#### FT SPECIAL REPORT

# The Business of Formula One

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# Off-track drama rivals season's climax

F1 looks set to change hands again as rival suitors circle the sport, say *Malcolm Moore* and *James Allen* 

> his weekend could be a Hollywood moment for Formula One.
> On the track, Lewis Ham-

ilton hopes to clinch this year's F1 championship in front of more than 100,000 American fans at the Circuit of the Americas in Austin, Texas.

In the stands will be Matthew Higgins, the chief executive of RSE Ventures, which is leading a consortium to buy F1, partly in the hope of cracking the elusive US market.

The timing would be perfect: the stuff of which movies are made.

But nothing is certain in F1, whose recent corporate history is full of twists as treacherous as the hairpin bends in Monaco. An \$8.5bn deal could still unravel: they have done so repeatedly in the past.

Bernie Ecclestone, the sport's chief executive, is enigmatic. So too is Donald Mackenzie, the co-founder of CVC, which owns a controlling stake. The teams in the paddock have learnt to respond to questions about a change of ownership with weary caution, rather than rash optimism.

F1's other reported admirers are media companies such as Liberty Global, which see growth opportunities in new media and digital, areas which Ecclestone has appeared reluctant to embrace as he protects his television rights holders.

As well as looking towards the US, RSE Ventures wants to create a market in China and is reported as having a Chinese investment partner.

The uncertainty over F1 has cast a shadow over this season. There are only



Frontrunner: drivers at the start of the Russian Grand Prix, won by championship leader Lewis Hamilton (front) - AFP

A deal for Renault to save the Lotus team from bankruptcy still seems up in the air. At the recent Japanese Grand Prix, Lotus found itself locked out of its hospitality unit in the Suzuka paddock because of unpaid bills from the previous year's event. But the show went on; the team competed and scored its second best result of the season, with both cars coming home in the points, in seventh and eighth places. worryingly, F1's television audience is in long-term decline, partly because younger viewers are switching to different viewing platforms and partly because of the sport moving behind a paywall in several key markets such as the UK, France, Italy and Japan.

In August, the uncertainty of the situation saw the German broadcaster RTL, one of F1's longest-lasting partners and offset by the rise of social media and online engagement, driven by the teams, the drivers and the wider media. But this is a positive trend that many believe must continue to grow to protect the sport's commercial appeal. The viewership Ecclestone has built is impressive — Formula One Management, which markets media rights to the sport, claims annual numbers of 3m If the drivers' championship is not wrapped up in Texas, it is still likely to be concluded well before the final race of the season in Abu Dhabi, the fifth time in seven years that has happened. Hamilton's superiority is partly due to

the new rules brought in last season, which mandated a new type of power unit, based on 1.6-litre V6 hybrid turbo engines. Mercedes got the jump on the opposition with this technology, leaving Ferrari and Red Bull in their mirrors.

Meanwhile, another powerhouse team, McLaren, has been embarrassed by its partnership with Honda, which re-entered the sport this season and has been humiliated by an underperforming engine.

The predictability of the competition has not deterred fans from turning out for races. Montreal, Silverstone and Monza, in particular, have seen huge crowds this year. More than 120,000 people were at Silverstone to see to see Hamilton win his home grand prix.

But both Monza and Silverstone are under threat as Ecclestone and CVC target race venues willing to pay the \$50m annual price tag to host F1.

Race hosting fees have generally accounted for about 35 per cent of F1's commercial revenues and for 2016 Ecclestone is extending the calendar to feature 21 races, with Azerbaijan entering the field as a host.

The quest for new venues is also about adding television viewers. Some 60 per cent of F1's TV audience is based in Europe, and the opportunity to put on grands prix in different time slots, with races in Montreal, Austin and Mexico later in the afternoon or evening helps boost their potential viewership. Night races in the Middle East and Singapore also help the scheduling.

But there are many who will rue the loss of famous tracks. Sebastian Vettel, the four-time world champion who now drives with Ferrari, has voiced fears that F1 is losing its heritage. The German said after an emotional podium in the Italian

#### Inside



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five more years of the current so-called "Concorde" agreement — the contract between the teams and the sport — and several teams are in open revolt.

As this supplement went to press, Red Bull, whose success has re-energised F1 in recent years, was threatening to quit the competition at the end of the season because of the reluctance of its rivals, Mercedes and Ferrari, to sell it engines for the 2016 season. Its junior team, Toro Rosso, which is also owned by the Austrian billionaire Dietrich Mateschitz, would also leave. Two other small teams, Force India and Sauber, have lodged a complaint with the European Commission over how F1 is run and the payments awarded to the top teams that put them "at a perpetual sporting and economic disadvantage".

