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Executive Summary – Sports Megatrends

This report by CSIRO for the Australian Sports Commission identifies six megatrends likely to shape the Australian sports sector over the next 30 years. A megatrend represents an important pattern of social, economic or environmental change. Megatrends occur at the intersection of multiple trends and hold potential implications for policy and investment choices being made by community groups, industry and government. The megatrends are shown below in an interlinked and overlapping Venn Diagram. This captures the connection between the different forces potentially shaping the future.

A Perfect Fit

Individualised sport and fitness activities are on the rise (Standing Committee on Recreation and Sport, 2010). People are fitting sport into their increasingly busy and time-fragmented lifestyles to achieve personal health objectives. Participation rates in aerobics, running, walking, along with gym membership, have all risen sharply over the past decade while participation rates for many organised sports have held constant or declined (Standing Committee on Recreation and Sport, 2010). People are increasingly opting to go for a run with headphones and a music player when the opportunity arises rather than commit to a regular organised sporting event. Expenditure on healthcare as a proportion of total expenditure has been, and is forecast to continue, rising (Australian

Government, 2010). Australians are becoming more health conscious. We are increasingly playing sport to get fit, rather than getting fit to play sport.

From extreme to mainstream

This megatrend captures the rise of lifestyle, adventure and alternative sports which are particularly popular with younger generations. These sports typically involve complex, advanced skills and have some element of inherent danger and/or thrill-seeking. They are also characterised by a strong lifestyle element and participants often obtain cultural self-identity and self-expression through these sports. These sports are likely to attract participants through generational change and greater awareness via online content (e.g. YouTube, Facebook, Twitter). There is strong viewer demand for extreme sports videos on the internet and television. These sports are also finding their way into the Olympic Games; with a recent addition being BMX cycling, introduced at the Beijing 2008 Olympics. International associations for skateboarding and rock climbing are making substantial efforts to have these included as Olympic sports in the future.

A perfect fit
Personalised sport for
health and fitness

Tracksuits to business suits arket pressures and

Market pressures and new business models

From extreme to mainstream The rise of lifestyle sports

New wealth, new talent Economic growth and sports development in Asia More than sport
The attainment of health,
community and overseas
aid objectives via sport

Everybody's game
Demographic, generational
and cultural change



Sport for children and adults is an effective means for reducing the rising rates of obesity and diabetes.

More than Sport

The broader benefits of sport are being increasingly recognised by governments, business and communities. Sport can help achieve mental and physical health, crime prevention, social development and international cooperation objectives (Cameron & MacDougall, 2000; Schmitz et al., 2004). Sport for children and adults is an effective means of reducing the rising rates of obesity and chronic illness. If managed appropriately, it can be an effective mechanism to help achieve social inclusion for marginalised groups and reduce crime rates. Sport can also build bridges to other countries and achieve overseas aid, peace, development and foreign policy objectives.

Everybody's Game

Australia and other countries of the Organisation for Economic Cooperation and Development (OECD) face an ageing population. This will change the types of sports we play and how we play them. There are indications that Australians are embracing sport into their old age. To retain strong participation rates, sports of the future will need to cater for senior citizens. They will also need to cater for the changing cultural make-up of Australia. Australian society has become, and will continue to become, highly multicultural. Different cultures have different sporting preferences and recreation habits. Sporting organisations will be challenged with capturing the interest and involvement of diverse cultures.

New Wealth, New Talent

Population and income growth throughout Asia will create tougher competition and new opportunities for Australia both on the sports field and in the sports business environment. Asian countries are investing heavily in sports capabilities and, especially in the case of China, have rapidly improved gold medal outcomes at the Olympics over recent decades (Hong et al., 2005). As disposable incomes grow, the populations of Asian countries are becoming more interested in sport. This may create new markets for sports television, sports tourism, sports equipment, sport services and sports events.

Tracksuits to Business Suits

Market forces are likely to exert greater pressure on sport in the future. In some sports, elite athletes have had considerable pay rises and large sponsorship deals. This has not occurred in other sports (McMillan, 2011). Sports with higher salaries may draw athletes away from those with lower salaries. Loosely organised community sports associations are likely to be replaced by organisations with corporate structures and more formal governance systems in light of market pressures. The cost of participating in sport is also rising and this is a participation barrier for many people.



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Introduction

Australia loves sport. It has always been and will continue to be part of our cultural identity. From playing catch in the backyard through to the Olympic and Paralympic podiums the majority of Australians play, watch and enjoy sport.

Sport may be defined as 'a human activity involving physical exertion and skill as the primary focus of the activity, with elements of competition where rules and patterns of behaviour governing the activity exist formally through organisations and is generally recognised as a sport' (Australian Government, 2011). Over the course of a year, 82.3 per cent of people aged 15 and over participated at least once annually in physical activity for exercise, recreation or sport (Standing Committee on Recreation and Sport, 2010). Participation rates for children are also high. Almost two thirds of Australian children participate in organised sport at least once a year outside school hours (ABS, 2011g).

In the international arena, Australia's performance is outstanding. When countries are ranked in descending order of Olympic gold medals Australia is placed in the top ten. In cricket,

rugby, swimming, cycling, netball, sailing and many other sports Australia excels on the international stage.

Sport holds economic significance to Australia. The sports sector directly employs 75,000 Australians, which equates to one per cent of the total workforce. Every year Australian households spend some \$A8.4 billion on sporting services and products. The export of sporting goods has averaged \$A442 million per year over the past seven years (ABS, 2011e).

The sports played in Australia, as well as how and why we play them, are changing over time. This will have social and economic impacts. By understanding possible future directions for Australian sport, government, industry and the community will be better placed to make strategic decisions.

This report summarises the outcomes of a foresight project conducted by CSIRO in partnership with the Australian Sports Commission. The report describes six sports megatrends that may redefine the sport sector over the next 30 years.

A megatrend represents a substantial shift in social, economic or environmental conditions into the future with implications for decision-making. There is evidence that each megatrend is already being felt. However, the full impact of each megatrend will play out in coming decades. A megatrend is based on the aggregation and synthesis of multiple trends. A trend is a pattern of economic, social or environmental activity supported by data and evidence that will change the way people live and the products they demand.

The megatrends presented in this document are based on:

- interviews with 40 people with long-standing involvement in the sports sector, conducted from November 2011 to January 2012;
- a review of industry reports, government reports and academic papers relating to Australian sport;
- analysis of datasets held by public and private sector organisations relating to Australian sport;
- the compilation and analysis of over 100 trends compiled through an online forum with 89 participants administered by CSIRO;
- A workshop involving 43 sports sector and related industries experts, held in Canberra on 31 January 2012; and
- a workshop involving 22 experts working on high performance sport, held in Canberra on 23 March 2012.

Limitations of this report concern the data used and the scope of the trends. Some data sources are based on participation in any physical activity as opposed to organised sport. Hence comparisons of data from difference data sources, beyond the comparisons made in this report, need to be made with caution. Prominent factors such as technology, climate change and globalisation are relevant to the future of sport in Australia. However, these have not been included as separate megatrends. They are considered cross-cutting factors that will impact all the megatrends.

Exploring the Future

The purpose of this study is to inform decisions about Australian sport by constructing a narrative about the future. However, the future is not known with certainty. In this study evidence and imagination are balanced to construct a narrative of the future that is both credible and insightful. To achieve this we use the concept of the 'futures cone' (Figure 1) to frame the study and identify sports megatrends.

The diameters of the circles in the futures cone can be considered inversely proportionate to the level of certainty about the future. At the current point in time the circle is a pinpoint because, if we can access accurate data, we have perfect certainty. As we project into the future we have three circles of increasing diameter and decreasing certainty.

The smallest circle is referred to as the 'probable'. This relates to future events that can be forecast using historical data series and statistical inference. Predictions of rainfall patterns, population growth and economic growth may fall into this category. Given the limited availability of historic time-series data on many

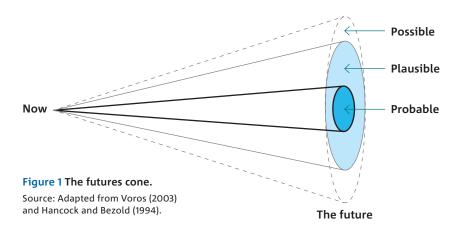
important trends, and the limited ability for statistical forecasting of those data, the probable cone is unlikely to permit novel or insightful descriptions of the sports futures.

The largest circle is referred to as the 'possible'. This captures every event that could conceivably occur in the future. The problem with working in the possible space relates to credibility. If decision-makers cannot see a solid evidence base they are unlikely to use these narratives when making important choices.

In the centre of the futures cone is the 'plausible' space. This moves beyond the narrow, and empirically derived,

outcomes in the probable space. However, it avoids the speculative and hard-to-substantiate nature of the 'possible' space. The plausible cone is a balance of evidence and imagination.

While probable, plausible and possible futures all have a valid role. This study aims to reside within the plausible space. It means that evidence already exists for each megatrend currently occurring. However, the megatrends are projected to play-out to a greater extent in future decades.



A perfect fit



Rise of non-organised sport and physical activity. The elements of skill, physical exertion and competition are present in both organised and nonorganised sport. However, organised sports such as cricket, soccer or sailing regattas occur at fixed times and follow structured rules and procedures. Organised sports are typically managed by a sporting club with volunteers or paid staff. They involve a greater level of commitment from participants. In contrast, non-organised sports such as running or playing soccer on the beach are unscheduled and flexible. While participation rates in organised physical activities have remained level over the past decade, participation rates for non-organised physical activities have grown (Figure 2) (Committee of Australian Sport and Recreation Officials, 2011). Non-organised physical activity has a much higher participation rate. Possible explanations are the decreasing willingness of timeconstrained people to commit to structured sporting activities and a greater emphasis on recreation, health and fitness as opposed to competition.

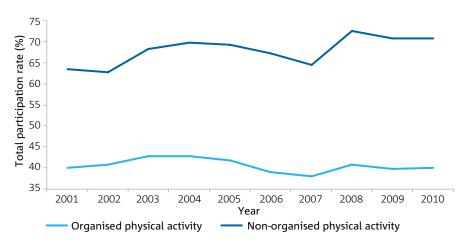


Figure 2 The rise of non-organised physical activity, 2001-2010. Source: Committee of Australian Sport and Recreation Officials (2011).

