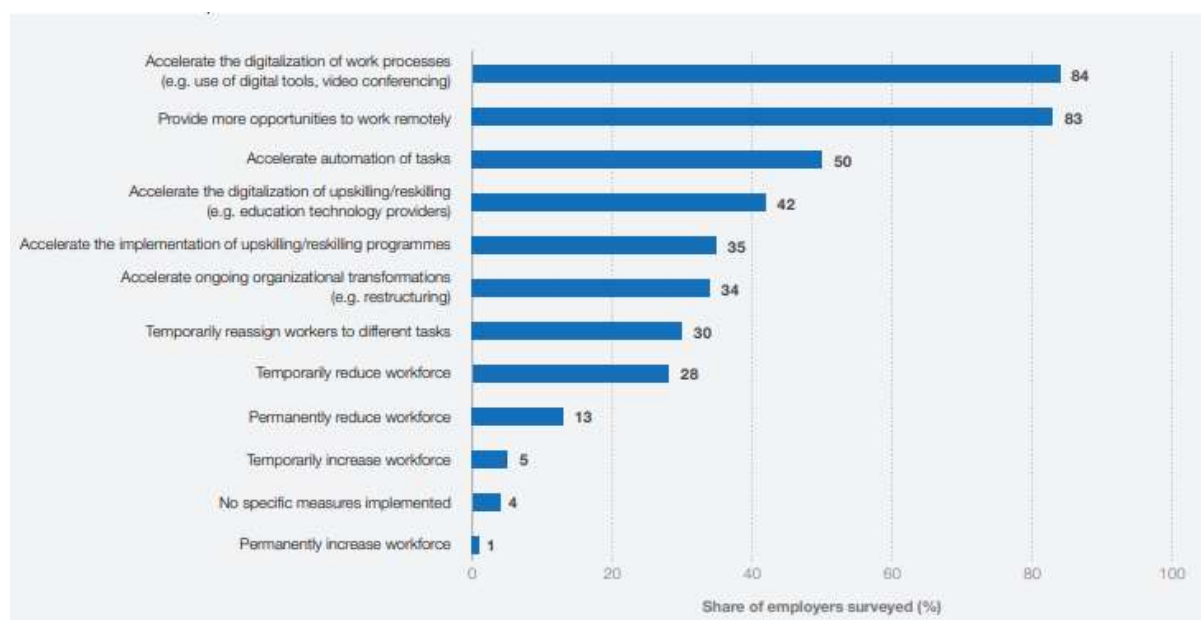
Health and hygiene now affect what we eat, drink and the way we keep fit. Out of home consumption is being replaced by home delivery and, as restrictions are lifted, we will continue to eat and socialise at home with a smaller group of friends and family.

It is clear that some things may have changed irrevocably. So, what is the new normal, and specifically, what is the wholesale and retail sector's new normal?

During lockdown, physical stores across the world were forcibly upended and consumer behaviour adapted accordingly. Retailers and wholesalers returning to business post-lockdown are now operating in a different world. With physical stores opening and closing at a whim, many had to turn to the digital world for their retail needs, including industries and customer segments that previously avoided doing so. These digital barriers have now been broken and it is unlikely that business will return to how it was conducted before.

The World Economic Forum (2020) published the results of a survey on employees on the future of jobs. Most respondents believed that in response to COVID-19, they have had to adapt and embrace technology with more opportunities to work remotely and welcome the acceleration of digitisation of work process. The acceleration of automation, upskilling and reskilling is key.

Figure 31: Planned Business Response to COVID-19

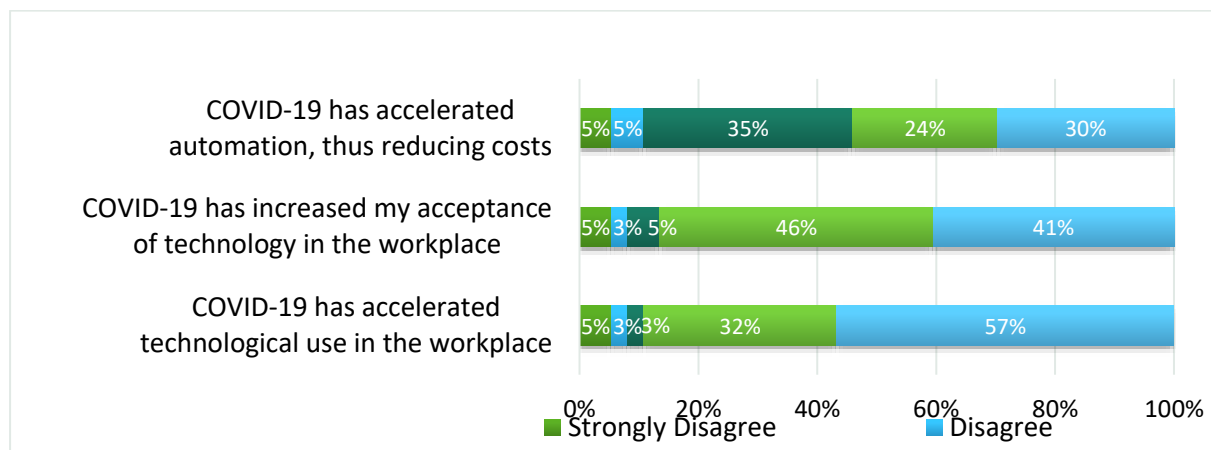


Source: (WEF, 2020)

Juxtaposing the World Economic Forum (2020) paper with the fieldwork and consultations reinforce the relationship between 4IR and COVID-19. In **Figure 32** respondents agreed that COVID-19 has accelerated the use of technology in the workplace (89.19%) and 86.49% agree that COVID-19 has increased their acceptance of change and the use of technology in the workplace. 54% of respondents also agree that COVID-19 has accelerated automation in order to preserve costs.

"We have had to accept new tools of the trade and it forced us to adopt this new normal going forward. We cannot go back as working from home has opened our eyes to new possibilities and acceptances."

Survey, Employer, 2021.

Figure 32: Customer Sources After COVID-19

Source: Stakeholder Survey, 2021

As technology adoption rises, more employees and consumers are expected to utilise digital platforms. What this means from a customer perspective, is that the offline and online relationship is now more important than ever. Brands that cannot combine the two may struggle in this new era. Physical retail remains a very powerful tool for customer engagement and the digital environment does not currently compete with the value and experience that a physical store can provide. This so-called 'phygital' (physical and digital combined) approach is far from a new concept, but this process will be a continuous evolution and not a once-off change (Moore, 2020).

Shoppers will choose self-service and store payments at a distance, while online shopping and a more immersive digital experience will see fewer customers go in-store to interact with retailers and brands. The role of technology is central to future development of supply chains (Alvarez and Marsal, 2020). COVID-19 has hastened our thinking of the use of technology in the workplace and in the retail sector.

There has thus been a technology convergence where COVID-19 has changed the way we view and interact in all spheres in life. Using 4IR, digitisation and innovation will change the shopping experience. Radial (2020) makes some bold predictions about what will unravel over the next 5-years:

- Smart stores will replace today's brick-and-mortar shopping experience to provide a more frictionless, tech-driven, and immersive experience.
- Shoppers will receive real-time, personalized messages, alerts, and promotions on their smartphones while shopping in stores.
- Corporate honesty, integrity, and responsibility will become increasingly valued by shoppers and will influence their purchases.

Living in this uncertain time will require an acceptance to change and technological adoption, while still being able to adapt at a whim.