The high fees levied by F1 on racetracks could see two of the sport's most historic venues, Silverstone and Monza, homes of the British and Italian Grands Prix, respectively, dropping off the calendar. Finally, and perhaps most For years, he has run it as he has this season: as a sport mired in controversy

one that has covered the sport since 1991, renew its current deal only for two more years. The decline in its live TV audience has not yet caused panic among the sponsors and manufacturers involved in the sport, as it appears to be race attendees, half a billion viewers on TV and 67m fans online.

Lewis Hamilton's Mercedes AMG Petronas team has more than 20m followers on Facebook, while he and other leading drivers have millions of Twitter followers. On track, the action has not been thrilling. Once again, Lewis Hamilton and Mercedes have dominated, leaving rivals in their wake and removing any element of unpredictability about the outcome. F1 has often been a parade rather than a competition in recent times. Grand Prix that if the race was lost for financial reasons "you are basically ripping our hearts out".

If F1 does change hands in the near future, there will immediately be a question mark over the future of Ecclestone, 84, who has been involved in motor racing since the 1950s.

For years, he has run it as he has this season: as a sport mired in controversy. But the US executives watching this weekend in Austin may have a different strategy if they can get to the finishing line themselves with a deal.

#### **Return to Mexico City**

The F1 caravan is set to arrive in the sprawling capital after an absence of 23 years Page 3

# New chief whips the prancing horse into shape

### Management Maurizio Arrivabene, a marketing man, has got Ferrari back on track, says *James Allen*

There are few jobs in world sport more daunting than team principal at Ferrari in Formula One – a task recently taken on by rugged Italian Maurizio Arrivabene.

Manchester United, Real Madrid and Juventus are all iconic teams with large followings, but they do not unite a country like the "Prancing Horse".

Ferrari is not just part of the sporting landscape, it is part of the history of Italy. By the end of the second world war, many of the country's bridges had been destroyed. Some were rebuilt so that the 1947 Mille Miglia 1,000-mile road race could take place and it symbolically reunited a divided country. Enzo Ferrari was part of that process.

Stewardship of this team brand has fallen this season to 58-year-old Arrivabene, who has never managed any kind of sports team in his life. He is a marketing man, one who has promoted Philip Morris' Marlboro brand via its sponsorship of Ferrari over the past 20 years.

Arrivabene had a front-row seat as a key sponsor of Ferrari through the dominant Michael Schumacher years in the early 2000s and observed close up how it was achieved.

Now he has stepped into the toughest reporting structure imaginable; every two weeks he gets an appraisal and it can be brutal as well as affirmative. His predecessor, Marco Mattiacci, was axed after less than a year in the role. "It's like being a leaf in the autumn,"

says the Italian. "Every single race is a kind of shot of wind and the leaves can fall down or stay on the trees. This is exactly what I feel."

It has started well. After a disastrous 2014 season, which saw Ferrari fail to win a race and score only two podiums, there was a bloodletting that brought in Arrivabene last November to replace Mattiacci.

This season has seen a return to respectability. Sebastian Vettel replaced Fernando Alonso and returned the team to winning ways. Ferrari has mastered the new hybrid turbo engine rules, so has that been the reason for the revival?

"The key to it is actually Ferrari itself," says the former Marlboro man. "It's a name; it's a company that has given a special commitment to everybody, not only a job. Just concerning me, I'm just one of a few guys who have a mission, and that mission is to continue, for a certain period of time, the history of this great name."

But everything starts with the engineering ambition of its founder, Enzo. "The engine is the core of the business



Tough at the top: Maurizio Arrivabene took over after a disastrous 2014 - Getty

of Ferrari," Arrivabene says. "Last year, we were struggling a bit, but this year the guys are doing a good job. We are all together doing a good job."

Achieving success is not merely down to deep pockets, he insists. "It's also related to knowledge, to the people that were investing their hours and passion and their technical abilities to solve the problem.

"Many years ago, when Renault introduced the turbo, the first year Ferrari struggled but then they caught up and this is the magic of this company. It's not just related to the investment, it's related to the history and to the people working there."

Vettel, Ferrari's lead driver, has been a galvanising force. The 28-year-old is a four-time world champion, already one of the all-time greats of the sport. He is a hard worker in the mode of Schumacher; a man who takes care of all the details and works with individuals around him to get the best result.

Ferrari's most successful periods have come with drivers leading the team: Niki Lauda in the 1970s and Schumacher in the 2000s. Vettel continues the tradition and possesses, a cold nerve and a relentless work ethic allied to tremendous speed in the car.

The recent Hungarian Grand Prix was

a good example. It followed the funeral of Jules Bianchi, a much-loved driver and the first to die following an F1 accident for 21 years. Vettel was among those who carried the coffin.

