

STARTUP **WA**

**METS  
INNOVATION  
REPORT**

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# ACKNOWLEDGEMENT OF COUNTRY

StartupWA acknowledges the Traditional Owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respects to them and their cultures; and to elders, both past and present.

## ACKNOWLEDGEMENT

StartupWA is a not-for-profit, representative organisation that promotes the growing startup sector in Western Australia. The StartupWA Board of Directors are all volunteers and share a vision for Western Australia to be recognised as a global hub for entrepreneurial and technology talent.

StartupWA would like to thank its Board of Directors consisting of Jason Balchand (Chair), Peter Clarke, Les Delaforce, Kay Solanki and Todd Murray for their contribution to organising and running the event and authoring this report.

The METS Industry Roundtable would not have been possible without the help and support of many other volunteers. In particular, StartupWA would like to extend its gratitude to Graeme Stanway and Alex Bertram.

# EXECUTIVE SUMMARY

The METS Industry Roundtable Discussion was held to inform StartupWA on the potential roadblocks that Mining Equipment, Technology and Services (METS) startups face in Western Australia (WA), with a specific focus on the technology companies. Inspired by the World Café Methodology, an open dialogue between participants was facilitated. Attendees included representatives of the Western Australian State Government, the City of Perth, mining companies, METS startups with early-stage and later-stage technology, investors, and consultants.

The event commenced with a presentation highlighting the METS sector in Australia. The content of the presentation drew on the Austmine 2020 National METS Survey<sup>1</sup> to outline the scale of the sector and compare WA's performance to other states. Afterwards, the facilitated roundtable discussion started, consisting of three rounds where participants discussed the barriers and actions of the following questions:

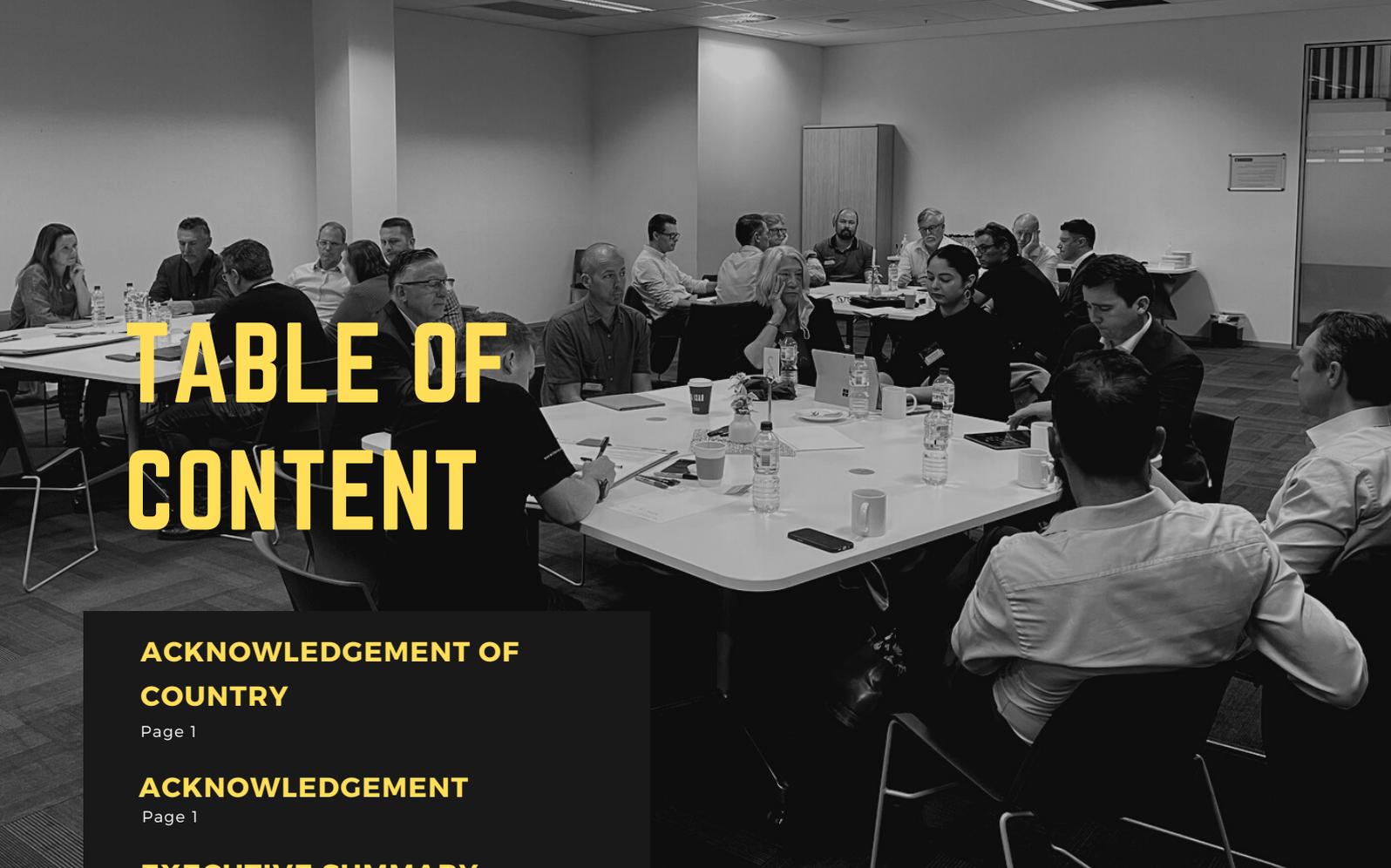
- How might we grow the METS sector in WA and the startups within it?
- How might we increase government support in the METS sector in WA?
- How might we increase the industry support for the METS sector in WA?

