

Make your tax headaches

DISAPPEAR



Little LogBook is affordable, automated & easy to use with no painful monthly expenses.



Contact us for a free demo. www.littlelogbook.co.za (011) 05 00 9999

Also available from these leading retailers:



















TFG magazine terms and conditions:

TFG magazine terms and conditions:

You have subscribed to *Tech* magazine ('the magazine'), a publication of Foschini Retail Group (Pty) Ltd ('TFG'). Your TFG account will be billed monthly for the magazine. Should you not wish to be billed for the magazine when your account has a zero balance, please advise us of this. You may be charged interest on your subscription amount monthly, if the payment plan that you have selected attracts interest. You may cancel your magazine subscription at any time by contacting our customer services centre on 0860 576 576. TFG reserves the right to cease publication of the magazine at any time in our sole and absolute discretion. In such an event, we will cease to bill you for the magazine. TFG reserves the right to change or cease the benefits offered in the magazine at any time, and to change the level of service offered to subscribers of the magazine.

TFG may change the shape and the size of the magazine at any time. The price of the magazine will be adjusted at any time during a calendar year, and you will be billed the increased amount on your TFG account from the date of the increase. We will give you notice of any increase before we increase your subscription. Terms and conditions can change from time to time and you will be bound to any new terms and conditions from the date of publication in the magazine. We hereby notify you that it may be necessary for certain third party benefit providers to process your personal information to enable them to provide their services to you. By making use of the benefit, you agree to this.



when IT comes to personal privacy, I totally nailed it. That's right, I took my hard drive out of my old pc and hammered a large nail right through it. Not once, but half a dozen times. I had to make sure it would never work again.

I simply had no use for it, and rather than try and scrub all my personal data off, it was easier to just destroy it.

So all that was left now was the cremation. The right way to dispose of electronic waste is going to an e-waste facility, where gadgets are shredded or melted down.

E-waste is the fastest-growing waste stream, and Africa's distinctly bad at handling it. Do your part by heeding the guidelines at Electronic Waste Association of SA: **ewasa.org**.

To combat the e-waste problem, we want to help you get full value out of all your tech. We want you to buy the products that will get the job done at the right price, and that last longer.

Most people never even use all the cool features of their expensive, high-end smartphones. Instead, you could choose from our collection of **top-performing budget phones** on page 24.

Right now, it really feels as though high-speed fibre-optic broadband is never going to reach my hood, and that's very frustrating. You may do much better, with big rollouts planned this year. Here's what to expect, on page 30.

Does everyone around you seem **ready to ride with Uber?** Perhaps you're more cautious. Here's how it all works, on page 40.

Tell us on Facebook about topics you'd like featured, and you could

CoolerMaster keyboard

This is a cool mag that empowers you with information on the latest technology. It even removes the blindness that makes one feel primitive around tech.

- Mercy Mohammed on Facebook

win a cool prize. After all, we want you to get full value out of every edition of *Tech*, too.





Post your comments to TechMagazineZA on Facebook and you could win this Mio Fuse activity tracker with built-in heart-rate monitor.

F

All material in Tech is strictly copyrighted and all rights are reserved. Reproduction without permission from TFG (The Foschini Group) is forbidden. Tech does not accept unsolicited manuscripts for publication. Every care is taken in compiling the contents of this magazine, but we assume no responsibility in the effect arising therefrom. The views expressed in this publication are not necessarily those of the publisher or TFG (The Foschini Group). Prices and specifications correct at time of print and subject to any inadverted no obvious errors. Availability and printing subject to change without prior notice.

TFG (The Foschini Group) is made up of the following stores:

@home @homelivingspace AmericanSwiss Charles & Keith colette downs.

DUESOUTH EXACT Fabiani. FIX FOSCHINI G-STAR RAW MARKHAM MAT & MAY NEXT S O D A R Sportscene STERNS TOTALSPORTS

Highbury Media: Editor Gavin Dudley Managing Editor Richard Brown Chief Copy Editor Jonathan Meyer Senior Copy Editor Rhynhardt Krynauw Art Director Warren Uytenbogaardt Designers Ryan Adams, Mish-al van Rijmenant, Devon Fourie Group Sales Director Clive Kotze Sales Director FIG Jason Hill Project Manager Kenneth Wiid Advertising Sales Tanay van Niekerk, Josie Hauptfleisch, Johann Hauptfleisch, Evann Wessels HR Director Rizqah Jakoet Financial Director Lindsey Makrygiannis Production Director Blees Allie Commercial Director Shane Keohane MD Tony Walker CEO Kevin Ferguson TFG (The Foschini Group): Head of Publishing Sarah Kuttel Publishing Manager Laylaa de Villiers Brand Manager Carol Roux Marketing Assistant Melanie Snyders Enquiries Tech magazine, PO Box 6020, Parow East, 7501, Tel: 0860 282 896, Email: tech@tfg.co.za







Published by Highbury Media for The Foschini Group © Highbury Media (Pty) Ltd 2004/031056/07, ISSN 2313-7029, Highbury Media, 21st floor, Metropolitan Centre, 7 Walter Sisulu Avenue, Foreshore, 8001, Cape Town, South Africa. www.hsm.co.za Editorial enquiries Tel: 021 416 0141, Fax: 021 421 1250, Email: mail@tfgtech.co.za Advertising enquiries Tel: 021 416 0141, Fax: 021 418 0132, Email: kenneth@hsm.co.za

Magazine subscription terms and conditions for non-account customers: 1 You have subscribed to Tech magazine ("the Magazine"), a publication of Foschini Retail Group (Pty) Ltd ("TFG"); 2 For enquiries regarding your subscription, contact customer services on 0860 576 576; 3 TFG reserves the right to cease publication of the Magazine at any time in our sole and absolute discretion. If your subscription is still running at that point, you will receive a refund for Magazines still due to you; 4 TFG reserves the right to change or cease the benefits and competitions offered in the Magazine at any time, and to change the level of service offered to subscribers of the Magazine; 5 Magazine benefits are only available to customers who subscribe to the Magazine for a minimum period of six or 12 months and do not apply to customers who purchase single copies of the Magazine; 6 Customers who subscribe for 6 or 12 month periods will be automatically entered into all "automatic entry competitions", however, customers who purchase single copies of the magazine will not be entered into these competitions. 7 All counts enter "SMS entry competitions" by sending a SMS to be eligible to be in the draw for any reason whatsever in any month, you will not be sent a Magazine for that month and you may be charged a financial handling fee; 9 You must provide us with the correct address where your Magazine must be sent to every month, failing which you will not receive your Magazine, and we will not be liable to re-send your Magazine to any alternative address. Should you change your address, you must advise customer services of this; 10 TFG may change the shape and the size of the Magazine at any time; 11 The price of the Magazine will be disubscribed at any time during in a calendar year, however, customers who subscribe for six or 12 month periods will not be subject to price increases during the term of their subscription; 12 These terms and conditions can change from time to time and you will be bound to any updated terms and condi

Bitdefender.

SECURITY MEETS ARTIFICIAL INTELLIGENCE

Best Performance. Best Protection







VIRUS BULLETIN'S VB100 FEBRUARY 2016 (Bitdefender Security for Samba Linux)



PC MAG "EXCELLENT" AWARD - JAN 2016 (Bitdefender gravityzone business security)



Intact Software Distribution www.intactsoftwaredistribution.co.za

info@intactsecurity.co.za + 021 488 6405 and + 021 801 9979

BENEFIS

Special offers, discounts and fab prizes exclusive to *Tech* subscribers



TO WIN ANY OF THESE PRIZES, SMS the keyw your ID number to 43: Standard SMS rates appropriate to the standar

DECEMBER 2016

TO WIN ANY OF THESE EXCITING PRIZES, SMS the keyword and your ID number to 43183. Standard SMS rates apply.

Ndlumbini S, Kareedouw

HUAWEI P9 PLUS

Moselakgomo T, Siyabuswa

HUAWEI B315 LTE 4G

WIRELESS ROUTER

Tlhapi EC, Bekkersdal

ASUS X 553 NOTEBOOKS

Jackson TW, Mooi River

VOLKANO BAZOOKA

BLUETOOTH SPEAKER

SA Alloys, Strand

SAMSUNG 32'HD FLAT TV

Windvogel AA, The Hague

PLEASE CALL ME

Dial *130*3272*18# from your cellphone, select the benefit you'd like to access and we will call you back! (Standard USSD rates apply)

HOW TO

CALL 0861 177 725

to redeem your Tech benefit

LINES ARE OPEN

Monday to Friday 8 am to 5 pm Saturdays 8 am to 12 noon

Not available on Sundays and public holidays

SUBSCRIBE &

YOU'LL STAND A CHANCE OF WINNING GREAT GEEKY GEAR EACH MONTH

TO WIN ANY OF THESE **EXCITING PRIZES**

SMS the keyword along with your ID number to 43183. Standard SMS rates apply.



SAMSUNG GEAR 360 CAMERA worth R7 000 **Keyword: MARCH GEAR**



GREAT DEALS FOR SUBSCRIBERS

Terms and conditions for *Tech* magazine: 1 All *Tech* magazine subscribers will be automatically entered into selected competitions in the magazine. 2 Standard SMS rates apply for all SMS competitions. 3 Automatic entry winners and SMS winners will be required to provide a valid TFG (The Foschini Group) account card number. 4 Winners will be randomly selected by means of an automated system for all automatic and SMS competitions. 5 This competition will commence on 13 February 2016 and end on 31 March 2017. 6 The winner will be notified via email/telephone within one month of the closing date. 7 The prize will be sent to the winner via RAM courier service to the winner's home address or to the nearest TFG (The Foschini Group) store if the winner does not have a physical address. 8 The winner's name will be published in the June 2017 issue of *Tech* magazine. 9 All participants must reside in South Africa. 10 By entering the competition, you agree and understand that you may win a prize and that there is no guarantee that you will win a prize. 11 Unclaimed prizes are only valid for six months. For any queries regarding competition prizes, email tech@tfg.co.za. 12 Valid *Tech* magazine subscribers will only be allowed to win a maximum of two prizes per issue. 13 Terms and conditions apply. In order to view or receive the full terms and conditions, send an email to tech@tfg.co.za or call 0860 282 896.

