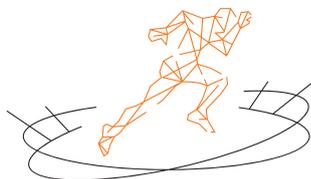




ASTN Sports Innovation Report

July 2022

DEEP DIVE INTO AUSTRALIA'S THRIVING SPORTSTECH SECTOR
WITH SPOTLIGHT ON INDUSTRY INSIGHTS AND MAJOR TRENDS.



Australian Sports
Technologies Network
Powering Sports Innovation

10 YEAR ANNIVERSARY 2022

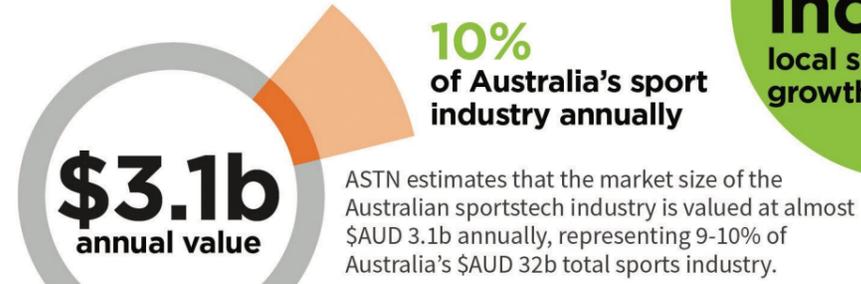
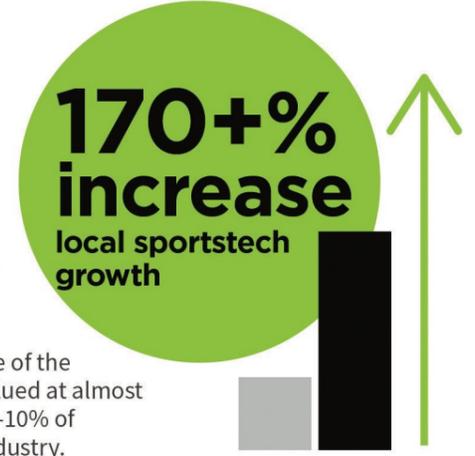


SPORTS INNOVATION REPORT 2022

A deep dive into Australia's thriving sportstech sector with spotlight on industry insights and major trends.

Local sportstech growth

Over the past decade the number of local sportstech companies has grown from just over 200 to around 600



employs nearly **10,850** people

Australia has developed a world competitive industry and is now regarded as one of the **top five nations globally in sportstech.**

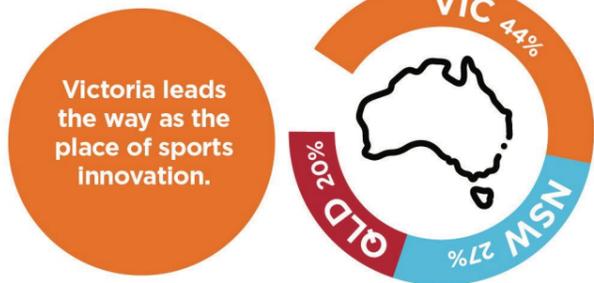


ASTN companies leading the way

ASTN has identified approximately 120 Australian sportstech companies as industry leaders and has estimated in 2022 that these companies employ more than 8,000 people and generate \$AUD 2.72b revenue per annum, or 89% of the total revenue of the industry.

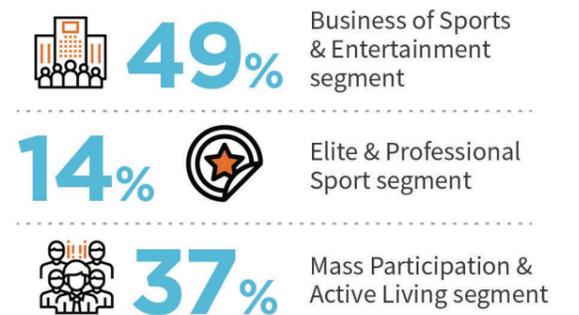


State by state breakdown



Market applications

Of the 600+ companies in the sportstech industry:



ASTN acknowledges the Victorian State Department of Jobs, Precincts and Regions in supporting this research as part of the funding provided to the ASTN to establish the Australian Sports Innovation Centre of Excellence (ASICE).

ASTN acknowledges and pays respect to the past, present and future Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

ASTN.COM.AU

Foreword

Job creation, economic growth, and trade and investment are on track to be among the great legacy achievements of which Australia can be immensely proud.



As Australia's peak industry body for sports technology and innovation, the Australian Sports Technologies Network (ASTN) has developed its latest report: ASTN Sports Innovation Report 2022.

Australia is building one of the world's most advanced and integrated sports innovations ecosystems over the next decade leading up to the 2032 Summer Olympic Games. Job creation, economic growth, and trade and investment are on track to be among the great legacy achievements of which Australia can be immensely proud.

The ASTN was established in 2012 to play a leadership role in the development of 'Australian-inspired' sports technologies. As we celebrate our 10th year anniversary, we pause and reflect on the past decade, how the sector has evolved, what has been achieved and the growth of the industry during that time. These findings impact our strategy moving forward, and how our sights are set on the next 10 years and our role in continuing to propel the industry forward – to enable Australia to be a global leader in sportstech.

This report is designed to present the latest industry findings on sportstech in Australia – including a detailed market sizing and economic impact analysis on Australia's sportstech industry.

Many of the insights are grounded in conversations with industry leaders, government, ASTN members and Australian sportstech startups. In this bottom-up approach to analysing the industry, ASTN has generated insights including estimated industry revenue and employment, market categories that 600+ sports technology and innovations companies service, the technologies used by these companies to develop their solutions, as well as their geographic distribution. We have also quantified the growth of the industry over the past 10 years.

ASTN will continue to update the industry analysis and take a deeper analysis into the industry over the coming years through this Annual Report. We anticipate that this analysis and quantification of the economic impact of the industry will be a critical cornerstone in Australia's future national sports innovation strategy and its drive towards the 2032 Olympics.

We remain committed to strengthening the reach, international reputation, and global connections of the Australian sportstech startup ecosystem across important global markets.

We see this report as an important piece for further discussion and debate. As the peak body of the Australian sportstech industry, we always welcome feedback and insights from the broader sports industry on our analysis to further enhance the status of our industry.

Given the significant growth in the industry over the past decade, we foresee that the coming years will be incredibly interesting. We hope this report will inform future discussion for key leaders. Please feel free to reach out to us to if you have any questions.

James Demetriou

James Demetriou
Chair, Australian Sports Technologies Network (ASTN)



Executive Summary

ASTN has an unwavering passion to build the next generation of sportstech companies, helping them to thrive and grow both locally and globally.

With exponential sportstech growth world-wide, and increased demand for Australia's innovation and technologies – Australia's sportstech sector is on course to reach unprecedented levels. Local sportstech firms have a very real opportunity to take their business to new heights.

