



Scenario Planning to Inform Australia's National Inquiry into Freight and Supply Chain Priorities: Appendices

**CENTRE FOR SUPPLY
CHAIN AND LOGISTICS**

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APPENDIX 1: LITERATURE REVIEW

Potential drivers of change in freight and transport supply chains: A review of recent literature

Introduction

The land transport sector is a substantial contributor to a country's economic activity. In Australia, this sector accounts for 9 per cent of the nation's Gross Domestic Product. To put this in perspective, it is estimated that on an average day in Australia, the sector moves nearly five million tonnes of freight – equivalent to approximately 200 kilograms moved for every person in the country (National Transport Commission, 2017). Notwithstanding the current size of this sector, Australia's total domestic land freight task is projected to grow by 80 per cent between 2011 and 2031 (Davies, 2017). This is generally expected to be driven by (i) strong economic activity, (ii) population growth, (iii) expansion of urban regions and (iv) growth in international trade both in the export and import areas. In addition, and a compounding factor in this context is that the *nature* of freight transport is expected to undergo substantial changes. The likely development of inland transport hubs to ease urban transport pressure and the burgeoning of the short trip delivery industry are examples of these infrastructural and transport related changes, which will significantly impact on future freight tasks.

Against this background, the purpose here is to undertake a review of the literature relating to perspectives on the key issues or drivers of change in freight and transport supply chains in Australia. This will help to better understand current thinking and potential planning and key drivers of change and will provide improved information to policy makers and industry participants around Australia. This will also allow an informed design and implementation of reforms and strategies to improve the productivity, safety and environmental performance of Australia's freight and transport supply chain systems.

Key drivers

A brief survey of the literature related to this area has identified 10 sets of issues that have attracted the attention of freight and transport sector participants. It is important to recognise that this is not an exhaustive list. However, it provides useful insights into the key issues or drivers of change in freight and transport supply chains in Australia. These issues will be discussed under the following headings:

1. Growth and ageing of the Australian population
2. Increase in trade
3. Infrastructure investment
4. Intermodal facilities
5. Technological advances
6. Funding infrastructure investment: road networks and road pricing
7. Ageing workforce, skills shortages
8. Energy use and variability in weather systems
9. Data assembly and use
10. First and last mile challenges

Growth and Ageing of the Australian Population

Australian population is projected to grow from 24 million at present to 30 million by 2030. The majority are expected to continue to reside in urban areas (ABS, 2013). It is expected that most of the population will continue to live in capital cities. Sydney and Melbourne currently receive 55 percent of Australia's population growth, whereas regional Australia received only 17 percent (ABS, 2016). Also, between now and 2050 every State and Territory is expected to experience a significant ageing of its population. The related pressures of growth and ageing of population in Australia will have several impacts relevant to freight and transport supply chains. These impacts include:

- Population growth, urbanisation and changing consumer activities such as online shopping will significantly influence urban freight distribution requirements and this will impact on the movement of both people and freight in these areas.
- The freight transport workforce is the second oldest industry workforce in Australia. As the older workforce retires, skill shortages are likely to increase.
- Ageing population and demographic changes will impact the amount of revenue raised by income taxes exerting pressure on government budgets. This in turn will impact on the availability of public funding for transport infrastructure.
- Growth in population and cities could lead to very sophisticated logistics hubs that receive all the goods coming into the city and allow for their 'final mile' distribution by a variety of transport services. This could include Uber-type freight delivery operations and even personal pickup by the client themselves (Ferrier Hodgson, 2017)

Increase in Trade

Australia's international and domestic trade is predicted to grow significantly in coming decades with increasing demand from both our domestic consumers and our trading partners.

At present, six of Australia's top 10 largest export markets are in Asia – Japan, the Republic of Korea, Singapore, Malaysia, Thailand and China. Already 75 per cent of our exports of minerals, resources and agricultural products are going to Asian countries.