This report provides an overview of the collated participant feedback to the above 'how might we' questions. It presents the reader with practical recommendations on how Industry, State Government, together with stakeholders from the Western Australian startup ecosystem, may minimise these challenges and contribute to the growth of the METS industry startup sector in Western Australia.

The insights can be grouped into the following four themes, which are:

- More Venture Capital investment needs to be made available in WA;
- The importance of education for both founders and investors;
- Success stories from within WA need to be shared far and wide to help build the brand of WA; and
- Procurement policy – both at a Government and Industry level – can be a barrier to growing our METS startup ecosystem.

<sup>1</sup> <https://www.resourceindustrynetwork.org.au/Portals/13/Austmine%20National%20METS%20Survey%202020%20FINAL.pdf>



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## **INTRODUCTION**

StartupWA is a not-for-profit, representative organisation which promotes the growing startup sector in Western Australia. It seeks to accelerate the growth of the Western Australian startup ecosystem so that it is an internationally recognised, leading hub for early-stage technology and innovation companies.

Western Australia has an economy that is highly dependent on the mining and resources sector. 2013 data show that the mining industry contributes \$186.6 billion — or 46% — to Western Australia's gross state product (GSP).<sup>2</sup>



As such, the sector has become a world leader in the development, adoption, and utilisation of technology to improve operations, productivity, and safety.

It should stand to reason that Western Australia should have a strong, world-leading Mining Equipment, Technology, and Services (METS) startup sector, with a specific focus on the technology aspect, fueled by the state's strong mining and resources activity. While Western Australia is growing a large number of resources and mining technology-related companies, it does not have a position in the global marketplace consistent with that leading market position.

The 2020 National METS Survey<sup>3</sup>, conducted by Austmine, highlights the potential, successes, and challenges of Australian METS companies in each Australian state. Some key insights from this study are as follows:

- The METS sector is economically significant. It generates over \$100 billion in revenue annually and employs 197,000 employees.
- METS companies, particularly startups, use advanced technology as a differentiator and have a global outlook.
- There is a lost economic opportunity for Western Australia as revenues are directed to companies headquartered in New South Wales and Victoria.
- Queensland and Western Australian companies are younger, more numerous, smaller, tech-focused, and more agile.
- The number of Queensland METS companies has doubled in the last five years, while Western Australia's numbers have decreased.
- The majority of METS companies serve multiple sectors and export their products and services.

To better understand the opportunities and barriers faced by the METS startup sector, StartupWA facilitated a roundtable discussion with key industry leaders.

<sup>3</sup> <https://www.resourceindustrynetwork.org.au/Portals/13/Austmine%20National%20METS%20Survey%202020%20FINAL.pdf>

Held on the 10th of November 2022 at Liberty Flexible Workspaces in Perth, the roundtable discussion sought to uncover the knowledge and experiences of the industry leaders working in the sector.