The industry is changing, and to survive in this fast-changing industry – sportstech firms, entrepreneurs, government and established companies must adapt and evolve if they want to be leaders on a global stage. This report takes a deep dive into industry insights, economic impact and technology categorisations. It also identifies 10 major themes likely to define the industries evolution over the next five years and beyond.

Market size of sportstech in Australia

Of the total sports industry valued at \$AUD 32 billion, ASTN estimates that Australian sports technology and sports innovation companies contribute about 10% and employ more than 10,000 people.

There are now around 70 sportstech networks and clusters, 90 sports technology accelerators and more than 100 dedicated sportstech investors globally (Source: ASTN 2022).

Australia has developed a world competitive industry and is now regarded as one of the top five nations globally in sportstech.

ASTN companies and national snapshot

ASTN has created a directory of more than 600 sportstech companies which provides the foundation of the analysis of the industry. Since the ASTN started in early 2012, the number of companies in the industry has grown by a remarkable 170+%.

ASTN has identified around 120 sportstech companies as industry leaders and has estimated that in 2022 these companies employ more than 8,000 people and generate \$AUD 2.72 billion revenue per annum, or 89% of the total revenue of the industry.

ASTN notes that the state of Victoria is the most dominant state of activity for the sports innovation industry in Australia. It represents 44% of the industry, followed by New South Wales at 27% and Queensland at 20%. The remaining states and territories in Australia are under-represented with a combined 9% of the total number of established entities when compared to the 22% of Australia's population they amount to. Over the next decade, ASTN expects Queensland to grow jobs and sports economy considerably with the recent launch of their SportX innovation economy strategy and momentum towards the 2032 Summer Olympic Games hosted across South East Queensland.

Future trends

With rapid sportstech consumer growth world-wide, and many major sporting events on the horizon for Australia – demand of Australia's sportstech innovation is set to reach unprecedented levels. ASTN has identified 10 major themes – from smart apparel to sustainability and women in sportstech – that form part of ASTN's five-year strategy and provides strategic opportunities for Australia's sportstech industry.

ASTN believes startups, companies, founders, government and the wider sports industry must recognise and embrace these themes – looking at how they impact current activities, how they need to evolve and adapt, and what opportunities they present.

The ASTN has identified approx. 120 sportstech companies as industry leaders and has estimated that in 2022 that these companies employ more than 8,000 people and generate \$AUD 2.72 billion revenue per annum, or 89% of the total revenue of the industry.



1. Market Size of Sportstech in Australia



ASTN was established in 2012 to play a leadership role in the development of 'Australian-inspired' sports technologies.

The Australian Sports Technologies Network (ASTN) has been established for more than 10 years and in that time, we have seen significant evolution of the sector both domestically and globally. From a nascent industry in 2012, sportstech is now well represented globally and a critical part of the \$US 2.3 trillion global sports industry (Best & Howard – Global Sports Industry 2022). The global sportstech industry is estimated to be worth \$US17.9 billion in 2021, and it is expected to grow by 17.5% per annum to \$US 40+ billion by 2026 (MarketsAndMarkets 2021).

On the domestic front, ASTN was established in 2012 to play a leadership role in the development of 'Australian-inspired' sports technologies. ASTN was created on the back of Australia's historical and globally regarded credentials in elite sports performance, sports science, and sports management. At the time, ASTN predicted the emergence of an important industry, and it became one of the first co-ordinated sportstech 'eco-system' or 'super-cluster' initiatives globally. Today, there are now around 70 sportstech networks /clusters, 90 sports technology accelerators and more than 100 dedicated sports technology investors globally (source: ASTN 2022).

Australia has developed a world competitive industry and is now regarded as one of the top five nation's globally in sports technology and innovation¹.

ASTN has accumulated significant industry knowledge and intelligence to be able to confidently undertake a detailed market sizing and economic impact analysis on Australia's sports technology and sport innovation Industry. In this bottom-up approach to analysing the industry, ASTN has been able to generate insights including estimated industry revenue, employment and market categories that the 600+ sports tech companies' service.

In addition, this report categorises the technologies used by these companies when developing sportstech solutions for the sector. By quantifying the growth of the industry over the last 10 years, ASTN has also identified the geographic distribution of sportstech companies across Australia.

1. Demetriou, Schlegel, Samson; Chapter 13: Australian Sports Technologies Network: adding value through creating synergies; in: Clusters of Innovation in the Age of Disruption, Engel J.S. (ed), University of California, Berkeley, USA



2. Definition – What is Sportstech?



Definition of Sportstech

At the intersection of human performance and science, technology, engineering and math (STEM), a discipline evolved which nowadays is referred to as 'sports technology' or in short 'sportstech'. However, sportstech includes more than sports equipment, apparel, protective supplies or footwear. In addition to on-the-field technologies used in monitoring health and improving performance of athletes of all abilities, off-the-field technologies involving sports business applications, fan engagement, broadcasting, sports infrastructure and communication are also considered part of sportstech.