O SUBSCRIBE

WAYS

Call 0860 282 896

2 Email your name and TFG (The Foschini Group) account number to tech@tfg.co.za

3 SMS* 'Tech magazine' with your TFG account/ card number or ID number to 43183 and we will automatically subscribe you at the cost of R27.99 per month, billed directly to your TFG account. For Ts&Cs, visit tfgclub.co.za/tech. *Standard SMS rates apply



TFG MOBILE APP

Free, BlackBerry, Android and Apple iOS Manage your store accounts, rewards and vouchers on your smartphone.



Earn Rewards EVERY time you shop. Account customers are automatically Rewards members.

TFG GIFT CARDS

1 OF 4, worth R1 000 each Automatic entry for all subscribers



HUAWEI GR5 MINI WITH SELFIE STICK AND KEY CHAIN

worth R4 000 Keyword: MARCH GR5





JBL FLIP 3 PORTABLE BLUETOOTH SPEAKER

worth R2 100 Keyword: MARCH JBL



MY PASSPORT LUMEN 1TB EXTERNAL HARD DRIVE

worth R1 500 Keyword: MARCH PASSPORT



1 SAVE 10%

SAVE with weFix repairs! Get 10% off iPhone repairs, and 5% off any Samsung mobile and Apple Mac repairs.



2^{SAVE} 15%

Get 15% off the cost of repairs for selected Apple, Samsung, LG, Nokia and Blackberry devices at SmartLab. Parts and services are guaranteed for 90 days.



3 SAVE 10%

Get 10% off* labour when your PC is fixed or upgraded by Dial a Nerd tech experts. *First hour only



SHARE &

POST A COMMENT ON THE TECHMAGAZINEZA FACEBOOK PAGE AND YOU COULD WIN A MIO FUSE ACTIVITY TRACKER

Nintendo's revolutionary Nintendo's revolutionary new console gets itself new channel

Words Zaid Kriel @Zaidkriel into shape



The screen battery is expected to last up to 6 hours and has USB Type-C ports so you can use a powerbank to keep the mobile fun going.



Technophile Robyn Farah has evolved from digital artist to hardware hacker to innovation entrepreneur as she builds out Cape Town's geek community Words Joanne Carew @littleCarew

AT FIRST GLANCE, SHE SEEMS unassuming. Then she starts to talk and it very quickly becomes apparent that Robyn Farah is the consummate connector, standing at the epicentre of a constantly expanding network of geeks, techies and makers.

She's an entrepreneur who does work with hardware and software innovators through her company, called KATO (which stands for Kick Ass Technology - Obviously). She also founded and runs two of Cape Town's most enthusiastic techie communities, Arduino Cape Town and Modern Alchemists - and on top of that, she also hosts monthly geek gatherings called Tech Talks.

If it sounds exhausting, that's because it is. But Robyn is driven by a vision of hardware innovation and technological penetration all across the African continent. We sat down with her and found out about her projects.

WHICH OF YOUR MANY PROJECTS EXCITES YOU THE MOST RIGHT NOW?

KATO always remains my main thing. KATO essentially runs all of these other communities, and a lot of the expenses pass through the company. All the communities we run have always been a passion project of mine.

A lot of people are stuck in this world of apps, but electronics is what really make me tick. I think the next step is definitely going to be hardware and I think that people need to start integrating hardware with apps.

When KATO first started, I did a whole bunch of different things, such as designing digital marketing campaigns for brands, but now we have moved more into product design and building prototypes.

WE KNOW THAT YOU RUN SA'S MOST WELL-KNOWN MAKER COMMUNITY, BUT WHAT EXACTLY DOES IT MEAN TO BE A MAKER?

'Maker' is a very, very broad term that could include someone who makes cupcakes or sews clothes, or even writes software or builds electronics. It basically means that you like to build things from the bottom up, and that you like to share skills as well. I'm especially interested in makers in the tech industry, so the people who like to code or are into gaming – or who are enthusiastic about taking things apart to start building again from scratch.

HOW DOES YOUR WORK FIT WITH THE LOCAL IT ENVIRONMENT?

We've just transformed the company, so instead of being predominantly a service business, where we develop products for clients, we're actually trying to identify people who have created their own hardware products including integrated software, and then we try and promote those.

We want people to push those ideas to us, and we'll accelerate them and fund them through the company. And if we do not have the means to fund something, we also have other partners to fund it.

Essentially, we take disruptive hardware ideas and make them a reality. I guess I'd say that we're a hardware accelerator.

SO HOW DOES THIS BUSINESS MODEL WORK?

We recently got an investor on board at KATO who would like





THE GUARDIAN SERIES

LEARN MORE AT SEAGATE.COM









It's so nice to know that you've made the best choice to protect your family against life's expected and sometimes unexpected challenges.

TFG (The Foschini Group) is much more than fashion and has been offering you affordable and convenient insurance cover since 1994.

We have just the product for you - from funeral, account protection, health and lifestyle cover.

Simply call us today **0860 576 576**

Foschini Retail Group (Pty) Ltd is an authorised financial services provider. Insurance underwritten by Guardrisk Insurance Company Limited and Mutual & Federal Risk Financing Ltd, both which are authorised financial services providers Terms and Conditions apply.



SAY WHAT?

Elevate your geek banter with these tech terms

Words Craig Wilson @craigwilson and Joanne Carew @littleCarew



THE CUPERTINO EFFECT

If you've ever fallen victim to an embarrassing autocorrect mishap, you have experienced this effect. The name is derived from results of the spell-checker on the 1989 edition of Microsoft Word, which suggested 'Cupertino' when users typed 'cooperation' without using a hyphen. Cupertino is a small city in California best known as the world headquarters of Apple. Free advertising, anyone?



STEAM

Effectively the iTunes Store for PC games, Steam is a game distribution platform, created in 2002 by the Valve Corporation, that has become a wildly popular hangout for literally millions of serious PC gamers. You install the Steam application on your PC, create an account, add payment details and can then use it to buy and download games, join multiplayer games and chat with other Steam users. The advantage of using Steam is that, because you don't have actual discs which could get damaged, lost or stolen, it is easy to re-download and reinstall games at any time. And because it saves your game progress in the cloud, you can log in to your Steam account on someone else's home computer, play any game and not affect their saved games. Steam also offers the neat side effect of keeping your games up to date for you.



TEAM FORTRESS 2.

ARK: SURVIVAL EVOLVED

SMURF ACCOUNT

Get too good at something and no one wants to play against you any more. Greg Boyko and Geoff Fraizer encountered this problem with the online multiplayer game Warcraft II: Tides of Darkness. They'd become unbeatable and no one bothered to challenge them, so they created alternative accounts under the new names PapaSmurf and Smurfette. Now, a second account in any game can be called a Smurf account, and might also be created to help boost friends' rankings, to try things out without affecting a primary account, or if a player wants to play a game again, or wants to play it a little bit differently than before.



CITIZEN JOURNALIST

Smartphones, social media and the internet have essentially made it possible for anyone to become a journalist. If you're the first person to arrive at a protest, or witness an accident and you share a video clip, tweet or photo about what's been going on, you're a citizen journalist. In fact, more and more such citizen journalists are breaking big news stories before the trained journos can arrive on the scene.



PLAYSTATION 4 PRO

Sony's latest gaming console improves on the existing PS4 by adding 4K ultra-high-definition (UHD) output. Of course, you'll need a 4K-capable TV to go with it. It also adds HDR (or High Dynamic Range, which means better colour rendering, especially in scenes with both very bright and very dark areas). The Pro also includes improved WiFi and Bluetooth, but, curiously, doesn't include a UHD Blu-ray disc player. So it won't play UHD video discs, even though it can output UHD visuals for games. At launch, 30 titles will support Pro Mode. This means they've been reworked for the new platform. The new console will also offer the best experience of PS VR, Sony's virtual-reality hardware and games.

XBOX SCORPIO

Anything Sony can do, Microsoft can do better. That's definitely what it's trying to prove with its forthcoming console, Xbox Scorpio. Microsoft's answer to the PS4 Pro, the console will also offer the 4K UHD output and HDR support, but Scorpio has a UHD Blu-ray player built in. The final specifications are not yet known, but expect it to be a potent machine with far more RAM and processing might than its predecessors. Like the PS4 Pro, the Xbox Scorpio will also be VR ready. And we know that it will support existing Xbox One titles - though don't expect that compatibility to work the other way round too, as Scorpio games will be too demanding for older Xbox kit.



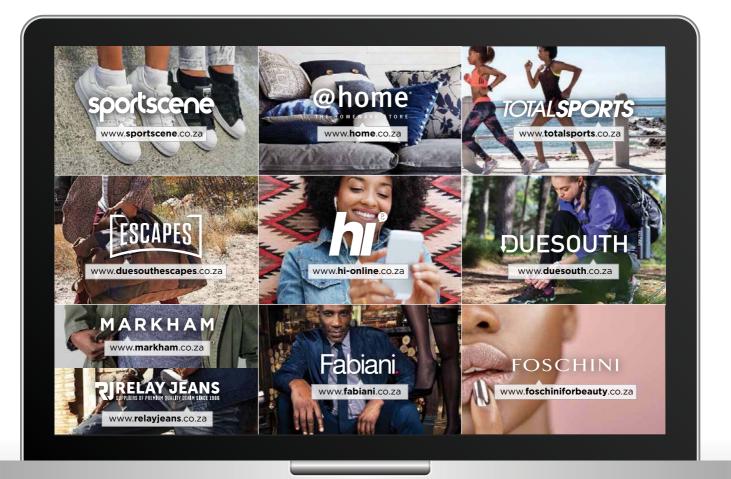


Find it. Love it. BUY, IT.