A few days later, on the grid, the drivers formed a ring with Bianchi's helmet in the centre. Then when the race started, Vettel rocketed into the lead from third place on the grid and drove a masterful race to take the victory.

"Sebastian has enthusiasm," says Arrivabene. "And there are few jobs in sport more daunting than this."

His own role is to gel the wider Ferrari team together. "We need to prevent the formation of any kind of cliques and we must be focused on what we are doing," he says.

"I am the leader of the orchestra, but we have our president [Sergio Marchionne] who is writing down the music. The driver is important and is the main actor of the show, but when the driver is able to have a good car and extrapolate the best from the car, then the orchestra sounds very, very good."

But now the pressure is on to move up a gear and take on Mercedes next season. "We want to be competitive," he says. "Being competitive means, hopefully, being able to fight, head-to-head, with Mercedes."

# Being at one with the car is a special talent

#### **Driving skills**

Why are Lewis Hamilton and Sebastian Vettel a breed apart from the ordinary motorist? By *James Allen* 

When you watch Lionel Messi or Cristiano Ronaldo play football, they are running and kicking a ball, which more or less anyone can do — only they do it much better. It is the same with Usain Bolt and Mo Farah; anyone can run, just not as quickly as they can.

So what about Formula One drivers? Millions of people drive cars every day, so what makes the 22 who race F1 cars special? On the face of it, the controls are the same; throttle, steering, gears and brakes. So what do Lewis Hamilton and Sebastian Vettel do with those controls that makes them the best drivers in the world, able to find fractions of a second on the stopwatch?

Valtteri Bottas, of the Williams Martini Racing F1 team, is one of the young drivers challenging Hamilton and Vettel for supremacy.

Bottas is clear where the art of driving an F1 car lies. "It's all about details; how you feel the car, how you are at one with the car," he says. "Normally, when you have that feeling, you're quick. It's also about planning ahead.

"For me, it's more about the pedals than the wheel. You can tune the car balance so much with the pedals. In some corners, if you're good with the pedals, you can nearly go through the whole corner with the steering wheel straight."



'It's more about the pedals than the wheel. You can tune the car balance so much with the pedals' **Valtteri Bottas** 

"Braking is one of the biggest parts of the corner, feeling like you're absolutely at the limit — close to a lock-up but not locking-up the tyres too much. When you turn in, you need to be really precise in how you decrease the brake pressure.

"In terms of car balance and the perfect amount of speed that you want to carry into the corner, then the decreasing of the brakes is the key," he adds.

Like all athletes, F1 drivers' performance is minutely scrutinised. There are sensors all over the car measuring all of the driver's inputs and benchmarking them against his own lap times and *Continued on page 2* 

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# Powerbrokers divided on best way forward

#### Regulations

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Even the sport's own chief executive admits F1's rules make it tougher to sell, writes James Allen

Few sports are as prone to "Gerald Ratner" moments as Formula One.

The notorious 1991 episode, where the boss of the UK jewellery chain described one of his products as "crap" and wiped £500m off the value of his business, serves as a cautionary tale for all senior executives.

Bernie Ecclestone, the chief executive of F1, has publicly described his sport's current iteration, with rules centred on the recent introduction of hybrid turbo engines, as a "crap product to sell", but so far without any commensurate damage to the value of the business.

In part, this is because Ecclestone is known for his idiosyncratic pronouncements. But seasoned observers of the 84-year-old know that there is always a

grain of truth in even his most outlandish comments. In this case, his dislike of the current regulations is well known. He has called for a return to V8 engines to improve the show and cut costs.

In 2014, the governing body, the Fédération International de l'Automobile (FIA), decided to replace the trusty and loud V8s that had served the sport so well for a decade with the more muted 1.6-litre hybrid turbo engines. The price teams had to pay for engines rose from about £5m a year to £15m.

Many fans rebelled, missing the visceral thrill of the ear-splitting V8 engines. Smaller teams have been pushed to the brink by the cost. Two went out of business last winter and three of the current teams are close to the edge.

Meanwhile, the cars are heavier and slower and the drivers complain publicly that they look and feel "numb" to drive.

Another problem of the new rules is that Mercedes has done a much better job with the technology than its rivals, with the result it has dominated for the past two years. F1 has ceased to be a

competition at the front of the grid. Red Bull is threatening to quit the sport, saying it cannot be competitive with the engines available to it.

One team boss, Sahara Force India's Vijay Mallya, recently urged Ecclestone to "un-crap" the product and there are plans afoot to do just that from 2017 onwards, with faster, more aggressivelooking cars that make F1 appear and sound extreme again.

