An Australian aid initiative implemented by
Global Trade Professionals Alliance on behalf of
the Australian Government

This research was supported by the following organisations:
Key Highlights from large business respondents

• A high percentage of large businesses have either offshore branches, offshore manufacturing operations or offshore services operations.

• Only a very small number of large businesses have a woman as the head of their business operations which is similar to the findings from the SME survey. A majority (two thirds) of large businesses have fewer than 50% representation of women at the executive level. Almost a quarter have no women executives at all.

• Almost a third of the responding large businesses estimate that they sell goods and services to more than other 10 large businesses as inputs into their global supply chains, while almost another third don’t know to how many they sell to.

• A third of responding large businesses estimate that they receive goods and services as inputs into their global supply chain from more than 10 SMEs, while almost another third does not know how many goods and services from SMEs they receive as inputs. However, this would be dependent on who completed the survey within the business, and they may not have complete oversight of the procurement process. Although these findings still support the concept that large businesses have little transparency into their supply chains, and often have little knowledge of the SMEs that are critical providers of goods and services within their supply chains.

• Several issues control the extent to which large businesses source from SMEs. Key attributes of supplier performance include the ability of SMEs to meet quality requirements, conform to due diligence risk requirements when sourcing from international SME suppliers from other markets, financial health, ability to meet cost and price targets and technological capability.

• Other sourcing considerations include concerns over business ethics and legal considerations, available capacity, and delivery times/costs (frequency, lead times).

• A number of responding businesses report that their risk and due diligence requirements for SME sourcing have increased as a result of COVID-19.

• A quarter of large businesses experienced delivery delays/failures followed by reduced customer demand and production facility closures because of COVID-19.

• Over a third of large businesses are planning to expand their global supply chains while a third have no plans to change.
Policy recommendations

In conclusion we put forward four critical policy recommendations from the data collected in this survey that APEC members could address going forward into 2021 to support large business engagement in global supply chains.

1) **Create incentives to gather more data on large business/SME linkages.** The data revealed that large businesses and SMEs are closely connected, however, a considerable number of the large businesses responding to the survey do not know the extent to which they sell or source from other large businesses or SMEs. This is also connected with the fact that, of the respondent large businesses, only 7% have full visibility of their global supply chains, with only around a third having visibility of more than 50%. Innovative policies and incentives are required for large businesses to improve the visibility of their supply chains and linkages with other large businesses and SMEs across different sectors and regions. Without more detailed and accurate data, policies and their impact will always be limited in scope and effectiveness.

2) **Seize the opportunity to turn change in global supply chains into value.** The response of large businesses regarding their offshore manufacturing or services operations are largely similar – except, naturally, for less expected localisation in services operations due to the nature of the sector – with most businesses either not changing their operations or being unsure about making any changes as a result of the COVID-19 pandemic. Governments must seize the opportunity to ensure that future changes, whether in diversification of supply/input sources or localisation, are driven largely by the creation of value in global supply chains. While potential changes in global supply chains may be naturally driven to reduce costs and risks, this can impact the overall creation of value, which is the main source of economic growth and innovation in these complex ecosystems. Governments should design and implement policies to incentivise future change and enhance certainty in the direction of increasing value in global supply chains.

3) **Harness large businesses’ appetite to continue growing and innovating.** Market access is one of the top incentives for large businesses to participate in global supply chains. This points towards the direction of continued liberalisation of trade and deepening economic integration. Large businesses are also forward-looking. They value investment in research and development (R&D) and knowledge-based assets (KBC), and investment in training and skills, alongside exports, as the top areas in which to receive incentives to participate in global supply chains. They also value investment in high-tech/automation and collaboration between firms and universities. Likewise, they consider sustainable global supply chains as a valuable area for future skills development, followed by investment in digital trade/E-Commerce and big data, and the impact of trade policy on global supply chains for business. Given the weight of large businesses in global supply chains, driving substantial change in any direction at a global scale will necessarily require that large businesses are on board. Their enthusiasm for growth, innovation, digitization and sustainability should be harnessed through new public policies that could benefit the overall economy and SMEs. Access to leading technical experts; on-site intensive learning; and networking with industry, government and peers, should be considered valuable channels to drive new policies.