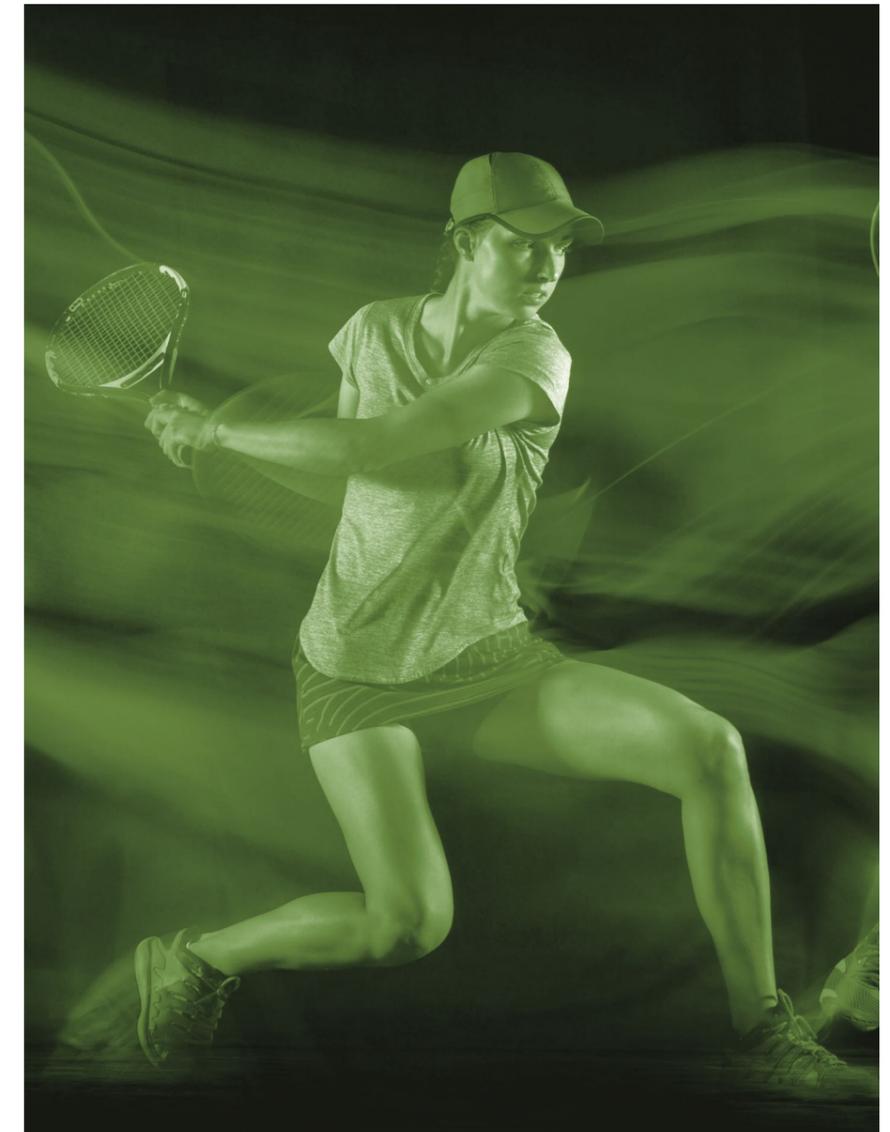
Sportstech Categories

The ASTN has created a directory of Australian sportstech leaders which include more than 600 sports technology and sport innovation companies that provide the foundation of the analysis of the sportstech industry.

As part of the detailed analysis of the sportstech industry, the ASTN has developed a categorisation system that is applied to each sportstech company.

- **Market Application** identifies the application segment of the technology used across three sports market verticals, namely the:
 - i. Business of Sport & Entertainment,
 - ii. Elite & Professional Sport and
 - iii. Mass Participation & Active Living.
- **Technology Stack** identifies type of technologies utilized to form a proprietary product or service solution by the sportstech business, grouped by:
 - i. Information & Communications Technologies,
 - ii. Advanced Materials,
 - iii. Medical, Health & Biotech and
 - iv. Sensors & Devices.

The sports technology and sports innovation Industry – now typically known as sportstech – includes companies working at the intersection of data, digital, technology and business and direct applications to the Sports, Fitness, Media, Entertainment, Esports, Stadiums and Venues, Wearables, Wellness and Active Living.



Market Applications



Of the 600+ companies in the sportstech industry almost half (49%) service the Business of Sports & Entertainment segment, 14% Elite & Professional Sport and the remaining 37% service the Mass Participation & Active Living segment.

Business of Sport & Entertainment

Solutions and products servicing the Business of Sport and Entertainment focus on improving operations of sports federations, leagues, teams and / or facilities. More specifically this includes:

- Improving the efficiency and profitability of business operations,
- Improving fan experience, and
- Maximising the commercial value of rights holders digital and physical assets

Elite & Professional Sport

Solutions and products servicing Elite Sport focus on monitoring, assessing and improving the performance and aiming to reduce injury of elite and professional athletes – both in and out of game. More specifically, solutions and products that focus on:

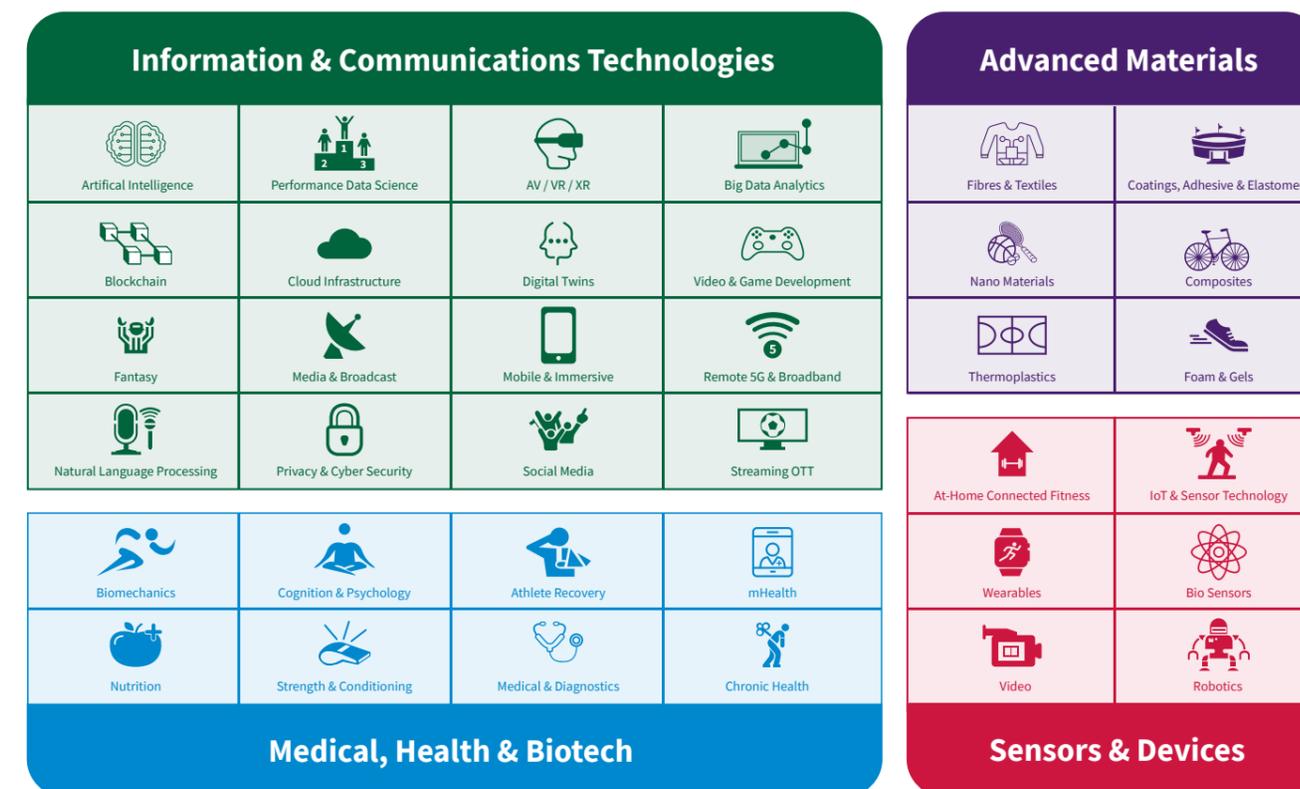
- Improving training, coaching & tactical analytics of elite athletes & professional teams,
- Improving the physical and emotional well-being of elite athletes, and
- Enhancing the equipment & facilities used by elite athletes for competition.

Mass Participation and Active Living

Technologies servicing Mass Participation and Active Living include monitoring, maintaining and improving the physical health, well-being and performance of amateur, grassroots and junior athletes or the general population.

This category also includes design, development and provision of sports apparel, footwear, equipment & facilities innovations to the mass market.

Technology Stack Categorisations



Information and Communications Technologies (ICT)

Relates to digital, communications, cloud, software and IT hardware typically associated with creation, management and distribution of sports video, data and content.

Medical, Health & Biotech

Relates to technologies relating measuring, assessing and / or improving the physical and / or psychological well-being of elite and amateur athletes as well as the general population.