But the future F1 will still be based on the hybrid turbo engines and Jean Todt, the FIA's president, is adamant that this is the right direction for the sport.



"We are very pleased with the new 1.6-litre turbo hybrid power unit," he says. "There have been some challenges mostly to do with the cost of the engines and the competitiveness of some manufacturers to date. However, the engines are incredible. We are talking about the same amount of power as before, but using 30 per cent less fuel. And... engineers are chasing more power and even greater efficiency."

Todt adds: "There is a good reason the most potent road cars now are hybrids - LaFerrari, the McLaren P1, the Porsche 918 . . . With today's technology, hybrid is the most efficient way of generating substantial power."

One of the consequences of the VW emissions scandal is that diesel technology may become unfashionable. This could lend weight to the development of more fuel-efficient hybrid turbo petrol engines and play into the hands of F1 as the leading expression of this cutting-edge technology.

While Ecclestone is focused on the show and the money that flows from it, Todt concerns himself more with the bigger picture in terms of the automotive industry and also how the sport reflects broader social mores.

"Did I love the old 3.5-litre V12s, or the 3.0-litre V10s? Of course I did . . . But it is a different time and, as the pinnacle of world motorsport, Formula One must

embrace and lead this new age," Todt says. "The Formula One engine manufacturers were behind this new engine formula, and the engines were introduced with their blessing because it was - and is - seen as representative of current and future road car technologies, albeit at an extreme level."

He adds: "F1 is something of a standard-bearer for the automotive industry - it must be in line with the concerns of its time?

The greater weight placed on fuel efficiency in F1 as an exemplar to broader engine development is natural "in a world where the environment is a key policy platform for governments", he savs.

Meanwhile, the key to F1's appeal remains in ensuring a sense of competition; if Ferrari can close the gap to Mercedes next season and provide wheelto-wheel battles, then the fuss over the power units will quieten down.

And, if the teams and rulemakers get it right in 2017, the new generation F1 cars will once again have the "wow factor" that some in the sport, including Ecclestone, suggest is missing currently.

### Being at one with the car is a special talent

#### Continued from page 1

those of other competitors. It is the job of the engineers to analyse that data and to help the driver find ways to shave further fractions off lap times.

For Tom McCullough, chief engineer of the Sahara Force India F1 team, the brain of an F1 driver is of crucial importance. "A lot of people can drive a race car fairly quickly, but there are not a lot of people who can do it consistently through tricky conditions, weekend in, weekend out, to get the most out of the car," McCullough says.

"The amount of processing [a top] driver has to be able to do – not only the basics but also all the additional stuff they tend to be the ones that really stand out."

McCullough uses the word "repeatability" to describe what makes great competitors excel. It is the notion that the likes of Roger Federer and Lionel Messi find a way to deliver a high level of performance every time, with hardly any off days. Similarly, in F1 there are only a handful of drivers who can do this and they are the household names.

"It's about every qualifying session, getting the most out of what you've got and then building on that in every race," McCullough says.

"What we really work on with the drivers is making sure they leave the track every day having learned something. The good things or the bad things that happened to them – if they weren't quick in a qualifying lap or in one corner, do they really understand why? If they don't, they will make the same mistake again."

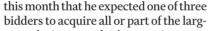
This is a key frontier in sports development and one the business world can learn from. It is a field that McCullough admits F1 has been slow to embrace.

As a sporting challenge, F1 consists of two disciplines. First, there is the flatout 90-second single lap qualifying on Saturday, chasing a pole position on the grid. Sunday presents a different challenge: the 300km race, which can last up to two hours. An F1 driver has to be sprinter Usain Bolt on a Saturday and distance runner Mo Farah on a Sunday. "Driving a car to the limit when it's all

Caveat emptor is best advice for potential F1 purchasers

**Ownership** Restructuring may not resolve the tensions within the sport, writes Simon Gray

he prospect of a change in brought F1 engine technology closer to ownership for Formula One that of everyday drivers and strength-



Mackenzie said in July that there was no Force India, Sauber and Lotus teams pressure to leave F1. since CVC's funds

threatened to boycott the race in protest

'It's about every nualifying sessio



comes as the sport is struggling to unpick a knot of interwoven problems that

add up to something close to an existential crisis for F1.

Critics suggest that those in charge of the sport are simply trying to satisfy too wide a range imperatives that are often incompatible.

F1's most pressing aim is to consistently deliver a compelling show for a global audience and to compete with other forms of entertainment.

Next, the sport must maintain its position at the pinnacle of automobile technology while remaining relevant to the vehicles driven by ordinary road users. F1 is also grappling with the need to keep costs down to ensure that teams throughout the grid can compete effectively. In addition, the sport is now obliged to demonstrate its commitment to sustainability and protection of the environment.