4) **Use of harmonised global standards to drive policies in global supply chains.** Given that a large number of respondent large businesses use recognised industry, private, or international certifications or standards in relation to supply chain management, these can be a powerful vehicle to embed change in global supply chains and drive a large set of policies. They can be beneficial in building integrity and sustainability in those supply chains to increasing visibility, traceability, inclusion and trust between large businesses and SMEs. However, harmonisation of these standards is also crucial to enhance their impact and facilitate the participation of SMEs.
About the participants

A total of 188¹ large businesses responded to the survey, of which 52% are located in Japan, 12% are located in Australia, 7% are located in the United States, and 4% in Indonesia. The rest are distributed across different economies and regions.

Most large business respondents reported employing between 2,500 to 20,000 employees (41%) and almost a third (29%) have between less than 2,500 employees.

More than a third (33%) of large businesses have revenues of between $250M to less than a $1B, almost a third (30%) from $1B to less than $10B, and almost another third (29%) from $10B to more than $50B.
A significantly high percentage (85%) of large businesses have overseas branches, with 67% having offshore manufacturing operations, and 62% having offshore services operations. The global presence of these business activities is likely to shift as a result of the post-COVID economic outcomes, and many companies will be looking to re-shore more of their global business operations to be closer to customers, given the disruptions experienced during the pandemic.\textsuperscript{4}
Almost half (52%) of offshore services operations of respondent large businesses are located in the United States (26%), China (11%), and Australia (5%), Singapore (5%) and Thailand (5%). However, the results will reflect upon the responses by large business from each APEC market. The other half is distributed across different regions and economies. This distribution does reflect the importance of global trade with large businesses to APEC members.

Women leadership either at a management level or ownership level in large global respondent businesses is still lagging far behind male management or ownership. Male business ownership dominates (89%) large business ownership compared to 11% female ownership.
This is disappointing, as the role of women in global business operations has been identified as a critical objective for many organisations. The survey results suggest that perhaps not enough is being done to promote women into leadership roles as well as to support women embracing opportunities for entrepreneurship.

Given the important role of women in the global economy, there is work to improve the circumstances that also look at women in leadership roles in large businesses, with almost two thirds of large businesses (62%) having fewer than half of women at executive level management roles, and almost a quarter (24%) with no female executives at all.

Engagement and workshops between current women leaders in the community with universities, industry association events and other forums is one way to improve the motivation and urgency for this to take place. Additional recommendations have been outlined in the SME and Industry & Government reports.

Is the head of your business a woman?

- Yes: 11%
- No: 89%
Participants in the large business survey were invited to select the types activities that their business operate within. Many large organisations operate in a number of sectors. The top business operations reported that they are engaged in include the services sector (44%) and a third (33%) in the manufacturing sector, 12% in primary production, extracting and mining, 7% in manufacture-related services, 1% in activities of extraterritorial organisations and bodies, and 3% in other sectors not listed. 

Within these options, the question of what most accurately describes their main business operations: 62% reported manufacturing and 25% providing services.

**Main operations of large businesses**
International business activity and global supply chains have evolved over time to include a range of different business activities beyond simply importing and exporting. Participants were invited to select the top 3 international business activities that most accurately described their international business operations.

It is not surprising that large businesses are engaged in a combination of exporting goods overseas (30%) and importing goods from overseas (20%). 10% were engaged in primary production of, extracting and mining activity, and manufacturing products or parts of products overseas through licensing agreements (8%).

The survey responses reflect the presence of globalised supply chains, where the components that make up a final product may travel across many regional borders before arriving at their final distribution point in a market anywhere in the world.

These data emphasise the importance of global trade facilitation as a foundation for economic growth. The diminishing of trade barriers can help escalate this growth even further.
As large businesses are often positioned within complex global supply chains, it is important to understand how businesses are positioned within those supply chains. Most of the respondents (39%) indicate they sell primary goods and primary services into global supply chains rather than directly to end consumers.

Almost a third (30%) provide goods or services into global supply chains but they are not directly selling to the end consumer, 19% of respondents activity is to create and add value to existing goods or services to then reach end consumers.

What this means is that large businesses are most often engaging in business to business supply chain activities, and not as much in direct consumer sales.

### Large businesses’ position in global supply chains

- 39% provide primary goods and primary services into global supply chains to then reach end consumers
- 30% provide goods or services into global supply chains to then reach end consumers
- 19% add value to existing goods or services to then reach end consumers
- 12% don’t know
Large business resilience during the COVID-19 response

The following section highlights the findings on large business resilience during the COVID-19 response.

Almost a third (30%) of large businesses estimate that they sell goods and services to more than 10 large businesses as inputs into their global supply chains. While a third of respondents (30%) don’t know the degree to how many business they sell goods and service too.