Shop your favourite TFG brands online! Anywhere, any time and only checkout once.

Standard delivery is free for orders over R500 and returns are free within 30 days.

Choose to pay with your TFG account card, credit card or both. **The choice is yours.**





Earn Rewards EVERY time you shop. Account customers are automatically Rewards members.





Shock-Proof



Super HD 1280*720



Bulletproof Glass



Ulta Fast Fingerprint



Memory 2GB/16GB



Hi-Fi Box Speaker

AVAILABLE FROM







TERMS AND CONDITIONS APPLY. THE SMARTPHONE SHOP 54 VINEYARD ROAD CLAREMONT 7708. 021 671 6701. www.smartphoneshop.co.za

MESSAGING SERVICE SNAPCHAT has more than 150 million daily active users, mostly reckoned to be teenagers and younger adults.

The video- and image-sharing platform announced last year that it would begin to sell a hardware product, named Spectacles, via pop-up vending machines (also known as Snapbots) at a number of secret locations around the US. Selling for \$129.99 (about R1 800), the 'sunglasses that Snap' have proven to be a cultish success with young people in the US.

Available in three colours (black, coral or teal), and shaped much like the familiar Rounds popularised by Ray-Ban, the new Spectacles from Snapchat can record 10-second video clips – with just the simple

touch of a button. They are paired to the Snapchat app already on your phone and upload wirelessly to your Snapchat Memories.

Spectacles can take about 100 or so 10-second snaps on a single charge, and come in a charging case, itself rechargeable, that'll recharge them four times, so there's plenty of opportunity to record your daily quota of social media.

Snapchat Spectacles may well have a runaway hit in this latest wearable tech, and the device's rarity is driving up demand even further. However you feel about oversharing on social media, with plenty of sunshine to go around it seems only fair that South Africa should appear somewhere in the global roll-out for Spectacles. •

outward-facing cameras

outward-facing cameras surrounded by LED lights

10 -second clips, uploaded automatically

3 colours black, coral and teal

PRICE \$130 from Snapbot vending machines

US Hora at auction on eBay for \$900+

KHUMO MOKGOKO
Content & Community
Editorial Manager, Cerebra

Will Snapchat Spectacles take off in SA?

'Unlike other wearable tech right now, Spectacles actually have a low price point. This makes them very gettable compared to devices such as Google Glass, or even action cams such as GoPro. Young people familiar with Snapchat will be able to instantly put on Spectacles and know what to do with them. Adding to that, they also have a "cool factor" you just don't see with some other wearables.'

How will people use this tech?

'People who can share new and exciting experiences will quickly rise to the top of the popularity pile. It's not just about lying on your couch and filming your lounge - that's not what people want to see. The best content to come out of Spectacles will be immersive and give people a taste of things they couldn't necessarily do themselves.'



HYCK YOUR LIFE

Practical tips for the tech-savvy
Words Joanne Carew @littleCarew

PHONE REPAIRS Tech subscribers get up to 10% off weFix repairs. Dial *130*3272*18#

CV SAVVY

The days of printing out your CV for job applications are long gone. Your CV will most likely be read on a screen. If you're a job seeker, you can use this to your advantage by making your CV a little more interactive. Why not add links to your LinkedIn profile, Facebook page (if it's work-appropriate, of course) or to the websites of any of the companies for which you previously worked.

To create a hyperlink in a Word document, simply right-click, select 'Hyperlink' and paste in your URL. This will work in both Word and PDF documents and, by doing so, you'll be giving potential employers a more interactive experience of your capabilities and the projects you've worked on in the past.

BATTERY BOUNCE

If your old batteries accidentally get mixed with your new ones, there's a simple test to tell them apart. Hold each battery a few inches above a hard surface, then drop them and see which ones bounce around. The ones that

bounce are the older ones, with more of their chemical compounds already having been used up.



STILL FRIENDS

Most of us have friends or family members who really get on our nerves, but who we still follow on Twitter simply out of obligation. It could be an overeager aunt, a boastful friend or a cynical boss. and perhaps you can't unfollow them without experiencing some awkwardness. Luckily, Twitter has a mute function, so you can keep following someone without ever having to see what they've been tweeting. Simply navigate to the person's Twitter page and click on the little cog wheel in the top-right corner, right next to the 'Following' button. Now scroll down and select 'Mute' and you'll never have to see their tweets again.

AIRLIFTED

Laptop batteries definitely prefer being kept cool, but that's hard to do when the laptop is radiating so much heat. Don't bother investing in any fancy cooling pads to circulate air underneath the laptop: they don't have much impact. A very simple solution is to place two forks with their tines face-down underneath either side of the PC. The curve of the tines will lift the laptop off the surface of the table and allow air to flow underneath. For best results, use matching forks, of course.

TOP TIPS

Most good earphones are sold with spare silicone tips, sometimes in many different colours. Try using different colour tips as a quick way to distinguish the left and right buds (if they're the same size). Once you insert them into your ears, the buds aren't visible to others anyway.



Blue, red, yellow and green - the Google logo has all the colours you need to test the ink levels in your printer cartridge. Load up Google. co.za then select 'File' in the topleft corner and then 'Print'. Also, it's just the right size to check for any misfiring nozzles without using too much ink.





KEEP CONNECTING!

ACCOUNT!



GET UP TO 30% MORE AIRTIME VALUE WITH YOUR TFG ACCOUNT!*



PAY R40 pm 25 SMS

SAVE R15pm SAVE

PAY RTO R79 pm 25 SMS

SAVE R31pm

PAY R148 pm 25 SMS

SAVE R62pm

PAY R286 pm 50 SMS

SAVE R84pm



PAY R49 MB

PAY R89 pm



PAY R109 pm



J

SMS 'TECH' TO 32177 OR CALL 0860 004 151 WE'LL DO THE REST!

*MTN AND ONE2ONE T'S AND C'S APPLY. PRICES CORRECT AT TIME OF GOING TO PRINT. ONE2ONE IS A DIVISON OF TFG PROVIDING MTN AIRTIME AND DATA PACKAGES BILLED MONTHLY TO YOUR TFG ACCOUNT.

SLEEPEND

With the right app, your phone makes an even better bedside alarm clock

Words Hadlee Simons @HadleeSimons



STOPWATCH AND TIMER Free, Android

going strong for a long time and has maintained a very high rating in the Android Play Store all that time. As the name suggests, it's a stopwatch and a countdown timer, but it also has a few extra features such as a lap timer on the stopwatch and customisable alarm sounds. The digits are big and bold so that they're easy to see from a distance, like when you're moving around a gym circuit.



MIMICKER ALARM Free, Android

Microsoft has now small range of highbid apps. This unusual in clocks requires the orm complex actions a alarm. Actions maying facial expressions,

to silence the alarm. Actions may include making facial expressions reciting a tongue-twisting piece of text - or even somehow groggily co-ordinating the taking of a selfic They're all designed to drag the sleepiest part of your brain into full wakefulness.



TIMELY ALARM CLOCK

Free, Android
This is certainly one

of the more aesthetically pleasing alarm apps for Android. Beyond standing out just for its sheer good looks, this alarm-clock app includes a timer and a bunch of other handy features such as the 'low light' night mode, a decreasing snooze time, and a wake-up challenge to disable the alarm. But other than that, it's a no-frills package that trades on its good looks, but also does all the things you'd expect



GOOD MORNING ALARM CLOCK Free, Android, iOS

I his popular alarm clock has a slick interface, but adds some substance to the style as well. Besides offering the usual alarm functionality, it also adds a surprisingly well-integrated weather forecast and some fairly sophisticated sleep tracking. Using sleep-tracking data, alarms can be set to go off at the optimal point in your sleep cycle. We were put off by all the ads on the free Android version, though.



REALARM Free, Windows Phone

as many apps for Windows Phone as for Android, but there are some real gems, like this one. The Realarn app looks a little basic, but it does have a number of features, such as a dark/night theme and customisable alarm tones (including using your music). If you've set Quiet Hours on your Windows Phone, then be aware that this will also override your alarm settings – so no excuses for being late...



COUNTDOWN DAYS - APP AND WIDGET Free, Android

in the traditional sense, but the Countdown Days app plays the longer game. Tap the large plus sign icon to add a date you are counting down to, from wedding anniversaries to family birthdays and planned holidays. You can even use your calendar to pull an important date into the app, or choose to count only certain days of the week.

ERS



HUAWEI GR5 MINI WITH SELFIE STICK

SMARTER CHOICES

Well-priced phones that make you look good

IT'S A SIMPLE TRUTH THAT MOST people overspend on phones. The size of your screen and the brand of your handset have fast become powerful statements about your social status, but most never even unlock the true capabilities of their handsets. Most phone users aren't tech nerds, after all, and the phone is just a device they use as a tool, like a car or a washing machine, to make their lives better. They want to take good photos, type easily, send messages, and occasionally make a few calls. Some want to play Candy Crush, watch YouTube vids or listen to music.

Of course, almost every single smartphone above R3 000 does all of that perfectly well. We think you can still have it all: a stylish, top-performing phone that also won't break the bank.

This line-up could actually be called 'phones that aren't socially embarrassing' but we prefer to think of them as the really smart phones for really smart people.