Transport infrastructure presents a significant opportunity to reduce supply chain costs and maintain a trading advantage in our export markets, especially in the Asian region. This is also important in the context of many free trade agreements that Australia has entered into. There are several issues related to international and domestic trade which are relevant to freight and transport supply chains. These include:

- The industry competitiveness is closely linked to the quality of our national supply chain infrastructure – the ports, railways, roads and airports that link Australian goods and services to domestic and international markets.

- For many agricultural and food businesses, particularly those dealing with perishable or time-sensitive goods, trucking is the primary option for transport and is likely to remain so. However, rail is commonly used to transport bulk commodities at low cost – for example, grain uses rail for approximately 85 per cent of its export freight task.
- Around 60 per cent of agricultural output is exported from Australia. Australian agricultural production is predominantly focused in southern Australia, south western Australia and along its east coast. A key challenge lies in maintaining and upgrading the existing infrastructure (ports, rail lines and roads) in these regions, and making the best use of what is available, and making them as efficient as possible.
- In Northern and North-Western Australia, agricultural industries are now looking to grow to meet new markets in Asia and establish industries in Northern Australia. Hence, in Northern and North-Western Australia agriculture needs access to transport infrastructure to allow the industries to develop - along with the need to develop and improve the existing infrastructure.
- A key challenge in all of this will be to make sure that strategies around road, rail, and port infrastructure are not developed in isolation (Nelson, 2009).

Infrastructure investment

Infrastructure Australia (IA) maintains an [Infrastructure Priority List](#) to support evidence-based decision making and investment in projects that will deliver the best outcomes for the economy and the community. IA (2017) has recently released a revised version of the Priority List, identifying 100 nationally-significant infrastructure priorities from across the country. Priority List projects are advanced proposals that have undergone a full business case assessment by the independent Infrastructure Australia Board. Some of the issues relevant in this context are:

- Examples of Infrastructure Projects already attracting attention include the Moorebank intermodal terminal (NSW), the expansion of Inland rail (national), and the M80 Ring Road Upgrade (VIC). These projects will contribute to a reduction in congestion on vital parts of the road network. They will increase general network capacity and more efficiently connect regions, towns and cities.
- The [Australian Infrastructure Audit](#) found that without action to increase capacity on our transport networks and better manage supply, congestion could cost the economy \$53 billion per year by 2031 up from \$13.7 billion in 2011.
- Optimising our rail and road network infrastructure is paramount. Whilst investing in new infrastructure is important, getting the best out of existing assets needs to be the focus of logistics planning. More efficient use of existing infrastructure will involve greater focus on timely maintenance together with the use of new technology, including sensors and data analytics, to secure service improvements.
- There is a need to explore opportunities for smart planning of national freight corridor updates including: planning and construction of passing rail track loops and

improved intermodal terminals (Department of Industry, Innovation and Science (2017)).

- In the Priority List, IA (2017) recommends that embedding technology in existing infrastructure can provide operators with rich data on network performance and use. In this way, small targeted investments can drive significant improvements in efficiency and reliability, and deliver better outcomes for Australian infrastructure users.

Intermodal facilities

Continued growth in freight volumes is resulting in a range of increasingly complex challenges for governments, industry and the community. These require a national focus and effort to identify the 'places for freight'. These will be the major freight precincts or hubs including ports, airports, intermodal terminals, collection and distribution centers and industrial precincts together with the road and rail links that connect them (Standing Council of Transport and Infrastructure, 2012).

Freight precincts or hubs are broadly defined as major hubs where a high level of activity relating to transport, logistics and goods distribution occurs on a commercial basis by various operators. These hubs include intermodal terminals, road-to-road terminals, ports, major rail yards, and transport, warehousing and distribution precincts (see WA Department of Transport, 2013).

An intermodal terminal is a location for the transfer of freight from one transport mode to another, for example between road and rail. Intermodal hubs will have a central role to play in easing the road traffic burden on ports and immediate hinterlands, and are essential if rail is to increase its role in the freight transport and distribution system (WA Department of Transport, 2013). Demand for intermodal facilities will continue to grow across key freight hubs. This will require heavy industrial estates and intermodal terminals to be better integrated with road and rail networks so that freight can be transported, stored and transhipped efficiently with minimum adverse social and environmental impacts.