Advanced Materials

Relates to the materials used in the manufacture of sports equipment, apparel, footwear and any other tangible sports product (such as surfaces, vehicles and vessels). Advances in the development and use of materials typically improve the performance of the sports product and equipment.

Sensors & Devices

Relates to both wearable and non-wearable devices that capture data for the purposes of monitoring, assessing and improving the performance of elite athletes, amateur athletes and fitness enthusiasts.

3. Sportstech – A National Snapshot



With regards to the technologies deployed by companies in developing their solutions, 61% were ICT-based, 16% were advanced materials, 13% were sensors and devices whilst 9% were health, medical and biotech.

In relation to ICT in the sportstech industry, there is a very strong skew towards sports data, mobile, cloud and broadcast applications for both Business of Sports & Entertainment, and Elite and Professional Sport Categories. Live sports data and the capture and distribution of sports content is a key driver of the sportstech industry's activities.

Development of new sports equipment, products and apparel requires application of advanced materials, typically in fibres, composites and gels. Australia has a small sports product, apparel and footwear market. However, instrumentation of equipment (non-invasive health and human measurement equipment) and products (balls, helmets, mouthguards) are creating new beachhead opportunities for sports innovators. This is captured by the sensors and devices category.



Market Size - Revenue and Employment

Professional services firm KPMG values the total sports industry in Australia at \$AUD 32 billion (source: KPMG²).

ASTN estimates that the market size of the Australian sportstech industry is valued at almost \$AUD 3.1 billion annually, representing 9-10% of Australia's \$AUD 32 billion total sports industry, and employing more than 10,800 people.

Of the total estimated market size, Australian sports technology and sport innovation companies are estimated to contribute about \$AUD 2.78 billion of revenue and employ more than 9,950 people. Domestic operations of acquired Australian sportstech companies and Australian operations of international sportstech companies contribute the remaining \$AUD 280 million revenue and employ almost 900 people.

In the landscape map and listing below, the ASTN has identified approx. 120 Australian-inspired sportstech companies. These companies represent 19% of the 600+ companies identified in our analysis.

The biggest 19% generate 89% of revenue

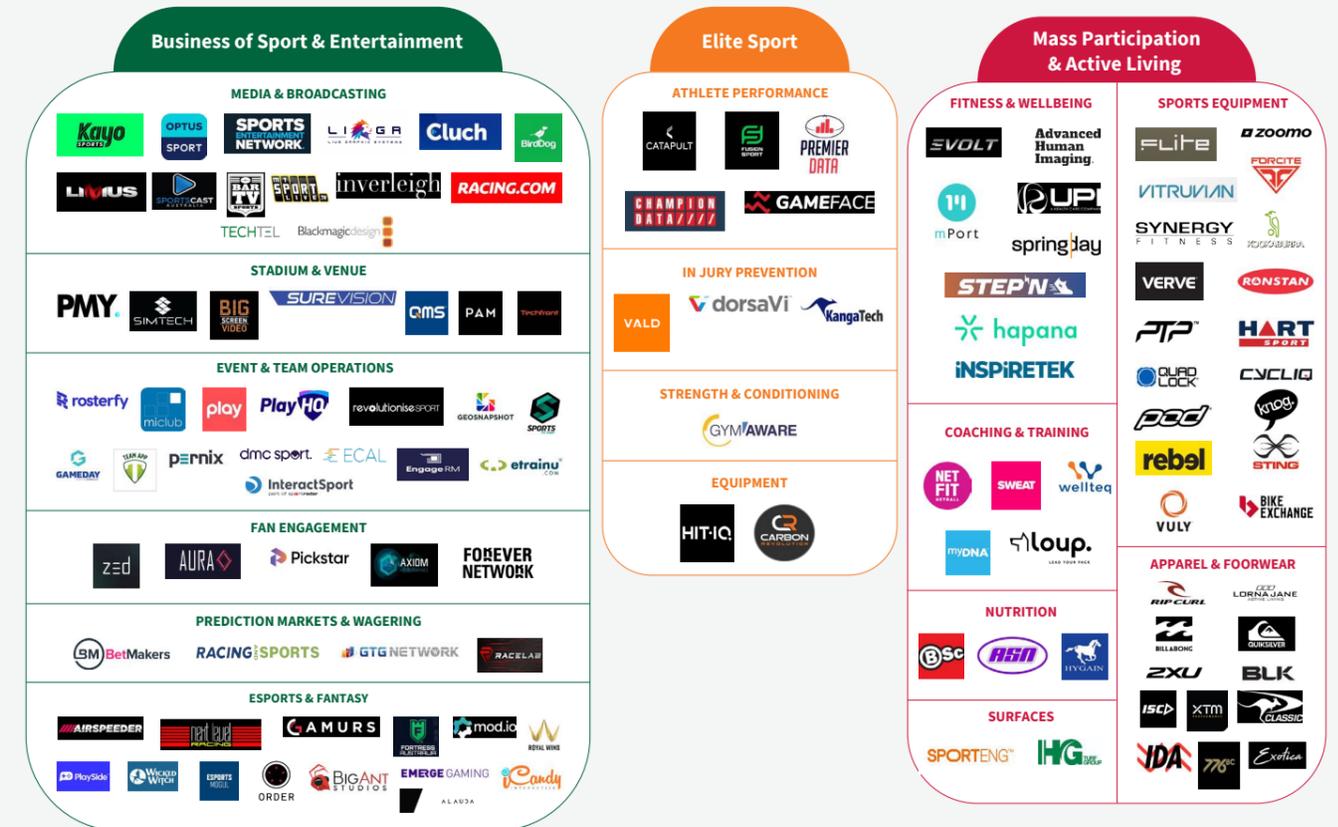
ASTN estimates that in 2022 these sportstech companies employ around 8,078 people and generate \$AUD 2.72 billion revenue per annum, or 89% of the total revenue of the industry.

Of these companies, 51% service the Business of Sports & Entertainment segment, 40% the Mass Participation and Active Living segment and 9% the Elite Sports segment.

2. KPMG; Sports Industry Economic Analysis: Exploring the size and growth potential of the Sport Industry in Australia; prepared for Office for Sport – Commonwealth Department of Health; March 2020.