**Other large businesses to which good and services are sold as supply chain inputs**

The main three markets from which respondent large businesses purchase the most goods and services (by value) from other large businesses as inputs to their global supply are China (15%) and equally the United States of America and Australia (10%). Most of the markets (65%) are distributed across other economies and regions. However, this is reflective of the markets in which businesses responded to the survey and further research going forward may provide more detailed information.
More than a third (37%) of large businesses estimate that they sell goods and services to more than 10 SMEs as inputs into their global supply chains, while more than a quarter (27%) don’t know and 11% don’t sell to SMEs.
Participants in the survey were invited to select up to 3 markets from which the business purchases most goods and services (by value) from SMEs as inputs into their global supply chains.

The main three markets from which respondent large businesses purchase the most goods and services (by value) from SMEs as inputs to the global supply chain are located in China (19%), the United States of America (17%) and Japan (14%), making for half of the responses.

The other half are distributed across other markets and regions.

<table>
<thead>
<tr>
<th>Response (%)</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Other</td>
</tr>
<tr>
<td>19%</td>
<td>China</td>
</tr>
<tr>
<td>17%</td>
<td>United States of America</td>
</tr>
<tr>
<td>14%</td>
<td>Japan</td>
</tr>
</tbody>
</table>

Around a third (34%) of large businesses estimate that they receive goods and services from more than 10 other large businesses as inputs into their global supply chains, while almost another third (30%) don’t know, and 12% don’t receive goods and services from other large businesses. The data suggests that a lack of visibility exists in many global supply chains beyond tier 1 customers and suppliers. This lack of visibility makes it all the more difficult to understand how events in other parts of the world can disrupt business operations. To the extent that governments can support industry and government development to provide greater transparency across global supply chains, particularly from a trade facilitation and chain of custody perspective.
This will also help these businesses operate and recover more easily from major geopolitical and weather-related events.19

More than a third (38%) of large businesses estimate that they receive goods and services as inputs into their global supply chain from more than 10 SMEs, while more than a quarter (26%) don’t know, and 12% receive goods and services from 1 to less than 3 SMEs. 10% don’t receive goods and services as inputs into their global supply chain from SMEs.

The main markets (by revenue) from which respondent large businesses source goods and services under preferential tariffs agreements are China (15%), followed equally (10%) by the United States of America and Australia. Most of the markets (65%) are distributed across other economies and regions.

Main markets (by revenue) from which the business sources goods and services under preferential tariffs agreements. (Top 3) (%)
Most of the large business respondents (89%) use recognised industry, private, or international certifications or standards in relation to supply chain management. These standards are required to ensure quality management of products and services across supply chains, establish global standards to enable improved cost management, and comply with increasing levels of government regulations for importing into different markets.

A more recent category of risks for those operating within global supply chains has emerged in recent years: namely, risks associated with ensuring integrity standards in supply chains. The GTPA has done further studies on this issue, particularly around chain of custody transparency.

Integrity is the capability of businesses to ensure sustainability, ethical behaviour, security and inclusion throughout their entire operations across global supply chains.

Large businesses that rely on a social license to operate, which is the case for the majority of businesses around the globe – and especially for renowned MNCs – can no longer ignore the pressures of a socially engaged world.

As consumers have become more socially conscious, so too have investors who are increasingly seeking closer scrutiny of the integrity of global supply chains both to protect their investments as well as to use their investor influence to improve integrity-associated outcomes.

Respondents in the survey were invited to list any recognised industry, private or international certifications or standards in relation to supply chain management utilized by their business [e.g. ISO 9001:2015; ISO 34101-3:2019; ISO 14001:2015; ASCM-SCOR Enterprise Certification; Qualsys EQMS; Starbucks Ethical Sourcing: Coffee; McDonald’s Sustainable Sourcing; Nestlé Commitment to Child Labour in Agriculture; FairTrade Certification].
Overwhelmingly, ISO/IEC standards are by far the most adopted standards, with ISO/IEC 9001:2015 the most common.

ISO 9001:2015 specifies requirements for a quality management system when an organization:

a) needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and

b) aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of ISO 9001:2015 are generic and are intended to be applicable to any organisation, regardless of its type or size, or the products and services it provides.

A common barrier for SMEs entering global supply chains can be some of the risk and due diligence requirements that large business require. As we look to better integrate SMEs into global supply chains and widen the opportunity for large business to diversity their suppliers it is important to understand the due diligence considerations large businesses rank as important when researching prospective international SME suppliers from other markets.