It is becoming clear that Governments and industry will need to work with relevant stakeholders to facilitate the development of intermodal terminal facilities to service interstate and international freight movements, and their integration with key freight transport hubs and metropolitan road networks to ensure the efficient movement of goods.

Technological advances

Australia's freight and transport supply chain networks are already being affected by the advent of big data, open data and digital technologies. The industry needs to prepare for the impact of new developments such as automation, distributed production, 3D printing and drones, amongst others (Davies, 2017). In addition:

- Online and mobile shopping has had an impact on how Australian businesses manage their supply chains, since inventory availability and shipping times greatly influence purchasing decisions. With global firms such as Amazon entering the Australian market, it is likely that there will be further acceleration in the growth of online shopping. This could have an impact on the domestic freight task in Australia in several ways.
- Opinion is still open on the question of how further growth in online shopping would affect small goods vehicle movements. Would we see fewer, more predictable car movements replaced by less predictable but more efficient white van movements? Or would it generate a net increase or net reduction in movements? In this respect, ABS data shows that between 2006 and 2014, the number of light commercial vehicles grew by 35 per cent - almost twice the rate of passenger vehicles (19.1 per cent) and rigid trucks (20.7 per cent). This trend reflects the importance of urban supply chains in a growing services economy (Davies, 2017).
- Automation in the freight transport and logistics sector may increase the demand for new, more advanced skill sets that provide opportunities for both existing workers to advance and new workers to enter the workforce.
- Increasing the visibility and traceability of goods and transport assets along the supply chains using digital technologies and global standards is becoming increasingly important in order to ensure safety of goods and efficiency of distribution. This could be facilitated by the collection and use of freight and transport supply chain related data elements using digital technologies. This data could provide better knowledge of transport demand and usage, as well as providing the capacity to cross-link databases to answer emerging questions.

Funding infrastructure investment: road networks and road pricing

Funding road networks is one of Australia's most pressing opportunities for infrastructure reform. The link between usage and charging in the current system of road funding is very weak. What we pay is only loosely related to what we use and how our use of vehicles impacts other users, and this is particularly true of heavy vehicles (Davies, 2017). Strategies are needed to ensure that we have a secure, sustainable source of revenue to fund the building and maintenance of our roads.

- The current system of fuel excise tax does not accurately reflect usage. Alternative road pricing measures could relate to either space occupied on road infrastructure, peak time travel congestion or the physical impacts from vehicle mass, on the roads. At present, fuel excise raises less than half of what Australian governments at all levels spend on roads.
- Fuel excise tax revenue is forecast to drop and this fall in revenue will accelerate over coming decades as we shift towards more fuel-efficient vehicles and alternate fuels. This means we will be collecting less from users while the costs to build and maintain the roads continue to grow.

- The heavy and light road users do not receive price signals to minimise their impact on other users and the broader network. Hence, in terms of overall transport efficiency, we now have a road network which is chronically congested for portions of the day, but with excess capacity across most of the 24-hour cycle.
- Clearly, strategies need to be developed to take action now to ensure that we have a secure, sustainable source of revenue to fund the building and maintenance of our roads. Adoption of better road transport pricing/road user charging models which allow for both explicit cost recognition and responsive pricing (to reflect true costs or to steer behavior) needs to be a priority.
- Infrastructure Australia (2016) recommended moving to direct user charging for all vehicles within 10 years, and introducing direct heavy vehicle charging within the next five years. This reform must include the removal of all existing registration and usage charges and the introduction of supporting regulatory and investment frameworks – including a cohesive, national freight and supply chain strategy.

