

How technology took the V8 Supercars from local sport to international spectacle

The V8 Supercars. The name calls to mind revving engines, the classic Holden vs Ford battle, and of course, petrol heads. But putting aside the raw edge of snapped conrods and blown head gaskets in front of baying Mt Panorama fans for a moment, it becomes apparent that the modern day V8 Supercars race is, in fact, a tech enthusiast's dream.

With high-performance automotive tuning equipment and sophisticated multimedia, the cutting-edge tech required for modern-day V8 racing means that you're just as likely to find a team of computer engineers in the pit as you are to find grease-monkeys...

BY JONATHAN COTTON





nd with huge technical advances in the way the sport is performed and presented, the audience has changed as well. The days of the V8s being the exclusive cultural property of Aussies and Kiwis are long gone. These days, racing is big business and a truly international affair. The V8 Supercars organisation now stages events all over the globe – from Austin, Texas to Bahrain, Abu Dhabi and even in Cyberspace. Now acknowledged as the number three motorsport series in the world, the V8 Supercars championship has transformed itself from Aussie provincial attraction to a well and truly global phenomenon, and it's still growing rapidly.

This year marks the 51st anniversary of the V8 Supercar championship. While fifty years may seem a long time, the race's evolution into what it is today has been a gradual process of moving with the times.

Though the Australian Touring Car Championship began in 1960, it was not until 1993 that the then Confederation of Australian Motor Sport introduced the new Class A Australian made 5.0 litre V8 engines of the Fords and Holdens. The decision played on the long-standing rivalry between the two brands, a rivalry made all the more significant by the popularity of the Ford Falcon and Holden Commodore with the Australian car-buying public. Over time the lesser class B & C cars were phased out of the race, leaving only the Ford and Holden V8s to battle it out for supremacy on the race track, and the V8 Supercar event, as we know it today, was born.

The V8 Supercars moniker was adopted in 1997, and Network Ten began televising the series in the same year. The Australian Vee Eight Supercar Company (AVESCO) was later formed to run the series directly and when the company became an independent organisation, the future of the series as an Australasian institution was secure.

In recent years the organization began an aggressive push into overseas markets, prompting a huge surge in international popularity, with races held all over the world, including the US, Canada, Europe and the UK, the Middle East and Asia, as well as Australasia. The modern day V8 race is a sophisticated, progressive event, with organisers embracing new technology as a means to attract and interact with fans to an extent unthought-of ten years ago.

And in notoriously tough times, the V8 Supercars seems to be managing the impossible, and enjoying year on year growth.

"It is quite simply the best touring car championship in the world," says V8 Supercars CEO Martin Whitaker. "It is a great product and a great competition. And that's one of the biggest differentiators between this and any other championship competition – it's close racing, it sounds right, it looks right, it's got a healthy mix of consumer brands now involved in the



sport. And just the television content is magnificent in terms of out and out racing spectacle."

And while the majority of the V8 Supercars' audience still engages with the race via free-to-air television (the race is broadcast in 139 countries around the world to approximately half a billion households every race weekend), subscription TV, online and mobile technology is creating new commercial avenues for the race. And new channels of audience engagement mean new corporate opportunity.

As the organisation enters into new rights agreement negotiations around free-to-air and online broadcast rights, with both current agreements expiring at the end of 2012, they're currently reassessing just how they can maximise the potential of the new content streams. Online feeds, gaming, TV rights, and the potential offered by mobile technology means that the V8 Supercars organisers are increasingly looking to market split channels of content to interested parties. The V8 Supercars organisation is now focused on splitting rights packages into multiple parts, allowing different bidders to focus on different channels, depending on what their strengths are in the market. The challenge for the V8 Supercars Series is to deliver on those channels.

"The beauty of what we're doing is to marry together every possible means of communicating with the general public, the spectator and the corporate businessman," says Whitaker. "It hasn't fundamentally changed the way we do business, but it's evolved. We've evolved the way we sell tickets and corporate hospitality, and communicate about our business. We're in a state of evolution right now - we're evolving through these new mediums that are now available to us.

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Martin Whitaker, CEO, V8 Supercars

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"Ultimately, selling to people isn't rocket science," he says. "As much as anything it's ensuring that you communicate with people. Make sure that they realise what you're offering them, what the advantages and benefits are of the offering and, most importantly, communicating the way in which our sport is a platform for entertainment, business networking, tourism, etcetera. And we've got to use the modern tools of the trade to make sure we do that."

That focus on effective communication carries over into the organisations relationship with the fans too. Though races may be held in far-flung corners of the globe, fan interaction with the race is about as intimate as it can get.