BUYING GUIDE

DATA STORAGE

Stated plainly, 8 GB of storage is simply not enough, even for a noob user. Apps have gotten much bigger, and most can't be moved to the memory card. To avoid constant frustration, get at least 16 GB.

RAM

What makes some phones seem faster than others is the amount of RAM. On Andoid, you'll need at least 2 GB for a smooth experience, although 3 GB is better. Top-end phones now have 4 GB or more.

METAL VS PLASTIC BODY

Metal phone bodies feel a lot more luxurious, and they certainly look a cut above. In truth, a plastic body can be just as durable, affects your reception less and often shows less wear and tear than metal.

CAMERA

Phone cameras above 5MP will all take great photos once you learn their limitations (slow focus and low light, for example). So, image quality now depends a lot more on the camera software than the lens and sensors.

MEMORY CARDS

All the phones in our line-up have removable memory cards, critical for storing loads of photos and video clips. The exception is the iPhone-like Xiaomi Mi4, which even copied that annoying trait from Apple phones.

FINGERPRINT SENSOR

When they're working well, fingerprint sensors are useful for quickly unlocking the phone. In a few years, we'll possibly even see fingerprint recognition on our phones used to authorise payments at checkout.



HUAWEI GR5

This sophisticated aluminium magnesium alloy body with its handsome polished border certainly looks the business, and it's available in gold, silver and grey. Below the surface, though, the specifications and performance are somewhat underwhelming, especially against the strong competition it's facing in this price range. It's not a bad phone, overall, and it has a 3 000 mAh battery, which is bigger than most, but for a few hundred rand more, we'd spring for the Huawei G8, which still remains the top-rated phone on the Tech Mag Top 5 listings (page 70).

4G LTE, 5.5", 13 MP rear/5 MP front camera, 2 GB RAM, 16 GB storage,



XIAOMI MI 4

Today, Xiaomi is one of the biggest phone brands in China, but before the iPhone launched there, Xiaomi got its start by shamelessly copying Apple's designs, features and even the style of its operating system icons. Of course, Xiaomi then soon discovered that its phones were pretty great in their own right, and the rest is history. But some of that legacy continues here, where the Mi 4 looks remarkably like an old iPhone 5, and although it's been surpassed by the excellent Mi5, it turned in a strong performance and still feels great in hand. It's the only phone on test offering an 8MP front camera and high dynamic range, which balances areas of light and shadows in your shots, on its rear camera.

camera, 3 GB RAM, 16 GB storage 3 080 mAh battery, 149g, Android, R3 800

Surprisingly, despite being by far the oldest model on test here, the Mi 4 offers great graphics performance and a larger battery for the mobile gamer.





HISENSE INFINITY FAITH 1

While it's almost a carbon copy of the specs found on the LG K10, this phone certainly makes a striking impression with its rose-gold colourway and metal bodywork. However, a close inspection reveals that the build quality, while not shoddy, falls a bit short of the leaders on our list. The top and bottom caps on the body appear to be plastic, not metallic, for example, and the camera was decidedly average. Certainly, for only a little more cash you could have the full-metal body of the much more maiestic Elegance model (see opposite page). But it handled all the tasks we threw at it with only occasional stutter as the jobs piled up, and the fingerprint sensor on the back worked reliably and quickly to unlock the phone.

4G LTE, 5", 13 MP rear/5 MP front camera, 2 GB RAM, 16 GB storage, 2 500 mAh battery, 143g, Android, R3 000

SONY XPERIA E5

There were no corners cut on Sony's entry-level model, but there is also precious little to make it stand out from the crowd. Its overly conservative design and uninspired plastic shell mask what is a strong all-round multimedia performer. Screen and music performance are on par with our overall winner, the LG K10, and better than all the other models on test. Photo quality is also top notch, although it regularly hesitates before snapping for no discernible reason. Still, without paying a little more attention to this phone's forgettable physical first impressions, its technical abilities will end up being easily passed over on the shelf.

4G LTE, 5", 13 MP rear/5 MP front camera, 1.5 GB RAM, 16 GB storage, 2 300 mAh battery, 147g, Android, R4 000 Some Hisense models are only available from SA's leading electronics retailers.

HISENSE INFINITY ELEGANCE

Here's a rare case of a tech product that truly lives up to its name. The Elegance is a beautifully contoured shape for an all-metal body, and it's finished in an attractive and tactile brushed-gold or rose-gold colour. The luxurious experience extends to the technical performance too, where it easily handled all the heavy lifting we threw at it, probably because of the generous 3 GB of RAM, which is what really counts to make your phone fly. The rear fingerprint sensor was quick enough; the camera was adequate, and certainly on par with others in this test. We're calling this a strong runner-up to the LG K10, and it costs about the same too.

4G LTE, 5.5", 13 MP rear/5 MP front camera, 3 GB RAM, 32 GB storage, 3 000 mAh battery, 160g, Android, R4 000



See the *Tech* Top 5 Buyer's Guide on page 70 for other top models that tick our box for great value.







AVAILABLE FROM



5.5" FULL HD DISPLAY | 64GB | 4GB RAM | 13MP CAMERA FINGERPRINT SENSOR | USB TYPE-C | ALERT SLIDER | STYLE SWAP COVERS



STYLE SWAP COVERS

SANDSTONE BLACK | BAMBOO | ROSEWOOD | BLACK APRICOT | KEVLAR



LIGHT-SPEED INTERNET

Every family could use a little more fibre

Words Trevor Crighton

IF SOMEONE HAD TOLD YOUR parents that TVs would one day become as thin as a magazine, they'd have laughed out loud.

And if they had told them they would be able to watch anything they wanted, at any time, and it would arrive via a glass pipe filled with flickering light, young mom and dad would have told them to seek psychiatric help. Yet that is exactly what has come to pass.

One of the most prevalent tech buzzwords of the past few years is fibre, specifically as in 'fibre to the home' (FTTH).

This is a broadband internet connection that uses hundreds of microscopically thin glass tubes, bundled together to form a single thin cable, that carries the data signal using flickering light as a sort of extreme Morse code. This bendable cable of glass fibres is used to replace the copper wire currently used for old-fashioned landlines and ADSL broadband.

ADSL uses the copper-cable infrastructure laid down by Telkom over many decades, but now half a dozen independent fibre providers have dug up pavements across the country to install their lines. For the first time, South African consumers are free to connect to the internet without Telkom (and can no longer be made to pay for landline phones they never use).

SPEED AND RELIABILITY

ADSL speeds are affected by the condition of the copper wires. The greater the distance between your

home and a Telkom exchange, the more 'noise' or interference will be picked up on the line, which then degrades the speed.

In addition, the further away you are from that exchange, the more people will be connected (called contention), which also degrades your speed.

As fibre transmits light signals, rather than electricity, down the cable, these are immune to any radio-frequency and electromagnetic interference, as well as water damage. Internet speeds also don't really depend on the distance to the exchange, as the data's rocketing down the cable at, well, the

speed of light. Literally.

Fibre offers users download speeds potentially faster than 1 000 megabits per second. The majority of fibre customers are only using about 100 Mbps, but

CABLE SWAP

According to Finance24, the cost of replacing the country's existing 5 million-cable copper infrastructure with fibre would amount to roughly R60 billion. The original idea was that providers such as Telkom, Neotel and the mobile operators would shoulder this cost and recover it slowly over time (data-price increases, anyone?). Urban centres would obviously get fibre faster, especially where there were businesses prepared to pay for better internet, while rural areas would have to wait for the required infrastructure to be built from scratch and for the costs to drop.

that's still five times faster than SA's current ADSL speeds, which top out at around 17 Mbps.

Another big factor driving the rapid roll-out of fibre-optic cables is the huge impact of copper theft. The loss of copper cable and the effect on South African businesses runs into hundreds of millions of rands every year. On the other hand, fibre cable has no real resale value

at all, so shouldn't be a target for thieves.

Matching upload and download speeds is another feature of fibre. Using ADSL, all of your uploads (sending emails, posting a video to Facebook, making a backup into the cloud) are normally arranged to

be only one tenth as fast as your downloads. Historically, this was done because most people were downloading much, much more than they were uploading. Today, though, uploading lots of large multimedia files and using cloud services has become the norm, but ADSL has not kept pace with these changes. Fibre, however, has this built in.

DO YOU NEED IT?

But what does a faster internet connection get you? Well, you'll never have to wait for even HD YouTube videos to buffer ever again, which is a good start. But fibre also opens up many other cool opportunities.



Earn Rewards EVERY time you shop. Account customers are automatically Rewards members.





HOT PROPERTY

MULTIMEDIA STREAMING

Downloading large files is much easier. A full-HD movie - about 5 GB - takes just over an hour to download on a normal 10 Mbps ADSL line, but you would have your movie in just 7 minutes if you're using fibre.

If you're streaming video from Netflix, ShowMax or Amazon Prime, movies will play almost immediately, and it's also a less choppy experience. Instead of trying to figure out which mess of pixels is Hugh Jackman and which is James McAvoy, you'll be watching your favourite films on your ultra-HD flat-screen TV the way its makers intended.

HOME DATA ACCESS

With the speedy uplink the fibre provides, you can easily access files on your home network from anywhere. This includes watching movies right on your phone, or streaming your favourite playlists directly from your home PCs. Of course, you will also be able to use cloud storage properly for making backups or sharing any amount of data with others.

SECURITY

With a fast and reliable connection to and from your house, you could employ more sophisticated security systems, including video cameras to monitor the safety of everyone on the premises. These cameras can stream video directly to your

get there.