Individualised sport. With the exception of outdoor soccer, non-team (individual) physical activities, such as walking and running, have grown since 2001 compared with team sports such as netball, golf and swimming, which have recorded lesser growth or declined (Figure 3). A possible explanation is that people are increasingly turning to sport to achieve personal fitness goals. A game itself, involving competition and team play, might be less important. People may be less willing to commit time needed for training and match fixtures in some team sports. The result is a rise of individualised sport and physical activity.

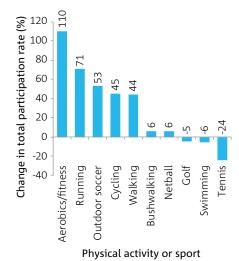


Figure 3 Change in total participation rates (at least once per year) for physical activities in Australia, 2001-2010.

Source: Standing Committee on Recreation and Sport (2010).



Time fragmentation. Peoples' calendars are being more densely packed with immovable events and appointments. This means discretionary time available for sport and leisure is fragmented. Evidence of time fragmentation comes from Australian Bureau of Statistics surveys of time usage (ABS, 2011e). Time is classified as 'necessary' (e.g. sleeping, eating), 'contracted' (paid work), 'committed' (e.g. collecting children from school) or 'free' (e.g. socialising, sport). While necessary and free time of an average person's day have decreased from 1997 to 2006, the time spent on contracted and committed activities has risen from 39 per cent to 42 per cent (ABS, 2011e). The more people are locked into committed and contracted activities the more time fragmented they become. Consequently they seek, often serendipitous, opportunities to play or watch sport that fit into a busy schedule.

Less time playing, more time working. While time is becoming more fragmented people are also spending less time on recreation. Between 1997 and 2006, total recreation time decreased from 4:28 (hours: minutes) to 4:13 per day or 1:45 less per week. By contrast, people have increased the amount of time spent in paid work by six per cent from 3:16 to 3:27 per day. Within the category of 'recreation', people are spending less time playing sport and more time watching screens. The amount of time people spend engaging in 'sport and outdoor activities' has decreased even more, by 30 per cent, from 27 minutes per day to only 19 minutes. Time spent on audiovisual entertainment has increased by eight per cent from 2:10 to 2:20 per day (ABS, 2011e).

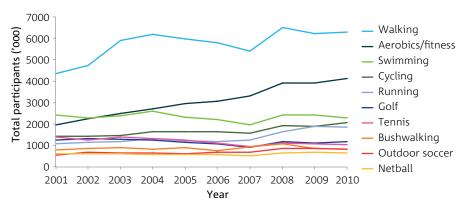


Figure 4 Total participants in top 10 physical activities, 2001-2010.

Source: Standing Committee on Recreation and Sport (2010).

Health matters more to Australians than ever before. The Australian Government Treasury forecasts that health expenditure as a proportion of gross domestic product (GDP) will nearly double over the next 40 years (Australian Government, 2010). Healthcare accounts for two-thirds of the forecast increase in total spending in the Australian economy over the same period (Australian Government, 2010). This is connected to a general increase in the demand for healthrelated information about products and services. Health is likely to feature to a greater extent in people's choices about sport. We are not getting fit to play sport, we're playing sport to get fit.

More gyms. There has been a significant growth in the number of fitness centres (a 24 per cent increase) and their income (a 131 per cent increase) across Australia over recent times (figures 5 and 6). This indicates the growing demand for fitness services and awareness of health issues.

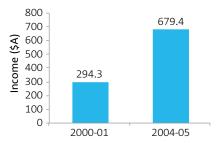


Figure 5 Increase in the income of fitness centres in Australia.

Source: Australian Bureau of Statistics (ABS, 2009).

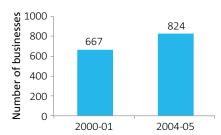


Figure 6 Rise in the number of fitness centres in Australia.

Source: Australian Bureau of Statistics (ABS, 2009).

Growth of the fitness industry. The Australian fitness industry provides products and services to improve people's fitness. Examples include gyms, personal trainers, pools, exercise equipment, sports clothing, running shoes and nutritional supplements. According to IBISWorld (MacGowan, 2011) in 2011-12, the fitness industry had revenue of \$A2.9 billion and its 7281 individual businesses generated profits of \$A229.6 million and wages of \$A1.2 billion. The industry is forecast to grow revenue at the rate of 3.6 per cent per annum over the period 2012 to 2017. Future growth in the industry will be boosted by the government and societal focus on health and wellbeing.

Personalised gyms. Gyms have started to diversify to capitalise on the growing demand for fitness experiences. One such trend is the rise of 24-hour access gyms, such as 'Anytime Fitness', 'Jetts' and 'Snap Fitness'. Another trend is to offer the customer a personalised experience. An example comes from 'Virgin Active'. The company has over 170 clubs in the UK, Italy, Spain and South Africa, with over 900,000 members (Virgin Active, 2012). The company's first Australian club opened in December 2008, followed by another four shortly after. The company differentiates itself from other fitness clubs by offering a tailored customer experience through its 'Who are you?' campaign.

Personal training. People are seeking personal trainers to meet their unique health and fitness needs. In 2011 personal training held 19.8 per cent of the market share in the fitness industry and is forecast to grow (MacGowan, 2011). This reveals consumer demand for personalised fitness solutions.

Rising sales of fitness equipment.

The appetite for fitness training is also reflected in the sale of fitness equipment. The sale of fitness equipment outperformed all other commodities in the sports equipment market in 2004-2009 in Australia, with total revenues of \$A318.4 million, equivalent to 24 per cent of the market's overall value (Datamonitor, 2010).

Rising sales of lycra. The fitness trend has spurred growth in sports fashion sales. An example of the rise in sports fashion comes from the Lorna Jane stores. Lorna Jane opened her first store in Brisbane CBD in 1990. By May 2011 she had opened 104 stores across Australia, generating \$A90 million in 2010 (Mills, 2011). While providing new business opportunities, sportswear fashion may exclude those from lower socioeconomic areas or particular age demographics such as youth who cannot afford sports fashion merchandise.

Social pressures influencing participation. Participation in sport is influenced by a number of factors. Weight management, social interaction and enjoyment are common motivators for participating in sport (Allender et al., 2006). Young girls in particular are motivated by concerns about maintaining a slim body shape and conforming to popular ideals of beauty (Allender et al., 2006). At the same time, however, there is a growing perception that participation in sport in adolescence does not create a desirable image, particularly for adolescent girls. A survey of adolescent girls aged between 13 and 15 revealed the perception that girls who participate in sport are more likely to be labelled as unfeminine (Slater & Tiggemann, 2010).

Social media to build and foster fitness opportunities. Telstra's most recent survey of mobile internet use on smartphones found that in 2011 social networking sites were the fifth highest service accessed, after search engines, mail, weather, maps/directions. Daily access of social networking sites through a smartphone has increased from 31 per cent in 2010 to 41 per cent in 2011 and is forecast to grow (Telstra, 2011). A current trend in the fitness sector is the use of social media to build and foster sporting communities, such as the 'UrbanRec' Facebook group or the 'RunKeeper' app. Social media create online communities through which people can engage in sport and communicate sporting preferences to a wider audience. The involvement of sporting clubs and government would facilitate better delivery of sporting services. Smartphone communication technology is likely to play an important role in building fitness communities into the future.

Emergence of active electronic gaming. Technology advances have allowed physical movement to be incorporated into electronic games. The Wii Fit allows a player to participate in yoga, strength training and aerobics. The Wii simulates sports such as boxing, bowling, tennis and baseball. The XT3 X-treme Sports Simulator offers extreme sports such as skiing, snowboarding and wakeboarding. These electronic games break the mould of sedentary gaming, given that, based on the calories expended, the physical exertion required is comparable with light to moderate physical activity (Mileham, 2008). On this basis, active electronic gaming is a growing alternative to organised physical activity that may grow in popularity and encourage new participants in unorganised physical activity.

Emerging questions

- 1. What investment needs to occur in sports to ensure the fitness trend does not continue to grow at the expense of organised sport at a community level? There is a possibility that, as people increasingly visit the gym, run, walk and exercise they drift away from traditional organised sport due to time pressure. In addition to providing the fitness and health benefits attainable through individual exercise pursuits, organised sport can help build life skills and capabilities for adults and children and develop cohesive communities. This is particularly important for children: they learn about winning and losing, the value of teamwork and trying hard. High participation rates also increase the athlete pool for high performance sport. However, gym membership, running, walking, aerobics and other fitness-oriented activities might, in some instances, provide a more direct
- and time-efficient path to physical and mental health. For many people fitness and exercise is a substitute for organised sport. A fit and healthy society is undoubtedly a good thing and a high priority. The question for government, sports and society is what investment needs to occur to ensure the broader benefits of organised sport are accessible to all. This could involve partnering with other bodies to provide these services.

 2. How can sports best adapt the rules, venues, timing and management
- venues, timing and management of their sports to better suit time fragmented lifestyles and a fitness oriented consumer? One of the main barriers to participation in organised sports is the unwillingness of people to commit sufficient time. As people pack more events into their calendars, and spend more time at work and more time travelling, they are less able to commit to an organised sport. Technology may also help organise group-based sporting activities at convenient times. For example, there are smart phone applications that allow individuals to register as part of a sport (e.g. indoor soccer) network. Any member can propose a game at any time and place. If other members also want a game they can respond, and if teams are formed the game can take place. There may be a need for similar innovations for organised sports to capture people's time and resources. Community sporting bodies could better facilitate initiatives that support the community structure and engage better with an active society.
- 3. Is there an under-developed opportunity to engage people in sport within working hours? People, especially males, now spend greater amounts of time at work. Furthermore, a large and increasing portion of their recreation time is spent watching television and internet screens. Therefore, an effective avenue for actively engaging people in sporting activity might be through their work environment. This might be achieved by employers encouraging staff participation in sporting events and making time available for sport during the working week. The benefits to employers would be a more physically and mentally healthy workforce. This may lead to increased levels of productivity.
- 4. Is there opportunity for partnering with other agencies to target participation in under-represented groups in society? There is evidence that higher socioeconomic groups are more likely to hold gym membership (Hillsdon et al., 2007; Powell et al., 2006). The trend towards individual fitness pursuits may occur at the exclusion of lower socioeconomic groups that do not traditionally have high levels of participation in individual fitness pursuits. Children living in areas of lower socioeconomic status with the most relative disadvantage are nine per cent less likely to participate in organised sport, as compared with children who do not have a relative disadvantage and come from a 'mid-range' socioeconomic status¹ (ABS, 2012). There may be opportunities for sporting bodies to partner with healthorientated non-sport-specific agencies in order to target these groups and ensure participation in sport and physical activity across all groups.