A good example of the contradiction between these goals was the new 1.6-litre turbocharged V6 motor formula introduced last year, which arguably

ened fuel consumption curbs. However, it also sent costs soaring and arguably diminished the spectacle by ushering in an era of domination by Mercedes and its driver Lewis Hamilton.

The problems are compounded, in the view of smaller teams, by a governance system that grants established teams a disproportionate share of prize money through a complex and seemingly arbitrary payments structure and gives those same teams a stranglehold on rulemaking through the role of the F1 Strategy Group.

At the centre of all the debates, as he has been for the past four decades, is Bernard Charles Ecclestone, the London used-car dealer turned racing driver, championship-winning team owner, F1 commercial rights holder and today, aged 84, still the impresario pulling most of the strings in a multi-billiondollar sport that he did more than anyone to create.

It was Bernie, as he is universally known, who sparked the latest flurry of speculation about the future ownership of the sport when he announced earlier est stake in Formula 1's operating companies, held by private equity firm CVC Capital Partners for nearly a decade.

The potential bidders include RSE Ventures, an investment group founded by Stephen Ross, owner of the Miami Dolphins, with Matthew Higgins, possibly in tandem with Qatar Sports Investments, which also owns the Paris Saint-Germain football club.

Other mooted bidders include Rupert Murdoch's Sky pay-TV group, as well as John Malone's telecoms and cable conglomerate Liberty Global, which held unsuccessful talks about acquiring a stake in partnership with US broadcaster Discovery last year.

But F1 watchers have grown to treat Ecclestone's often gnomic utterances with caution - particularly because within days the F1 chief executive was suggesting that he might buy the stake himself or in partnership with CVC cofounder Donald Mackenzie, investing in a personal capacity.

Officially CVC is in no hurry to sell up, even though 10 years is a long investment period for a private equity firm.

have a 12-year deadline to return capital to investors, which it has already done. Besides, he said, "we like owning [Formula One], we don't want to sell it".

In fact CVC has already nearly halved its shareholding in Jersey-based F1 holding company Delta Topco since 2012, when an equity market slump derailed a planned IPO in Singapore that would have valued the business at up to \$10bn.

In May that year CVC sold a combined 21 per cent stake for \$1.6bn to asset managers Waddell & Reed and BlackRock and Norway's central bank, which manages the government's pension fund. Further sales have taken CVC's ownership down to 35.5 per cent today, but it still controls a majority of voting rights.

Any acquirer would be buying into a sport that to a casual outsider appears to be at war with itself.

Smaller teams continue to protest at the special financial incentives enjoyed by their bigger rivals, especially Ferrari. Last year the US Grand Prix at Austin

was nearly thrown into chaos when the

at the unequal distribution of the sport's revenues, although they eventually backed down.

Since then Lotus has spent much of the 2015 season trying to keep creditors at bay while waiting for confirmation of a takeover of the team by Renault.

Last month Force India and Sauber formally lodged a complaint with the European Commission, claiming that both F1's payments and decision-making structures give an unfair advantage to the five biggest teams - Ferrari, Red Bull, Mercedes, McLaren and Williams - and is unlawful under EU competition rules. Sauber and Force India say they have been obliged to take whatever terms they have been offered.

However the wheels of the EU's competition directorate-general grind exceeding slowly. Any ruling might take two years to emerge - by which time F1 may have a new controlling owner, and the sport's governance might have been shaken up.

But perhaps not: few people expect the new owners, whoever they might be, to prise Bernie's hands from the tiller.



about getting the fastest lap time on a low fuel level and new tyres tends to be the hardest skill," McCullough says.

"Come race day you need consistency. You tend to find you can train drivers to race very well, but it is harder to get drivers to drive fundamentally quicker in qualifying. There are more drivers out there who are fast on a Sunday than are fast on a Saturday."

And that is why the top drivers earn the big bucks. Bottas is developing a reputation as one of the standout drivers in this area. "You always need to calculate about getting a clean lap and being absolutely on the limit," Bottas says.

"If you know that this is *the* lap, then in qualifying your concentration just goes to a different level than any lap in practice. When your mind is in the right place it just feels so easy, and you just end up doing all the corners exactly as they should be done.'

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# City workers trade chasing deals for pursuing a dream

#### Engineering

The thrill of competition and fast turnround of ideas are attracting top technicians to the sport, says Kate Walker

The image of the grease-stained mechanic wiping his hands on an oily rag as he repairs your car is very far from that of the modern automotive engineer.

The new breed of Formula One engineer is typically a highly qualified graduate from a top-tier university and someone who is more accustomed to analysing streams of data than wielding a spanner.