8 Skills and Occupations

This section discusses insights from stakeholder consultations that draw attention to their current and future employment and skill trends. There is an immediate need for training employees in 4IR-related subjects as business competitiveness and the advent of COVID-19 have placed an immense emphasis on understanding and implementing 4IR-related technologies for business continuity and reaching customers more effectively through informed decision making. We can appreciate that the advancement of technology is exponential, and the future becomes hard to forecast. Having transversal 4IR skills which will allow for occupations to be more tempered as the nature of jobs change, will assist in reducing redundancy and job obsolescence.

"60% of jobs in 2030, haven't been invented yet, being ready for 4IR is essential."

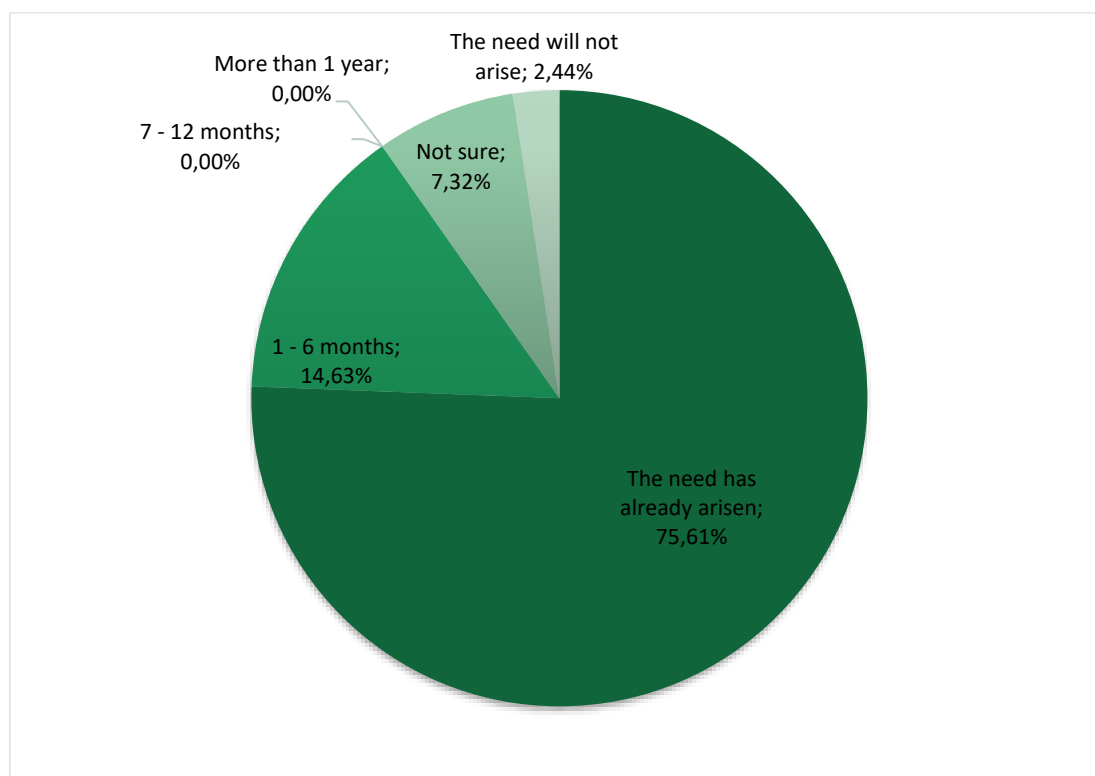
Survey, Academic & 4IR Commissioner, 2021

Consultations with stakeholders also drew attention to prioritising change management. This is an essential skill needed - building flexibility into the workforce to unlearn and relearn new things. Change management also assists with employee adoption of new technology. Training related to change management skills should be incorporated into all training. What COVID-19 has done, is that it has increased our tolerance to change in a way that is positive and allowed us to be open to new ways of working with new digital tools.

"There is a resistance to change and reluctance to change inherent in all of us. Thus, change management and embracing new ways is key."

Survey, Training Provider, 2021.

In **Figure 33** respondents indicated that 76% believe that the need has already arisen for employee training in innovation and digitisation with 15% are expecting the need to arise in the next 1-6 months. 7% are unsure of when the need will arise to be trained in these disciplines.

Figure 33: Expected Timeframe for Employee Training

Source: Stakeholder Survey, 2021

During the consultations, many of the participants mentioned that there was a major emphasis on the future of jobs being very data intensive. Thus, all jobs that have a focus on analysing, visualising and interpreting data would be in demand.

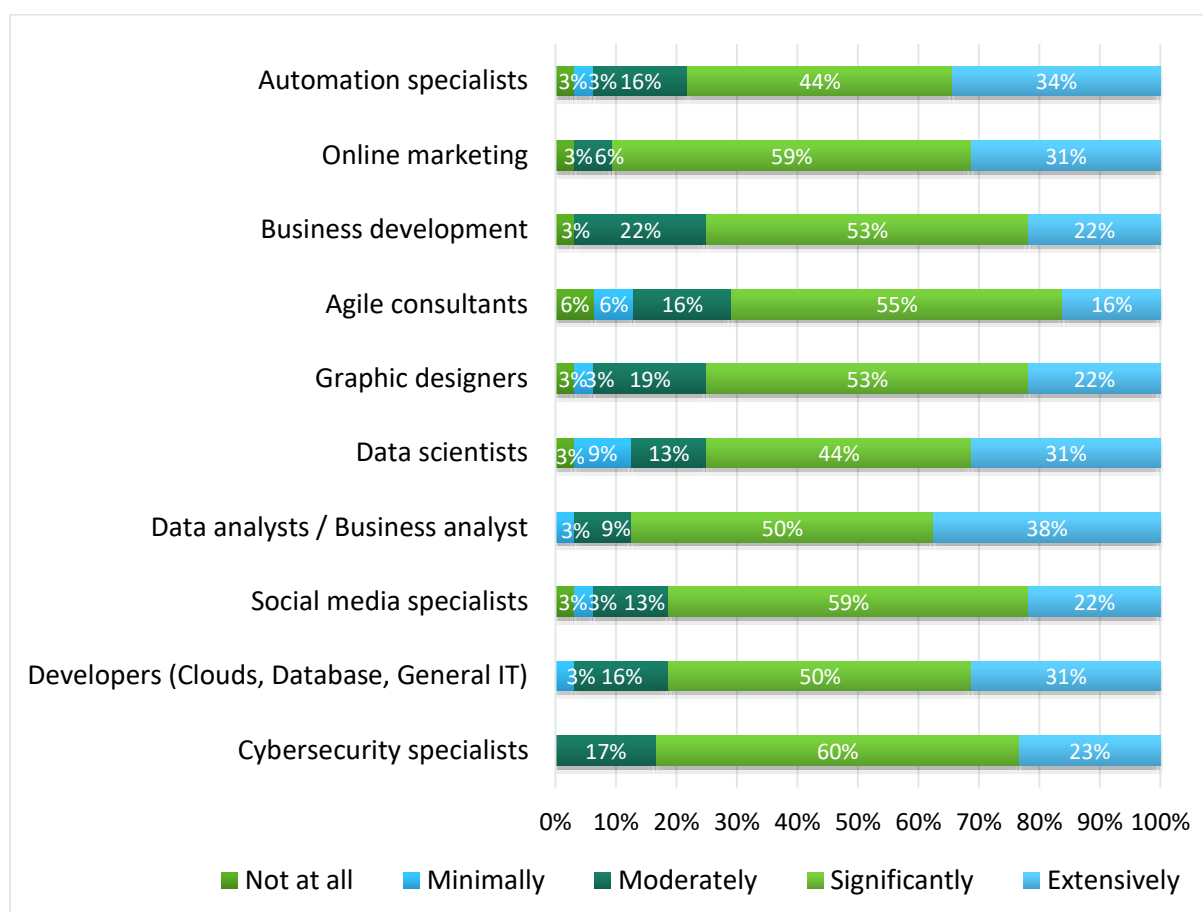
"Having access to talent that can find, analyse and interpret big data are essential for management decisions – all jobs focusing on data will be in demand."