¹The Socio-economic Indexes for areas and a child's parents' employment status were used as a proxy to determine a socio-economic status. Socio-economic status was divided into quintiles and ranging from the most disadvantaged (quintile 1) to the most advantaged (quintile 5) and compared relative to quintile 3 (ABS, 2012).

From extreme to mainstream



Rise of the alternative sports culture.

Alternative sports started to gain popularity in many countries during the 1960s and 1970s (Wheaton, 2010). It was a time which saw 'many middle class participants embodying countercultural philosophies, rejecting the overly rationalised, technologised and bureaucratised world of traditional sport and embracing free, fun, cooperative and individualistic activities' (Donnelly, 1988). While all action sports are different, many also have shared characteristics, including 'antiestablishment, individualistic and/or do-it-yourself philosophies' (Thorpe & Wheaton, 2011). The past five decades have seen unprecedented growth in participation and visibility of action sports in the public space (Breivik, 2010). Traditionally, young, white, middle- and upper-class males have been the driving force of action sports, but demographics are shifting (Thorpe & Wheaton, 2011).

Growth in popularity. While participation rates in some mainstream and organised sports have held constant or declined over the past decade, lifestyle sports have risen on the demand (participation) and supply (industry) side. It is estimated that over 150 million people worldwide participate in action sports (Kellett & Russell, 2009). These sports are gaining popularity among large segments of Generation Y (born between 1978-1995) who connect to a counter-culture of irreverence, adventure and freedom of expression. The data on many of the lifestyle sports remain scant.

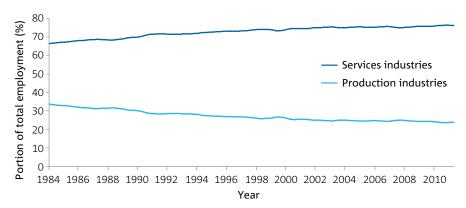


Figure 7 Proportion of all employed people in the services and production industries, 1984-2010.

Source: Australian Bureau of Statistics (ABS, 2011d).

Sedentary jobs. Over the last fifty years, the Australian workforce has shifted into service-sector and knowledge-based jobs (Figure 7). The social, economic and cultural consequences of this shift will be felt over coming decades. Today the majority of Australian employees work in offices, shops and other service environments. It is possible that sport is an increasingly important avenue for experiencing the innate human drive for adventure and thrills. Adventure sports such as rock-climbing, white water rafting and kite surfing are well positioned to deliver these experiences. Adventure sports provide people with an opportunity to 'break free'.

From extreme to mainstream. Extreme sports are finding their way into the Olympics, the most recent addition being BMX cycling, introduced at Beijing in 2008. This resulted from concerted efforts by the International Cycling Union (ICU), partly with a view to keeping younger generations connected to Olympic cycling events. There are substantial efforts by other international associations to have skateboarding and rock climbing included as Olympic sports in the future. Often the extreme sports communities are split about whether competing in the Olympics is desirable or not (Thorpe & Wheaton, 2011). The debate in the skateboarding community is polarised. Some members-are pushing hard for entry into the Olympics lineup. Others believe such formalisation contradicts the skateboarding culture and philosophy. Given that the very nature of lifestyle sports is characterised by constant change and experimentation with new forms of self- and sport-display (Thorpe & Rinehart, 2010) inclusion in mainstream competitions may threaten the integral aspects of such sports.



Today, the majority of Australian employees work in offices, shops and other service environments.

A competitive advantage for Australia?

The best winter Olympics ever for Australia was Vancouver, Canada in 2010. Lydia Lassila and Torah Bright won gold medals in relatively new extreme and lifestyle sports – aerial skiing and snowboard half-pipe. Adventure sports have proven popular with younger generations of Australians and, if they are included in the Olympics and Paralympics to a greater extent, may be an area of competitive advantage.

Skateboarding. Skateboarding is a lifestyle sport experiencing a rapid surge in popularity. In May 2002 a 'teen' marketing firm in the USA asked Generation Y who was the 'coolest bigtime athlete'. They placed skateboarding star Tony Hawk ahead of mega sporting celebrities Michael Jordan and Tiger Woods (Wheaton, 2004). There are more than 990 skate parks throughout Australia. On average two skate parks per week have been built in Australia since 2005, indicating growing demand (Kellett & Russell, 2009). Skateboard fashion and skateboard equipment are large and fast-growing industries.

Kiteboarding. Memberships of the Australian Kitesurfing Association (AKSA) have quadrupled between 2002-03 to 2010-11 from 519 to 2130 members (AKSA, 2008). In response to rising popularity in May 2012 the International Sailing Federation (ISAF) voted that kiteboarding be included at the 2016 Rio Olympics. However, on 10 November 2012 the International Sailing Federation reinstated windsurfing for the Rio Olympics, and dropped kiteboarding, with a 51% majority vote. The International Kiteboarding Association indicates it will continue to work hard to get the sport into the summer Olympics (International Kiteboarding Association, 2012). This shows the closeness of kiteboarding, and other adventure and extreme sports, entering the mainstream and being accepted into international competitions. It also reveals the contentious nature of these decisions.

Scuba diving. Scuba diving, one of the main adventure sports and recreational pursuits attracting international tourists to Australia, has experienced significant growth over the past few decades. The number of total worldwide scuba certifications (as issued by one of the leading certifying agencies, PADI - the Professional Association of Diving Instructors) has increased more than 400 times from 48 thousand in 1970 to over 19 million in 2010.

The rise of the X Games. The 'X Games' are considered the Olympics of action sports, blurring the boundary of a music festival and sporting event (Rinehart, 2000). A brainchild of the **Entertainment and Sports Programming** Network (ESPN), the X Games plays a 'significant role in the global diffusion and expansion of the action sport industry and culture' (Rinehart, 2000). The first X Games were held in the summer of 1995 in Rhode Island, USA, featuring 27 events in nine categories ranging from bungee jumping to skateboarding. Following the X Games success the first Winter X Games were launched in California in 1997, drawing 38,000 spectators. They were televised in 198 countries and territories in 21 different languages (Pedersen & Kelly, 2000). In 2011 the games were attended by 114,200 people and watched by 39.7 million people from the US (ESPN, 2011). This increase of over 30 per cent over four years demonstrates the popularity of action sports with the youth market.

New media. Embracing new media the youth market uses to watch sports, the 2011 Winter X Games were streamed over ESPN's digital networks, 'ESPN3. com' and ESPN's '24/7' which saw an increase in watched hours by 30 per cent compared to the previous year. Another example is 'Extreme.com', a 24/7 channel dedicated to extreme sports that is available through Sky and Virgin Media pay TV. 'Fuel TV', part of FOX Sports Media Group was launched July 1, 2003 and is now available in more than 50 countries (FOX Sports Digital, 2012).

Sports injury rates. An indicator that people are pushing the boundaries in sport comes from data on sports injury rates. A Victorian study (Andrew et al., 2011) analysing data from 2001 to 2007, found the rate of injury due to participation in sport and active recreation had increased by 10 per cent each year over the study period. Off-road motorsports had the highest rate of major trauma and death at 118.9 per 100,000 participants per year, and also showed a significant increase in major trauma rates over the study period (Andrew et al., 2011). The per-capita injury rate increases may be indicative of people taking greater risks in sporting activity.





On average, two skate parks per week have been built in Australia since 2005 indicating growing demand.

Emerging questions

New endurance sports and communities. 'Tough Mudder' is a rapidly growing company and sports movement. It manages an endurance event in which teams run through an 18-to-20 kilometre extreme obstacle course containing challenges such as mudslides, rope climbing, monkey bars and more. The company website claims to have engaged over 500 thousand participants (Tough Mudder, 2012) since its first event on 2 May 2010 in Bear Creek, Pennsylvania. In Australia the inaugural Tough Mudder challenge took place in Phillip Island, Victoria on 31 March 2012. Tickets were sold out to 15,000 participants (The Age Newspaper, 2012) with prices ranging from \$A90 to \$A150 (Tough Mudder, 2012). The Tough Mudder philosophy on the company website is about overcoming challenges and helping teammates, rather than winning. The popularity of these events reveals a significant niche consumer segment and social demographic, seeking physically demanding endurance sports. Another example of an obstacle course event held in Australia is "The Stampede". Endurance events and obstacle courses of this nature may provide an alternative to conventional triathlon and marathon events.

Accessibility of extreme sports.

Extreme sports often have high costs, both financial physical, given the associated risk of participation. The capital outlay for the material equipment required for windsurfing, for example, is significant enough to exclude some participants on the basis of salary (Dant & Wheaton, 2007). Business magazines such as Forbes and Business Week often feature articles and columns on extreme sports (Baker & Simon, 2002), an indication of the socio-economic status of participants.

- 1. Are high performance investment models adaptable enough to take advantage of changes to emerging sports such as skateboarding, rock climbing and surfing? These adventure sports have high participation rates and attract large audiences. They are especially popular with younger generations. For surfing, in particular, and other adventure sports Australia has relatively high per capita participation rates and performs well in international competitions. In the Vancouver Winter Olympics Australia won gold in women's snowboard halfpipe and aerial skiing. Before other new adventure sports gain Olympic status there may be an opportunity for Australia to develop a competitive lead on other countries. The question for Australia is whether it can move quickly to establish a competitive lead in adventure sports which may find their way into the Olympics in the future?
- 2. Are notions of "winning" changing and what might be the impact? The 100m Olympic and Paralympic sprint is an unambiguous competitive event. The fastest time wins; athletes spend years preparing for this single event. This contrasts with adventure sports, which have a strong lifestyle and recreational component. In skateboarding, the style of manoeuvres is important. Winning in adventure sports may not always be as clear-cut as winning in track and field events or other traditional sports. While the scoring of some traditional sports, like gymnastics and ice-skating, does take account of skill and flair, the sum of the component scores determines who wins overall. Competitors and spectators in non-traditional sports may be less concerned with winning than with other qualities of the athlete such as stamina, skill, concentration, focus and flair. These changing notions of winning may have implications for future competitions and how sport is perceived generally. Perhaps future public support may be garnered from more than simply winning. The other qualities of sport may be of equal or greater importance.