Australia's Sports Innovation Landscape

Top 118 Local Leading & Fast-Growth Companies = 8,078 jobs and \$2.72 billion annual revenue



Business of Sport & Entertainment

- Media & Broadcasting**
 - Kayo Sport
 - Optus Sport
 - Racing.com
 - Sports Entertainment Network
 - Inverleigh
 - Cluch
 - My Sport Live
 - Bar TV Sports
 - Sports Cast
 - Black Magic Design
 - Bird Dog
 - Linus Technologies
 - LIGR
 - TechTel
- Stadium & Venue**
 - PMY
 - PAM
 - SimTech
 - Big Screen Video
 - QMS
 - Sure Vision
 - Techfront Australia
- Event & Team Operations**
 - Rosterfy
 - DMC Sport
 - GameDay
 - Interact Sport
 - Team App
 - PlayHQ
 - Revolutionise Sport
 - EngageRM
 - MiClub
 - Play Sport
 - eCal
 - GeoSnapShot

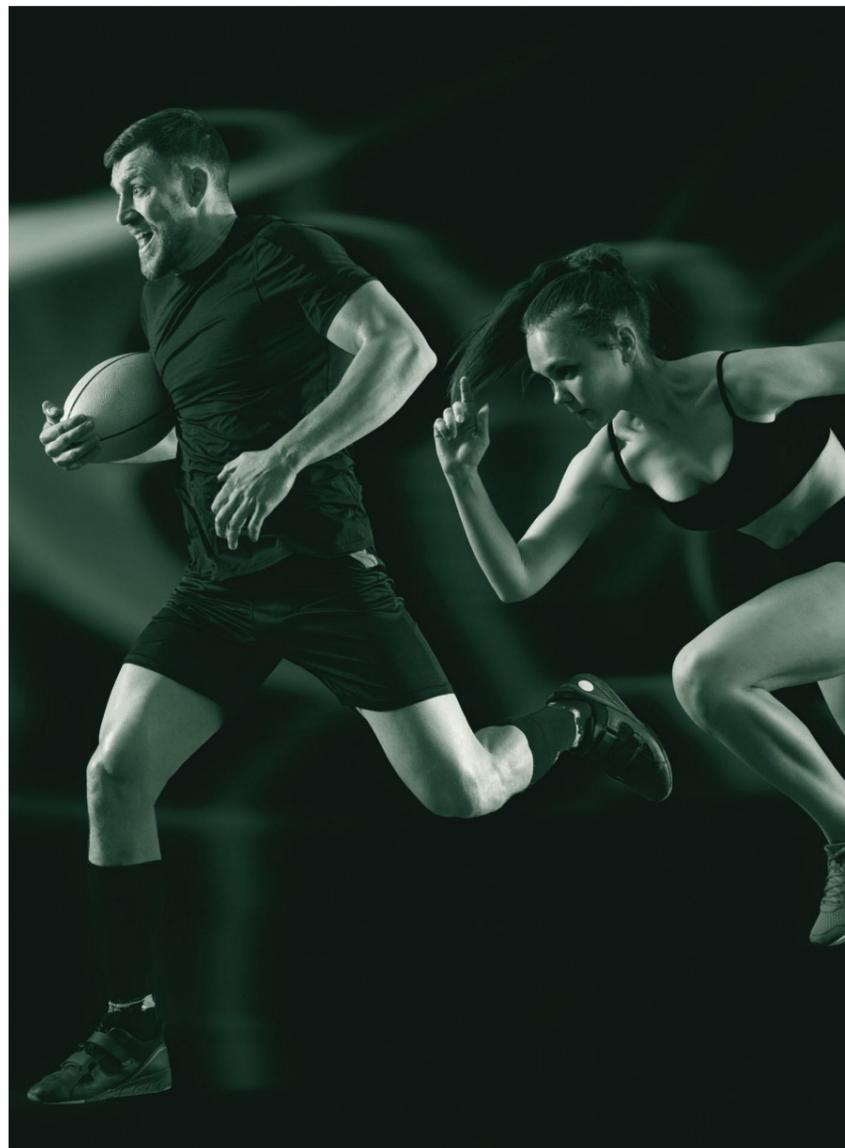
- Fan Engagement**
 - Zed Run
 - Aura
 - Pickstar
 - Axiom Holographics
 - Forever Network
- Prediction Markets & Wagering**
 - Betmakers
 - GTG Network
 - Racing & Sports
 - RaceLab
- Esports & Fantasy**
 - Esports Mogul
 - Airspeeder
 - Next Level Racing
 - Alauda Areonautics
 - Gamurs
 - Playside Studios
 - Big Ant Studios
 - iCandy Interactive
 - Mod.io
 - Royal Wins
 - Fortress Australia
 - Emerge Gaming
 - Order Esports
 - Wicked Witch Software

- Elite Sport**
 - Athlete Performance**
 - Catapult Sport
 - Fusion Sport
 - Champion Data
 - Premier Data
 - GameFace
 - Injury Prevention**
 - VALD
 - dorsaVi
 - KangaTech
 - Strength & Conditioning**
 - GymAware
 - Equipment**
 - HIT IQ
 - Carbon Revolution

- Mass Participation & Active Living**
 - Fitness & Wellbeing**
 - Evolt 360
 - Advanced Human Imaging
 - Mport
 - United Pacific industries
 - STEPN
 - Spring Day
 - Hapana
 - Inspirek
 - Coaching & Training**
 - NetFit
 - Sweat
 - WellTeq
 - MyDNA
 - Loup
 - Nutrition**
 - Body Science
 - Australian Sports Nutrition
 - Hygain
 - Sports Equipment**
 - Bike Exchange
 - Cycliq
 - Zoomo
 - Fliteboard

Note: If your business is not on this list and you think it should be please let us know. Typically, a minimum of 15 employees is a benchmark for inclusion.

Since the ASTN was established in early 2012, the number of companies in the industry has grown from around 224 to 605 by 2022, representing a 170% increase over 10 years.



3. <https://www.fintechaustralia.org.au>
 4. <https://www.afr.com/companies/fintech-sector-moving-into-full-stride-20180823-h14ebc>
 5. <https://home.kpmg/au/en/home/insights/2021/10/australian-fintech-landscape.html>
 6. <https://www.austrade.gov.au/international/invest/opportunities/fintech>

Long-tail of the Sportstech Startup Economy

The ASTN has quantified a significant long tail in the sportstech startup economy. Similar to other industries, the Pareto Principal applies whereas 20 per cent of the largest businesses contribute 80 per cent of the economic activity. Vice versa, a large number of small companies, i.e. 80 per cent, contribute the remaining 20 per cent of activity.

The ASTN estimates that the smallest 81% of established companies (approximately 500) contribute approximately \$AUD 242 million revenue per annum and employs 2,425 people.

Based on ASTN's analysis of the 600+ companies a total of around 60% of established companies in the industry employs 1-10 staff – whilst the top 10% of companies employ 50+ people and the next 30% (11-49 people) employs.