THE INTERNET OF THINGS

Effectively the expansion of the internet into the physical world, the internet of things is all about creating smarter, more connected environments in which everyday items 'talk' to each other, allowing them to exchange all manner of useful information to improve our quality of life. Think of appliances you can control from your phone, or a car that can communicate with your house.



HOW TO GET IT

There are three main considerations: availability, provider and price.

1. Coverage

Although the fibre footprint has been growing fast, it's currently still limited mainly to inner-city areas, upmarket business districts and a few posh suburbs.

Ironically, Telkom is leading the charge and has set the target of reaching a million homes with fibre by the end of 2017.

The way to know whether FTTH's heading your way is to look out for vans branded Openserve (Telkom's infrastructure division) and look out for cables being laid in newly dug trenches along pavements. Then there are a number of independent providers – Vumatel or Fibrehoods, for example – who may be hanging fibre cables on poles (far faster and cheaper, but not a pretty sight).

but think of it as a means to an end and you'll start feeling much better about the whole thing.

2. Service

Exactly like with your current ADSL broadband, you will need a service provider that will connect you to the internet. Many of the original local ISPs, such as MWEB, Axxess and Webafrica, now also offer fibre packages to customers, as do the mobile operators Vodacom, MTN and CellC.

There are plenty of deals out there, so be sure to shop around a little first. Some providers offer month-to-month deals that include modems and routers, while others tie you down to longer-term deals or require certain payments for installation. You will also need a special fibre router; this is usually provided by the ISP.

3. Pricing

An entry-level package for a 100 Mbps line with a 50 GB data cap will cost around R550 per month. A 100 Mbps line with uncapped data should end up costing closer to R3 000.

What we would do with all that bandwidth - and all that speed - is one challenge we'll be very happy to accept. •





OUR FIBRE PARTNERS:









Get connected. Get Axxess.









(F) (G) (1 0861 300 900



HIGH

A six-seater jet that you can park in the garden
Words Zaid Kriel @zaidkriel

NOTE

An innovative design decision was placing its two engines on top of the wings, creating a distinctive look and freeing up space in the main fuselage. This design creates less drag, which increases speed and improves fuel efficiency. It also means that there's less engine noise, making for a quieter flight.

HondaJet Personal aircraft

Honda is best known as a car, motorcycle and outboardmotor manufacturer, and geeks will be familiar with its
cutting-edge robotics division. Now the company is trying
something new. The HondaJet is a proper six-seater luxury
jet that will take on the private-plane industry, competing
directly with big names such as Gulfstream and Cessna.
Its secret is in its compact size compared to other private
jets. The HondaJet measures less than 13 metres from nose
to tail, and more than five metres of that is for passengers
and crew. That's a lot of space for such a small plane, but
that small footprint also means the HondaJet is the fastest,
quietest, and most fuel-efficient light jet in its class. But
what really matters to the super wealthy is that it's now
also one of the most spacious.

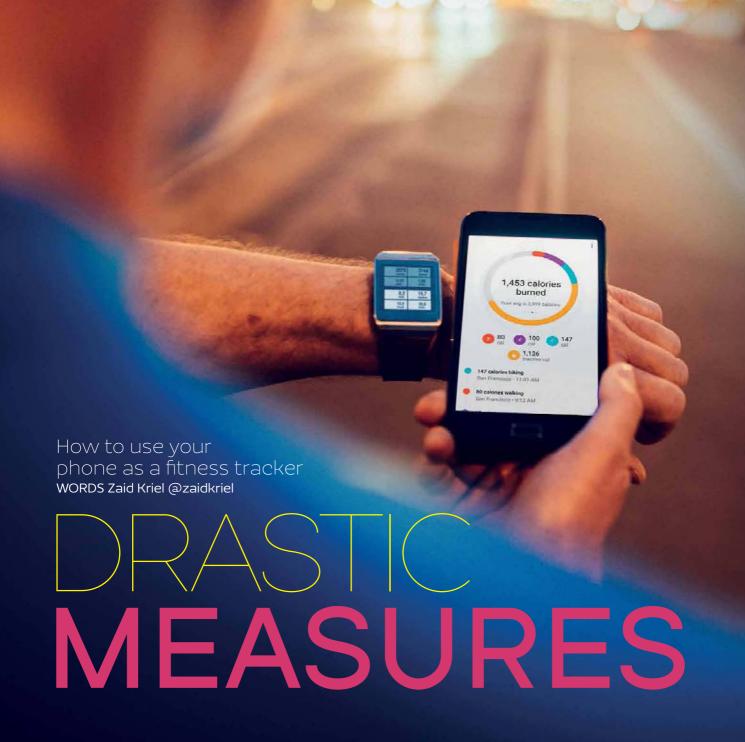
782 km/h max speed, two GE Honda HF120 turbofan engines, 9.1 kN thrust per engine, 2 264 km max range R63 million, hondajet.com







next-generation, allglass Garmin G3000 touchscreen avionics system, resulting in much more space for the pilots to fly comfortably. Also, the decrease in instrumentation means that there's more space for windows, which increases visibility.



games and the endless must-see YouTube clips, most people now believe cell phones make us less active. However counterintuitive it may seem, though, smartphones can also help to make us healthier.

For health tracking, your phone is usually working in combination with a fitness wristband of some kind, which will then monitor your physical activity using a bunch of sensors. But these activity-tracker bands aren't cheap, and it's still a bit tricky figuring out what kind of band you would need.

Luckily, the majority of modern smartphones contain some of the basic sensors to do this job for you. Usually, smartphones have both a movement sensor and GPS tracking, which work together to measure your activities and then display all that data in your preferred fitness app. In this way,

your handset pretty much replaces the pricey band and, working with an app, can be used to easily monitor your activity levels.

Some
phones, such
as the Samsung
Galaxy S7, can
detect your heart
rate through their
fingerprint
sensor.

There are tons of fitness-related apps available out there, but we'll be concentrating on the one most people probably already have or can get most easily for free: Google Fit. And if the Google Fit app isn't already on your smartphone, you can get it easily from the Google Play Store.

FIT FOR DUTY

Using the app is extremely simple indeed. To start, you'll just need to manually enter your weight, height and an activity goal (steps taken, total calories burned or distance

PHONE FITNESS

Here's how your phone stacks up against activity trackers.

PROS

- You already own it
- Uses movement sensors and GPS
- Wide variety of apps
- No connection problems between devices

CONS

- Bulky to carry on workouts
- Slight battery drain
- No sleep-quality tracking
- No continuous heart-rate monitoring

covered, for example). The rest of Google Fit's busywork happens passively in the background. As long as the app is running in the background, it will **automatically monitor your activities and log them** against your goals. You can check your performance stats at any time.

Remember, though, that your smartphone isn't specifically built as a fitness-tracking device, so it will never measure as accurately as a fancy sports watch or upmarket tracking wristband. Instead, the statistics and data you will see in Google Fit should be seen as a 'best effort' to measure something quite complex. Mostly, the phone is monitoring its own movements and guessing how that relates to your activities.

For example, if you don't carry your phone with you at all times, it won't count all your steps. If you leave it in your desk drawer when you walk the four flights of stairs to the accounts department, it won't give you any credit for that. So if you like validation, bear that in mind

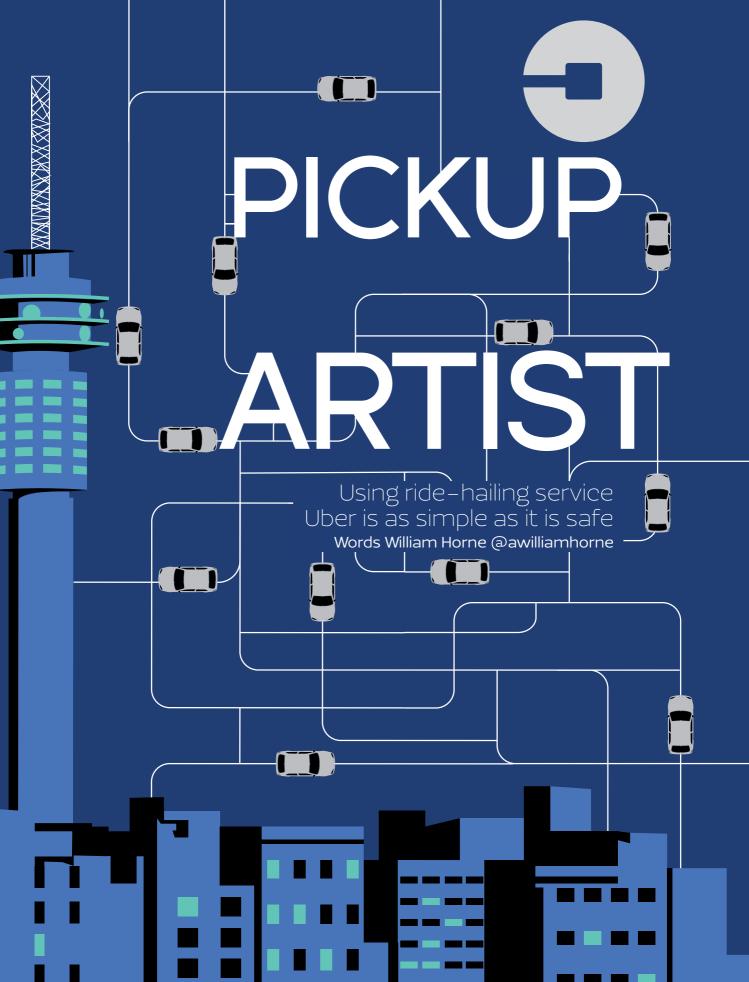
The phone also can't know when you're sleeping. If your smartphone is stationary during normal sleeping hours (say, after 11 pm), then it just guesses you're asleep, even though you may be binge-watching *Game of Thrones*. At other times, it may guess that you have been cycling when you went for a long mountain walk. Luckily, you can correct these, er, missteps from within the Google Fit app itself, and tweak the app's tracking capabilities so it becomes just that little bit more accurate.