Survey, Employer, 2021.

Figure 34 highlights that over 70% of respondents indicated that all of these occupations will increase significantly in demand. The top 5 occupations that were significantly and extensively increasing were:

- Online Marketing (90.63%)
- Data analysts / business Analyst (87.50%)
- Cybersecurity specialists (83.33%)
- Developers (Clouds, Database, General IT) (81.25%)
- Social media specialists (81.25%)
- Automation specialists (78.13%)

This indicates that there will be a push using social media channels to drive sales while there is a strong demand for professions that are in data analytics, and cyber security.

Figure 34: Extent to Which Occupations Will Increase in Demand

Source: Stakeholder Survey, 2021

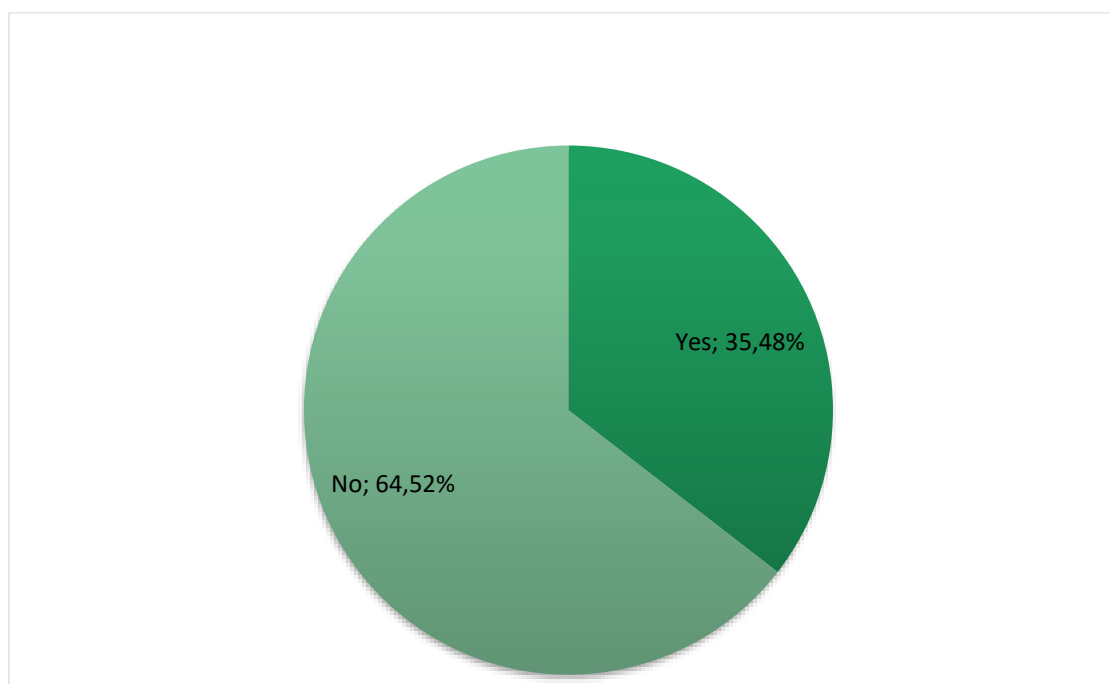
The SETA should also consider the base technological areas at the secondary and tertiary level e.g., basics of cybersecurity, cloud computing and data analysis, before moving into more advanced skill sets. Ensuring that a solid foundation is set should be a key priority. From the consultations it is also evident that skills development as it relates to artificial intelligence and machine learning are future areas of interest that should be explored today, for tomorrow's skills that will be demanded and to pre-empt skills shortages in these areas.

"We need to developing skills in the Artificial intelligence and Machine Learning arenas – and we need to focus on the funding of tertiary education in all the foregoing areas."

Survey, Employer, 2021.

Figure 35 highlights that 65% of respondents indicated that they do not have training programmes centred around digitisation and innovation. This is therefore also an area where the SETA can intervene to bolster 4IR skills and knowledge in the sector.

Figure 35: Percentage of Respondents Offering Training Programmes on Digitisation and Innovation



Source: Stakeholder Survey, 2021

A training provider noted that they had moved to a completely paperless training platform just before COVID-19 and were therefore able to continue as usual during the pandemic when face-to-face interactions halted. From these consultations there was also mention of providing more training programmes centred around computer literacy, basics data and cybersecurity principles and more need for 4IR training.

"During COVID-19 we moved towards a paperless training platform."

Survey, Training Provider, 2021.

8.1 New Jobs in eCommerce and Digitisation

A reskilling imperative as outlined by the World Economic Forum (2018) indicated that by 2022, no less than 54% of all employees will require significant re- and upskilling. Of these, about 35% are expected to require additional training of up to six months, 9% will require reskilling lasting six to 12 months, while 10% will require additional skills training of more than a year.

Brick-and-mortar retailers are altering their operations to cater to online consumers, and omnichannel retailing. This seeks to create a unified, frictionless experience between online and traditional shopping is expanding.

In order to take part in this transformation, many international retailers are considering 10 essential skills needed by employees in order to participate in 4IR, eCommerce and digital business transformation.

The below table by Cleverism (2020), outlines the top 10 skills with description needed to be 4IR ready.

Table 6: The 10 Skills Needed to Thrive in the Fourth Industrial Revolution

Skill	Description
Complex problem solving	<p>A skill that can enable a person to see a link between industries and create unique and creative solutions to various problems.</p> <ul style="list-style-type: none"> • <i>E.g., First, always think about the bigger picture. Secondly, keep it simple</i>
Critical thinking	<p>A skill that involves the undertaking of thinking, these skills combine a set of five skills: creativity, analytics, creativity, open-mind, and problem-solving.</p> <ul style="list-style-type: none"> • <i>E.g., Curiosity and a strong urge to explore and demystify the world are fundamental pillars of critical thinking</i>
Creativity	<p>An idea is just an idea unless the execution happens. Creativity is the ability to shape random thinks, situations, and thought into something.</p> <ul style="list-style-type: none"> • <i>E.g., The ability to perceive the world, and existing solutions, in new ways, is the way of creativity</i>
People management	<p>Leadership and managerial skills are mandatory, for leading diverse and multicultural teams. This requires people skills.</p> <ul style="list-style-type: none"> • <i>E.g., Not just for top management. A nervous customer can cause several problems. However, even a cashier knows how to calm prison down, and talk about the problem out; both sides can benefit</i>
Coordinating with others	<p>A skill of coordination with others refers to effective communication and team collaboration. This skill will be high in demand in any industry.</p> <ul style="list-style-type: none"> • <i>E.g., it's important to respect everyone's needs and social preferences. Being organized and organizing with others can lead to an ability to foresee potential problems and obstacles before they even happen</i>
Emotional intelligence (EQ)	<p>EQ is someone's ability to understand and evaluate others. The most typical qualities that are linked to emotional intelligence are empathy and curiosity. EQ comes with five different components:</p> <ul style="list-style-type: none"> • Self-Awareness • Self-Regulation • Motivation • Empathy • Social Skills <ul style="list-style-type: none"> ◦ <i>E.g., It is essential to interact with people, listen to them, and create a healthy relationship</i>
Judgement and decision making	<p>The skill that is tightly linked with one's ability to condense a vast amount of data, using data analytics and interpret data in a way that will offer the right decision. The idea for this decision is to lead to a solution that will be useful in the digital era.</p> <ul style="list-style-type: none"> • <i>E.g., Think twice before you act or even speak</i>
Service orientation	<p>Service orientation can only be mastered through work with people on solving specific real-life situations.</p> <p><i>E.g., This involves:</i></p> <ul style="list-style-type: none"> • Practice active listening • Empathize with customers • Always use positive language and power words • Improve your technical skills, so you address different problems on different platforms • Always know products and services • To communicate clearly • Analyse and be open for customer feedback