Where once motorsports engineers learned their skills on the job, these days the nature of the sport is such that an F1 team is made up of specialists in fields including electrical engineering, aerodynamics and composite materials.

Paddy Lowe, technical executive director of the Mercedes F1 team, was at the forefront of that change.

"I've got a degree in engineering from Cambridge," Lowe explains. "At that time, for a graduate of Cambridge – or

any top university - to go into Formula One was relatively unusual. It certainly wouldn't have been on the career list of any careers office within school or university.

"Formula One wasn't on the radar. It wasn't seen as a career, and that's now completely transformed," he adds.

Broadly speaking, the role of an engineer has grown alongside the sport's technological progression. In the modern era, harvesting information and using it to find incremental improvements makes the difference between victory and defeat.

"The role I do is very much databased," says Andrew Murdoch, senior performance engineer for Williams F1. "The real skill is tying up the data with what's physically happening."

Tom McCullough, chief race engineer at Sahara Force India, explains the evolution of an engineer's role. "Ten to 15 years ago, we'd pack our bags, we'd say 'bye' to the factory, we'd head off for a race weekend, we'd come back and then we'd report back what we were doing,' he recalls.

"Nowadays, it's optimisation: it's not really cost-effective to ship people around the world, so we've got support at the factory throughout the race weekend. My role is co-ordinating that, making sure people can see the wood for the trees.

The push for constant improvement is part of the attraction, according to McCullough.

"That's the excitement of the job. You very rarely finish a race weekend and think, 'I did everything right there, I



Top job: Paddy Lowe, engineer and executive director of Mercedes F1

know everything.' You often come away thinking, 'We didn't get the most out of that or we need to improve there; how can we do that?'."

The sport's expanding calendar, spread across 10 months, five continents, and many time zones, has made life in Formula One a significant commitment.

Long hours are the norm for employees both in the factory and on the road. But for those who have chosen F1 as a career, the rewards of competition at such a high level make the sacrifices worthwhile.

"When you finally see that time on the stopwatch that you've put all that effort into, it is incredibly rewarding," Lowe says. "I think that's why so many engineers love being in the sport.

"Occasionally, you get people who tell you 'I thought of going to work in the City', where perhaps there's easier money to be made.

"Because they like the engineering, they're picking this career. We've even had a few who've left the City to come and work in Formula One because they got fed up with what they were doing and felt this was a more rewarding career."

Tom Stallard, race engineer for Jenson

lure of competition. He says: "The best thing about this job is that I get to keep competing in a way that I wouldn't if I'd stopped rowing and gone to work for a City company."

Button at McLaren, came to F1 after a

spell as an Olympic rower. While several

One perk of the job cited by many is the rapid turnrounds demanded by the sport, a cycle that sees projects developed and brought to fruition in a matter of weeks or months, rather than the years or decades to which engineers in the aviation or the automotive industry

Gianluca Pisanello, chief engineer at

very extreme end, you can invent something on Monday morning and it's helping you win the race the following Sunday. There's that incredible engagement which makes it very rewarding."

are accustomed.

the Manor F1 team, believes these rapid turnround times create a "dreamland" for technical professionals.

"You have an idea and that idea becomes true in two weeks rather than in five years like the automotive industry, or 20 years like the aviation industry," he says.

Lowe agrees: "In Formula One, at the

former teammates were tempted by the Square Mile, Stallard couldn't ignore the

#### The Business of Formula One

# New horizons threaten old favourites in racing's future

**Venues** Bernie Ecclestone is taking Formula One out of its traditional heartland, says Roger Baird

he Formula One calendar is set to add two races next year – bringing the total up to 21 – which suggests that despite a fragile global

economy there is no shortage of cities willing to shell out hundreds of millions to host a Grand Prix weekend.

In November, Mexico will host its first race in 23 years, after signing a five-year deal with the sport's commercial rights holder, led by Bernie Ecclestone, to run races at the Autódromo Hermanos Rodríguez in Mexico City.

Next year, Baku in Azerbaijan is set to hold its first Grand Prix on a street circuit that will pass the oil-rich Caspian state's parliament building on the seafront promenade. This month, Vladimir Putin hosted Russia's second race of the modern era in Sochi on the Black Sea.

What is clear is that there has been a steady shift away from F1's traditional heartland of western Europe toward new venues. This year, F1's 19 races include two in the Middle East, four in Asia and four in the Americas. Longstanding events at Magny-Cours, in France, Estoril in Portugal, and Italy the San Marino Grand Prix at Imola – have disappeared, perhaps forever.