ACTIVE PARTICIPATION

While Google Fit is meant to work passively in the background all the time, it works far better when you're actively managing it. For example, it's better to log on to Google Fit when you're going for a run and start and stop this activity, or else Fit will count your steps, but may not credit you for the pace you maintained, and it won't fire up the GPS to track your route and distance accurately.

You can also use the Google Fit app with other fitness apps. There are a number that can collect your activity data and send it to Google Fit, which is widely compatible with other options.

Google Fit is really best suited to fitness beginners who are just starting out at living a more active lifestyle. As soon as you graduate to a fitness regimen of more intense activities (regular gym visits, bike rides beyond your neighbourhood), you may find lugging your phone around less convenient, and may be hoping for more accurate data, such as what you would get from a wrist band. But if you're looking for a little extra motivation to get started on a healthier path, then this is one more way you can get some real value from your smartphone.



UBER IS EVERYONE'S PERSONAL chauffeur. Open the app, tell it where you want to go, and your phone summons and directs the driver. The best part? The app is linked to your bank card, so you don't need to have any cash: just tap and ride.

Of course, behind the scenes. there's a lot of tech that makes the process of Uber rides smooth, safe and efficient. Here's all you need to know to catch your first ride:

THE SETUP

Download the Uber app from the app store for Android and iPhone. On opening, the app will ask you to switch on Location Services on your phone. This switches on your GPS, which is needed to be able



CASH PAYMENT

Uber South Africa now also offers a cash-payment option. Before you select the Request Uber box, tap Payment option directly above the box, and select Cash. At the end of the exact amount owed, which you hand to the driver with no haggling on either side

to send a driver to your location. Uber also needs to keep track of where you are travelling for billing and safety reasons.

To register yourself in-app, you'll need to supply an email address (to receive your receipts) and your mobile number (used to verify your identity), and choose a password. Then, you will create a small profile so drivers can recognise you when they pick you up, and you will have to verify your mobile number with a PIN number sent to your phone.

LOCATION AND DESTINATION

To catch a ride, begin by simply firing up the app. You'll see a map with a blue dot showing your current location. The app will automatically assume that this is where you want to be collected.

If you are indoors, the app may struggle a little bit to get a fix on your location: GPS doesn't work quite as well without a view of the sky. Instead, it will show you a menu labelled Where To? Tap this, then type the address you want to go to. The app immediately draws a route on your map. At the starting point, labelled My Location, tap the box to fill in your pick-up address. Even easier, you can drag the pin showing your starting point to the correct location.

YOUR RIDE

Uber offers three main kinds of rides. A standard car, called UberX, is the quickest and least expensive. The price of the ride is made up from calculating the distance you have travelled and time taken, accounting for traffic, for example. A 6-seater option, called Uber XL, will summon a driver in a minivan, while a more luxurious transport option, called UberBlack, will summon a large, shiny (usually German) sedan great for meetings, or impressing the in-laws.

You'll see the fare estimate under each option. Choose which one you need, and tap Done. Then, to request the car to pick you up, tap the black box at the bottom that says Request Uber. A little box tells you how long it will take until your driver arrives.

STAR QUALITY

Uber tries to match you with eight drivers nearby. The drivers have a slightly different app that shows your incoming request. They have to tap to accept if they're interested. Based on your ride experience, you score your driver out of 5 stars. However, the driver rates you as a passenger, too, and this protects other drivers and their vehicles from unpleasant passengers. You can check your own star rating through the app itself by looking under Help, Account and Payment, Account Settings and Ratings, I'd Like to Know my Rating.





FARE INCREASE

If you see a blue lightning bolt in the Uber app, this indicates surge pricing, meaning that all fares are temporarily more expensive due to unusually high demand. You can accept the higher fare, or wait until it lowers again

YOUR JOURNEY

TIF

The app will let you know when your driver arrives, and tell you the driver's name, type of car and license plate number. So getting into the right car shouldn't be too difficult. Of course, your driver will already know exactly where to take you, because this information was sent to him when you first hailed the ride, so you can just sit back and relax.

On your screen, you can split the fare with a friend who is riding with you. You can then also share your progress with people who may be expecting you. They receive a link to a function that shows the car you're in moving towards your destination on a live map.

Once you've arrived, you will be prompted to rate your driver. This is important to raise their profile and get them more business, so you should consider this carefully. You will also receive an email receipt for the fare, with the payment amount automatically deducted from your bank account. 🕤





EARN REWARDS EVERY TIME YOU SHOP.

Account customers are automatically Rewards members. Merchandise available at selected stores from 9 February 2017 while stocks last. E&OE.

QUESTION

My favourite game stopped working and I am getting a message that the disc is unreadable. What do I do?

Words Hadlee Simons (a) Hadlee Simons



UNLIKE COMPUTER SOFTWARE or video files, the DVD holding a video game spins for many hours at a time. These discs are often shared between friends, too. It all adds up to a lot more wear and tear, and vastly increases the chance of the disc failing due to scratches and dirt.

Top-end video games now cost more than software and movies, so it can feel calamitous when the disc fails. But all hope is not lost. Here are some solutions to get your disc working again.

DIY CLEANING

Of course, a little spit and polish could succeed, especially if the disc isn't scratched, but just a little dirty. A bit better than your saliva, though, is to use the right kind of liquid solvent.

Plenty of music and computer shops stock disc-cleaning kits, which include a spray-on cleaner. These kits all come conveniently packaged with the right kind of microfibre cloth, which helps the situation. If you have a bunch of discs to clean, then it's cheaper to use rubbing alcohol – available from a well-stocked supermarket or chemist.

Another alternative is window cleaner. This has a very high alcohol content, so it dissolves greasy dirt and evaporates quickly, leaving no residue. Be very careful what you pull from the cleaning cupboard, though. Spray for cleaning kitchen

surfaces or furniture will likely contain other chemicals that will further damage your disc.

If the dirt on the disc is visible to the naked eye, you should first clean that off using warm water and a small bit of hand soap or dishwashing liquid.

The truly desperate may resort to using toothpaste. This solution is completely different to the solvents above and works more like microscopic sandpaper, grinding down the top layer of plastic on your disc. This works best for buffing out lots of fine scratches. Be sure to wash and dry the disc thoroughly.

Avoid using paper towels to clean your discs. The wood fibres that make up the paper can lead to even more scratches. Instead, consider investing in a microfibre or lint-free cloth, available from most optometrists and online.

PROFESSIONAL CLEANERS

If your DIY solutions don't work, you may consider a professional cleaning service.

Not all cleaning services are equal, though. Wesley Gombard, owner of the X DVDs and Games store in Cape Town, offers clients a professional disc-cleaning service. He says that high-end disc-cleaning machines cost thousands and can polish discs in batches. They have tiny brushes that apply a chemical compound that fills in the scratches. 'People believe the disc surface is being "skimmed" but that is actually incorrect. A second set of brushes then polishes the discs close to mint condition,' he explains.

According to Gombard, a cheap professional cleaning option entails the same process used to polish jewellery using an ordinary bench grinder, the right brushes and the necessary jewellery polish. Only one disc at a time, though.

DOWNLOADS ON THE UP

Game downloads have now drawn nearly level with physical disc sales in many countries, and they offer some distinct advantages, as well as some downsides.

PROS

Games load faster than from discs Downloads can't be lost or damaged

CONS

Downloads can be huge (20 GB+) Downloads can't be lent to friends



Post your comments to TechMagazineZA on Facebook, and you could win this Mio Fuse Activity Tracker.



New owners create a unique FFID profile to go with the car, and all your customised driving settings (seat position, dashboard layout, music playlists, radio stations, etc) are saved under this profile. This global user profile can be transferred to any other FF 91, so you can sit down and immediately feel right at home.

FARADAY FUTURE FF 91 Electric car

Tesla may be known as the first commercially successful electric carmaker, but Chinese-backed US start-up Faraday Future is hoping to be among the front runners when electric vehicles go mainstream. And its exciting new FF 91 car doesn't stop at an electric engine. Instead, it's modelling itself as the futuristic car experience that we've been promised in sci-fi movies.

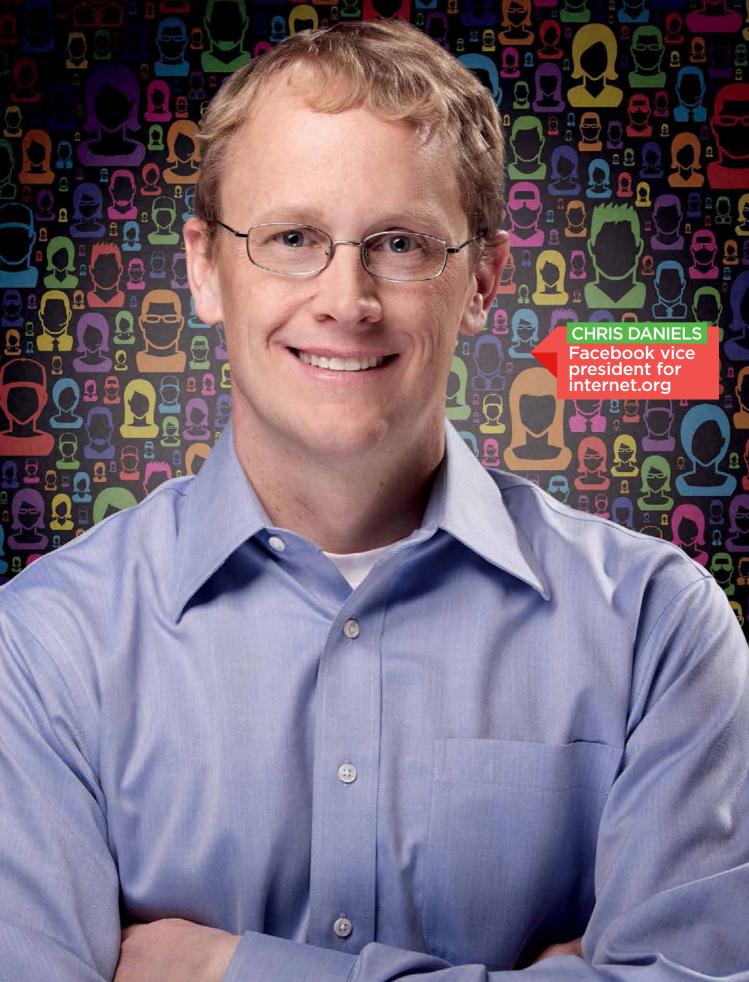
It has industry-leading selfdriving capabilities and, like its competitors, it can find its own parking spot while you're off at the shops, and find you again when summoned by an app.