Skill	Description
Negotiation	A negotiation is a discussion aimed at reaching an agreement, and this skill will be in high demand in affected industries of the modern world – it is a skill that helps people settle differences
Cognitive flexibility	<p>This skill is all about the brain's ability to transition from thinking about one concept in a satisfying way or another.</p> <ul style="list-style-type: none"> • <i>E.g., Cognitive flexibility can be acquired through altered everyday routines, new experiences, meeting new people, transferring your learning, and even challenging your morals</i>

Source: (Cleverism, 2020)

The most important of the required skills as the world transitions into the 4th Industrial Revolution, is EQ. As machines take over technical operations, employers will begin to place greater value on soft skills and tasks that cannot be performed by robots.

In addition to the above 4IR skills needed there are new and emerging skills as outlined in the W&RSETA – Hard to Fill Vacancies and Skills Gaps (2020):

- Digital marketing skills;
- Digital customer communication skills;
- Problem-solving skills;
- Financial literacy skills;
- Data analytics skills;
- Ethics & discipline;
- Information Communication Technology (ICT) skills.

8.1.1 Emerging and Declining Occupations in the W&R Sector

Globally, 15% of W&R Sector workers are at risk of unemployment due to the changing nature of jobs (WEF, 2020). A new study by Euler Hermes (2020) found that 56,000 stores, or 10.7% of the discretionary retail footprint, have closed in the U.S. and 670,000 net jobs (9.6% of the total) have been lost since 2008. The report also points to 41% of traditional retailers seeing their profit margins decrease in that timeframe. Those various retail losses have tracked with the expansion of eCommerce, which has grown well ahead of other retail segments at 10.5% per annum. But for every job created in eCommerce, four and a half jobs are lost by traditional retailers (Euler Hermes, 2020).

As outlined by BigCommerce.com (2021), the following are emerging occupations in eCommerce.

Table 7: Emerging Occupations in eCommerce/ Retail

Jobs in eCommerce	Description
Customer service representative	<ul style="list-style-type: none"> • Of all eCommerce job titles, customer service representative is the most fundamental. No eCommerce company can thrive without these employees. • They are the frontline workers who handle orders and answer customer queries. Often, they may also deal with inbound sales over the phone, email marketing, eCommerce website design, and more.
Marketing specialist	<ul style="list-style-type: none"> • Marketing is an essential part of eCommerce. Marketing specialists help businesses track and understand prevailing market trends. • They ensure that new products, promotions, and more get tailored to consumer demands.
SEO content writer	<ul style="list-style-type: none"> • In the online world, the search engine is king. • No eCommerce business can thrive without page traffic.

Jobs in eCommerce	Description
	<ul style="list-style-type: none"> • An SEO content writer is essential to vaulting a site up the search engine results pages. • These workers are responsible for optimising all the written content on eCommerce websites.
Warehouse personnel	<ul style="list-style-type: none"> • Logistics is a critical aspect of eCommerce. • Warehouse personnel are essential to order fulfilment. • They pick the items needed for each order, pack them, and ensure they leave on time. Workers in the warehouse are also vital for inventory management. They update colleagues or systems on stock levels, ensuring firms do not over or undersell.
Administrative assistant	<ul style="list-style-type: none"> • Operating an ecommerce business generates a lot of admin. • That includes handling supplier payments, doing the accounts, and more. • An administrative assistant shoulders the burden of such paperwork and organization.
Retention specialist	<ul style="list-style-type: none"> • A retention specialist works to keep customers loyal to a brand, in whatever way they can. • Maintaining a customer base, after all, is critical to any business.
User experience designer	<ul style="list-style-type: none"> • User experiences are fundamental to ecommerce. They're the interactions between customers and a brand's services – i.e., their website or apps. • A user experience (UX) designer must ensure those services work as well as they can. • A UX designer would have been responsible for tailoring the site to its audience. They will have decided on the placement of the search bar, and the titles for the navigation tabs.
Community builder/ social media specialist	<ul style="list-style-type: none"> • All businesses – in ecommerce and otherwise – want loyal customers. Consumers who keep coming back for more are great for the bottom line. One way to boost loyalty is by building a community around your ecommerce brand. This is something that often leverages the power of social media.
Developer	<ul style="list-style-type: none"> • There are two main types of developers who work for ecommerce businesses. Those are website and software developers. The role of the former is self-explanatory. • The latter are often tasked with building specialist databases or applications.
IT Technician	<ul style="list-style-type: none"> • eCommerce companies have extensive IT infrastructures. Many run various types of software solutions and have lots of hardware in offices and warehouses. • An IT technician is charged with providing the all-important technical support.
Business analyst	<ul style="list-style-type: none"> • Their job is to keep their fingers on the pulse of business operations. A business analyst will analyse the data generated by an ecommerce company. • They will then report back to ecommerce managers, project managers, and others about what is and isn't working.
Graphic designer / Content Creators	<ul style="list-style-type: none"> • Ecommerce is a visual niche. The imagery used on an ecommerce website or in marketing materials plays a major role in influencing customers. Online consumers, after all, can't see products 'in the flesh'. • A graphic designer for an ecommerce business handles that crucial visual communication. They may get charged with designing a new homepage or drafting images for new products.
Supply chain manager	<ul style="list-style-type: none"> • Keeping track of the supply chain is essential for any ecommerce brand to succeed. • A supply chain manager has ultimate responsibility for that process. That means they must stay across many activities and areas.

Jobs in eCommerce	Description
	<ul style="list-style-type: none"> Those include relationships with suppliers, inventory management, deliveries, and reverse logistics.
Digital operations manager	<ul style="list-style-type: none"> A digital operations manager is similar to a project manager. In their case, though, the project encompasses all the firm's digital activities. Think website maintenance, SEO, email marketing, and more. In essence, this ecommerce specialist must keep all digital platforms operational and stable.
Digital marketing manager	<ul style="list-style-type: none"> This type of ecommerce manager focuses on material that's customer-facing. A digital marketing manager is in charge of all online promotion of a brand. They use tools such as Google Analytics and manage staff, including SEO content writers and community builders.
Customer satisfaction manager	<ul style="list-style-type: none"> This individual must keep an overview of all the brand's attempts to improve user experience. They would have responsibility for non-managerial customer service employees. They also play a part in tech decisions impacting those staff. For instance, they might recommend a call forwarding service to connect customers better to support agents.
Financial manager	<ul style="list-style-type: none"> A financial manager has ultimate control over a firm's finances. That means they look after budgets, expenditure, payroll, and more.
Director of ecommerce	<ul style="list-style-type: none"> The director of ecommerce is in charge of all a firm's online shopping operations. The previous managers and all other ecommerce project managers answer to them.