More than Sport



Obesity rates. One of the biggest challenges facing Australia and other OECD countries is rising obesity rates. This will be a major factor influencing sports policy in coming decades. Governments and companies are increasingly turning to sport as a means of addressing obesity. In Australia, one in two people are overweight. The proportion of people overweight is projected to rise a further 15 per cent over the next 10 years (see Figure 8: (OECD, 2010). Data from Access Economics show that in 2008 some 3.7 million Australians were obese. This is forecast to rise to between 4.7 and 7.5 million by 2028 in the baseline low-tohigh scenarios (Access Economics, 2006).

Diabetes is on the rise. Diabetes is the fifth leading cause of death in most developed countries (OECD, 2011a) and is a major health problem in Australia. As discussed in more detail later in this chapter, sport has an important role in dealing with this, as with obesity. In 2010, 5.7 per cent of Australian adults aged 20-79 were estimated to suffer type 1 or 2 diabetes. The OECD average is 6.5 per cent. In 2010, Australian children aged 0-14 years were above the average OECD incidence of type 1 diabetes of 16.9 cases per 100,000 population, with an estimated 22.4 cases per 100,000 population (OECD, 2011a).

Sport may help reduce obesity. Sport for children is an effective means of reducing obesity in adulthood. This was shown in a study in the United States of 209 African American women and 277 Caucasian women aged 18 to 39 (Alfano *et al.*, 2002). The study examined the dietary records of the women and conducted a pen and paper survey about their sport participation during school. It was found that a history of

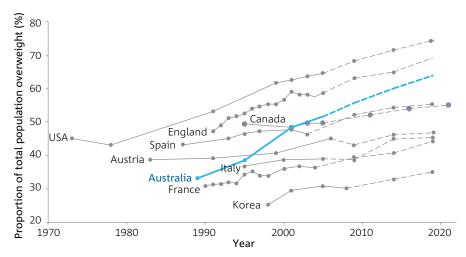


Figure 8 OECD obesity trends and projections, 1970 – 2020.

Source: Organisation for Economic Cooperation and Development (OECD, 2010).

sport participation at school accurately predicted lower adult body mass index (i.e. less overweight). Playing sport at school also increased the likelihood of participating in sport in the future.

Sport improves mental health. Mental health problems carry a huge economic and social burden. There have been many controlled studies into the benefits of sport and exercise in the clinical treatment of mental disorders. These studies overwhelmingly show that the sport/exercise group experiences better outcomes than the control group (Stathopoulou et al., 2012). For example, a population study in Finland found that individuals who exercised two to three times a week experienced significantly less depression, anger, stress and cynical distrust compared with those who exercised less frequently or not at all (Hassmén et al., 2000). Another study of 7100 people in Germany also linked sport and physical activity to better mental health (Schmitz et al., 2004).

Sport may reduce crime rates.

The evidence of sport influencing a reduction in crime rates is more anecdotal than empirical. However, the Australian Institute of Criminology (AIC) states that 'with careful planning, sport and physical activity have crime prevention potential' (Cameron & MacDougall, 2000). The AIC provides many examples where the provision of sporting facilities has been linked to reduced crime rates. One comes from a program in Canning, Western Australia where young offenders maintained swimming pools and enrolled in scuba diving courses. The manager of the centre reported that vandalism and theft dropped by 85 per cent as a consequence of the program. The AIC also reports that petrol sniffing and heavy drinking, as well as juvenile and adult property offences in some remote communities have drastically reduced during sporting carnivals. More empirical research is needed to better understand the possibilities for crime prevention through sport.

Sport as part of preventative health strategies. In the 2010-11 Federal Budget, preventative health was a major priority, with funding specifically targeted towards anti-smoking campaigns, preventing binge drinking and diabetes management. As part of this funding, \$A262.7 million was committed towards increasing sport funding to encourage participation in sport and active recreation (Department of Health and Ageing, 2010). This was followed by the establishment of the Australian National Preventative Health Agency (ANPHA) in 2011. By 2015, ANPHA aims to have achieved significant growth in the number of workplaces and schools that have incorporated healthy lifestyle and health promotion programs into employment packages or the curriculum (ANPHA, 2011). Sport can go some way in helping achieve these objects. There is likely to be an increasing role for sports bodies and organisations in assisting governments to position sport in health agendas such as these.



Sport is a universal language that can bring people together, no matter what their origin, background, religious beliefs or economic status.

Kofi Annan, United Nations Secretary General

Sport helps build international

relations. The Australian Government is actively using sport to build relations with overseas countries and foster social and economic development. The Australian Sports Outreach Program (ASOP) is an Australian Government program that uses sport to build the capacity of individuals and organisations, through the use of quality sport programs for social benefits. It is funded by the Australian Agency for International Development (AusAID) and delivered by the Australian Sports Commission in partnership with in-country organisations. As part of ASOP, a number of community-based Sport for Development programs are being delivered in the Pacific Islands, the Caribbean and India. ASOP delivery in the Pacific Islands began in 2006. In 2009 it received an additional in funding, not only to extend the program until 2014 but expand into two new countries (Tonga and Solomon Islands) and enhance the programs in the existing five countries (Nauru, Kiribati, Fiji, Western Samoa and Vanuatu). It also included a commitment to establish new partnerships between Australian, regional and Pacific Island sports federations in cricket, netball, rugby league, rugby union and football (soccer). The total funding to be provided over the eight years of activity up until 2013-14 is \$A32 million.

Sport for development and peace.

Recent years have seen a rapid expansion of international agencies involved in the new social movement called 'Sport for Development and Peace' (Kidd, 2012). Today there are 166 organisations around the world listed on the 'International Platform on Sport for Development' maintained by the Swiss Academy for Development. These agencies are using sport to achieve social and developmental objectives. One example comes from the slums of Nairobi, Kenya, where the Mathare Youth Sports Association uses soccer as a means of achieving equality for women, greater school participation and protecting the environment. The UNICEF humanitarian project 'Open Fun Football Schools' teaches children in the Balkan countries, the Trans-Caucasus countries and the Middle East about the perils of landmines. In 2001 the United Nations created the position of special advisor on Sport and Development for Peace (UNOSDP, 2011). Sport features in several important United Nations documents, including the 2000 Millennium Declaration, the 2005 World Summit Outcome Document and the 2010 Millennium Development Goals high level meeting outcome document.

Sport features in government policy.

At federal, state and local levels, there is evidence of sport featuring in government policy to achieve social and economic objectives. For example, the Western Australian Government has a policy statement on 'Making healthy choices easy' (Government of Western Australia, 2012). This contains a set of six priority actions to improve the health of employees through sport, physical recreation and healthy lifestyles. 'You're in the Game', an initiative by the NSW Department

of Communities, Sport & Recreation, recognises the importance of sport in the inclusion of people with disabilities in the community. The program sets out a framework to create a culture of inclusion in sporting communities.

Sport features in non-sport sectors.

The role of sport is no longer limited to recreation and entertainment. Other sectors and industries are increasingly engaging with sporting bodies as a means to connect to wider audiences. The Australian Football League (AFL), for example, has several partnerships with health and community wellbeing initiatives (AFL, 2011a). AFL is a supporter of the White Ribbon Foundation aimed at eliminating violence against women, the 'Ladder' project, a joint project between the AFL and the AFL Players' Association, is aimed at addressing youth homelessness and the partnership with the Olivia Newton-John Cancer and Wellness Centre aims to raise awareness and funds for the centre.

Decline in trained sports teachers.

Despite the mental and physical health benefits of sport there is evidence revealing decreasing prominence of sport and physical activity in the school curriculum. In 2009, the Independent Sports Panel reported that there has been a decline in the number of trained teachers to deliver sport programs (Australian Government Independent Sport Panel, 2009). ABS data support this statement: employment in this group has been increasing from 2000 onwards, but started to decline in 2007. In 2010 there were 643,300 people employed as coaches, instructors or teachers (58 per cent male, 42 per cent female), a 2.3 per cent decrease compared with 2007 (Figure 9) (ABS, 2011h).

Sport in schools. Prior to 2009 physical education was required for a minimum of two hours per week in primary and secondary schools. However, there was no measurement of delivery, nor was it mandatory. Under the National Education Agreement published in 2009 this requirement no longer applies. Investigations by the Independent Sports Panel in 2009 found participation in sport and physical activity is usually left to the discretion of individual schools and teachers to implement (Australian Government Independent Sport Panel, 2009). Given that sports participation during adolescence is associated with higher levels of physical activity later in life (Tammelin et al., 2003), boosting participation through participation in schools is likely to help in achieving a more active society later in life.

Policies to boost sport for children. The Australian Government's Active Afterschool Communities (AASC) program is a program for primary school children with access to free sport and other structured physical activity programs in the after-school time slot of 3.00pm to 5.30pm. The program aims to engage traditionally inactive children in sport and other structured physical activities through a positive and fun experience, and develop a love of sport that inspires them to join a local sporting club. The program was launched in 2004 and piloted in 21 schools (ASC, 2007). In 2010, 190,000 children from 3270 schools and after-school care centres participated in the AASC program (ASC, 2010).

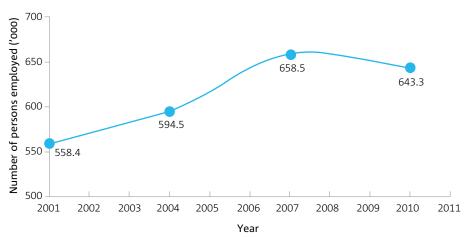


Figure 9 Number of coaches, instructors or teachers, 2001-2010.

Source: Australian Bureau of Statistics (ABS, 2010a).