Not only is it all-wheel drive, it uses all-wheel steering too. There are no door handles and no keys. Instead, buttons open and close the motorised doors. Cameras on the doors use facial recognition to identify the driver and unlock the car.

And, to dispel the myth that electric cars are just a nerdy fad, the first live demonstration of its engine power saw it beating a range of sporty cars (including Ferraris and Teslas) to be named the world's fastest electric car. Tesla's hit back with a time only 0.001 sec faster. The race is on.

130 kWh battery pack, 783 kW engine, all-wheel drive, all-wheel steering, more than 30 sensors for autonomous driving R2.45 million, ff.com





HRIC

Facebook's Chris Daniels is coming up with innovative ideas to grow the connected population

Words Joanne Carew @littleCarew

WITH MORE THAN A BILLION active daily users, Facebook has certainly progressed beyond just silly selfies and minute-to-minute status updates to become a fully fledged information-distribution network. In fact, by far the biggest challenge to Facebook today is not getting people to use their social network, but simply getting more people connected to the internet in the first place.

Part of Facebook's business plan is to target developing economies, such as most African countries, and build out the internet infrastructure. Should we be sceptical about their motives? Chris Daniels, Facebook's vice president for its internet.org initiative, shares his thoughts.

YOU'VE BEEN SPEAKING A LOT ABOUT EXPRESS WIFI. **WHAT IS THIS?**

Only about half the world now has access to the internet. And in Africa, internet penetration is at only 28%. Internet.org wants to

connect these people. We would like for every single person on the planet to have access to all of the social and economic benefits of the internet and we're making use of a number of technologies to bring about this reality.

Most of the people in remote communities are accessing the internet using expensive cellular data connections.

HOW DOES IT WORK?

Internet.org's Express Wifi program is envisaged as a rural communityentrepreneur purchases a broadband internet connection as usual from a commercial ISP. Then, using software entrepreneur can easily turn their PC into a WiFi hotspot, and then sell this community living within range of the hotspot. Making use of the Facebook software, it is also possible to simply daisy-chain a number of hotspots together to offer blanket coverage

As an alternative, Express Wifi offers them access to affordable WiFi services. The technology we have developed makes it easier and cheaper to deploy WiFi in remote areas. And our business model is based around working with local ISPs and operators to make it more financially viable to scale WiFi out as a connectivity solution. The idea is to empower local entrepreneurs to provide fast, affordable internet access to their towns and villages.

WHAT HAVE YOU LEARNED SO FAR?

So far, I'd say the results show that the business model is sustainable for local ISPs. In 2017, we intend to work with our ISP partners to deploy more hotspots in these and other countries. What really makes us excited, however, is being able to see this idea making a difference for people who didn't have internet access until now. For example, up in Lagos, Rosemary Njoku started selling Express Wifi from her shop

EXPRESS WIFI

STARTED IN INDIA *IN SEPTEMBER*

SOUTH AFR

and she's making more money this way than her business did in the past. A number of our Express Wifi entrepreneurs have increased their revenues by as much as 100% per month. What we're trying to do is give them the opportunity to join the digital economy.



HAVE YOUR STRATEGIES CHANGED MUCH FOR DIFFERENT MARKETS?

No two unconnected regions are the same. We use each technology as we'd use building blocks — we will put them together in whatever way works for that scenario, based on the population statistics, local topography and current levels of connectivity. For example, the local entrepreneurs selling Express Wifi to their communities are the most important localisation component of the programme. These guys can help us to understand their region's unique problems and make it easier to localise the programme. This part entails everything from finding the right locations to choosing the best strategies to market the services.

We already all know that Africa is a mobile-first continent and South Africa is at the forefront of mobile innovation, so much of what we will learn here can then also help us in other markets.

Power supply is consistently a major challenge. A number of our Express Wifi partners have created energyefficient solutions that meet their unique power needs and particular constraints. And we're also trying to help power some of these systems by investing heavily in solar power and by exploring exciting modern technologies like satellites, lasers and even long-range high-altitude planes. This is done through our Connectivity Lab.

IS INTERNET ACCESS A BASIC **HUMAN RIGHT?**

Just imagine the huge difference an accurate weather report could

BIRD'S EYE INTERNET

Both Facebook and Google are looking to grow internet coverage from unmanned aerial vehicles.



FACEBOOK: Aquila solar-powered unmanned planes

The drone plane uses lasers to beam less than a car. Aquila uses the same amount of electricity as the average



GOOGLE: Project Loon high-flying balloons

Internet signal goes from antennas balloons, which use their high altitude Machine learning alters the balloons behaviour to keep them in one place for longer. A test flight conducted over Peru lasted 98 days.

make for a farmer planting crops, or how an online encyclopaedia could help all the many children without textbooks. Imagine what these people could contribute to the world if people could actually hear their voices. Internet access is synonymous with opportunity. It enables progress and improves society's knowledge. It's such a foundational element of today's global society that no one should be without it.

Je@ellery Insurance Offers you peace of mind

Every jewellery piece holds a precious memory, making it all the more valuable. No-one understands this better than us. This is why The Foschini Group Financial Services offers you optional insurance to cover your jewellery item or watch against damage, theft or loss.

What's more, you can choose whether you'd like to pay your monthly premium via debit order or your store account (if you're an account holder at a Foschini Group store).



SMS: "TFGJ-Tech" & your account number to 43183 Standard SMS rates apply.

Call: 0860 117 527

Email: jewelleryinsurance@tfg.co.za

1896

STERNS AMERICANSWISS

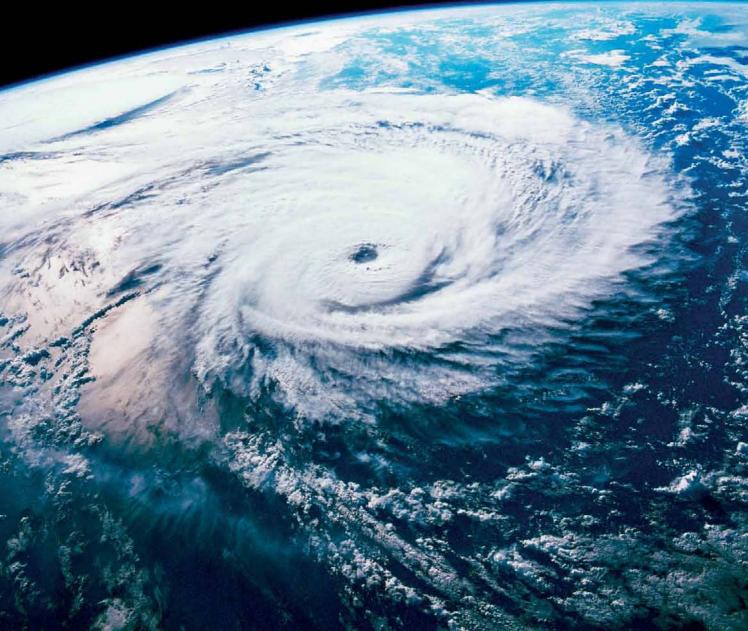
Terms and conditions apply. Your jewellery item or watch must be insured within 30 days of purchase. Jewellery Insurance is only available when the jewellery item or watch is purchased from American Swiss, Sterns and Foschini jewellery boutique stores. Premiums are dependent on the original selling price of the jewellery item or watch and insurance option selected. Insurance cover on the item purchased commences immediately and is subject to an excess



THE POSITION OF PLANET EARTH IS really lucky. Move us a little closer to the Sun and we'd end with permanent 700 km/h gale force winds like those on

really lucky. Move us a little closer to the Sun and we'd end with permanent 700 km/h gale force winds like those on Venus. On Earth, the weather is generally on our side. Sometimes referred to as living in the Goldilocks Zone – not too hot, not too cold – our planet's weather and climate are just about right to sustain life. But not always.

Extreme weather conditions that quickly turned lethal Words William Horne @awilliamhorne





GET THE POINT Biggest typhoon

The world's most serious storms are known as hurricanes, typhoons or cyclones, depending on where in the world they occur. Hurricanes are in the Atlantic and East Pacific oceans, typhoons are in the West Pacific, and cyclones occur in the South Pacific and Indian oceans.

On the 12th of October, 1979, the world witnessed the largest and most intense typhoon ever. Super Typhoon Tip formed near Japan. It soon became clear that Tip could be the most powerful storm ever recorded, and more than 60 planes

were sent right up into it to take scientific measurements.

At its peak, Tip was producing gusts of up to 306 km/h. But it was its monumental size that was truly astonishing. The superstorm spanned a colossal 2 220 km from edge to edge, or enough to cover all seven countries that make up Southern Africa in one enormous weather system.