Twenty-five (25) attendees were present, represented by the Western Australian State Government, City of Perth, mining companies, METS startups, investors, and consultants. The first-hand experiences and insights gained from the roundtable discussion, coupled with industry expertise from StartupWA Director, Peter Clarke, will inform StartupWA on what structural changes need to be made in order to help grow and support the Western Australian METS Startup ecosystem.



**”A SIMPLE YET POWERFUL CONVERSATIONAL PROCESS THAT HELPS PEOPLE ENGAGE IN CONSTRUCTIVE DIALOGUE, BUILD PERSONAL RELATIONSHIPS, FOSTER COLLABORATIVE LEARNING, AND DISCOVER NEW POSSIBILITIES FOR ACTION.”**



# METHODOLOGY

The format and methodology for the METS Industry Roundtable Discussion were inspired by the World Cafe Methodology, as it proved to be a successful tool for the StartupWA Summit Series hosted in 2021. The World Cafe Methodology is an effective and flexible format for hosting large group dialogue. Following the seven design principles, the METS Industry Roundtable discussion fostered a collaborative conversation, active engagement, and constructive possibilities for action.<sup>4</sup>



<sup>4</sup> International Creative Commons Attribution4 Design, 2022  
<http://www.theworldcafe.com/key-concepts-resources/design-principles>



## THE PARTICIPANTS

Participation in the METS Industry Roundtable Discussion was curated to ensure a diverse mix of founders and leaders from the METS industry ecosystem. Twenty-five (25) stakeholders were in attendance, representing the Western Australian State Government, City of Perth, Mining companies, METS startups, investors, and consultants. A complete list of participants is outlined in Appendix A.

## QUESTIONS AND POWERFUL CONVERSATIONS

In line with the World Café design principles, the METS Industry Roundtable sought to use questions that frame, but not limit, the discussion. The three 'How might we' questions addressed in the roundtable discussion were:

1. How might we grow the METS sector in WA and the startups within it?
2. How might we increase government support in the METS sector in WA?
3. How might we increase industry support for the METS sector in WA?



# METS ROUNDTABLE DISCUSSION CAPTURE

The roundtable discussion consisted of three rounds. Each round addressed one 'How might we' question. After a brief table introduction, participants discussed the same 'How might we' question for fifteen (15) minutes per table. Subsequently, each table host then presented the gained insights to the whole group. After each round, participants were shuffled to form a new group on each of the three tables to commence discussion of the next 'How might we' question. This way, the formation of an opinion leader on each table group was minimised and equal discussion participation was enabled.

The table below captures the barriers and potential actions that participants discussed during the METS Industry Roundtable.

## HOW MIGHT WE QUESTION

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### Round 1:

#### How might we grow the METS sector in WA and the startups within it?

## DISCUSSION CAPTURE

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### Table 1

#### Barriers:

- There needs to be a greater sector-wide understanding.
- Current procurement processes are quite onerous and drawn out, especially with regard to 'Tier one' mining companies. It's especially difficult for early-stage startups as the sales cycle and procurement process may extend eighteen months to two years, and early-stage startups typically don't have the financial runway for such a long sales cycle.
- Especially in the current labour market, access to talent is difficult. Taking a specific focus on developers and other technology talent, startups are competing with the likes of large tier-one mining companies, such as BHP.
- Current salary expectations make it difficult for startups to compete in competitive labour markets.
- A portion of the market consists of customers who are conservative and risk-averse by nature. This makes it difficult for startups to sell their innovative solutions. Reducing this conservative nature is pivotal to growing the sector.
- Increase the pipeline of projects.

#### Actions:

- There needs to be increased access to venture capital for early-stage companies in the Western Australian market, especially pre-seed and seed stage.

## HOW MIGHT WE QUESTION

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## DISCUSSION CAPTURE

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- Mining companies need to be better educated on the startups operating in the ecosystem and the innovative solutions on offer by Western Australian companies.
- Mining companies and Government need to be encouraged to be less conservative and risk-averse.
- The Western Australian startup ecosystem needs to establish stronger global links with other ecosystems throughout the world.

### Table 2

#### Barriers:

- The problem of circular challenge. “We couldn’t get the money to attract customers needed to prove our product/service.”
- There is no or low access to debt.
- No/limited local capability and capacity to grow a METS startup in WA.