Emerging questions

- 1. How do we ensure sport becomes part of the solution curbing raising rates of obesity and ongoing mental health issues? Sport has been shown to improve people's mental and physical health. Health expenditure in Australia is rising rapidly. Diabetes and obesity are also rising rapidly, and society is becoming more aware of the impact of mental health issues. These trends may place a much stronger emphasis on sport to help achieve health outcomes. Given the contribution of sport to physical activity outcomes how do we ensure the inclusion of sport in health policy in government, corporate and community spheres, and should be increasingly combined with other incentives and health solutions to ensure a holistic approach to combating these issues.
- 2. How do we ensure sport participation rates are sufficiently high to positively impact Australians? The Australian Government recommends adults have at least 30 minutes of moderate intensity physical activity every day of the week (Australian Government, 2012). A recent survey reveals that at least 72 per cent of the Australian population aged over 15 years fail to meet this guideline because they participate in physical activity less than five times per week (Standing Committee on Recreation and Sport, 2010). The survey also shows that 18 per cent of Australians participate in no physical activity, 13 per cent less than once per week and 22 per cent one to two times per week2. It is clear that a large number of



Australians are not benefiting from active participation in physical activity or sport. Is there a need to raise levels of community participation given the benefits that sport and physical activity can provide?

3. What are the correct models for ensuring children are exposed to sport in the school setting? Children are experiencing increasing amounts of screen time, which is a sedentary activity. Sport and physical activity have been declining as a proportion

of children's leisure time. Given the benefits of sport and physical activity, it may be questioned whether new models could be introduced, or increased effort through existing models is required, to bolster engagement in these activities. Throughout this study many anecdotes were supplied by experts about the decline in sport and physical activity in the school curriculum. Is there a need to reinvigorate sport and physical activity in the school setting?

² Statistics that identify the number of times persons participated 'per week' are calculated by dividing the number of times individuals participated in physical activity for exercise, recreation or sport during the 12 months prior to interview by 52 (that is, number of weeks in a year). This provides an average of the number of times persons participated 'per week' (Standing Committee on Recreation and Sport, 2010).

Everybody's **Bane**



Ageing population. Fourteen per cent of the Australian population is currently over 65 years of age. This is forecast to reach between 23 and 25 per cent by 2056. Over this same period the median age will rise from 37 years to between 41 and 45.2 years of age (ABS, 2008). This trend is not isolated to Australia. The world population as a whole is ageing, albeit at a slower rate. In 1950 around 8 per cent of the world's population was over 65 years old. This grew to 11.2 per cent by 2011 and is forecast by the United Nations to reach 22 per cent by 2050 (Hajkowicz et al., 2012; UN, 2011). An older population will have different sport, fitness and recreational needs, behaviours and preferences.

Longer lifespans. Life expectancy for Australians continues to rise (ABS, 2008). In 1900 males lived for 51 years and females 55 years on average. By 2006, life expectancy at birth was 79 and 84 years respectively. Government projections see these life expectancies increase to 84.5 and 87.8 years by 2030 and 87.7 and 90.5 years by 2050 (Australian Government, 2010). People may continue to engage in sporting activities further into their old age.

Gender similarities and differences.

Participation rates for sport and physical activity have shown similar trends for men and women over the past decade (Figure 10). Females tend to have higher rates of both regular and frequent participation. However, audiences and sponsorship deals remain much higher for males in many organised sports such as cricket, rugby, football and AFL.

Participation of people with a disability. In 2009, 18.5 per cent of Australian had a disability, equivalent

to approximately 4.9 million people (ABS, 2011b). Just over half (52 per cent) of people aged 60 years and over had a disability. Of the 4.9 million people with a disability, approximately 24 per cent participated in sport or physical recreation in 2009. This proportion has not increased significantly from 2003, when approximately 25 per cent of people with a disability took part (ABS, 2011f). Although there are some initiatives targeted at participation of people with a disability (for example. Sports CONNECT supported by the Australian Sports Commission), the low participation rates indicate that there may be opportunities to better include this group in sport and physical recreation.

The rise of the Paralympics. The Paralympics are an elite sporting event for athletes with a disability. The competition, which originated shortly after the Second World War from a competition for disabled ex-servicemen and women in England, has seen a great rise in participation over the past decades. The number of people participating in Summer Paralympic Games has increased from 400 athletes from 23 countries in 1960 in Rome to 4524 athletes from 164 countries in 2012 (International Paralympic Committee, 2012b). Australia is a world leader and ranked fifth out of 74 countries in the gold medal tally at the 2012 London Paralympics (International Paralympic Committee, 2012a).

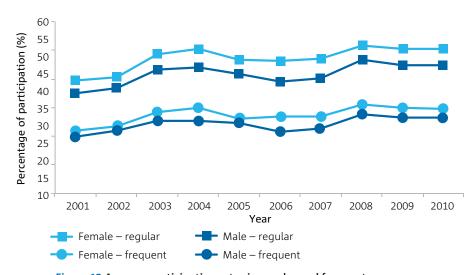


Figure 10 Average participation rates in regular and frequent physical activity, by year and gender³, 2001-2010.

Source: Committee of Australian Sport and Recreation Officials (2011).

^{&#}x27;Regular participation' is defined as participation at least three times per week or more, on average, over the 12 months prior to the interview; and 'frequent participation' is defined as participation at least five times per week or more, on average, over the 12 months prior to the interview (Standing Committee on Recreation and Sport, 2010).

World Masters Games. The World Masters Games are an international multisport event that is open to all competitors of 35 years of age and above (or for some sports, competitors over 25 years of age) without competition qualification requirements. It is a sporting event targeted at older generations in both participants and spectators. Taking place every four years, the World Masters Games have grown rapidly over the last few decades (Figure 11). The event has been held three times in Australia and on each of these three occasions attracted more competitors than any other country. This suggests that the ageing population is still eager to participate in sporting activities.

Culturally and linguistically diverse (CALD) communities. One quarter of Australians are foreign-born, the fourth highest in the OECD after Luxembourg, Israel and Switzerland and more than double the OECD average of 12 per cent (OECD, 2011b). Australia will become more multicultural into the future. Different cultures have different sporting preferences and different patterns of sporting behaviour.

Changing migration patterns. The cultural diversity of Australia is being propelled by immigration patterns (Figure 12). In 2010, 27 per cent of the Australian population was born overseas (6.0 million people) (ABS, 2010b). North-West Europe including the United Kingdom) still holds the largest proportion of overseas-born in Australia's population. Over the last

decade, the proportion of immigrants born in North-West Europe, as well as in Southern and Eastern Europe has declined, falling from 7.8 per cent in 2000 to 7.1 per cent in 2010 and 4.5 per cent to 3.7 per cent respectively (ABS, 2010b). Migration from the Asian regions has increased: for example, immigrants from North-East Asia increased from 1.7 per cent to 3.0 per cent (ABS, 2010b).

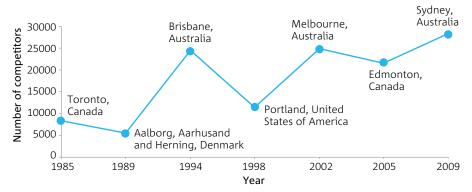


Figure 11 Competitors at Summer World Masters Games.

Source: Sydney 2009 World Masters Games Organising Committee (2009).

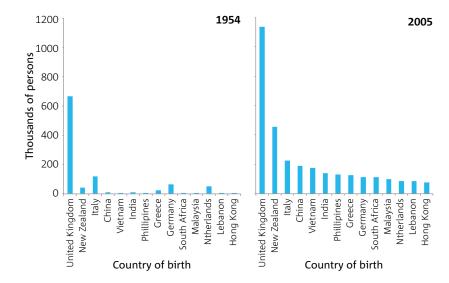


Figure 12 Country of birth for immigrants living in Australia in 1954 and 2005, thousands of persons.

Source: Australian Bureau of Statistics (ABS, 2007).

Cultural integration. After Canadians, Australians are rated in surveys as the second most tolerant society, among all OECD countries, of minority and cultural groups. An average of 84 per cent of Australians consider their local community to be "tolerant" compared with the OECD average of 61 per cent (OECD, 2011b).

New sporting preferences. In general, people born in Australia or overseas in a main English-speaking country were more likely than those born in other countries to participate at least once a year in sport and physical recreation (ABS, 2010c). Walking was the most popular physical recreation for all people regardless of ethnic origin (Figure 13). As Australia becomes more culturally diversified sports preferences are likely to change.

The rise of soccer. Participation in outdoor soccer has experienced significant growth between 2001 and 2010, from 551,300 participants (Dale & Ford, 2001) to 843,900 (Standing Committee on Recreation and Sport, 2010). This makes outdoor soccer the physical activity with the third highest increase among the top 10 physical activities, after aerobics/fitness and running. On the professional scene, there have also been two significant developments. Firstly, in 2005 the Football Federation Australia launched a new domestic national soccer competition called the Hyundai A-League. Secondly, the Asian Champions League is currently growing at a rapid rate. Industry analysis (McMillan, 2011) indicates that in the long-term (10 years minimum) the Asian Champions League may rival the European Champions League, the largest club tournament in the world, and revenue may be boosted significantly. The high-profile sporting bodies in other sports such as AFL, could aim to follow this trend and establish the competition on an international stage.

Community sporting events. Large-scale community competitions have become increasingly more popular over the past few years. For example, the 'City to Surf' fun race has grown from its first competition in 1971 with only 2000 entrants to more than 85,000 entrants in 2011 (Figure 14) (City 2 Surf, 2012). Other

popular examples are the Kathmandu 'Adventure Series', the Mountain Designs 'Adventure Race Australia' and MS Australia's 'Sydney to the Gong' cycling competition. These events reveal a demand for sporting activity across broad cross-sectoral demographics.

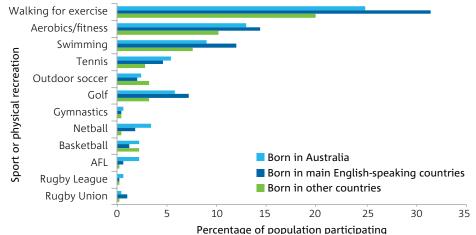


Figure 13 Participants in sport and physical recreation, by country of birth, 2005-2006.

Source: Australian Bureau of Statistics (ABS, 2010e).