Ageing workforce, skills shortages

The work force in the freight transport and logistics sector is ageing. This is a common feature in many sectors in the Australian economy, given the ageing population. Around 12 per cent of the Transport and Logistics workforce is 60 years or older. Many of them are looking to retire over the coming years. Another 35 per cent is aged between 45 and 59 years. These factors will have some implications for training, upgrading skills and competencies, leading to the following issues:

- There are challenges in attracting new staff with the right mix and levels of skill. Retaining suitable staff is also a challenging issue resulting in skills shortages which are a real problem in some areas. In 2002, around one third of the transport and logistics workforce held some form of educational qualifications. By 2012, this had increased to 45 per cent. However, the industry is still lagging behind the Australian workforce as a whole, in which 63 per cent hold formal qualifications.
- The need for qualified staff to service many firms' emerging requirements is increasing. Appropriate staff are generally scarce, and this issue is becoming particularly prevalent in SMEs, which account for the majority of the employment in the freight transport and logistics sector in Australia. These constraints will have a significant bearing on the efficiency and productivity of freight transport and logistics operations together with the concomitant quality of the services. Furthermore, the gap in this area between SMEs and corporate logistics providers is growing.
- During the period June 2011 to June 2015, there were 84,545 firms in the transport and logistics sector in Australia with 97.9 per cent small, 1.9 per cent medium and 0.2 per cent large businesses. The transport and logistics sector employs around 485,000 people across occupations including transport, warehousing, logistics, storage, handling and distribution. With the increasing changes to the nature of activities in the sector including the adoption of e-commerce and other digital trading platforms along the supply chains, there is a growing need for upskilling workers to adapt to evolving technology and systems.

- Increasing uptake of technology is driving the requirement for higher order skills in the sector, as well as new skills such as those needed for maintenance and programming of automated equipment. Computerisation and automation have altered the nature of work in the freight transport and logistics services sector. Specialised and higher-level computer skills, problem-solving and analytic skills, and more sophisticated contract management practices are driving a more integrated approach to freight transport and logistics management.
- Disruptive technologies (for example, drone parcel delivery; automation, robotics, Uber and other service platforms) and the internet of things (for example, digital devices, sensors and data methods that connect networks) will have an effect on the freight transport and logistics workforce, driving demand for new skill sets to effectively manage and operate within changing environments. In this operating environment, firms need their workforce to be agile and responsive to meet the skills demands created by new technologies, automation and other innovations as they evolve. Raising skills and competency levels in the freight transport and logistics services sector is a major challenge that requires attention both from the industry and governments.

Energy use and variability in weather systems

The transport sector is a significant energy user and a greenhouse gas emitter. The strategic issue of rising fuel prices and an increasing focus on reduction of greenhouse gas emissions will need to be more carefully considered in developing freight transport solutions. Increasing the efficiency of transport through improved infrastructure provides a mechanism to reduce fuel use, and as a consequence of this more efficient management of elements of the infrastructure may reduce the negative impact of energy price rises and greenhouse gas emissions.

It is widely agreed that major impacts and disruptions to freight movement may come from higher variability in weather systems. This will lead to more extreme weather events such as floods, bush fires and cyclones. Consequently, the freight transport sector will need to develop more resilient communication lines and have built-in redundancy attributes capable of meeting a range of sudden, unexpected interruptions to services.

Data assembly and use

It is now accepted that many smart technologies will be capable of tracing, sensing, responding, communicating, and sharing important data in the freight transport and logistics sector. Consequently, reliable mobile phone and satellite coverage in regional and remote areas in Australia will be required to allow freight transport firms to effectively collect operational data across the country and to use this information for developing more efficient transport planning and fostering improved productivity and increased personal and material safety (Business Council of Australia, 2017).

Currently, the private sector generally collects and holds most of the freight related data.

They are often reluctant to provide access and share such data due to commercial reasons. A key challenge for the development of more sophisticated transport and freight handling systems will be to encourage data sharing and data security along and beyond the supply chains (Port of Brisbane, 2017). This issue is also relevant from a cyber security risk management perspective. Voluntary and/or regulatory arrangements are required to enable wider access, de-identification, security and sharing of these data for more effective use.