Fintech v Sportstech

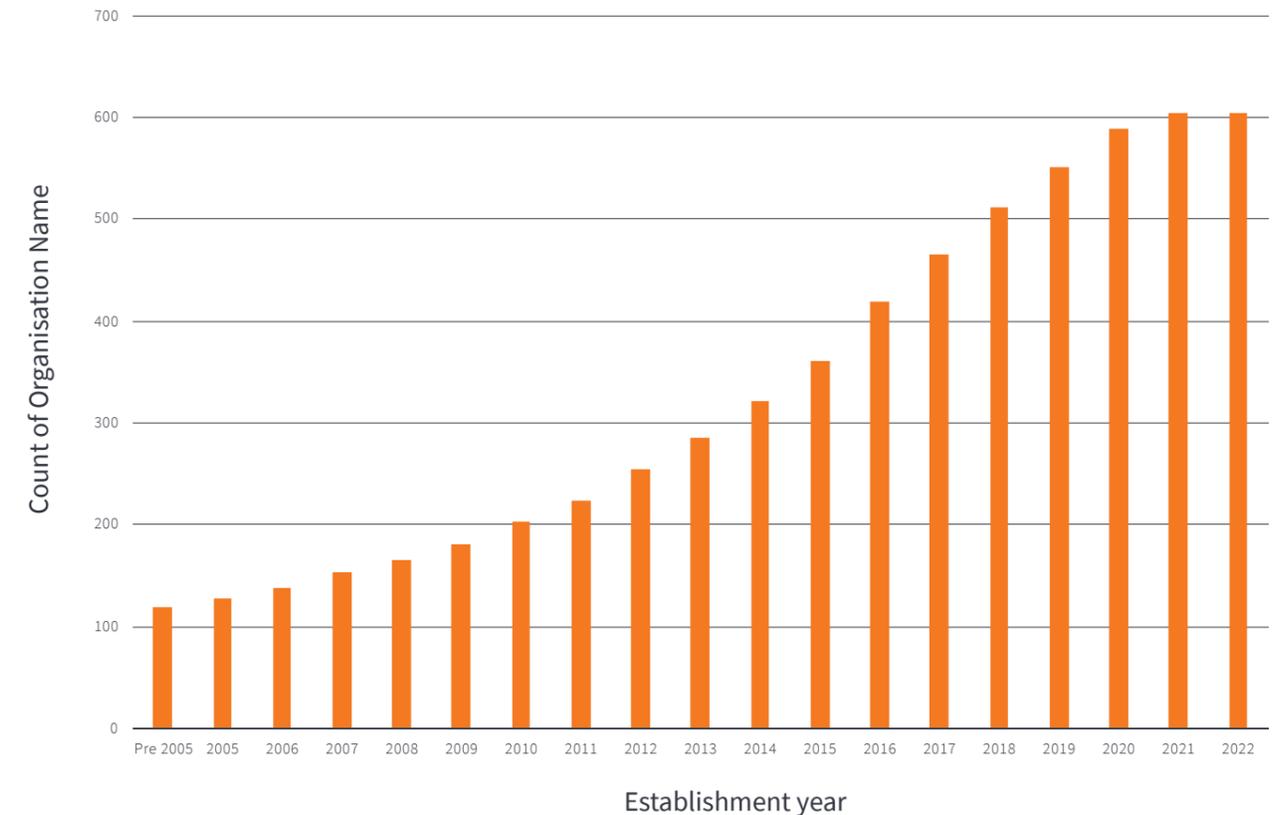
It is worth noting that Fintech Australia³ recently estimated that the size of the Australian Fintech industry was around \$AUD 4 billion in 2021⁴ along with 718 active startups as of October 2021 (per KPMG⁵). Success of the emerging industry is built on the back of Australia's \$10 trillion financial services industry⁶.

By comparison, the Australian Sports Innovation industry size of \$AUD 3.1 billion and 600+ companies is highly competitive and deserving of continued contribution by the private sector and government sector alike.

Growth in the Number of Sportstech Companies

There has been significant growth in the number of Australian Sportstech companies over the last decade.

The four-year period from 2016 to 2019 represented the period of most significant growth for the industry, when the number of established companies grew by around 191. Established entities appear to have plateaued during the COVID-impacted years of 2020 and 2021. However, ASTN expects a return to the 15-20% year-on-year growth levels experienced in previous years in 2023.



Australian Sportstech Companies by State

Victoria

Victoria is the most dominant state of activity for the sportstech industry in Australia. Whilst Victoria is home to 44% of the sportstech companies, the number of employees in the sector working in Victoria is higher. ASTN estimates that nearly half of jobs are currently located in Victoria as of the top 118 largest sportstech companies, 46 are based in Victoria.

The significance of sport as an economic driver in Victoria makes the state an attractive destination for startups. Melbourne is home to one of the leading sporting precincts in the world and boasts a significant major sports events calendar highlighted by the Australian Open Tennis and the Australian Formula One Grand Prix. It is also home to the headquarters of several leading national sports federations and largest sporting clubs.

Three sports technology startup initiatives are also based in Melbourne including the ASTN, the Sports & Events Tech Accelerator Program run by Startupbootcamp as well as the Tech-Stars Sports Tech Accelerator.

New South Wales

New South Wales is slightly under-represented with 27% of established entities (32% of population). The Olympic Park Precinct in Homebush has been a destination for sporting federations, the state institute of sport, leading clubs and as a result has become home to various sportstech startups.

Queensland

Queensland's sports innovation activity is currently representative of its population at 20%. However, this is expected to grow with

significant investment into the sports ecosystem over the coming 10 years with the hosting of the 2032 Olympic Games in Brisbane.

The remaining states of Australia are under-represented at a total of 9% of established entities (22% of population). The states typically don't have the sports federations and teams.

Melbourne: Victoria's Sportstech Hub

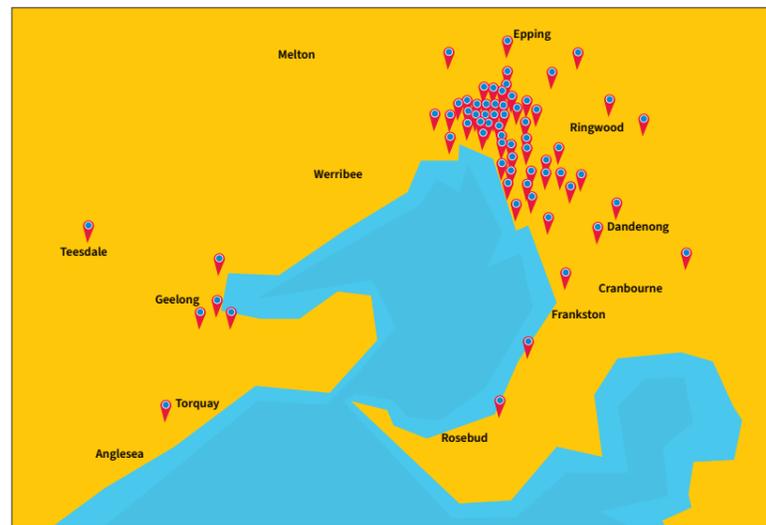
The significant sports innovation sector in Victoria is heavily concentrated in the metropolitan area, with only a small number of sportstech companies established in regional areas.

The graphic to the right also demonstrates the significant concentration of established businesses in the Melbourne CBD, inner city (within 10km of the CBD) and the south-east corridor. There is limited activity in the western suburbs and outer suburbs in general.