#### Actions:

- Innovation on the capital system. The idea is a cheap non-recourse debt (a type of loan secured by collateral) as an option for early-stage startups in the capital-intensive side of things.
- Involvement of government through own procurement practices. The government does not necessarily need to give startups money/grants; give them an order.
- These practices might potentially send a signal to corporations on how to procure with startups.
- Government might help change the risk equation for customers to work with and build startups. This may decrease the need for startups to leave WA as the capability and capacity to fund are present in the state.

### **Table 3**

#### Barriers:

- Founders have domain-specific skills and knowledge, but often lack the business skills required to operate a company and scale.
- Founders exiting early through acquisition hinders the growth potential of local startups and the overall ecosystem. This has resulted in a lack of aspiration and larger-scale success stories.
- Startups are often too focused on selling to big companies. Big companies typically have procurement processes in place that are not feasible for startups. Big companies are also often risk-averse in terms of innovation.
- There is a current skills shortage, making it hard to access the right talent to grow. This is largely driven by the big companies that are soaking up a lot of talent.
- The advantages of technology are often not understood in big(ger) exploration companies.
- Currently, many businesses lack a solid understanding of how technology can be integrated and used.

#### Actions:

- Startups should be educated on the benefits of selling to smaller companies.
- There needs to be an education program for the founders METS startups to teach them the core aspects required to build and scale a company.
- There should be greater education around the evaluation of different sources of capital that are available as funding options, and the advantages and disadvantages of exiting while still in the early stages.

## HOW MIGHT WE QUESTION

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### Round 2: How might we increase government support in the METS sector in WA?

## DISCUSSION CAPTURE

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- Founders may need help to develop their industry networks to unleash growth and further innovation – one such enabler would be through mentorship with established industry leaders.
  - Startups need to find a process to utilise the know-how and expertise of local WA-based exploration companies.
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### **Table 1**

#### Barriers:

- There is the lack of a burning platform. The perception is often that nothing is wrong, as there is monthly revenue.
- Overseas companies get acquisitive of local METS startups. This results in lost future revenue – GSP and taxation.
- Government payment terms are not always in line with what startups need.

#### Actions:

- Government has a key role as a connection-maker within the sector. The government may act as a facilitator (and engager) between startups and industry sectors – e.g. big METS companies and venture capital funds.
- This could happen via:
  - Accelerating Commercialisation Grants at the Commonwealth level and state level. Allow the government to take a bit more risk in whom the grants are awarded to. They don't necessarily need to fund the challenges the sector is facing but have a key role in connecting and facilitating those connections to the sector.

## HOW MIGHT WE QUESTION

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## DISCUSSION CAPTURE

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- A procurement champion within government – e.g., a Chief Entrepreneur – who drives facilitation and connection between startups and the industry sector. This will also increase the awareness and signal to the market that Western Australia takes startups and the METS sector seriously.
- Changing payment terms to be more favourable to startups.
- Using mining royalties to build a future industry fund to be used as an investment vehicle to continue to grow the sector in the longer term.
- Facilitate an increase in the amount of venture capital available in the market.
- Demonstrate orders that are bankable, by
  - Purchase order;
  - Bankrolling future sales;
  - Ability to raise working capital.
- METS founder education in commercial maturity. Startups need to understand who their customers are and how to access them. Provide education in commercialisation, sales, and marketing.

### **Table 2**

Barriers:

- The costs of grant cycle times – there is a mismatch of timing between the startup cycle (days/weeks/maybe months) and the Government grant cycle application (measured in months/quarters).
- Early-stage startups likely can't meet the high criteria set by Government grants (e.g. audited financial statements) and the costs of going through the application process are quite high.

## HOW MIGHT WE QUESTION

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## DISCUSSION CAPTURE

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- Longevity of ecosystem support. A two-year funding cycle for ecosystem support is not enough; it takes time to deliver the program, and the funding round is over.

### Actions:

- Increase the visibility of the capabilities in the state. i.e., shine a brighter spotlight on what we can do here in Western Australia.
- Increase the visibility of the innovation champions within companies (Chief Innovation Officer) – especially those who are open to partnering and collaborating with startups.