First and last mile challenges

In supply chains which are composed of sequential transport and handling elements, the growing complexity of ‘first and last mile’ issues have become apparent, and will become increasingly so in the future.

Particular challenges associated with first and last mile delivery of goods can arise both in road and rail freight transport. In road freight transport, first and last mile issues can be due to, for example, roads being under the control of different levels of government with different priorities. As a result, local roads under the control of local governments/councils that form the first or last section of a freight route are not designed for access by Higher Productivity Vehicles (HPVs).

Local governments may refuse to issue permits for HPVs to access their local roads for a number of reasons. These may include: damage caused by heavy vehicles that cannot be repaired without additional funding, and the difficulties involved in obtaining that funding from the usual local government funding sources; concerns about the amenity impacts of noise and air pollution, hours of operation, and the general safety of heavy vehicles in residential areas; access being limited to off-peak periods which may not meet the supply and demand conditions of deliveries; and inability to safely accommodate these vehicles on current road infrastructure (Standing Council of Transport and Infrastructure, 2012).

Several strategies have been used to address these challenges. First, governments are working with industry and communities to address expectations for urban amenity and the management of freight vehicle movements on local roads. Second, governments and industry are working to identify solutions to specific local issues on a case-by-case basis. In this regard, a major issue is whether there are appropriate incentives for road managers—including local governments—to meet the needs of freight operators in their areas through funding and access decisions.

First and last mile issues can also occur in rail, where freight might move over railway lines that are shared with passenger services. This could lead to inefficiencies where passenger services have a higher priority. This occurs where rail infrastructure around a port or intermodal terminal is shared with passenger trains.

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APPENDIX 2: ANSWER FORM

Individual Answer Form

Scenario Planning Workshop



Disclaimer: The scenario you have read describes one of many potential visions of the future. It was designed to facilitate a strategic discussion on Australia's freight and supply chain priorities. It is not a forecast or a prediction, and should not be interpreted as a preferred or official version of the future.

Session 1. Answer this question:

To succeed in a future like the one described in this scenario, what should Australia's top priorities be in terms of freight and supply chains?

All the members in your first breakout group were assigned the same scenario. Discuss the question with them, and write below your own answers. Write clearly, to ensure that your answers can be used.

Freight Priorities:

Supply Chain Priorities:

APPENDIX 3: FACILITATOR'S GUIDE

Facilitator's Guide

Scenario Planning Workshop

Standard Version



In a Nutshell

The goal: This workshop seeks to generate insights about the freight and supply chain priorities for Australia, based on our four scenarios, using what is known as *divergent* and *convergent* thinking. **Divergence:** After a brief introduction, the participants are divided into groups for the first breakout session. In this first session, all the participants in each group are assigned the same scenario, and they discuss what implications and priorities follow from this scenario.

Convergence: After a short coffee break, the participants rearrange in new groups for breakout session two. These groups combine people from different scenarios, and each group seeks to find priorities that work across scenarios. The workshop ends with a wrap up.

Agenda

Below is the agenda for the workshop, with **recommended structure** for the **breakout sessions**.

08.30am-08.50am Arrival tea and coffee

09.00am-09.15am Commencement of Workshop: Welcome and Instructions

Participants go to their respective groups for breakout session 1.

09.15am-10.30am Breakout session 1: Identify priorities for assigned scenario

- Discuss the scenario (~10 minutes)

- Discuss *implications* and propose *priorities* (~45 minutes)

- Participants write down *priorities* in forms (~10 minutes)

10.30am-11.00am Morning tea break (ready at 10.15am)

Participants go to their respective groups for breakout session 2.

11.00am-12.15pm Breakout session 2: Identify priorities that work across all scenarios

- Introduce all four scenarios (~10 minutes)

- Identify priorities that work across all scenarios (~45 minutes)

- Participants write down priorities in forms (~10 mins)

Participants convene in the main room.