Respondents in this survey indicated that 19% of large businesses rated quality control as the main due diligence consideration when researching prospective international SME suppliers from other markets. 18% consider financials, 14% cost targets and price, and 9% technological capability. The remaining due diligence considerations include business ethics and legal considerations (7%), available capacity and delivery times/costs - frequency, lead times - (6%).
As one respondent quoted in the survey:

“As mentioned the majority of our procurement is through Australian distributors that have global supply chains. Feedback from distributors on the main impacts they faced were around sea and air freight capacity and in-market COVID-19 labour shortages. Most chronic shortages presented earlier on in the pandemic due to panic buying of COVID-19 safety materials - which became unavailable through our Australian distributors - moving us towards buying from overseas. Albeit the majority of our core distributors have not experienced major impacts - at least not yet. In terms of direct overseas procurement experience sea and air freight capacity / customs clearance were issues.”

Main due diligence considerations when researching prospective international SME suppliers from other markets

40% of respondents indicated that their risk and due diligence measures for SME sourcing changed as a result of COVID-19. A quarter (25%) indicated no change, and another quarter didn’t know whether or not there if there had been any changes (24%).
Understanding the impact on global supply chains and business resilience over the last year as a result of the COVID-19 pandemic is important in terms of addressing short-term policies to support business, and the medium and long-term policies to assist businesses to recover and thereby support APEC members’ economic recovery.

The survey also asked large businesses what challenges they had experienced as a result of the COVID-19 pandemic when sourcing goods or services from international SME suppliers. A quarter (25%) of respondent large businesses mentioned that delivery delays/failure were one of the main disruptions when sourcing goods and services from SMEs as a result of the COVID-19 pandemic. This was followed by reduced customer demand (12%) and production facility closures (10%).
Due to the disruption of global supply chains, it was assumed that some businesses may seek to localise their production, which entails creating closer bonds to their communities. But business will also seek to diversify their suppliers, which also means more opportunities for SMEs in developing economies and least developed markets to engage in global supply chains. The mantra of “Buy where you sell, sell where you buy” may lead to more opportunities for SMEs in such economies to expand their customer base.

Currently 40% of large business respondents are planning to expand their global supply chains, while a third (34%) have no plans to expand. 20% are unsure and only 6% are planning to shorten their global supply chains.
Almost a third (32%) of respondent large businesses are not planning changes in their offshore manufacturing operations as a result of the COVID-19 pandemic, while almost a quarter (22%) are planning to diversify sources of supply, 9% are planning to localise offshore manufacturing operations, and 5% are planning to do both. Almost a quarter (23%) are not sure they will make any changes.
Participants were asked to indicate what factors are preventing them from diversifying manufacturing sources of supply. Since the response rate was too low to be statistically significant, this section will explore the general trends shown in the responses only.

For almost a third of respondent large businesses, the cost involved is the main factor preventing them from diversifying sources of supply, followed by logistical challenges and equally by regulatory or “behind border” barriers and loss of price premium for current market.

The largest respondents, from Australia, indicated that almost a third of respondent large businesses are planning to reduce offshore manufacturing operations from Australia.

Almost a third of respondent large businesses are planning to reduce offshore manufacturing operations within two years, followed by 20% that is planning to do it immediately or are not sure.

Going forward, gathering further data on business plans to diversify supply chains or relocate manufacturing would be useful as many businesses are in survival mode in 2020 and the years ahead could indicate alternative trends and should be watched closely.

In regards to the offshore services operations of large businesses and planned changes, the response rate to this question was statistically higher and more than a third of respondent large businesses are not planning changes in their offshore services operations as a result of the COVID-19 pandemic, while almost a quarter are not sure of making any changes.

Planning to localise offshore services operations (if any)
or diversify sources of supply of services (%)
For more than a third of respondent large businesses, the cost involved is the primary factor preventing them from diversifying sources of input services, followed by logistical challenges and regulatory or ‘behind border’ barriers. This suggests that some form of government incentives can play a role to encourage increased localization of domestic supply. This has proven to be an important component of diversification of supply and is likely to continue to play an important role. Tier 2 suppliers are often an important opportunity for smaller SMEs to play a role.29

The largest respondents, from Australia, more than a quarter of respondent large businesses is planning to reduce offshore services operations back to Australia. However, half of respondent large businesses that are planning to reduce offshore manufacturing operations are not sure when to do it.