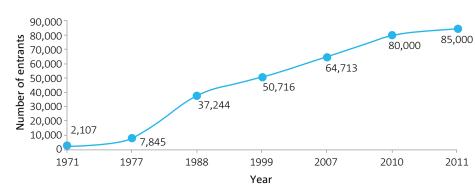


Figure 14 Rise in the number of entrants in the 'City to Surf' fun race, 1971-2011. Source: The Sun-Herald City to Surf (City 2 Surf, 2012).

Emerging questions

- 1. Does a shrinking athlete pool associated with an ageing population require high performance sports bodies to adopt a more targeted approach to recruitment? An ageing population means the number of Australians productively engaged in the workforce will shrink as a proportion of the total population. The same pattern is likely to occur in the sports sector as the talent pool for new athletes shrinks. As a result, high performance sporting bodies may need to take more targeted measures to identify new talent. A more targeted approach to the recruitment of coaches may also be needed to ensure Australia has the best expertise to remain competitive.
- 2. How do some of Australia's mainstream and traditional sports need to change in order to appeal to a more diverse population? The data from the Australian Bureau of Statistics (ABS, 2010e) reported in this section shows that persons born from non-English speaking backgrounds have preferences for different types of sport. As Australia becomes more culturally diverse the sports preferences of the nation are likely to change. In addition, demographic changes, gender differences and disability will influence tastes and preferences for participating in and watching different sports. Some sports may experience a decline in audience numbers and participation rates unless they can connect to wider audiences. This may require a rethink of the products offered, marketing strategies and/or the structure and format of the game to better meet the consumers' needs.
- 3. How do sports remove barriers to participation for older persons and how might these be addressed? The data show that older people want to stay connected to the workforce and want to be involved in playing sport (Australian Masters Games, 2012; Onyx & Baker, 2006). Some sports might be designed to cater for a young demographic and may not yet fully cater for older persons. For example, some barriers may be limited tournaments or skills divisions at sporting clubs for over 35s or over 60s. Given the ageing population, sporting organisations could consider providing more products and services specifically tailored to meet the needs of older Australians. This may help maintain population health and ensure a strong participation base.





As Australia becomes more culturally diverse, the sports preferences of the nation are likely to change.

New talent



A shifting world economy. Rapid economic growth in the developing world is shaping the global economy. This will affect the sports sector in Australia and create new opportunities and risks in global markets. In 2000, wealthy OECD countries dominated global GDP shares. By 2030, non-OECD countries will generate the bulk of global GDP (Figure 15). Economic growth across all of Asia has importance for the Australian sports sector. The Chinese and Indian economies in particular are likely to play a vital role in shaping the world economy, because of their size and potential for future growth.

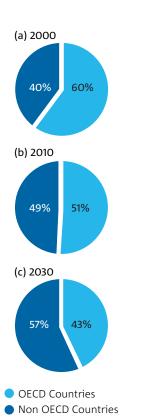


Figure 15 Changing shares of global GDP over two decades.

Source: Organisation for Economic Cooperation and Development (OECD, 2011b). World population growth. The international athlete pool is getting larger because of population growth. Australia's population is forecast to grow from 22.6 million in 2012 to 34 million by 2050 (ABS, 2008). That represents an additional 11.4 million people. However, the global population will grow from 7 billion in 2012 to 9.3 billion by 2050 (United Nations, 2011). That represents an additional 2.3 billion people. Assuming participation rates in sport at least remain constant over this period, the international sporting arena will become increasingly competitive for Australia. As the majority of population growth is forecast to take place in developing countries (United Nations, 2011), this assumption depends on the economic growth and development in these countries. In absolute terms however, the overseas athlete pool is growing faster than the Australian athlete pool.

Growth in the Chinese sporting equipment market. The size of the Chinese sporting equipment market increased by 5.9 per cent between 2005 and 2009 to reach a total revenue of \$A6,049 million. The Australian sporting equipment market increased slightly less, by 4.5 per cent (Datamonitor, 2010).

The Chinese sports system. After 32 years of absence at the Olympic games, China emerged in 1984 at the XXIII Olympic games in Los Angeles, where it won 15 gold medals and came fourth in total rankings (Hong et al., 2005). The rapid success of Chinese elite sports is attributed to the Chinese sports system, called 'Juguo tizhi', which translates as 'whole country support for the elite sport system'. It is based on an Olympic medal-oriented policy, centralised management and administration that channels the country's sports resources into elite sport. The system is based on a three-level pyramid that assists in the identification and selection of talent to develop professional athletes. A large population facilitates the operation and structure of such a national sport program by ensuring a large number of participants in the program (Figure 16). To support young athletes, the number of full-time coaches with a higher education certificate almost doubled from 2800 in 1979 to 5900 in 1995 (Hong et al., 2005).

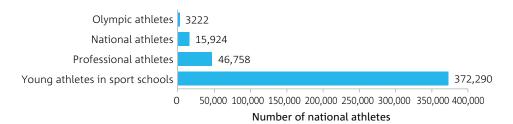


Figure 16 Number of national athletes in China in 2004.

Source: Reproduced from data published in The International Journal of the History of Sport (Hong *et al.*, 2005).

Table 1 Chinese sports budget, 1991–1996 (\$A thousands)

	Government funding		Commercial investment	
	Central Govt	Local Govt	Sponsorship	Commercial profits
1991	3176	36,956	0	0
1992	3496	42,745	0	0
1993	4760	48,833	561	185,879
1994	2421	29,582	662	10,659
1995	3655	35,023	593	12,604
1996	3211	40,351	726	15,297

Source: Reproduced from data published in The International Journal of the History of Sport (Hong et al., 2005) and Historic Currency Exchange Rate Data from the Reserve Bank of Australia.

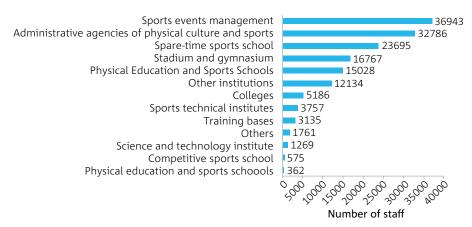


Figure 17 Total employment in China's Physical Education System, 2009, by category. Source: National Bureau of Statistics of China (NBSC, 2010).

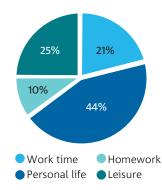


Figure 18 Weekly average time commitment in an urban Chinese household.

Source: Reproduced from data in the Journal of Family and Economic Issues (Yin, 2005) originally sourced from the Economic Science Press (Wang, 1999).

Sport event spectatorship in China.

In 2008 the CCTV (China Network Television) Olympic channels attracted a total of 1.102 billion viewers in China in the 13 days since the opening of the Beijing Olympics on August 8, representing 90 per cent of the nation's television viewers, or 84 per cent of the country's entire population of 1.3 billion (Beijing Organising Committee, 2008).

People working in sport in China.

In China the total employment in the physical education system increased from 144,915 in 1995 to 153,398 in 2009 (Figure 17) (NBSC, 2010).

Sports participation in China. After

20 years of reform, the Chinese people and economy are gradually accepting and adopting Western lifestyles. The economic development has started to raise living standards and available leisure time. China began its new work system with the five-day work week and two-day weekend in 1995 (Wang, 1999; Yin, 2005). A 2009 survey found that for urban households, the weekly averages per person per household of work time per day is five hours one minute, the time for personal life is 10 hours 42 minutes, the time for homework is two hours 21 minutes and the time for leisure is six hours six minutes (Figure 18) (Wang, 1999; Yin, 2005). Watching TV, reading books or newspapers, listening to the radio, playing Majiang, and chatting with family members are the most popular leisure activities. In 1995, China initiated the Outline of Nationwide Physical Exercise Plan. One estimate finds that only 7.5 per cent of men and 5.9 per cent of women aged 30–45 participate regularly in sports and physical exercise in China (Wang, 1999). The government aims to increase sports participation in coming years.

Imports from China. The value of sports and physical recreation goods imported into Australia from China increased by 68 per cent between 2004-05 (\$A501 million) and 2010-11 (\$A742 million) (ABS, 2011e). China was the largest contributor of imports over the entire period, and in 2010-11, the value of sporting goods imported from China represented a third of imports from all other countries combined (\$A2036.3 million).

The Asian Games. The Asian Games are the world's second largest multisport event, by spectators, after the Olympics. First held in New Delhi, India in 1951, they have grown from 489 athletes from 11 nations participating at 57 events in seven disciplines (Olympic Council of Asia, 2012) to a mega-event. The last Asian Games were held in 2010 Guangzhou, China and featured 9,704 athletes from 45 nations competing over 16 days in 42 sports and 58 disciplines at 476 events, supported by 60,000 volunteers (Olympic Council of Asia, 2012). A total of two million tickets were sold (Olympic Council of Asia, 2010a). In comparison, at the last Olympic Summer games held in Beijing, China had 11,028 athletes who competed in 302 events, supported by 100,000 volunteers.

The Republic of Korea (South Korea) as a sporting super power. South Korea has the 14th largest economy in the world and the fifth largest in Asia (World Bank, 2011). It was the second Asian country to host the Olympics, (Seoul in 1988). This event brought world-class sports infrastructure to South Korea. Since then South Korea has hosted several big sporting events, such as the FIFA World Cup in 2002, the Asian Games in 1986, 1999 and 2002 and the Korean Grand Prix in 2010. South Korea won the bid to host the next Winter Olympic Games in 2018 to be held in Pyeongchang. The 2002 World Cup was estimated to contribute \$ US 8.9 billion (2.2 per cent of the total) to the national income for South Korea (Baade & Matheson, 2000). South Korea's gold medal tally has risen over time (Figure 19).

Sports in India. India has the ninth largest economy in the world, and third largest in Asia (World Bank, 2011). The first ever Asian Games were hosted in New Delhi, India in 1951 (11 nations participating, 489 athletes competing in 12 sports over 57 events) (Olympic Council of Asia, 2012). However, while countries like China and South Korea have substantially improved their gold medal tallies at the Olympics over recent decades, India, despite its large population, has not yet done the same. It is possible that as India becomes wealthier and upgrades its sporting capabilities this might change in coming decades. The main explanation for India's not winning many gold medals, despite its large population, is low income levels. However, incomes in India are set to rise and so too might Olympic and Paralympic results.