Source: (Big Commerce, 2021)

The World Economic Forum's Report on the Future of Jobs (2020), outlines a succinct profile of South Africa's 4IR and future of new jobs readiness:

Emerging and redundant job roles

Role identified as being in high demand or increasingly redundant within their organization, ordered by frequency

EMERGING

1.	Process Automation Specialists
2.	Data Analysts and Scientists
3.	Social Psychologists
4.	Management and Organisation Analysts
5.	Business Development Professionals
6.	Big Data Specialists
7.	Assembly and Factory Workers
8.	Compliance Officers
9.	Chemists and Chemical Laboratory Scientists
10.	AI and Machine Learning Specialists

REDUNDANT

1.	Accounting, Bookkeeping and Payroll Clerks
2.	Client Information and Customer Service Workers
3.	Data Entry Clerks
4.	Administrative and Executive Secretaries
5.	Vehicle, Window, Laundry and Other Hand Cleaning Workers
6.	Sales Representatives, Wholesale and Manufacturing, Technic...
7.	Insurance Underwriters
8.	Business Services and Administration Managers
9.	Assembly and Factory Workers
10.	Accountants and Auditors

Current skills in focus of existing reskilling/upskilling programmes

Share of companies surveyed identifying this skill as being in focus across their reskilling or upskilling programmes

1.	Analytical thinking and innovation
2.	Complex problem-solving
3.	Technology design and programming
4.	Quality control and safety awareness
5.	Leadership and social influence
6.	Critical thinking and analysis
7.	Reasoning, problem-solving and ideation
8.	Creativity, originality and initiative
9.	Resilience, stress tolerance and flexibility
10.	Active learning and learning strategies

Key Insights

It was evident from the consultations **Figure 34**, that emerging occupations that will increase in demand would be professions that can assist with reaching customers through digital channels and those that handle, analyse and automate data would be the highest in demand.

The top occupation that were significantly and extensively increasing selected were:

- Online Marketing (90.63%)
- Data analysts / business Analyst (87.50%)
- Cybersecurity specialists (83.33%)
- Developers (Clouds, Database, General IT) (81.25%)
- Social media specialists (81.25%)
- Automation specialists (78.13%)
- Sales Representative (WEF - The Future of Jobs (2020))

This indicates that there will be a push using social media channels to drive sales while there is a strong demand for professions that are in data analytics, and cyber security. This also ties into some of the W&RSETA National Hard-To-Fill Vacancies List Occupations (2020) which refers to an occupation in your company that takes longer than 12 months to find a suitably qualified and experienced candidate. Some such occupations:

- Data analyst
- Systems analyst
- IT Specialist
- eCommerce manager
- eCommerce planner
- Customer service manager
- Marketing analyst
- Sales Representative
- E-learning designer

The World Economic Forum Report: The Future of Jobs (2020), indicates that the consumer retail industry outlook will remain stable with a 70% skills stability. Sales and related roles are growing globally in the retail sector, redundant job roles consider those that involve manual data entry or reconciliation as becoming redundant:

- Data entry clerks
- Administration managers
- Accounting, booking keeping and payroll clerks
- Accountants and auditors
- Material recoding and stock keeping clerks

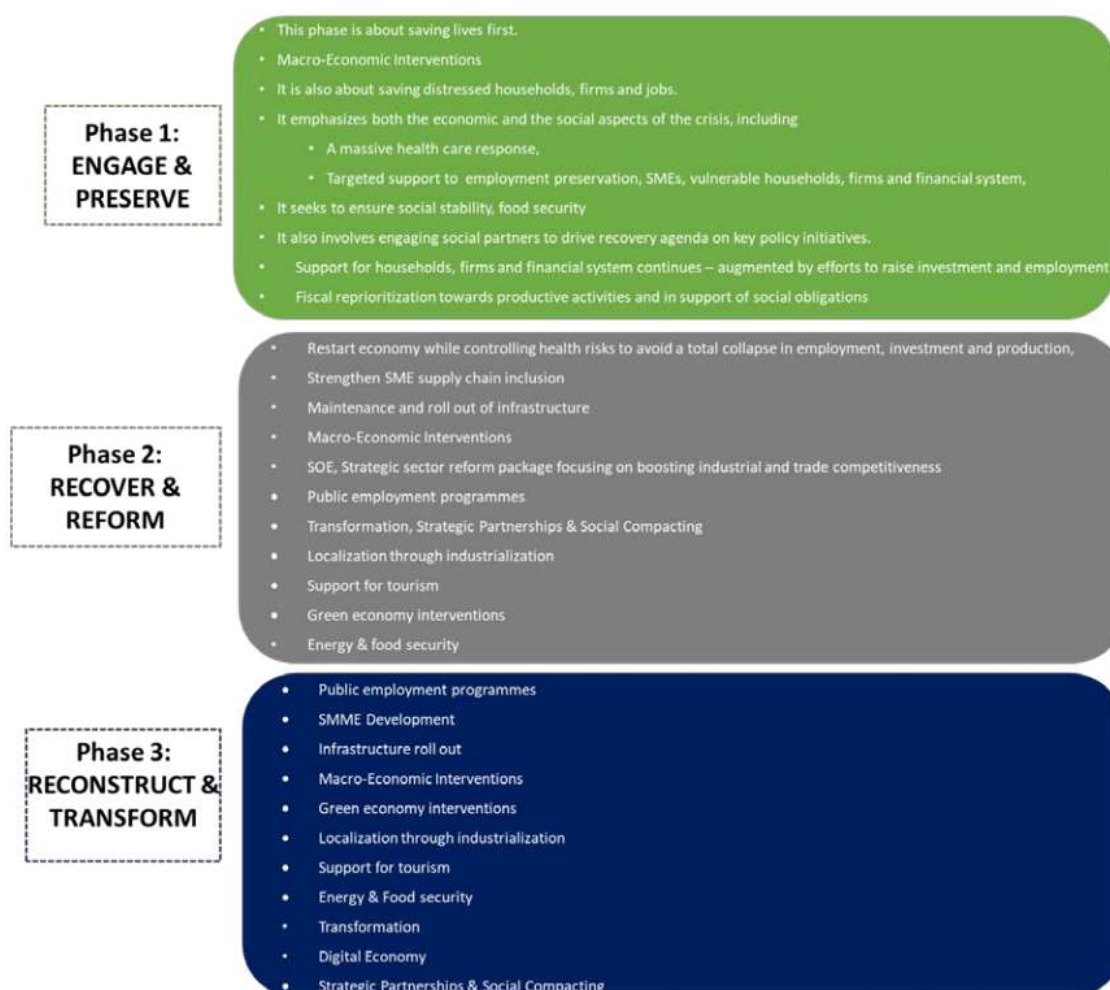
9 The National Reconstruction and Recovery Plan

Globally, national governments have all created one or more stimulus packages or recovery plans to stifle the effects of COVID-19 on impacted economies, sectors, and citizens. These vary from direct stimulus through social payments, through to green energy subsidies and incentives to sector-specific relief.

South Africa is no exception, publishing the Reconstruction and Recovery Plan (RARP) in October 2020 outlining key sector and programme initiatives to revitalise the South African economy (South African Government, 2020).

“The South African Economic Reconstruction and Recovery Plan has three phases: Engage and Preserve - which includes a comprehensive health response to save lives and curb the spread of the pandemic; Recovery and Reform - which includes interventions to restore the economy while controlling the health risks; and lastly, Reconstruct and Transform - which entails building a sustainable, resilient and inclusive economy” (South African Government, 2020).

Figure 36: Economic Reconstruction and Recovery Plan Phases



Source: (South African Government, 2020).