### **Table 3**

### Barriers:

- There is no burning platform to invest in the METS sector in Western Australia.
- The Government is focused on driving and creating mining companies, not METS companies, especially technology-based.
- The federal government is more concentrated on growing manufacturing on the East Coast, not in Western Australia.

### Actions:

- Start to promote Western Australia as an attractive destination for technology-based METS companies. That will attract METS startups and bigger companies, as well as talent, to Western Australia.
- Royalties for economic development in METS, and passing off 1% or 2 % royalties as an investment to directly go into the sector for economic development in METS.

## HOW MIGHT WE QUESTION

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**Round 3:**  
**How might we increase the industry support for the METS sector in WA?**

## DISCUSSION CAPTURE

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- Investigate the viability of ACARP (Australian Coal Association Program) style funding – e.g. a levy on every tonne of coal that is exported.
- Ambition to get enough access to funding.
- The government playing a bigger role and taking more action towards investing in METS, STEM, and digital innovation which is essential for the state's future. Someone needs to be appointed who can lead the narrative – the conversation is on the agenda and not only ideas on paper.

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### **Table 1**

Barriers:

- The mining sector has a branding problem.
- Procurement in big companies is not overly friendly for startups and early-stage companies.

Actions:

- The mining industry holds the biggest part of doing PR and branding component around NetZero.
- WA has the advantage that there is limited coal mining. Instead, WA is big in copper, iron ore, and gold. There is the potential to tell a good story.
- Big mining companies need to reduce the barriers to procurement so that it is easier and more fruitful for startups to work with them.
- Having procurement champions within big mining companies. Different categories of suppliers have different requirements.
- Streamlining procurement to make it friendly for METS startups.

## HOW MIGHT WE QUESTION

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## DISCUSSION CAPTURE

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- Messaging around the mining sector. Identity, recognition of the key player within the space.
- Having more collaboration with real-world actions attached to it.

### **Table 2:**

#### Barriers:

- Often, startups present solutions to problems that aren't problems.
- Companies often develop workarounds and then don't see it as a problem. However, it is inefficient.
- How can METS startups access talent from universities? How do we amplify emerging opportunities?
- The cycle time for procurement of big companies does not align with the cycle time of METS startups.

#### Actions:

- Show where the real challenges are. Make real industry opportunities and challenges more visible.
- Industry needs to communicate its problems better so they can be solved efficiently without the need for workarounds.
- A Chief Entrepreneur who leads open communication about the industry's current problems.
- Emerging internship-type programs that allow the connection between talent and startups. Universities can contribute talent and skills.

## HOW MIGHT WE QUESTION

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## DISCUSSION CAPTURE

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- Shorten cycle time mismatch between startups and big companies, by having a simple, premade, standard agreement for customer funding or collaboration agreement (first or early mover – simple IP, risk sharing).
- Shorten cycle time mismatch by helping startups choose the right customers.

### **Table 3**

#### Barriers:

- Mining has a brand issue.
- The sector is not overly attractive for students and new entrants.
- There is a big shortage of finance people coming into the sector.

#### Actions:

- To reach NetZero goals, the mining industry plays a key role.
- Improve message through technology to tell the story. Someone who is trusted and accepted by industry and government is needed (for example, a Chief Entrepreneur).
- Run an awareness campaign focusing on a good story about mining in Western Australia.

# EMERGING THEMES AND DEEPER INSIGHTS

This roundtable discussion has resulted in very similar emerging themes that StartupWA's previous Summit Series did in 2022. The Summit Series final report is available for download [here](#). For reference, that report can be found [here](#) and was used as an input to develop the WA State Government's Innovation Strategy.

Through this roundtable, the need for the role of a Chief Entrepreneur in the state government was also discussed. StartupWA has advocated for this for a number of years. South Australia and Queensland have a model that can be used as the starting point for this type of appointment.

The four key themes that emerged from this roundtable discussion are:

1. More Venture Capital investment needs to be made available in WA;
2. The importance of education for both founders and investors;
3. Success stories from within WA need to be shared far and wide to help build the brand of WA; and
4. Procurement policy – both at a Government and Industry level – can be a barrier to growing our METS startup ecosystem.

## VENTURE CAPITAL IN WESTERN AUSTRALIA

At the time this roundtable discussion was held, there was very little capital available in the market through WA-based venture capital firms. Since then, the Department of Jobs, Tourism, Science and Innovation announced its Innovation Strategy and WA Venture Support (WAVES) program.