The reason why so many cities are being drawn to F1 is clear. If you get it right, the way newer circuits such as Singapore and Austin, Texas, have done, the event generates tens of millions of dollars in local spending.

The Singapore Grand Prix, established in 2008, is now seen not only as the best of the newer races, but as one of the best meetings on the calendar.

The Singapore Tourism Board organises a 10-day festival around its race, with musicians such as Bon Jovi and Pharrell Williams playing concerts in the city state, as well as hosting a parallel two-day international sports business conference.

The board calculates that the race contributes to the country's tourist sector by bringing in an extra 300,000 visitors who spend £70m over the period.

Mehul Kapadia, managing director of F1 business at Tata Communications, which provides IT systems at every circuit, is a fan of the event.

"It is well located – the Asia-Pacific headquarters of many US and European businesses are there," he says. "Its timing in September is great. It's a night race, which means executives can work during the day when they are here."

But if organisers get the planning of a race wrong it can cost them dearly. This happened in India, where Jaypee Group, the organisers of the Indian Grand Prix, spent about £250m to build the Buddh International Circuit in Uttar Pradesh and hosted three races there from 2011.

This outlay included paying F1's commercial rights holder an initial annual licence fee of about £24m to put on the race, which, in common with most new

#### Mexico 110,000 expected to welcome back F1 after 23 years

The Mexico Grand Prix will take place on November 1 on a heavily remodelled version of the Autódromo Hermanos Rodríguez Circuit in Mexico City, which last hosted a race in 1992.

At an altitude of 2,250m, the racetrack is by far the highest on the F1 calendar. But the cost of staging the event is not sky-high. Redesigning the old circuit, rather than starting afresh as most new F1 venues must, has meant that costs are controlled.

Mexican entertainments company CIE (Corporación Interamericana de Entretenimiento) has taken the risk, with the support of other private businesses and the government; the investment of \$360m looks as if it will pay off as the event sold out months in advance and new grandstands have been added.

The draw of seeing Force India's Sergio Perez become the first Mexican to drive in a home Grand Prix for more than 40 years has boosted interest. More than 110,000 paying spectators will be there on the inaugural race day and Federico González of CIE says he could have sold 50,000 more tickets, but wants to manage the first year carefully.

"First of all, it's about the passion and having this great platform to promote the country and promote the city," says González.

"This is a joint venture between the government and the private companies who support us and it is about showing the world and bringing international events, shows and races to Mexico," he adds.

"We have to be very careful. We know that the enthusiasm we have right now may not stand always or for future years. We know we could have possibly sold 50,000 more tickets for this year, but we wanted to stop on the amount of tickets that we have already sold to protect the race for future years."

González is wise to be cautious. In recent years, other start-up Grand Prix venues such as Istanbul, Delhi and Mokpo in South Korea have launched and

> track deals, is subject to a 10 per cent increase every year. The commercial rights holder also keeps revenues from TV rights and track sponsorships.

As an organiser can only make money from ticket sales, it takes backers of a new circuit several years to recoup the initial outlay. The Indian Grand Prix drew 95,000 fans to its first race but this dropped to 65,000 the next year because of poor promotion.

The Indian race suffered because it was not fully backed by the Uttar Pradesh regional government, which decided F1 was an entertainment rather than a sport and so was subject to tax on everything from fans' tickets to drivers' salaries. The matter ended up in India's Supreme Court, and the race was



Ready to race: Mexico City Mayor Miguel Angel Mancera inaugurates the circuit with F1 drivers past and present, (from left) Emerson Fittipaldi of Brazil and Hector Rebaque and Sergio Perez of Mexico - Reuters

hosted only a few events before running into financial problems and losing their F1 contract.

One of the challenges for Mexico City is that it has been paired on the 2016 F1 calendar with Austin, Texas, which is close to the northern border of Mexico. It is a challenge for Austin, too, as about 30,000 Mexican fans travelled to Austin for last year's event and some will inevitably choose to support their home race in future, rather than the US event.

"It is a challenge," says González. "I think at the very least the people that used to go to Austin from Mexico are going to compare that race to the experience they

Europe may

of screening

races in the

early hours

to smaller

grow wary

get here in Mexico. They are going to make a decision if they are going there or staying here."

For the time being, he is confident the two events can coexist and thrive, even though they may compete for some custom.

"I also believe that the people from the north of the country, north of Mexico City along the border with the USA, they will probably go there still," he says. "But we are putting together a great experience so I think we're going to have happy customers and then in future years they will decide."

dropped from the calendar at the end of 2013 with no clear date for a return.

The future of European F1 "classics" is also under a cloud. This year, the German Grand Prix at the Nürburgring circuit, established in the calendar in 1951, lost its place in the season as organisers failed to raise the funds in time.