Going forward, gathering further data on business plans to diversify supply chains or relocate manufacturing would be useful as many businesses are in survival mode in 2020 and the years ahead could indicate alternative trends and should be watched closely.

Almost a third (30%) of respondent large business have visibility into more than 50% of their global supply chain, followed equally by 19% that have less than 50% of visibility and 19% don’t know. Only 7% have full visibility of their global supply chain.

![Large business global supply chain visibility (%)](chart)

- 0% (no visibility of international aspects of supply chain)
- 10% (full visibility)
- 100% (full visibility)
- 50% (visibility of about half of the business’ global supply chain)
- Don’t know
- Less than 50%
- More than 50%
- No applicable
Several of the large business respondents commented that:

“If referring to global visibility back to raw materials of all inputs - this represents a near impossible challenge. This would most likely require an international standard on ‘supply chain mapping’ of raw inputs consumed across global suppliers (manufacturers) - preferably ‘cloud based’ and easily integrated through a business intelligence platform. Methods we use to get visibility over our suppliers’ material ‘supply chain’ risks are ‘Business Continuity Plans’. However, these are more risk controls that describe how our suppliers plan to manage their risks rather than full visibility over their ‘supply chain’ back to raw inputs.”

“Digital enablement and integration of technology platforms of supply chain partners.”

“Global Supply Chain Basic Knowledge.”

“International Trading Knowledge.”

“Digital Infrastructure.”

“Global ERP software, standard reporting practice and improved international communication.”

Most (58%) of respondent large businesses do not manufacture essential goods or provide essential services in combatting the COVID-19 pandemic, while 42% do.

It would be worth evaluating how businesses that pivoted in 2020 continue to change or re-adapt in 2021, and what impact this has on those altered business activities and market demand.

**Does your business manufacture any essential goods or provide essential services in combatting the COVID-19 pandemic? (%)**

- No: 58%
- Yes: 42%
The main changes for respondent large businesses as a result of the COVID-19 pandemic have been: modifying service delivery and increasing communication with international clients (11%), followed by focusing on product innovation and delaying product launches (10%), and by halting/delaying production (8%).

### Change as a result of the COVID-19 pandemic (%)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>Modified service delivery</td>
</tr>
<tr>
<td>11%</td>
<td>Increased communication with international clients and suppliers</td>
</tr>
<tr>
<td>10%</td>
<td>Focused on product innovation</td>
</tr>
<tr>
<td>10%</td>
<td>Delayed product launches</td>
</tr>
<tr>
<td>8%</td>
<td>Halted/delayed production</td>
</tr>
<tr>
<td>7%</td>
<td>Shifted services to support essential services</td>
</tr>
<tr>
<td>7%</td>
<td>No change</td>
</tr>
<tr>
<td>7%</td>
<td>Expanded to eCommerce</td>
</tr>
<tr>
<td>7%</td>
<td>Diversified markets</td>
</tr>
<tr>
<td>6%</td>
<td>Shifted production to manufacture essential “personal protective equipment” (PPE)</td>
</tr>
<tr>
<td>3%</td>
<td>Reduced staff</td>
</tr>
<tr>
<td>3%</td>
<td>Other</td>
</tr>
<tr>
<td>3%</td>
<td>Increased staff</td>
</tr>
<tr>
<td>3%</td>
<td>Automated production</td>
</tr>
<tr>
<td>1%</td>
<td>Refocused business from international to domestic</td>
</tr>
<tr>
<td>1%</td>
<td>Push inventory closer to the end user to reduce possible delays</td>
</tr>
<tr>
<td>1%</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1%</td>
<td>Consolidated markets</td>
</tr>
</tbody>
</table>

Response (%)
Facilitating trade and the role of government

There will be a natural need to redesign global supply chains as a result of technological change and innovation in production and manufacturing techniques, and in consumer demand for goods and services. This would occur regardless of current circumstances.

In the long term, technological change and innovation will likely have a bigger impact on the design of supply chains than political trade frictions.

We can’t, however, discount the political frictions. We are in a world where there seems to be less common ground than ever between the largest trading economies, and the trend is seemingly toward greater divergence, so the resulting impact on supply chains could be very serious.

It seems likely that we are on the cusp of a new era of trade. Again, this is as much as a result of technological change and innovation as from the geopolitical and global health challenges currently being experienced.