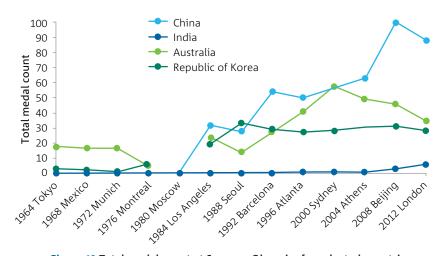
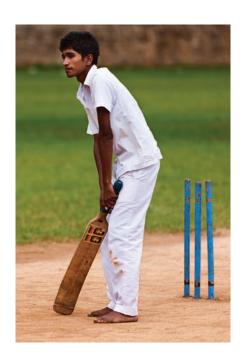


Figure 19 Total medal count at Summer Olympics for selected countries.

Source: International Olympic Committee (International Olympic Committee, 2012b).

Participation rates in India. Sports participation in India is very low, estimated at 1 per cent of the total population in 2010 (Mukherjee et al., 2010). Sport in India is often treated as a recreational and entertainment pursuit rather than a professional career option. In terms of participation, viewership and sponsorship, cricket is the most popular sport in India. Cricket is estimated to contribute 80-90 per cent of the total sports revenue. Until recently, sport was not even part of the national curriculum and hence many schools lack appropriate infrastructure. The majority of Indian government expenditure between 2005 and 2010 was used to support the Commonwealth Games (Figure 20). However, total expenditure has grown considerably over this five-year period.

Sports in Brazil. Brazil is the seventh largest economy in the world (World Bank, 2011) with a strong sporting identity. While Brazil has traditionally had a strong international presence in soccer, winning the World Cup five times (Embassy of Brazil in London, 2012), Brazil has also moved to establish itself on the world volleyball stage. The FIVB World Volleyball League is the premier annual men's international volleyball tournament (FIVB, 2012). In the tournament's first 10 years, Brazil was placed first only once (in 1993) but from 2000 onwards, Brazil has come first in eight out of twelve years (FIVB, 2012). International sporting events will likely strengthen Brazil's sporting presence. Brazil hosted the 2007 Pan American Games, the 2011 Military Games and will host the final match of the 2014 FIFA World Cup and the 2016 Olympic Games.



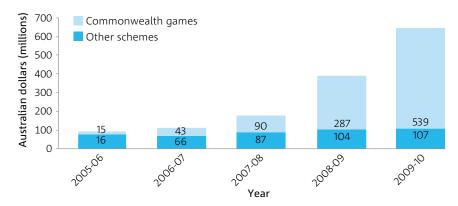


Figure 20 Financial outlays of the Indian Ministry of Youth Affairs and Sports for Sports and Physical Education, 2005-2010.

Source: Ministry of Youth Affairs and Sports Annual Reports (2006-2009) and The Indian Council for Research on International Economic Relations (Mukherjee *et al.*, 2010).

Emerging questions

- 1. Should Australia compete more regularly in Asian competitions? The Asian Games is the second largest multi-event international sporting competition after the Olympics. There are 45 members of the Olympic Council of Asia. While this list does not yet include Australia, an application was made in 2006 to join and was not accepted on the basis of regulatory technicalities (Australian Olympic Committee, 2006). However, in 2010 the Asian Olympic chief acknowledged the boost in the quality of competition that Australia would bring (Olympic Council of Asia, 2010b). Furthermore, in 2006 Australia moved from the Oceania Football Confederation to join the Asian Football Confederation.
- Despite this, the original decision still stands and Australia is not part of the Olympic Council of Asia. Given its geographic location, trade and cultural links with Asia the question may be asked: Should Australia continue to pursue membership in the Olympic Council of Asia?
- 2. Are there sports broadcasting and other business opportunities in Asia for Australian companies? One estimate suggests that 847 million people watched the Asian Games on television (Jie, 2011). As China, India and other Asian countries rapidly grow their economies there may emerge new audiences for niche sporting events.
- 3. Are there opportunities for the Australian sports sector to train athletes, coaches and other sports professionals from Asia? The Australian education sector benefited from an influx of Asian students seeking qualifications. It may be asked whether the sports sector could have a similar experience. As Asian people grow their incomes and become more involved in sport a demand for training facilities and programs may emerge. Australia could be a provider of these services and use the existing skills base to provide sporting services to other countries.
- 4. What opportunities are there for Australia to work with other emerging economies to strengthen sporting ties? Soccer and volleyball are popular sports in Brazil. Australia already has high participation rates in soccer and has used this sport to strengthen ties with China. As Brazil is likely to rise in prominence in the global sporting arena and also experience significant economic growth in the coming years (Wilson et al., 2010), should Australia invest more into volleyball as a means of strengthening ties with Brazil?
- 5. What pressures will emerge as Asia offers higher offshore salaries? Is this an opportunity or a risk? As the Asian sports market increases, there is a growing risk that Australian sports skills and expertise may be drawn into the Asian sports market. At the same time, however, the growth in these regions may present new opportunities for Australia to capitalise on this growth and provide sports-related services in areas such as sport technology, training and sport equipment manufacturing. Employment prospects for Australian athletes may increase and diversify.



3

One estimate suggests that 847 million people watched the Asian Games on television.

Tracksuits to business suits



The sport industry in Australia is strong and growing. Supported by lucrative television broadcasting rights agreements, corporate sponsorships and spectator interest, the sports sector is expected to grow by 3.5 per cent per year over the five years through to 2010-11, achieving a total turnover of \$A6.2 billion (McMillan, 2011). Major sporting bodies will need highly-skilled management personnel in order to retain or maximise market share in an increasingly competitive environment. The increasing professionalism of sport participants at the elite level will provide strong growth in the sports coaching and athlete management sectors. The growing sophistication of sports coaching and management in Australia will also provide increasing opportunities to market services from other countries to athletes. Data from Cricket Australia demonstrates the importance of media rights in generating revenue for sports organisations (Figure 21).

The AFL Business Model. The AFL provides an example of an Australian sport highly advanced in the journey from a community-run sports club towards formal corporate governance structures, indicated by revenue generated compared with other sporting bodies (Figure 22). The AFL started in 1858 in Melbourne with only a few clubs. Today it has over 650,000 members and a professional administration focused on five key segments: Corporate Affairs and Communications, Commercial Operations, Game Development, Football Operations and Finance and Administration (McMillan, 2011). The AFL is governed by the AFL Commission, which has a Chief Executive Officer and up to eight Commissioners.

Broadcasting deals. The AFL's revenue is primarily generated through the sale of broadcasting deals. The AFL signed its record \$A1.23 billion broadcast rights in April 2011, up from the \$A780 million in the previous broadcast deal (AFL, 2011b). It is important to note that the press and broadcasting landscape has changed dramatically over the last few years. Traditional television is no longer the only way to broadcast a game to spectators at home. Recent technological advances have resulted in a plethora of digital viewing options. For example, the deal mentioned above includes rights for Telstra to broadcast all matches including finals, using the Telstra NextG service that can be viewed on mobile phones and iPads. This will change the press and broadcasting landscape dramatically and coupled with the advent of the National Broadband Network (NBN) many clubs may decide to sell to the customer directly.

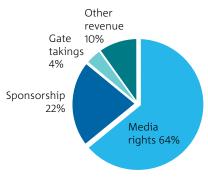


Figure 21 Sources of revenue for Cricket Australia, 2003-04.

Source: IBISWorld Industry Report (McMillan, 2011).

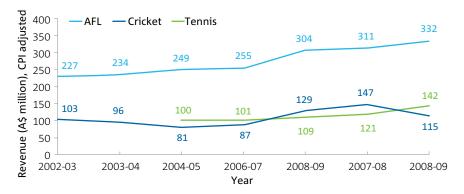


Figure 22 Revenue generated by the AFL, Cricket Australia and Tennis Australia, 2002-2009.

Source: IBISWorld Industry Report (McMillan, 2011).

Sport on smartphones. Recent years have seen rapid growth in the prevalence and use of smartphones. Telstra (2011) estimates that 46 per cent of Australian mobile phone owners currently have a smartphone and forecast that smartphone ownership will grow to 60 per cent of the Australian mobile population in the next year. Surveys show that Australians are frequently using their smartphones to access the Internet for information and entertainment. This is creating an opportunity for sports broadcasting, keeping people informed about sporting events and building communities around sports. Telstra (2011) estimates that 10 per cent of smartphone users access sports content on a daily basis, 29 per cent weekly and 45 per cent at some point. Smartphone use, and therefore accessing sports content on smartphones, is expected to grow into the future.

New media creating new opportunities.

Media outlets are rapidly changing the way people engage with sports. No longer are spectators restricted to watching the event on television or the internet, but companies are now offering the opportunity to 'virtually participate' in sporting events. One example is the Tour de France. Websites such as 'Map My Ride' allow participants to virtually ride alongside the cyclists. Virtual participants ride the specified number of kilometres each day and enter their ride data via software applications. Personal results can then be compared with the Tour de France peloton or other virtual participants, such as friends and colleagues. Opportunities such as these allow a unique engagement with a sporting event than has never before been possible.

Employment in sport. As the sport sector becomes corporatised it is employing an increasingly large number of people. In Australia, there were 75,155 persons employed in sport and physical recreation occupations in 2006. Employment in the sector experienced growth of 21.6 per cent over the proceeding five years (ABS, 2006). Most people were employed as fitness instructors, greenkeepers, swimming coach or instructor, stable hand and other sports coach or instructor (Figure 23). Employment in the sports sector is particularly popular with younger people; in 2006, the 15-24 year age group comprised a third of the total employment in the field.

Volunteers in sport. Traditionally, sporting organisations have relied heavily on volunteers to provide to services to members (ABS, 2011h). In 2010, sport and physical recreation organisations attracted 2.3 million volunteers, equivalent to 37 per cent of the volunteer population(adults aged 18 years and over) (ABS, 2011c). Although this was the largest category

of volunteers, followed by education and training organisations, the barriers to volunteering are growing (ABS, 2011h). They include issues such as time pressures, the increased bureaucracy associated with running voluntary sports organisations, lack of local council support, lack of appreciation or recognition and the fear of being sued (Griffith University, 2008). Without volunteers, it has been suggested, many sport organisations or individual clubs could not continue functioning (Griffith University, 2008). Encouraging increased volunteering in sports organisations is critical to ensure these organisations can continue to operate and offer sporting services to the local community.