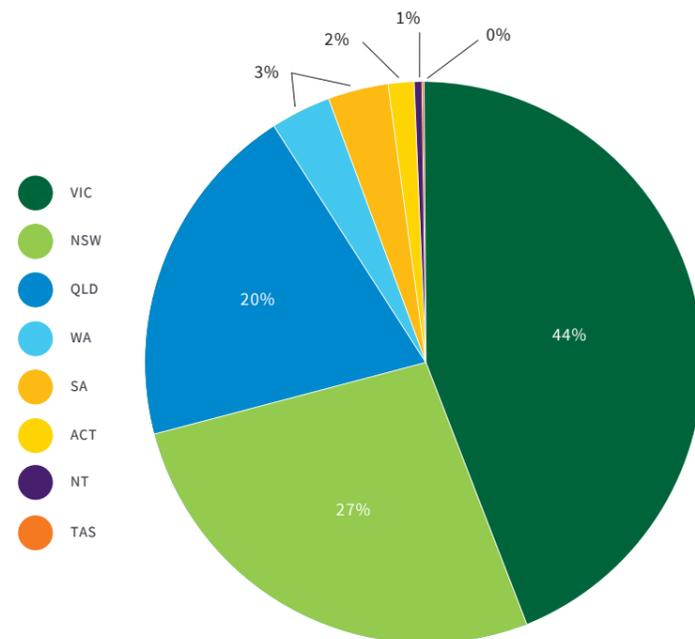
This geographic distribution may be explained by a number of factors including:

- Location and proximity to major sports precincts on the doorstep of the CBD in Richmond, the Docklands and South Melbourne.
- Headquarters of several major sports federations, teams and institutes being located close to or within these precincts.
- Access to startup and co-location facilities in the CBD and inner-city locations. The establishment of the co-located facility, Australian Sports Innovation Centre of Excellence (ASICE) in Cremorne / Richmond, will result in future concentration of activity around Melbourne's major sports precinct.

Of the more than 600 sportstech companies captured by the ASTN, 44% are Victorian-based despite the State only representing 25% of the overall population in Australia.



Sportstech Industry Market Share by State



State-Based Employment Stats (Est)

The table below represents an estimate of employment by state for sportstech employment.

VIC	NSW	QLD	WA	SA	ACT	NT	TAS	TOTAL
5176	2553	2584	176	252	92	15	5	10,853
48%	24%	24%	2%	2%	1%	0%	0%	





4. Emerging Sportstech Themes

M&A and Venture Capital Activity - Sports Innovation Transactions (2021-22)

Despite the impacts of COVID on the domestic and global sports industry, the Australian sportstech sector experienced significant mergers and acquisitions and venture capital activity through 2021-22. Transactions amounted to over \$AUD 1 billion for the period highlighted by the acquisition of three fitness and wellness apps. The acquisition of the three celebrity / influencer-led apps, including Sweat by iFit (\$AUD 400m est.), Centr by HighPost Capital (\$AUD 200m est.) and Australian Life Tech by MyDNA (\$AUD 71m), totalled nearly \$AUD 700 million of the total transaction value.

Two of the world's leading sportstech companies, Sportradar and Genius Sports, were also active in local market with the acquisition of Interact Sport and FanHub Media respectively. Stack Sports from the USA added TeamApp to its portfolio which also includes Australia-born SportsTG (GameDay). These acquisitions by leading international companies highlight the quality of solutions developed by our local small-to-medium enterprises.

Three other significant capital raises were from companies that have developed instrumented and sensor-based sports equipment for a range of purposes including Vitruvian (fitness training), HIT IQ (smart mouthguard for contact sports) and Forcite Helmets (smart helmet for adventure sports).

In fast-growing electric vehicle market E-Bike company, Zoomo, raised more than \$AUD 80 million, led by Atlassian's co-founders private venture capital businesses. Whilst Fliteboard focused on next-generation water-based transport with their e-foil boards and raised a Series B round.

With the emergence of Web3 there were two notable blockchain and NFT (non-fungible tokens) capital raises. This included \$USD 20 million for Zed Run, a digital horse racing game that has become a key player in their category globally as well as STEPN, a token-based fitness activity app that also raised \$AUD 5.5 million.

Date	Company	Description	Transaction Activity	Amount
Jul '21	Sweat	Fitness & Wellness App	Acquisition by iFit	\$AUD 400 million (est)
Mar '22	Centr	Fitness & Wellness App	Acquisition by HighPost Capital	\$USD 200 million (est)
May '22	Australian Life Tech	Fitness & Wellness App	Acquisition by MyDNA	\$AUD 71 million
Sept '21	Gameface.AI	Sports Computer Visioning for Tennis	Acquisition by Slinger	\$USD 33 million
May '21	Interact Sport	Live Sports Data & Video Platform	Acquisition by Sportradar	Undisclosed
May '21	FanHub Media	Fan Engagement Platform	Acquisition by Genius Sports	Undisclosed
Nov '21	TeamApp	Communications App for Sports Teams	Acquisition by Stack Sports	Undisclosed
Dec '21	Wicked Witch Software	E-Sports	Acquisition by Keywords Studios	\$AUD 6.5 million (est)
Nov '21	Zoomo	E-Bikes	Venture Capital	\$AUD 82 million
Jul '21	Zed Run	Virtual Horse-Racing / NFTs	Venture Capital	\$USD 20 million
Apr '22	Vitruvian	Smart Resistance Training Equipment	Venture Capital	\$USD 15 million
Dec '21	Racing & Sports	Tech Solutions for Wagering Markets	IPO – Australian Stock Exchange	\$AUD 29 million
May '22	Fliteboard	Electric Foil Boards	Venture Capital	Undisclosed – Series B
Jun '21	HIT IQ	Smart Mouthguard	IPO – Australian Stock Exchange	\$AUD 10 million
Jul '21	GAMURS	E-Sports	Venture Capital / Debt	\$AUD 7.5 million
Jan '22	STEPN	Web3 Fitness & Lifestyle App	Venture Capital	\$USD 5 million
Feb '22	Forcite Helmets	Smart Helmet for Action Sports	Venture Capital	\$AUD 5.5 million

Powering sportstech to 2027 and beyond

After consultation with members, ASTN has identified ten major themes that form part of ASTN's five-year strategy (2022-2026) and provide strategic opportunities for Australia's sportstech industry.

ASTN believes startups, companies, founders, government and the wider sports industry must recognise and embrace these themes – looking at how they impact current activities, how they need to evolve and adapt, and what opportunities they present.

In particular, sportstech startups and established companies have an opportunity to find solutions that address these market needs and business problems in the industry.

As a result of this work, the ASTN is looking to provide thought leadership and further input to these topics through stakeholder collaboration and the program activities of the Australian Sports Innovation Centre of Excellence (ASICE).

10 Sportstech themes for industry growth:



Theme 1 - Artificial Intelligence (AI) in Sport

AI is used in sports for boosting performance and health thanks to predictive analysis. With the advent of wearables that gather information about strain and tear levels, athletes can avoid serious injuries – but that's only the beginning. AI can help teams shape business and media strategies, tactics, and maximise their strengths both on-field and off-field.



Theme 2 - Active Living, Fitness and Wellness

Sports technologies are empowering people to live healthier, happier lives. Youth can embrace the digital tools and initiatives to measure and drive greater physical participation. Personalised wellness and personalised nutrition are among the fastest-growth markets in the world as elite and expensive technologies are democratised to mass markets quickly and globally. ASTN is seeing spectacular growth in this area in Hong Kong on the HKEX.



Theme 3 - Web 3.0, Metaverse, Gaming and Blockchain

Web3 is an all-encompassing phrase to describe NFT's, Metaverse, Crypto, smart contracts and community governance. Web3 will have one of the most game-changing impacts on the sports ecosystem in Australia, underpinned by revolutionary blockchain technologies that are enabling mass decentralisation.