There are also other factors at play that can’t be discounted, such as greater environmental awareness of the impacts of raw material mining, processing and transportation; advances in areas like 3D printing/additive manufacturing which reduces demand for traditional components; and, more broadly, the decreasing need to produce and transport physical items thanks to increased digital consumption of goods and services.

It also seems likely that trade blocs, such as the African Continental Free Trade Agreement and the recently signed Regional Comprehensive Economic Partnership will emerge which could have a greater shorter-term impact on supply chains just as technological evolution occurs over the longer term.

The impact on global supply chains will evolve. But a bigger part of it is likely a natural consequence of economic factors, for example higher labour costs forcing producers to move to markets with lower labour costs.

Whether this is an opportunity, or a threat probably comes down to how both organisations and government respond to these trends, rather than a consequence of the trends themselves.

There can be a natural inertia on the part of many businesses in response to change – even if that change can be healthy. Recent developments may force businesses to make changes that will ultimately be beneficial to their organisation, such as diversifying production locations or diversifying their supplier base. Government must play a role in facilitating trade and supporting business.

The following section highlights the findings on the role of government and other industry and support agencies moving forward out of this current crisis into other new emerging factors that will shift the paradigm.

To understand the requirements of business, participants were invited to indicate the top three areas in which incentives to participate in global supply chains would be of most value.

Respondent large businesses, equally rated exporting; investing in research and development (R&D) and knowledge-based assets (KBC); and investing in employment, training and skills (15% each) as the top areas to incentivise to encourage to participation in global supply chains.

This was followed by investing in high-tech/automation (12%) and collaboration between firms and universities (11%).
Of the total of respondent large businesses, almost a quarter (21%) mentioned market access as a top incentive to participate in global supply chains, followed by tax deduction (20%) and grants (16%).
Types of incentives for large businesses to participate in global supply chains (%)

<table>
<thead>
<tr>
<th>What incentives</th>
<th>Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market access</td>
<td>21%</td>
</tr>
<tr>
<td>Tax deduction</td>
<td>20%</td>
</tr>
<tr>
<td>Grants</td>
<td>16%</td>
</tr>
<tr>
<td>Tax credit</td>
<td>15%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>10%</td>
</tr>
<tr>
<td>Business loans</td>
<td>9%</td>
</tr>
<tr>
<td>Training support</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

Ranking support mechanisms of most importance to business

Large Business rank government support to investment in employment, training and skills as the number one incentive to participate in global supply chains, followed by investment in research and development and knowledge based-assets and export support.

<table>
<thead>
<tr>
<th>Government support</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest in employment, training, and skills</td>
<td>1</td>
</tr>
<tr>
<td>Invest in research and development (R&amp;D) and knowledge -based assets (KBC)</td>
<td>2</td>
</tr>
<tr>
<td>Export</td>
<td>3</td>
</tr>
<tr>
<td>Invest in high-tech/automation</td>
<td>4</td>
</tr>
<tr>
<td>Collaboration between firms and universities</td>
<td>5</td>
</tr>
<tr>
<td>Invest in infrastructure</td>
<td>6</td>
</tr>
<tr>
<td>Import</td>
<td>7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8</td>
</tr>
<tr>
<td>Invest in natural disasters prevention</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>Invest in real state/land acquisition</td>
<td>11</td>
</tr>
</tbody>
</table>
Workforce changes to build resilient skills

Over the past four months COVID-19 has exacerbated existing trade and geopolitical tensions, fuelled skepticism about the benefits of globalisation and seen already high-levels of economic uncertainty rise.

As governments across the globe respond to protect their citizens lives and livelihoods, the resulting restrictions on the movement of people, capital, goods and services across borders has proven catastrophic for many businesses working in global supply chains.

For many, the challenge of navigating an increasingly complex host of political, economic, regulatory and institutional barriers has simply proven too great. Since February 2020, thousands of businesses working in GVCs have closed their doors for good, while countless others continue to struggle to survive the global pandemic.

This has focused significant attention on the potential shortcomings of past business models, the configuration of GVCs, and raised questions about how businesses can build the resilience needed to withstand the challenges of the future.

What makes for resilient workers and management teams, when threats and disruptions are varied and unknown?

The term ‘resilience’ refers to an organisation’s ability to bounce back after disruptions, and to use the learning acquired through navigating those disruptions to increase its capacity to handle future adversity.

Confidence, purpose, psychological safety, and adaptive capacity are the cornerstones of resilient teams. We understand these qualities as follows:

- Confidence in the capability of the individual and the collective to effectively complete tasks.
- A shared understanding of collective purpose, as well as clarity concerning the individual roles, responsibilities and capabilities of all team members, and how they will work together to achieve shared goals.