The summary of the RARP can be seen in the figure below:

Figure 37: RARP Principles, Focal Areas & Enablers

- Protection for low income workers, the unemployed and vulnerable groups
- Enhance the capacity of the economy to grow and create decent jobs is enhanced
- Ensuring that local communities, particularly historically marginalized communities, are removed from the vicious cycle of under-development.
- Strengthening of the productive capacity of the economy
- Maintaining the planned levels of investment in public sector infrastructure
- Ensure localized procurement of key inputs, in order to strengthen and deepen backward and forward linkages within the domestic industrial base
- Strengthening the capacity of the state to intervene in the economy and to deliver on social services
- Crafting employment-intensive ways in which a turnaround can be achieved,

To achieve these goals, the Plan prioritizes high impact employment interventions with the following specific areas of focus:

- Infrastructure roll out
- Localization through industrialization
- Energy security
- Food Security
- Support for tourism
- Green economy interventions
- Public Employment Programs
- Macro-economic policy interventions

The following enablers to the success of the plan have been identified:

- Ensuring optimal revenue collection, fiscal sustainability, improved efficiency of spending, elimination of wastage and corruption and improved state capacity to collect revenue
- Increased access to finance: Ensuring expanded access to the R200 billion COVID-19 credit facility
- Establishment of a state bank & the amendment of Regulation 28 of the Pension Funds Act in order to unlock funding for long-term infrastructure projects and high impact capital projects, as well as facilitate direct access to pension funds pool of resources by Development Finance Institutions (DFIs).
- Increased issuing of green infrastructure bonds as a critical step in reducing carbon footprint and in order to secure the funding of infrastructure at concessional cost. Increased capacity for project preparation, to develop projects to bankability
- Regulatory changes to reduce the cost of doing business and facilitate ease of doing business
- Building a state that is equipped to deliver
- A social compact for fair choices and sustainable trade-offs
- Skills development and a population that is equipped for the new normal
- Communications and the digital economy
- Economic Diplomacy and further integration into the African continent

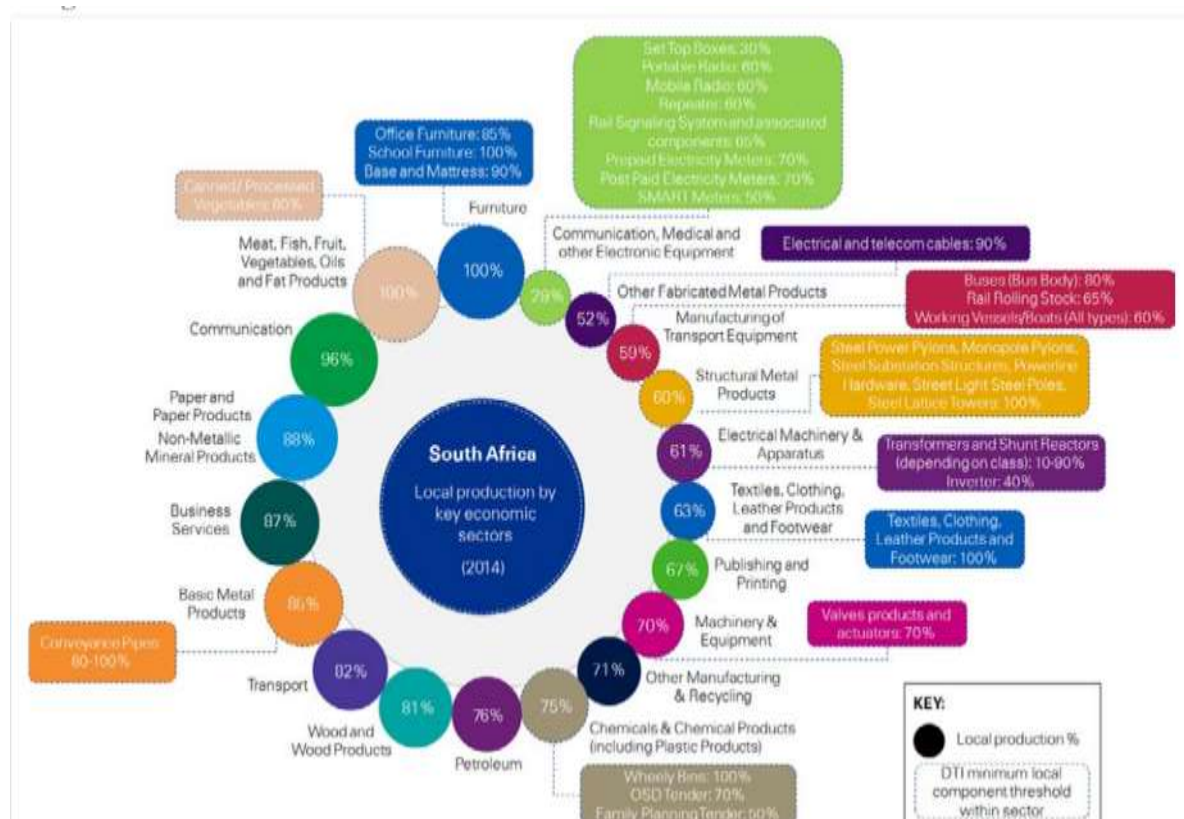


Source: (South African Government, 2020)

In promoting localisation, certain legislated requirements will be in place on procurement and locally sourced materials and products.

The below figure shows the RARP requirements for local production by key economic sectors

Figure 38: Localisation and Procurement Requirements



Source: (South African Government, 2020).

The next section will ascertain which section of the RARP may apply to the W&R Sector.

9.1 The W&R Sector

During the consultations it was noted that respondents made use of the Covid-19 UIF Temporary Relief Scheme programme to aid their workers.

"The hard lockdown affected our workers and the only scheme we made use of during mid-August was the Covid-19 UIF Temporary Relief Scheme Programme."

Survey, Employer, 2021.

The following focal areas are which the SETA and the W&R sector can participate in towards a recovery and precontraction of the economy, as taken from the RARP.

Category	Description and Example
Industrialisation through localisation	<ul style="list-style-type: none"> Overall, the programmes to drive industrialization through localization will seek to achieve the following strategic objectives: <ul style="list-style-type: none"> Reduce the proportion of imported intermediate and finished-goods; Improve the efficiency of local producers; and Develop export competitive sectors that can expand the sales of South African made products on the continent and beyond.

Category	Description and Example
	<ul style="list-style-type: none"> ○ Priority will be placed on key value chains such as in construction; agro-processing; healthcare; basic consumer goods; capital goods including equipment and industrial inputs used in infrastructure projects; and transport rolling stock focusing on automobile and rail assembly component production. ● State procurement will shift decisively to local procurement, while enforcement of local procurement requirements will be strengthened. The weight placed on pricing will be reviewed to enable deeper levels of local procurement. ● Competition policies will be utilised to ensure that the state does not face unreasonable pricing
Gender equality and economic inclusion of women and youth	<ul style="list-style-type: none"> ● The RARP interventions will be geared towards promoting greater participation by black people, women, youth and persons with disability at all economic levels ● 40% set aside for women in public procurement, legal remedies to close the gender pay gap, women's participation in key economic sectors, access to assets such as land, and women's financial inclusion and empowerment. ● Young people, women and persons with disability will be encouraged and supported to form cooperatives in key economic sectors such as retail, agriculture and agro processing, financial services (Cooperative Financial Institutions), manufacturing and infrastructure development. ● In addition, young people, women and persons with disability will be prioritized in accessing funding for initiatives that will drive the recovery and reconstruction effort.
Green economy interventions	<ul style="list-style-type: none"> ● Green industrialization also guarantees the security of energy, food, water and electricity supply ● This will help in creating new green jobs, industries and firms ● Support for small grower farmers through PPPs in forestry, including in state plantations ● Intermediary solutions for aquaculture products, and revitalisation and upgrade of existing government hatcheries and research centres.
Strengthening agriculture and food security	<ul style="list-style-type: none"> ● R50 billion in expanded social grants as well as the distribution of food parcels and vouchers. ● Critical components of agricultural value chains that contribute to declining gross-fixed capital formation include inputs and farm equipment as well as land improvements. ● The suite of measures contained in the Comprehensive Land and Agrarian Strategy will create 317 000 new jobs. The bulk of these jobs will be created by private sector players in the fruits and other high value crops. ● Over R80 billion in gross production value will be created relative to the baseline. The impact of proposed measures will ensure close to 230 000 households are supported thus directly addressing the food security at a household level. ● The following schemes modelled in the Land and Agrarian Strategy will be prioritized given the significant implications they have for food security: <ul style="list-style-type: none"> ○ Industrial Crops: Cotton and Sugar cane ○ White Meat: Poultry and pigs; ○ Red Meat: Cattle, Goat and Sheep; ○ Fibers: Wool/Mohair; ○ Grains: Maize, Wheat and Soybean; ○ Fruits: Citrus, Deciduous Subtropical; and ○ Vegetables: Potato, Tomato, Onion
Macro-economic policy interventions	<ul style="list-style-type: none"> ● Fiscal Policy ● Monetary Policy