Adapting the sport to grow the audience. Sporting bodies are changing the game rules in order to capture emerging markets. Several national sporting organisations have started to change traditional game rules to suit modern audiences and offer a better customer experience through faster and more entertaining games. For example, in 2003 the concept of 'Twenty 20'

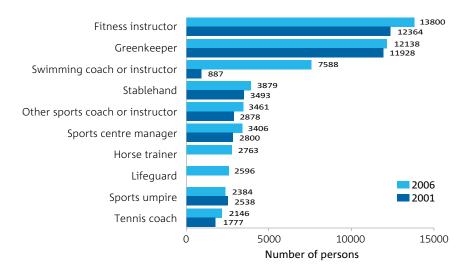


Figure 23 Changes in employment in the sports sector between 2001 and 2006

Source: Australian Bureau of Statistics (ABS, 2006)

cricket – a variation of the game that can usually be played in a few hours, unlike traditional Test Cricket, which can take several days – was introduced by the England and Wales Cricket Board,. This has proven hugely popular with fans and helped cricket retain diverse audiences. Cricket Australia (2011a) sees the 'Twenty20' competition as a major drawcard with which to continue to engage existing fans and increase the game's appeal to a larger fan base. In just over five years, average attendance at Australia's domestic Twenty20 events have grown to be second only to AFL (Cricket Australia, 2011b).

Attendance at sporting events. While it is difficult to identify a trend in sports attendance, recent years have seen large turnouts. In 2009-10, 7.6 million Australians (43 per cent) attended a sporting event as a spectator (ABS, 2011e). The six sports attended by the most Australian residents were: Australian rules football (16 per cent), horse racing (11 per cent), rugby league (9 per cent), motor sports (8 per cent), outdoor soccer (5 per cent) and outdoor cricket (4 per cent) (ABS, 2010d). The Australian public is likely to continue attending sporting events in large numbers into the future.



Sports products and services online.

Markets for sporting goods are likely to be affected by the rise of online shopping. There is little doubt that Australian households are increasingly buying goods and services online. Price Waterhouse Coopers and Frost & Sullivan (2011) estimate that in 2011 the Australian online shopping market reached \$A13.6 billion (5.5 per cent of total retail sales) and will have compound annual growth of 12.6 per cent, reaching \$A21.7 billion by 2015. They also estimate that Australians spent\$A6 billion on overseas websites in 2011. The online retail markets of the US and UK have sales equal to 7.5 per cent and 9 per cent respectively of total retail sales, compared with 5 per cent in Australia. The online retail markets in these countries are considered more mature than Australia's. The ABS (2011a) estimates that nearly two-thirds (64 per cent) of Australian internet users aged 15 years and over used the internet for making online purchases in 2008-09, up from 61 per cent in 2006-07.

The rising cost of sport. The cost of participating in sport is increasing. Today cost is a barrier to participation for many people. A survey of parents of Australian children aged 5-14 years, undertaken at the University of Sydney, found that cost is a significant factor for parents when allowing their children to participate in organised sport (Hardy et al., 2010). 'Sports libraries' have been proposed as a partial solution to this problem, allowing people to 'borrow' sporting equipment and facilities and thereby reduce the overall cost sport participation (Hardy et al., 2010).

Impact of globalisation. Australia's trade has grown by roughly 80 per cent over the last decade. Trade in sport and physical recreation goods has also increased significantly over this period (ABS, 2011e). Imports from China, for example, increased by 77 per cent from 2002-03 to 2008-09. However, given that Australian imports of sports and physical recreation goods were valued at \$A2055.5 million in 2008-09, when compared to exports valued at \$A463.1 million, it is clear that Australia does not have a large presence in this export market (ABS, 2011e). HSBC (2011) forecasts that by 2025, world trade in general will have grown by 73 per cent. As the flow of goods and services around the globe increases, there is great potential for Australia to expand in the trade sports and physical recreation goods and services.

International terrorism and violence in sport. As sport is increasingly played on the global stage, terrorism and violence is having a varying degree of impact on sporting events. Following the terrorist attacks in the United States on 11 September 2001, there did not appear to be a significant number of cancellations of Olympic trips for committed sports fans to the 2002 Salt Lake City Olympic Games. However, the incidental attendance of tourists already visiting Salt Lake City appeared to be lower than in previous years (Wicks, 2002). The incidence of violence in sport, particularly in outdoor soccer, has risen and is deterring occasional spectators from attending. This is supported by data observed during the 2002 FIFA World Cup in the Republic of Korea (Toohey et al., 2003). Considerations such as terrorism and violence have cost implications for the hosts of large sporting events, as tighter security measures are required to ensure the safety of athletes, spectators and residents of the host city (Toohey et al., 2003).

Developmental opportunities on a global scale. As globalisation continues to break down traditional countrydelineated barriers, there will be increasing scope for training, coaching and competing to take place on a global scale. Recent sporting developments have sought to establish the Gold Coast as a first-class sport destination and supplier of world-class sports goods and services (Gold Coast City Council, 2009). The Gold Coast has held events such as the Australian Surf Life Saving Championships, the Pan Pacific Masters Games and the Quiksilver and Roxy Pro World Championship Surfing Tour (Gold Coast City Council, 2009). Hosting the 2018 Commonwealth Games will further establish the Gold Coast's reputation as a world class destination for sporting teams.

New alliances. Popular Australian sports, such as the AFL, now have opportunities to expand into overseas markets. Since its establishment in 1896, the Victorian Football League has grown from eight foundation clubs to become the Australian Football League with 18 teams (AFL, 2012). AFL is now moving to establish itself overseas. In 2011, the fourth International Cup was held with participants from 19 countries, the first purpose-built AFL oval was constructed in China, the Papua New Guinea AFL taskforce was launched and a search for new talent conducted in four international locations (AFL, 2011a). The organisation has hopes that by 2030 the AFL will have a strong international presence (AFL, 2010).

Corporatisation of sport. As sports are increasingly played on a global scale, there is growing debate around the management and corporatisation of sport. Such issues are centered around the governance and management of league structures, ensuring local needs are met by international sporting bodies and scheduling and coverage issues as the dominance of international sporting bodies increases (Chadwick, 2009). The media have acted as a catalyst in the growth of international sporting bodies and the move to gain access to new and emerging markets (Chadwick, 2009). Technology has transformed consumer expectations and enabled 24/7 on-demand access to sport. This has the potential to shift the focus of the sport industry from a sportorientated business to an entertainment business (Chadwick, 2009).

Ethics and integrity in sport. Ethics and integrity continue to be upheld in sporting circles. In the recent 2012 Olympic Games, allegations of match fixing in badminton competition resulted in members of the four accused teams being disqualified from the competition (Kelso, 2012). According to media reports, one player subsequently announced they would be retiring from professional sport (ABC News Online, 2012). Furthermore, prior to the commencement of the Games, the International Olympic Committee (IOC) expected to carry out approximately 5000 tests to ensure that the integrity of sporting competitions continued to be upheld (International Olympic Committee, 2012a).

Emerging questions

- 1. What are the opportunities for sports that can't attract broadcast rights or major corporate sponsorship? Market pressures are drawing athletes and resources towards sports that can attract large audiences and sponsorship deals. This may threaten the profile, or existence, of other sports which have small audiences but hold traditional and cultural importance. A question for government is whether there is market failure and a case for investment?
- 2. Should sports focus on the effectiveness of their corporate governance models to ensure sustainability? Sports are increasingly operating as businesses with some experiencing considerable growth. This coupled with the government's requirement for greater accountability for the funding they receive suggests that those sports which currently have less formal governance structures may need a more formal governance arrangement.
- 3. What are the implications of the convergence of sport and entertainment? Does it detract from, or support, the underlying values of sport? There are strong market pressures, expressed through television broadcasting deals, to modify sport so it becomes more entertaining to watch and attracts larger audiences. Sport has become established as part of the Australian culture because it embodies values such as dedication, skill, achievement, focus, fair play, teamwork and tenacity. Entertainment is a by-product of these qualities. If entertainment becomes the main product, do we risk detracting from the underlying values? Or can sports entertainment be a mechanism for communicating and developing these values?



As sports are increasingly played on a global scale, there is a growing debate around the management and corporatisation of sport.

Conclusion

The sports that Australians play today are the result of cultural evolution over the last two centuries. The desire to play and watch sport is fundamental to Australian culture, and this is not likely to change in coming decades. In 2040 Australians will most likely still follow and participate in AFL, cricket, rugby, touch football, netball, sailing, soccer, swimming, basketball, lawn bowls and other sports in large numbers.

Australia will still compete intensely in the Olympics, Paralympics and other international sporting events and will most likely continue to perform well above our relative share of global population and gross domestic product. The sports trajectory upon which Australia is travelling is deeply set and will change over centuries, not decades.

Nevertheless, for those making decisions about sport in the public and private sector, change is on the immediate horizon, and will require responses. Our economy and society are rapidly evolving into the twenty-first century. New markets are opening and existing markets are changing, or even closing. People are changing the way they allocate their time, access information and interact with each other. These changes are creating challenges and opportunities for the Australian sports sector. Difficult choices need to be made about where to invest and what policies and strategies to adopt. The fast-paced environment of today's globally interlinked markets and societies will reward the right choices and punish the wrong ones.

This study puts forward a narrative about the future of Australian sport. This is designed to help people in government, private and community sectors make wiser choices. We see this as the first step in a broader process of strategy formulation, implementation and evaluation:

Step 1

Construct narratives about the future. Identify and describe future change via some type of narrative (e.g. megatrends).

Step 2

Identify actions. Identify possible actions that will better position your organisation with respect to the important changes, as described in the narrative, likely to occur in the future.

Step 3

Choose actions. Evaluate and select a portfolio of actions likely to deliver the best outcomes within budgetary and other constraints.

Step 4

Implement actions. Obtain fiscal, human and other resources to implement the chosen actions.

Step 5

Monitor and adapt. As new information comes to hand, adjust the portfolio of actions to ensure outcomes are achieved.

This report identifies six sports megatrends. They represent a narrative about the future of Australian sports amongst many other valid narratives. Early signals of each megatrend are already occurring. The megatrends will continue to play out over the next three decades and may shape the sports sector as we know it. They provide a platform for community, government and industry to help identify and make informed strategic investment and policy choices.



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