Finally, the adaptive capacity of individuals and teams refers to their ability to cope with uncertainty and unpredictability.

Director and co-founder of the Uncharted Leadership Institute, Andrew Stevens, explains that “in complex environments, success is increasingly driven by individual and organisational adaptive capacity. This is the capability to continually adapt, reshape and lead organisational functions while balancing short-term and long-term objectives.”

Teams that continuously acquire and apply new knowledge and skills, in ways that are both sustainable and difficult for competitors to replicate, are well-placed to succeed in today’s increasingly volatile, uncertain, complex and ambiguous (VUCA) global business environment.
What are the hard and soft skills that leaders need in the response to COVID-19 supply chain disruptions? What about in the future?

In an age of tightly interconnected global supply chains and unprecedented technological and trade disruption, it is more important than ever that leading teams engaged in cross-border trade have access to the technical trade knowledge and adaptive capacities required to effectively intuit and prepare strategically for a range of future scenarios.

Today’s business leaders must acquire the technical trade knowledge required to effectively monitor and evaluate the potential organisational impact of geopolitical and trade policy tensions, as well as emerging technological and social disruptors.

They must be sufficiently future-focussed and strategic to anticipate and adapt to the shocks to supply and demand, disruption to trade and investment flows, and fragmentation of GVC’s, which have led to the cessation of so many businesses since the outbreak of the global pandemic.

Finally, today’s leaders must support their teams’ capacity to learn, progress and adapt in rapidly evolving environments with high levels of uncertainty. They require the advanced complex and adaptive thinking capabilities to bring together diverse groups of people and collectively chart a path forward in these uncertain times. They must also be able to build organisational ecosystems (or cultures) that grow, support and reward innovation, learning and adaption. Organisational cultures that provide teams with a clear sense of purpose, value diversity in skills and thinking, support creativity and experimentation, distribute power and responsibility for greatest impact, and provide the continuous development necessary to equip their people with the knowledge and skills needed to make better decisions in complex operating environments.

The global pandemic has brought about unprecedented economic disruption, new challenges to the movement of goods and services, and an urgent need for business transformation.

Speaking on the impact of COVID-19 and how we can build more resilient teams for trade in the future, Professor Peter Draper, Executive Director of The University of Adelaide’s Institute for International Trade (IIT) called on educators to “rethink training solutions to better equip businesses working in GVCs to identify new working solutions with the potential to strengthen trade, create more resilient businesses, and support the long-term sustainability of GVCs”.

The following section highlights the findings on the role of what will be required to build resilient skills and new skills for future leadership within large business.

Of the total of respondent large businesses, 16% mentioned sustainable global supply chains as a valuable area for future skills development, followed by trade and investment in digital trade/E-Commerce (14%), and equally (13%) by big data and the impact of trade policy on global supply chains for business
### Valuable areas for large businesses for future skills development (%)

<table>
<thead>
<tr>
<th>Area</th>
<th>Response (%)</th>
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<tbody>
<tr>
<td>Sustainable global supply chains</td>
<td>16%</td>
</tr>
<tr>
<td>Trade and investment in digital trade</td>
<td>14%</td>
</tr>
<tr>
<td>The impact of trade policy on global supply chains for business</td>
<td>13%</td>
</tr>
<tr>
<td>Big data</td>
<td>13%</td>
</tr>
<tr>
<td>Digital transformation</td>
<td>10%</td>
</tr>
<tr>
<td>Industry 4.0</td>
<td>9%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>8%</td>
</tr>
<tr>
<td>The future of work</td>
<td>7%</td>
</tr>
<tr>
<td>Social issues for trade (health, education, labour standards and environment)</td>
<td>6%</td>
</tr>
<tr>
<td>Natural disaster vulnerability</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
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</table>
Of the total of respondent large businesses, almost a quarter (23%) mentioned access to leading technical experts, followed equally (13%) by on site intensive learning, networking with industry and government and networking with peers, and business development opportunities; 10% mentioned interactive online conferences.