The WAVES program has resulted in the announcement of three new venture capital firms, all based in WA. The final size and investment thesis of each fund are yet to be announced or confirmed; however, it is a big first step in addressing this emerging theme which has been identified in every roundtable discussion facilitated by StartupWA.

Regardless of fund size, this will result in easier access to capital for those METS startups that require it. Expanding on this emerging theme, the next hurdle becomes how do we encourage angel investors and venture capital firms to deploy their capital to grow the

METS startup and scale-up sector in WA. Secondly, how do we ensure there is continued access to capital for future, larger investment rounds?

## ENCOURAGING DEPLOYMENT OF CAPITAL

As the mining and resources sector is the core driver of the WA economy, it stands to reason that angel investors and venture capital firms should not require much encouragement to invest in METS startups.

However, there are a number of things that can be done to help this happen:

1. Provide education to potential investors that help them to understand the industry and market potential. Investors, both angels and venture capitalists, typically invest in market segments that they understand and where they can add additional value, outside of capital. This additional value can take the form of business knowledge, networks, and subject matter expertise.

The better-educated investors are, the more likely they are to be able to access an investment opportunity and make an informed investment decision.

2. Help facilitate connections between the startups that are seeking funding and WA's network of angel investors and venture capital firms. This is through efforts such as industry-specific networking events, pitch nights, and person-to-person introductions.

There are a number of pitch nights held every year by organisations such as Perth Angels, South West Angels, Modern People, and more. These pitch nights are the perfect opportunity to facilitate these connections. The addition of METS-specific pitch nights would also be beneficial and is something that could be hosted by organisations such as StartupWA or METS Ignited.

Regular startup networking events is a recommendation that was made in StartupWA's Summit Series report. Fostering connections within the startup community is important for both metro and regional startups in every industry vertical. StartupWA is in the process of organising a regular networking event that will help to connect and educate founders.

3. WA has a rich history of successful startups, both in the METS sector and in general. Shining a brighter spotlight on these successful startups will go a long way to increasing the appetite of investors to invest in the sector. More on this can be found in the following sections.

## **FOUNDER AND INVESTOR EDUCATION**

The availability of and access to education, both on the founder and investor sides, is always going to be important and fruitful for a growing innovation ecosystem. This roundtable discussion uncovered a number of areas where improved education is required in order to speed up growth and increase the rate of success. These areas are:

1. Improved commercialisation education for founders;
2. Education for founders on how to grow by acquisition; and
3. Education for investors to help them understand the investment potential of the METS sector and how to access the investability of the startups within it.

## **SHINE A SPOTLIGHT ON SUCCESS STORIES**

One of the most important initiatives that needs to be undertaken is to shine a bright light on the successful METS startups that WA has produced. These success stories need to be developed and distributed locally, nationally, and internationally, and will help to achieve a number of outcomes:

1. Raise the profile and brand of WA as an innovation ecosystem. This will help to speed up the growth of WA's overall ecosystem by positioning it as the go-to destination for METS startups.
2. It will assist in attracting external investment into the state to support the next wave of emerging METS startups.
3. It will help attract highly skilled human capital to the market. An ecosystem that is known as the go-to destination for METS startups will attract the best talent and startups from around the world.

# PROCUREMENT POLICY

The topic of procurement policy is always brought up as a lever that can be pulled to grow the startup sector. StartupWA's Summit Series report makes recommendations about changes that the State Government can make to its procurement processes to make it easier for startups to navigate the government buying rules and procurement process. In this instance, procurement policy and process was discussed with a stronger focus on industry requirements.

The key outcomes and suggested actions from the summit were:

- 1.** Reduce the barriers within the procurement process so that it's faster and easier for startups to sell to industry.
- 2.** Create a set of proforma, simple contract terms for small innovative companies to use to speed up the contract negotiation process during the procurement cycle.
- 3.** Reverse the procurement process by encouraging more mid-tier mining companies to engage startups and innovators, telling them the actual problems they're experiencing so that their pain points are more understood, resulting in better solutions created.
- 4.** Government procurement policies need to be modified to enable and encourage early adopter behaviour.

# APPENDIX A

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