Category	Description and Example
Communications and the Digital Economy	<ul style="list-style-type: none"> An Artificial Intelligence Institute with a focus on advanced manufacturing and new materials is important for the building of capacity for a globally competitive manufacturing sector will be established. South African based portals and platforms will also be developed in order to enhance the country's status as major player in the digital economy as opposed to it being a follower.
Skills development	<ul style="list-style-type: none"> The use of technology has taken centre stage in all economic sectors. Working with the SETAs, industry and TVET colleges the production of artisans with the required skills and competencies to drive the delivery and maintenance of infrastructure will be up-scaled. Workplace and industry training will also be leveraged on to support the drive to build and strengthen the required skills base. In this regard, artisanal programmes will also be rolled out, absorbing 20 000 learners a year. The skills strategy will be reoriented to be more demand led and responsive to the changing nature of work as well as to, in the immediate term, focus SETA skills training on addressing the impact of COVID-19. In the immediate term, programmes that bring youth into workplace-based learning in various sectors of the economy will be rolled out. In particular, 100 000 learners will be placed in these programmes in the first year. To support the building of a sustained skills pipeline, it will be a requirement that all infrastructure projects contribute towards the creation of new skilled artisans, drawn mainly from women and young people.
Economic Diplomacy, and further integration into the African Continent	<ul style="list-style-type: none"> This will include deliberate action to ensure the inclusion of South African manufactured products in major African value and supply chains. Priority will also be given to strengthening trade, investment and tourism with other regional blocs, such as the European Union, the Asia Pacific and the Americas.
Support for SMMEs, cooperatives and start-ups	<ul style="list-style-type: none"> Designing more appropriate financing products, such as microfinance, gap housing products and blended financing including for emerging farmers. The support to SMMEs to participate in the localization opportunities
Innovation	<ul style="list-style-type: none"> Additional investment in Aeroswift additive manufacturing (next-generation 3D printer) to enable the country to unlock global value chains; Increasing the uptake of additive manufacturing technologies in South Africa to facilitate local production in niche areas such as manufacturing scarce spares; Medical additive manufacturing will be scaled-up; Increasing broad-based technological support to manufacturing firms, especially SMMEs, through the Technology Stations Programme. During 2019/20, about 2 162 SMMEs received support, of which 1 055 were women-owned; Increased technological capability of local firms to leverage public procurement for increased local production – the Technology Localisation Programme is important in this area; The development of capabilities for the local manufacturing of satellites; and Providing technology support to firms across the manufacturing value chains, including manufacturing indigenous knowledge systems products

The following table outlines key Opportunities and Risks for the W&R Sector as rated as H(igh), M(edium), and L(ow).

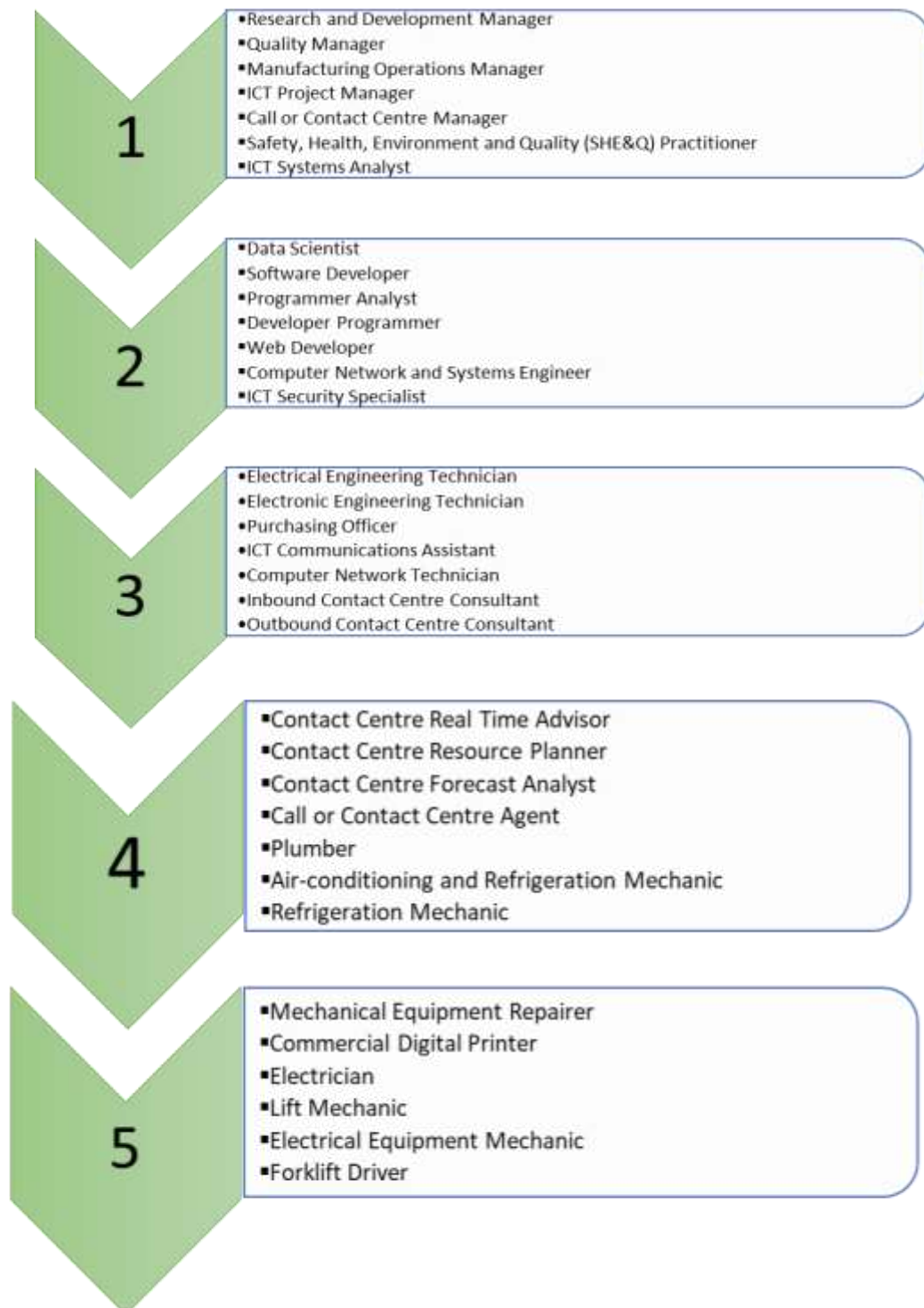
Table 8: Opportunities and Risks for the W&R Sector.