Monza in Italy also faces an uncertain future in F1. Promoter SIAS in protracted discussions to extend its contract, which has two more years to run, with the commercial rights holder which is demanding higher fees. This track is one of motorsport's oldest circuits, having held its first race in 1922.

The British Grand Prix at Silverstone, one of seven tracks included in the inaugural 1950 Grand Prix season, is reportedly in danger again after the circuit admitted struggling to pay its annual fees of about £16m.

"Races like Silverstone and Spa [in Belgium] and Monza have a tremendous amount of history and value with fans," says Graeme Lowdon, president of Manor Marussia F1. "A famous name like Ferrari built its reputation from wins at these circuits. The sport is right to maximise commercial rights but it should not go wherever the maximum income is. It's not that straightforward."

Zak Brown, chief executive of sports marketing agency CSM, warned that key European TV broadcasters may also grow wary of showing live races from Asia and the Americas early in the morning to smaller audiences.

**James Allen** 

audiences

## Women target roles behind the scenes — and the wheel

#### Gender

As numbers rise in technical positions, there is a drive to back more female racers in the sport, writes Kate Walker

At the start of the 2015 Formula One season, F1 chief executive Bernie Ecclestone proposed an all-female singleseater championship to boost opportunities for women in motorsport.

The women's championship would have been a support event for Formula One, giving female racers international exposure. But the concept has proved largely unpopular. Not only are there not enough women currently competing at an appropriate level to fill the grid, but motorsport is one of the few arenas in which men and women can already compete on equal terms.

There is historical precedent for singling out female entrants in motorsport, with the Coupe des Dames (Ladies' Cup) traditionally awarded to the highestplaced female finisher in various rallies.

Throughout the 20th century, women competed against their male peers in rallying, hillclimbs and circuit racing, although the creation of the Formula One World Championship in 1950 coincided with a drop in the number of women racing single-seaters.

But for now women have been relegated to a back-seat role in Formula One, working as test and development drivers while chasing the ultimate goal of being appointed a full-time race driver. The last woman to enter an F1 Grand Prix was Giovanna Amati, in April 1992. Amati was, however, unable to start the race having failed to qualify.

Then in 2009, the FIA's president Jean Todt launched the Women in Motorsport Commission (WiMSC), a body headed by former rally star Michèle Mouton and tasked with promoting motorsport as a viable career path for women, whether behind the wheel, working in the garage, or in any other of the sport's many avenues.

"Our goals are about encouraging young women to take an interest in motorsport and to hopefully get involved at a young age," says Mouton. "Traditionally, there are many more boys than girls racing in karts and at lower levels, therefore there is a much higher chance



Pioneer: Susie Wolff, Williams test driver and campaigner for women in F1-LAT

of them making it to the top. We have certainly started to see those numbers begin to change for the positive – but it is still a long way away before we even start to get close to even."

The WiMSC's achievements are varied, Mouton says, pointing to a number of recent successes for female drivers and co-drivers in rallying, touring and karting in the face of male competition.

For WiMSC ambassador and Williams F1 test driver Susie Wolff, the commission can offer vital support. "The commission is simply another way of helping young drivers," she says. "Yes, it's focused on female young drivers but any way you can help has to be seen as positive."

'Ultimately, you don't see how the person who's driving looks — all you see is the performance'

To secure success, it is essential to have access to mentoring and networks offering advice on how best to secure financial backing as well as the development of technical skills, says Wolff.

"No matter which level you're at, you need money to go racing. If you don't have money, it's about trying to figure out ways to get money," she says.

As awareness of opportunities open to

both sexes within motorsport has grown, so too has the female presence in the sport. Graduate recruitment programmes run by Williams and Mercedes have both seen an annual increase in the number of female applicants. In 2014, Williams accepted more female graduates than male.

While there has been a noticeable increase in the number of women working in technical roles over the past five years, it is still aspiring female racers who grab the headlines.

Wolff acknowledges the coverage of her own racing career was beneficial. "I was creating a lot of media attention and it helped the team - it helped my positioning in the team," she says. "I feel that if what I'm doing can help the next generation, then I've got to do it."

Breaking down gender barriers should be all the easier in a sport where appearances are less obvious. "Don't forget – in this sport you don't see the driver, because they've got a helmet on," argues Wolff. "Ultimately, you don't see how the person who's driving looks - all you see is the performance."

She adds: "Once you're in, it doesn't matter if you're male or female, it's down to what job you do. Internally, I'm just seen as a racing driver. When I'm in the car, it's just about being the best I can be. Outside the car, it has become a much bigger topic and I think I have a moral duty to be part of that discussion and to direct it in a positive way."



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