Theme 4 - Virtual Sports of Tomorrow: Esports, Drone Leagues, E-Bike and more

As technologies infuse every aspect of the sporting world, athletes, athleticism, and sports viewership are creating emerging modern sports. For example, ASTN is currently working closely with a leading Australian telecommunications company and Airspeeder, a revolutionary drone racing league for flying electric cars.



Theme 5 - Smart Apparel, Smart Equipment and Wearables

Performance levels of athletes and consumers will significantly increase on the back of materials technology, bio-medical science and neuroscience. ASTN has three directors which include Dr Martin Schlegel (Australian Sports Technologies Network), Shaun Bajada (Australian Sporting Goods Association) and Professor Tino Fuss (University Bayreuth, Germany) – who are recognised leaders in sports materials, sporting goods and sports apparel.



Theme 6 - Sustainability and ESG - Quantifying Impact

Sports is playing a leading role in promoting and supporting sustainability. Influencers, consumers and regulators will be the driving forces. Nothing less than a neutral footprint will and is already the target! This means new stadiums must be carbon neutral and fully recyclable, should recycle waste, and need to find ways to generate their own energy and water usage. Additionally, alternative ways of transportation to and from the stadium will be stimulated.

ASTN continues to develop one of the world's leading measurement tools for sustainability and ESG (environment, sustainability, governance) led by Professor Danny Samson at the University of Melbourne. Passionate about collaborating with its member network, ASTN encourages the use technology and innovation to drive more sustainable practices for the sports industry.



Theme 7 - Sports Digital Ethics in Practice

Collecting, transmitting and analysing sports performance and personalised tracking data provides great insights but come with significant responsibilities. Combining field-leading experts and business leaders who have practical experience of developing digital ethics strategy and carrying out the tactical changes needed to bring the strategic vision to life within sports, Sports Digital Ethics will become a critical issue to protect Australia's sporting future.

ASTN is working together with Swinburne University who are leading current Sports Digital Ethics, and are progressing from raising awareness of its importance to generating many models, frameworks, and sets of principles. This work is expected to yield possible solutions on how to implement these governance measures across sports and entertainment in Australia.



Theme 8 - Women in Sportstech

Research shows that less than five per cent of sports startups are women in Australia – the industry must work together to change the ratio of women in sportstech.

As part of its current educational programs, ASTN has demonstrated above industry average outcomes – with more than twelve percent of female founders or co-founders participating in ASTN programs. However, ASTN recognises that a specific and separate approach is required to effectively uplift female participation and long-term impact.

ASTN has a long-term partnership with Women in Sports Technology (WiST) to work together to increase representation of women in the sportstech industry in Australia, and works closely with its members to improve their culture to encourage a more inclusive and diverse workforce.



Theme 9 - Investment & Venture Capital into Australian Sports Companies

ASTN is working on securing a stronger, more reliable network of local and international investors for companies, since Australia has historically lacked access to seed and later-stage investment capital.

In order to provide access to capital for sportstech companies, ASTN has developed a sports global venture capital network, led by Mr Guy Bracher. The ASTN-led coaching programs are designed to ensure that Australian sportstech companies are investor-ready. This access to global capital now includes HK, USA and UK.



Theme 10 - Global Trade and Business Matching

Australia has proven to function as an important test and validation market for sports-tech. Within the Australian sports market, ASTN advocates to local sports organisations and sports events to embrace Australian-made sports innovation solutions and support local sports entrepreneurs.

Internationally, ASTN supports and promotes export growth through working together with Austrade, Victorian Government and Queensland Government on promoting Australia's excellence in sports technology to global markets. Such initiatives include ASTN priority export markets of United Kingdom, United States, Germany, Switzerland, France, Northeast Asia (HK, South Korea, Japan and China) and India.



Methodology

The ASTN has applied a 'bottom-up' approach in quantifying revenue and employment generated by the sportstech industry. ASTN has used publicly available as well as measured revenue-per head estimates to calculate the economic contributions.

The ASTN's original mandate and mission focused on developing 'Australian-inspired' sports technologies, and this also provided the foundation for the quantification of the sportstech industry.

- All revenues and employment (both domestic and international) of Australian headquartered companies were included for the purposes of market sizing.
- Where Australian companies have been acquired by international entities, only Australian revenues and employment have been included.
- International sportstech companies Australian operations were also included in the market sizing estimates.
- For companies servicing multiple industries an estimated pro-rata of sports-related revenue and employment was calculated.

The sportstech industry market size excludes the sports wagering and betting industry which is estimated to be \$AUD 5.2 billion per annum, employing close to 3,000 people. This sector relies heavily on sports data analytics and sports broadcasting and media talent in procuring services to the market. Professional services to the sportstech industry such as digital, architectural, engineering, product design, leisure, planning and strategic advice has also been excluded for the purposes of market sizing. It is estimated that this Professional Services sector employs at least another 2,000 people across Australia's sports economy.

Contributors & Acknowledgements

John R Persico Board Member

John Persico is an international leader in Sports Technology and Future of Sports. He advises governments, sports federations and leading corporates across the world on the sports digital economy, investments and transactions at the intersection of technology in Sports, Health, Media, Artificial Intelligence and Emerging Industries. He also co-founded the Australian Sports Technology Conference. He previously worked and studied in investment banking, private equity, law and management consulting.

James Demetriou Chair

James is an experienced Senior Executive Director in Mergers and Acquisition, cross border investment, specialist advisor in Asian investment and listed and large private board governance who has served on many government, large private and listed company boards. As the Founding Chair of the ASTN, James is one of Australia's most respected leaders in sports business, sports governance and sports technology having represented the University of Melbourne, the ASTN, the Victorian Government and Austrade at many Asian Conferences and trade missions. Over the past 40 years, James has played a major role in Australian sport as a senior player at the Essendon Football Club (1975-1976), a Board Director of Essendon Football Club in the mid to late 90s and the founding Chair of Sports Without Borders (2006 to 2016).

Craig Hill Sports Tech Startup Advisor & Industry Analyst

Craig Hill is a leading sports technology specialist in Australia, currently engaged as Research Analyst and Special Projects at Australian Sports Technologies Network. He acts as a mentor and advisor to numerous sports technology startups. Craig co-founded the Australian Sports Technologies Network (ASTN) in 2012 and was inaugural Executive Director until 2017. He led the development and implementation of a suite of programs to support the development of the sector including, international trade missions, startup accelerator programs, conferences and international partnerships.

Dr. Martin Schlegel Board Member

Martin has 25 years experience in the sports and recreation, construction and plastics specialty chemicals industry in the areas of product development, process engineering and research and development commercialisation.

He is Principal of Chemneera Consulting, providing advice in the sport and recreation industry across Australia, Europe and the USA. Previously, Martin worked in various positions in the USA and Australasia including management roles in business information technology, quality management engineering and business M&A. His ASTN work focuses on startup programs and global partnerships with other clusters of innovation.



Australian Sports
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Powering Sports Innovation

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