12.15pm-12.45pm Wrap-up. Workshop concludes

12.45pm-01.15pm Lunch (ready at 12:30pm)

What Facilitators Do

Clarify doubts on the scenarios. Facilitators clarify doubts about the scenario that was assigned to their group. You will be told in advance what scenario you are expected to facilitate. To be effective in your role, you must familiarize yourself thoroughly with this scenario, particularly with the main narrative and the salient points listed in the 'cheat sheet'. If you are asked a question about the future scenario that is too specific, feel free to say "I don't think the scenario goes into that level of detail", and keep going.

Keep the session going. Facilitators keep the session moving forward. Each one of the two breakout sessions is scheduled to last approximately 65 minutes. A suggested distribution for this time in each session is provided below, as a reference.

Keep people focused. Facilitators may have to remind participants of the premise of the scenario planning workshop: to think about what implications a future like the one described in the scenario would have for Australia's freight and supply chain priorities. This may mean:

- *Reminding people not to fight the premise.* Some people may challenge the plausibility of the scenario. They may think it is too far-fetched, or that it ignores some trend that they consider important. If you run into a person fighting the premise, acknowledge their concerns and ask them to suspend disbelief for the next hour, to consider the scenario as fact, and try to derive implications.
- *Reassure people that general implications are fine.* The scenarios are qualitative and general. People used to precision may say things like "I need more concrete / specific / detailed information to make a decision." As a facilitator, you have to politely ask them to do the best they can with what they have been given. They are not expected to make concrete / specific / detailed decisions. General and qualitative decisions are fine.

A few questions you may get...

Are these predictions? Is this DIRD's official vision of the future?

No, they are not. These scenarios describe four out of many potential visions of the future. They were designed to facilitate a strategic discussion on Australia's freight and supply chain priorities. The contents of the scenarios are not forecasts or predictions. They should not be interpreted as a preferred or official version of the future.

These are too general! How are we supposed to make decisions?

Describing the future in a few pages requires speaking in general terms. Because we are used to having abundant information, the scenarios will likely appear vague. In this workshop, we are not asking participants to make concrete decisions, only to derive a few implications, which can be as general as the scenarios.

Something like this would never happen. How can I take it seriously?

Scenarios are supposed to push your expectations beyond their comfort zone, and some of their features may strike you as exaggerated. For the time being, please consider it a thinking exercise. For the next hour, assume it is fact, and tell us what implications you anticipate.

Game Plan for Breakout Session 1

The objective of breakout session 1 is to examine one specific scenario, to discuss as a group what its implications would be for Australia's freight and supply chain priorities, and then to have participants write down the priorities – in their own opinion, not the group's – in the answer form. There is a logic to this mechanics of discussing as a group and writing as a person.

The breakout session will last around 65 mins. We recommend the following time allocation.

First, discuss the scenario (10 min)

You should plan to spend the first 10 minutes or so discussing with the group the features of this scenario. Keep this interactive, and have them do most of the talking. To start, ask them:

- “How would you characterize the world in 2037, as described in this scenario?” Then, let them discuss among themselves.

If the discussion is moving along, do not intervene. If it is fading out, or veering off topic, then refocus them with general questions along the STEEP / PESTER dimensions:

- “What’s going on in terms of _____?” (Insert here: *society, technology, economy, environment, politics, etc.*)

You can also make your own notes about the salient points in this scenario, or follow those listed in the *cheat sheet*, and ask the participants about those points, like this:

- “What can you tell me about automation technology in this future?” etc.

You may want to make some notes about the salient points of the scenario beforehand.

Then, discuss the implications and propose priorities (45 minutes)

You should plan to spend the next 45 minutes or so discussing with the group the implications of this scenario for freight and supply chains in Australia, and what priorities they would recommend in order for Australia to be successful in a future like this. Although both implications and priorities are discussed, *only priorities are recorded* in the answer form. Keep the discussion interactive, and have the participants do most of the talking.