Ten years ago, fans had two options for participating in the events - by buying a ticket to the race or watching the event on television. These days however, fans both overseas and local can watch every race in a variety of formats - online, on tablet devices or on their mobile phones. Taking a leaf out of the AFL's playbook, the V8 Supercars has seen the potential of the online space, not only as a means of providing revenue streams, but as a means of attracting and retaining fans.

V8 SUPERCARS

STANDARD TECHNICAL DETAILS Vehicle: Ford Falcon or Holden

Commodore

Engine: 5.0-litre fuel-injected V8 with control MoTeC engine management control system

Power: Estimated 635+ bhp limited to maximum 7,500 RPM

Gearbox: Control six-speed sequential Holinger gearbox – Australian made

Differential: 9 inch

Clutch: Triple plate carbon 7 ¼ inch

Suspension (Front): Double wishbone suspension with coil over adjustable damper and cockpit adjustable front anti-roll bar

Suspension (Rear): Four linke rear suspension with adjustable watts link, coil over adjustable rear dampers with cockpit adjustable rear anti roll bar

Brakes (Front): Alcon 6 Piston Monobloc Caliper with removable bridge bar 375mm ventilated discs

Brakes (Rear): Alcon 4 Piston Monobloc Caliper 343mm ventilated disc

Wheels: Rimstock control 17 inch x 11 inch magnesium alloy

Tyres: Dunlop control tyre

Fuel capacity: 75 litres (sprint events), 120 litres (endurance events)

Fuel: E85 – 85% ethanol

Vehicle weight: 1345kg (category minimum without driver)

Top speed: 294+ kph

>> 0-100kph: 3.8 seconds





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"We recognize that we've got hundreds of thousands, if not millions of fans around the world," says Whitaker. "There are those among that group that are really diehard fans and want to have every single parameter available at their fingertips whether they're at the race, live, or not. Via the online channels, they can dig into that as deep as they want, when they want."

While historically live timing data was available only to punters who had bought a ticket and went to the track, with crude race data displayed for paying patrons only, now, via the online membership services, fans have a range of data options to choose from, including a live timing feed that shows car numbers, times, positions on the track and other race-related information – and they can view lap and sector times as cars cross the line.

Furthermore, fans can also subscribe to data feeds via

the championship's partner, Australian telco Big Pond, which allows them to watch six different combinations of real-time content during the race. Live animated data feeds, including moving steering wheel animations, driver's gear changes, and top end speeds are on any mobile device or PC, all in real time. Using this telemetry, fans can watch the race unfold, lap by lap, second by second, in any form they want, from anywhere. Data feeds are provided free in Australia and are available to overseas viewers for a subscription fee.

Whitaker says that the new technology opens up the race to new audiences and allows the organisation to capture their attention.

"Primarily it is a tool to create greater awareness for the championship, which in turn leads to those mediums and platforms as opportunities for people to purchase tickets and gain more information about the championship. That's the great



thing about the technology. Whatever hair-brain idea you may have, with the new technology, there's a fair chance you're going to be able to achieve it."

Modern race fans want to consume their content in fractured ways: via iPad, iPhone, online, TV, pay TV, mobile phone. As the V8 audience drifts towards a younger demographic, the organisation is embracing these divergent broadcast avenues.

"Social media is becoming increasingly important," says Whitaker. "Social networking, the website and the internet has given us an opportunity to communicate with those people in a completely different way than we would have five years ago. When I joined last year, we had around 7,000 fans on Facebook and now we're over 150,000. I think we're almost up to 170,000 people. We have a Twitter account. We've got the website. We're increasingly looking at working with people outside Australia, because we now have this burgeoning international audience, and so we're working with major .com sites in America, Europe and Asia, to work out how to communicate better the values and products of V8 Supercars."

But while the online space is an area of growth, fans at the race itself are still the bread and butter of the event. And the numbers are significant. The recent Adelaide race attracted 300,000 ticket-buying customers alone.

"The fact of the matter is as long as you've got really good,



FUEL

Sucrogen BioEthanol is the official fuel supplier to the V8 Supercar Championship series in Australia, helping the sport to lower their carbon emissions by using renewable fuel ethanol (E85 – a blend of 85 per cent ethanol and 15 per cent unleaded petrol).

One litre of Sucrogen bioethanol produces about half the $\rm CO_2$ emissions of one litre of petrol as measured by a full lifecycle analysis.

Sucrogen bioethanol is a renewable, environmentally friendly fuel source made in Australia from the sugarcane crops of Australian farmers.

TRANSPORTATION

So what kind of challenge is posed by the staging of huge races all around the world? Nothing that can't be fixed with freight containers and 747s, apparently.