### Large businesses’ most effective delivery mechanisms for ongoing capacity building (%)

<table>
<thead>
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<th>Response (%)</th>
</tr>
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<td>Access to leading technical experts</td>
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<td>Networking with peers</td>
<td>13%</td>
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<tr>
<td>Networking with industry and government</td>
<td>13%</td>
</tr>
<tr>
<td>Business development opportunities</td>
<td>13%</td>
</tr>
<tr>
<td>Interactive online conferences</td>
<td>10%</td>
</tr>
<tr>
<td>Site visits to businesses and other organisations</td>
<td>8%</td>
</tr>
<tr>
<td>Simulated business case studies</td>
<td>3%</td>
</tr>
<tr>
<td>Mentoring</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
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</table>

Respondents were asked to list different types of critical capabilities needed within their business that individual team members should or need for managing international business operations.

- International trade knowledge
- Language skills
- Negotiation skills
- Supply chain management
- Digital skills
- Communication skills
- Trade facilitation skills
To support the development of critical capabilities, large business commented that they would welcome training initiatives that support:

“Training with new Industry 4.0, AI, Telecommunication 5G, Cloud and Industry focused.”

“Programmes with real case studies and industry visits.”

“Digital capabilities for visibility and analytical capability, risk-based approached to management, scenario planning to strengthen capabilities for the next change of events.”

“Continuous adaptation and innovation, not just on products but also on processes and procedures, for example the shift to digital.”

“Strengthen basic knowledge in Global Supply Chains and International Trade.”

“Training programmes on international trade policy, customs laws, shipping and freight, import, export, insurance.”

“A combination of online training that is supported by virtual conferences to watch practitioners in action. Access to mentoring and executive coaching.”
Conclusion

It is almost universally accepted that lessons learned are a prerequisite of building a better world.

When learning comes from simply looking at outcomes, options become limited and most situations are reduced to copying. This is invariably from a different context and in response to a different need. The future is going to demand innovative solutions that respond to emerging needs. History, experience and learning still have a part to play; but they can’t be allowed to define next steps.

In recent years global supply chains have been defined by agility: change quickly or die, driven by a digital age that never sleeps. With the onset of COVID-19 and the shutdown of many supply chains, resilience has become synonymous with success. The next shift will emerge post-COVID-19 as people try to regain the normality bringing with it a demand for agile resilience. Incumbent wisdom might suggest this will only be relevant to advanced trading networks. For the rest it will be an opportunity to learn from, and avoid, the mistakes made by leading edge organizations. This will mean thinking about how global trade will be developed in the future as well as defining the outcomes to be achieved. Both matter a lot.

In complex environments, such as, global trade there are many interacting parts separated by time and geography. Some cause and effect relationships are obvious. Modelling these interactions helps create a picture and strategy for success leaders can use as a reference model to guide their decisions. The impact of unintended consequences can be minimised, and value streams targeted for maximum effect.

Making a success of moving products and performing services across geographies will mean resetting the agenda and acknowledging the true intent of economies with regard to their role in supporting global trade. There is nothing wrong with putting domestic interest first on the condition it does not disenfranchise those least able to deal with the consequences. “What's in it for me?” is a generally accepted principle that just needs to be acknowledged and worked with. At the heart of the debate to come are the issues of what markets can do for each other as well as what these same markets want to achieve for themselves. In the end, all markets are part of a global economy, and the narrative for self-reliance by politicians often ignores the realities of how these supply chains operate. During COVID, the shuttering of exports between markets in Asia and the rest of the world our reliance on one another in a global setting became abundantly clear, but too late to prevent recessionary contagion.

The difficulty of this scenario is going to require true leadership to bring about the new economics of an emerging global trade model. Strong management will be required to make it work and keep it going. The command and control manipulations of the past should always be seen as a last resort, and an indication that things are not working.
References

1. The number of respondents for certain sections or questions varies, depending on whether a response was optional or not.
2. A total number of 207 responses
3. A total of 198 responses
5. A total of 195 responses
6. A total of 124 responses
7. A total of 145 responses
10. A total of 170 responses
11. A total of 170 responses
12. A total of 110 responses
13. Participants were invited to select up to 3 responses. A total number of 206 participants selected 285 options to describe different aspects of their international business activity.
14. A total of 151 responses
15. A total of 145 responses
16. A total of 209 responses
17. A total of 137 responses
18. A total of 171 responses
20. A total of 128 responses
21. A total of 88 responses
22. A total of 94 responses
23. A total of 102 responses
24. A total of 102 responses
25. A total of 236 responses
26. A total of 117 responses
27. A total of 113 responses
28. A total of 111 responses
30. A total of 108 responses
31. A total of 96 responses
32. A total of 71 responses
33. A total of 237 responses
34. A total of 214 responses
35. A total of 223 responses with multiple options provided
36. A total of 77 responses