#	Description	Opportunity	Risks
1	Tap into new customer segments (Online and eCommerce)	H	
2	Focus on customer experience	H	
3	SMME development	H	
4	Buy Local and localisation support	H	
5	Remote working	M	
6	Develop basic digital skills	H	
7	Impact of COVID-19 and national lockdown (3 rd wave)		H
8	Lower consumer disposable income and growth in national GDP (slower circular economy)		H
9	Disruption in global supply chains (Protectionism)		H
10	Cybersecurity and Data Breaches		H
11	Lack of technology uptake or technology inertia by workers		M
12	Slow technology training and redundancy due to tardiness in employee training		M
13	Technology adoption with quick technology obsolescence		M
14	Complexity of existing systems and infrastructure		H

W&RSETA has also outlined key Economic and Reconvey Plan Priority Occupations to be targeted as seen in

Figure 39. The ranking is based on the lack of relevant experience, sub-optimal curriculum content, lack of required technical skill and insufficient number of graduates.

Figure 39: Priority Occupations



Source: W&RSETA Survey Tool, 2021

With the above priority occupations in mind, the most appropriate intervention looks at reskilling to preserve jobs, updating or amending qualification, providing access to workplace experience (internship) and increasing access to programmes to increase enrolments.

There is also a need for these new occupations that need to be developed as seen in the below figure.

Figure 40: New Priority Occupations

Source: W&RSETA Survey Tool ,2021

In order to further develop appropriate interventions to close the skills gap there needs to be an upgrading of skills programme; a focus ICT and digital literacy; entrepreneurship development and support; industry specific- training and artisan skill programmes.

10 Key Findings and Recommendations

The table below presents a summary of the key findings and recommendations that have presented themselves during this Research Project.

Table 9: Key Findings and Recommendations

Focus Area		Key Findings	Recommendations
1	Partnerships	<ul style="list-style-type: none"> Various stakeholders have indicated that it would be beneficial to attend conferences and workshops in order to more fully understand the changes being brought about by 4IR and how best to manage these changes Partnerships are key to unlocking the potential of 4IR, skills transfer and know-how. 	<ul style="list-style-type: none"> We acknowledge that the W&RSETA currently arranges stakeholder forums where sector specific updates are provided, and knowledge is shared amongst stakeholders It is suggested that the SETA continues with this good practice It is noted that the SETA cannot effect change within the retail and wholesale sectors by itself, but it can act as the catalyst for stakeholders to connect with each other, learn from each other and share experiences as to how they are managing the impact of the 4IR It is also important for the W&RSETA to partner with other SETAs and formulate a coherent approach in dealing with 4IR related skills as there may be a significant overlap in challenges and opportunities being faced across sectors. This unified approach is likely to be driven by DHET In addition to the above, there may be scope for the SETA to create global partnerships where local businesses can learn from best practice international examples We further note that the above would further the principle encapsulated in the NSDP, being "Increasing collaboration between the skills system, government and industry"
2	Training at School Level	<ul style="list-style-type: none"> Stakeholders have indicated that it is best to start 4IR training at school level, as opposed to waiting until an individual enters the job market To achieve this, school curricula should be designed with what the market may require in the next 3 to 5 to 10 years 	<ul style="list-style-type: none"> We recommend that the W&RSETA shares its findings with the Department of Basic Education to assist in structuring school curricula to account for job market requirements, insofar as this relates to 4IR requirements.
3	Change Management & EQ Skills	<ul style="list-style-type: none"> Numerous stakeholders have cited the need for change management practices and EQ building to take place in order to manage the change being brought in by 4IR The key driver behind this suggestion from stakeholders appears to be that employees will need to buy-in to the 	<ul style="list-style-type: none"> It is advised that in addition to equipping employees with technical skills required to manage 4IR technologies, focus is also given to training employees on change management techniques In the conferences and workshops mentioned above in focus area 1,

Focus Area		Key Findings	Recommendations
		<p>concept of 4IR technologies in order to find a space for them to still be productively employed. This will require the acquisition of new skills and the mind-set of working with new technologies as opposed to resisting the change.</p>	<p>change management should also be explored.</p> <ul style="list-style-type: none"> EQ is a highly desired skill needed for 4IR. It is advisable that specific attention be given in training employees on how to better understand their colleagues and customer needs through training.
5	More certainty surrounding the impact of 4IR due to COVID-19	<ul style="list-style-type: none"> Stakeholders consulted were of positive views on the impact that 4IR is likely to have on employment This acceptance to technological use and change was accelerated by the impact on COVID-19 and the advent of social distancing, working from home and using new technologies in reaching customers. There is less uncertainty surrounding the impact that 4IR will have on economic growth, with many stakeholders indicating that if businesses can utilise 4IR technologies, this will provide them with the opportunity to grow 	<ul style="list-style-type: none"> There is a need to educate stakeholders on the employment possibilities that new technologies make available The W&RSETA should consider undertaking roadshows to schools to educate learners regarding new career paths within the retail and wholesale space
5	Impact of negative external economic factors	<ul style="list-style-type: none"> South Africa is experiencing a general trend of reduced economic activity. This places all sectors at risk of facing a period of reduced expenditure. The retail and wholesale sectors have already experienced a period of reduced activity and will need to protect themselves going forward 4IR is not likely to decrease jobs but rather makes it possible for more orders and possibilities to be in effect. It stands to reason that this benefit will be fully realised in a growing economy where demand for goods increases. 	<ul style="list-style-type: none"> The use of 4IR technologies provides opportunities for growth through increasing sales by reaching previously inaccessible markets (through online shopping and drone delivery, for example) and also to reduce costs and wastage through more efficient practices Reduced costs do not always need to go hand in hand with a reduced payroll 4IR provides an opportunity to improve efficiency through, for example, the use of predictive analytics to better predict what stock will be required and when. This is likely to reduce wastage and therefore costs Promote use of technologies that increase efficiency and reduce costs, e.g. predictive analytics, in order to help protect employers in a difficult economic climate
6	Inadequacy of training programmes	<ul style="list-style-type: none"> Current training programmes prove inadequate as they have limited focus on responding to 4IR In addition, programmes tend to take too long to develop, whilst change is rapid Customer service skills and other soft skills are a growing demand of 4IR, yet lack consistent and up to date articulation in training programmes 	<ul style="list-style-type: none"> Improve the time it takes to update or develop programmes Improve the consultative processes for updating or developing courses by

Focus Area		Key Findings	Recommendations
			<p>accelerating the process to include interested parties</p> <ul style="list-style-type: none"> • Introduce and/or emphasise unit standards on soft skills. This is expected to improve learners' employability • Whilst programmes are relooked at to include more emphasis on soft skills, short programmes can fill this void
7	Restrictive labour market	<ul style="list-style-type: none"> • Labour unions exert collective power over labour markets. Employers have 4IR capabilities but are not implementing them due to restrictive labour union invent • In order for south African to remain globally and locally competitive, 4IR becomes and inevitability. • Given south Africa socio-economic dilemma a balancing act is needed where by 4IR can play a central role through upskilling and reskilling for the new future economy and for jobs that are yet to be created through transversal skills 	<ul style="list-style-type: none"> • The SETA can assist with highlighting 4IR potential to create new jobs, while preserving national competitiveness through a balanced approach. • The SETA and employer bodies need to have a roundtable discussion as to see how 4IR can be accelerated and driven faster so that an inevitable global digital divide does not occur.
8	eLearning Policy Rigidity	<ul style="list-style-type: none"> • It was cited that ePolicy rigidity has resulted in a slower uptake of eLearning due to strict requirements 	<ul style="list-style-type: none"> • The SETA should streamline digitisation processes in a way that reduces physical paper requirements and moves towards a system of full eLearning

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