All the equipment for the race is airlifted to the event. Teams pack what's needed into freight containers – spare tyres, panels, engines – essentially whatever is required to rebuild a car twice over, but it all has to fit into a freight container. Those containers are then packed into one of two 747 300s, and then shipped, along with 28 V8 Supercars and two safety cars, to the track. The process is identical, whether the race is held in Australia, Austin, Abu Dhabi or any other destination.

DATA FEEDS

Racing teams' engineers and data technicians monitor sophisticated data feeds from the V8 racing cars in real time. There are over sixty different sensors on every car – measuring brake temperature, battery power, fluid levels, a sensor on every valve in every camshaft, and sensors measuring such dynamic elements as pressure on the brake and steering wheel movement. That data can then be downloaded after the race through a Motec device, which allows engineers to study race data after the fact, analyse what the car is doing throughout the race, and improve times for the next event.







strong, live audience attendance at the event, that in turn makes the image of the event on television look much more attractive," says Whitaker.

Attempting to broaden the race's appeal, the organisation is introducing a family-friendly format for the races, known as 'Rock and Race', designed to entice punters, and their families, along to the event. Families are encouraged to attend with family friendly zones, coffee shops and rides for the kids during the day, with international music acts such as ZZ Top providing evening entertainment following the day's racing. The plan widens the audience demographic and means punters view the event as a 'value for money' proposition in an increasing crowded entertainment market.

"We're very lucky that we've got a very strong fan base, especially in Australia," says Whitaker, "but we've still got to move with the times. One area where we've always tried to ensure that we differentiate from other sports is that we like to deliver a really good solid entertainment package and an experience for people over the course of a race weekend. And I think it's very encouraging to see that we're now appealing much more to a younger audience and particularly to a family audience. Because motor racing is no longer just people going and watching cars going round in circles."

The V8 Supercars has, historically, always been considered a Holden/Ford series. And for good reason. When the series

was created in 1997, Holden and Ford had 60 percent of the car market in Australia. These days, however, those two brands hold around 25 per cent of the market. The marketplace has changed - these days the biggest selling car in Australia is a Toyota.

Given this fact, and the sometimes prohibitive cost of assembling a race-ready car (\$450,000 to \$600,000), the Supercars series has launched The Car of the Future initiative, a standardised platform for the sport, in an effort to attract other brands into the competition.

Under the new system, every racing car will have a standardised chassis, control wheel, transmission and tyres, dramatically reducing the cost of building a car, and giving teams a new found longevity, a better ability to race without financial pressures, and creating cars that are easier to repair. The organization hopes that this will future proof the sport commercially and increase the viability of the sport's teams. Lowering the cost via the Car of the Future platform also makes it easier for new teams to form and enter the championship, enabling other manufactures to enter the race.

"The car of the future opens up the opportunity for new car manufacturers coming into the sport," says Whitaker. "As you can imagine, there are a lot of manufacturers who have an increasingly large role here in Australia and with our international races coming on, all these things mean we're getting



greater exposure to manufacturers around the world. There are a number of manufacturers who want to start competing in V8 Supercars, so no longer will it just be the traditional Ford and Holden, the red and blue competition on track. By the time the Car of the Future is introduced in 2013, we're expecting a few more manufactures to be involved."

"The crucial thing is that this is not like Nascar where they've done a similar thing except every car that races looks the same. They have to change the look of the cars by putting decals on the headlights and grills to be able to tell them apart. That won't be the case with the Car of the Future. Our cars will continue to have the DNA of the manufacturers' product in terms of body-shape and engine and all those identifiers.

"Because of the level playing field, races are closer, which means more of the crowd-pleasing dog-fighting, even among teams with vastly different budgets. And when it comes down to it, the good racing championships are still the good racing championships because of good, close racing. That will never change and the most important thing is if you've got a championship that has really good solid racing, then it's going to be one that not only attracts spectators, it's also going to attract an audience and investors into that series."

ANYONE CAN RACE

The V8 is pushing out into unexplored territory with its involvement in the virtual racing world of Microsoft's iRacing. com service.

iRacing (www.iracing.com) is a subscription based service that allows fans and gamers from all over the world to participate in staged simulation races online. It's considered the most realistic online racing game in the world, containing accurately modelled vehicles, laser scans of more than 50 of the world's most popular racing tracks, and precise racing physics. Add to this the fact that the game is used by actual racers from the V8 circuit, and you've got a system which blurs the line between gaming and real-life race car practice, allowing the game to be marketed as both an entertainment service and a training tool for would-be racers.

Players simply require a gaming steering wheel, PC or laptop and a subscription.

www.iracing.com