- There is no established sequence for the discussion: you can discuss freight first, and then supply chains, or you can discuss them together. Whatever feels more natural.
- Remind the participants that, even though the discussion will be done as a group, by the end of the hour they should write down their own thoughts in their answer form. (Participants do not have to wait to the end of the session to write their answers.)

- As the discussion progresses, you can write down some salient points in the flip chart. Use as clear a handwriting as you can. However, keep the notes brief, so you can focus on facilitating. You do not want to spend too much time with your back to the group.

The definition of what is an *implication* is simple: an implication is something that follows from the scenario. The definition of a *priority* is also simple: it is something that Australia, either as a whole, or in part (its government, its industry, its municipalities, etc.) has to prioritize if it is to be successful in a future like the one described. Only priorities are recorded in the answer form.

We do not have beforehand – and want to avoid having – a predefined, rigid definition of what these implications and priorities would look like. The whole purpose of scenario planning is to encourage new, original, previously unforeseen thoughts. So do not shy away from creative discussion, as long as it is reasonably plausible within the time horizon of 20 years.

Finally, ask them to write the priorities in the form (10 minutes)

You should reserve the last 10 minutes or so for your participants to write down their chosen priorities in the 'Individual Answer Form' that they were handed at the beginning of the session. (You should have some spare copies of the form, in case a participant needs one.)

For breakout session 1, the participants are expected to write their answers on the first page of the answer form. There are two areas for the answers: freight priorities, and supply chain priorities. Participants can write priorities in one of these areas, or in both, as they prefer.

- Remind them to keep their handwriting clear, so that we can later capture and process their thoughts.
- Participants should not write their names on these answer forms.
- Participants are free to write down whatever priorities they want, even if they are views that are not shared by the rest of the group.

When the session is over

- Ask participants to keep their answer forms with them. They will need it for the second breakout session.
- Remind participants that they have half an hour for coffee break and networking, and should then go to the location of the group they were assigned for the second session.

Game Plan for Breakout Session 2

The objective of breakout session 2 is to identify priorities that work across all the scenarios. It is said that a priority works in all four scenarios when:

- it is beneficial in all scenarios (a positive 'no brainer'), or at least
- it is beneficial in some scenarios and not detrimental in any scenario (a 'no regrets')

A priority that fits either of these two cases should be recorded as working well in all scenarios.

The breakout session is scheduled to last 1 hour. We recommend the following time allocation.

First, all four scenarios are discussed (~ 10 min)

Ask a representative of each one of the four scenarios to give a brief (2 minute) summary of their scenario to the group. Some people may want to go longer, so make sure to emphasize it is 2 minutes, and do not be shy in keeping them to this time allocation.

Then, identify robust priorities (45 minutes)

You should plan to spend the next 45 minutes or so identifying priorities that work in all four scenarios.

Ask participants to volunteer a priority from their scenario, one that they think is promising, for discussion by the group. Once a priority is voiced by a person, the other participants should discuss whether that priority would work in their respective scenarios. That way the group tries to reach a consensus on whether the priority mentioned works well across all scenarios or not.

Once a priority that works across all four scenarios is identified, you can write it down in the butcher pad. Repeat this process for as long as the time allows, trying to strike a balance between depths of discussion and advancing the session. Strive to discuss at least five or six priorities, which would give you at most 8 or 9 minutes of discussion for each one.

Again, keep this discussion interactive, and have participants do most of the talking.

Finally, ask them to write the priorities in the form (10 minutes)

You should reserve the last 10 minutes or so for your participants to write down the priorities they think work in all four scenarios in their 'Individual Answer Form'. For breakout session 2, participants write their answers on the second page of the answer form. Participants are free to write down whatever they want, even if they are views that are not shared by the rest of the group. If they disagree with one priority being applicable in all four scenarios, they can exclude it. If they want to add a priority they think works in all four scenarios, they can do so.

When the session is over

- Ask participants to give you their answer forms. We need them, in order to process their answers.
- Remind participants that there will be some light lunch served, and they will have an opportunity for networking. Alternatively, they can leave after the session if they want.



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