By the time it made landfall in Japan, Tip had luckily lost some of its strength, but still destroyed 20 000 homes and started a few hundred mudslides. It killed 86 people and injured hundreds more.

STIFF BREEZE Fastest wind

In the north-eastern corner of the US sits Mount Washington. Standing only 1917m tall, it's not especially high, cold or snowy, but still manages to serve up some extreme weather patterns that rival the highest peaks and the coldest places for records.

On 12 April 1934, observers at the top of the mountain were caught in a sudden change of weather that would lead to world-record wind observations, and quite a nervewracking ordeal for the researchers.

At its fastest, the wind atop Mount Washington was blowing at 372 km/h (faster than a Boeing 747 at take-off). This set a new wind-speed world record that held for more than six decades, and it's still the fastest wind speed ever seen on land outside of a cyclone.



COLD SWEAT

- The lowest natural temperature ever recorded on Earth was at the Vostok Station in Antarctica. It sits around 1 300 km from the South Pole. In 1983, the mercury there hit an astonishing -89.2°C.
- The highest natural temperature ever recorded sits at a sweltering 56.7°C. This was recorded on 10 July 1913 in Death Valley, in California in the US
- The lowest known temperature of a permanently inhabited settlement, however, remains with the Russian village of Oymyakon, or as it is also known, 'The Pole of Cold'. In 1924, the town of 500 people experienced a frigid -71.2°C. There is a sign up in the village to commemorate the date but we're not sure why anyone would want to.



with the latest news, features and player profiles from the domestic and international scene

KNOW YOUR GAME Every month, you'll be automatically entered into select competitions Email your account number soccerclub@tfg.co.za

in the magazine.

Fan gear from your favourite soccer clubs

• Soccer jerseys worth R699

• R10 000 TFG gift cards and R1 000 Shoprite gift card

Get access to a FREE legal and medical advice line Don't have a Foschini Group account?

Go into any store and open an account today!

monthly, billed conveniently to your account from any TFG (The Foschini Group) store.

or ID number to

SMS 'SOCCERTECH' and your account number to 44001 Standard SMS rates apply

TFG (The Foschini Group) is made up of the following stores:

@homelivingspace **AMERICANSWISS** donna @home CHARLES & colette Fabiani. FIX **DUESOUTH EXACT FOSCHINI** MARKHAM MAT & MAY NEXT S O D A 🔐 sportscene

BRAIN FREEZE Hail storm

In 1942, a game reserve ranger in India stumbled upon a terrifying sight. In a valley in the mountains of Roopkund, he found a small frozen lake just filled with skeletons. In the summer, when the lake melted, the water revealed even more carnage - remnants of about 300 skeletons in total - and all of the remains were found with cracked skulls as well as broken shoulders.



After a forensic investigation in 2004, it could be determined that a group of travellers - maybe Iranian pilgrims, maybe the family of the King of Kannauj - had been trying to cross the valley in the year 850 when they were suddenly caught in a severe hailstorm. Hail the size of golf balls had killed every last one of them. To this day, there is an old folk song in the area that describes an event when a goddess was so enraged by outsiders defiling her mountain sanctuary that she rained death down upon them with ice stones 'as hard as iron'.

Death by hail is an exceedingly rare occurrence, though it does still happen when severe storms create powerful wind currents that can support small ice particles for long enough to allow them to grow into extremely large hailstones.

BIG ZAPPER Dry lightning

Severe thunderstorms can be pretty

trick to tell you how close you truly are to getting struck by lightning. If you see lightning flash in the sky you simply count, 'one Mississippi, two Mississippi...' until you can hear the rumble and crash of thunder. A three-second count means the storm is about 1 km away.

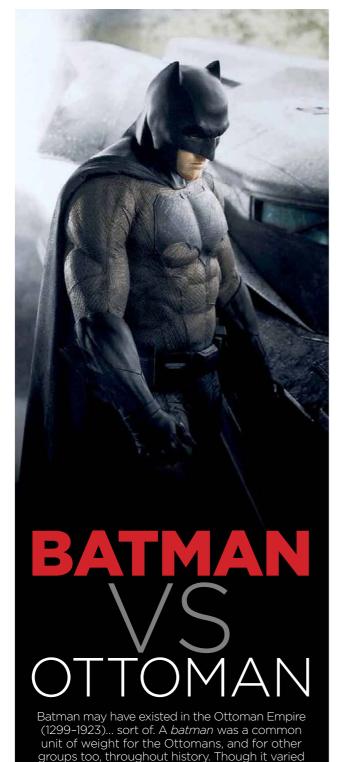
However, what if lightning strikes without warning, or on a perfectly clear, summery day? So-called dry lightning happens without any rainy or stormy weather.

In July 2014, lightning struck the iconic Venice Beach in Los Angeles, killing one person and injuring 13 others. It was on an otherwise fine beach day with only a few clouds high up in the sky. Lightning had apparently come out of nowhere.

This phenomenon is surprisingly much more common than you'd think; it just usually occurs in arid, desert-like areas like the American south-west, where it is responsible for the majority of veld-fires. Dry lightning manifests when there is



Scope



over time, one batman was roughly 7.5 kg. That

means that the new Batman, actor Ben Affleck,

weighs about 13 ancient batmans.

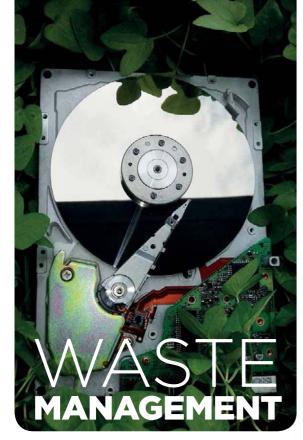


Scientists at MIT have developed an AI that can see into the future – all of two seconds. The AI has been designed to predict what two people will do when meeting: hug, shake hands, kiss, etc; and do it two seconds before the event. The scientists trained the program by having it binge on TV shows such as *The Big Bang Theory* and *The Office*, and it now has a prediction success rate of 43%, compared to 71% for the average human.



BORDERLINE

Not even the departed can escape the nuisance of travel-related bureaucracy, it appears. When the mummy of the ancient Egyptian pharaoh Ramses II was sent over to France in the '70s for display, the Egyptian Government actually issued him a legal Egyptian passport for the trip. The passport listed Ramses' occupation as 'King (deceased)'.

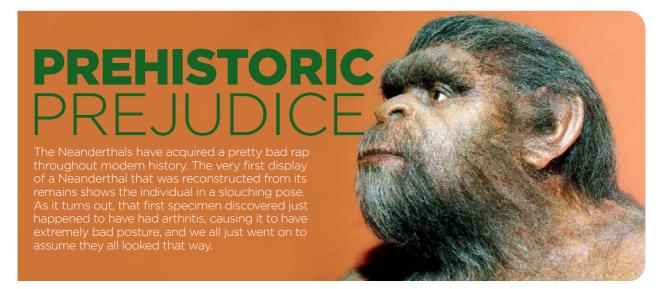


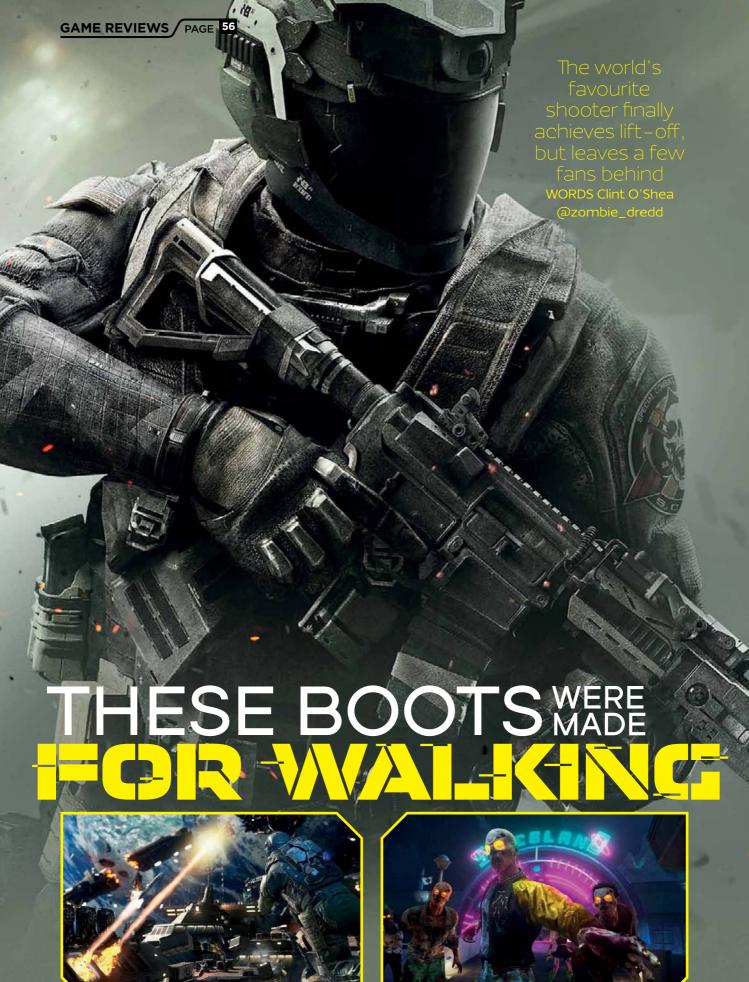
Somewhere in a landfill near Newport, Wales, is an accidental buried treasure worth more than R100 million. It's a tiny computer hard drive no one has been able to find. In 2009, James Howells decided to get involved in a small new fad called Bitcoin. After 'mining' 7 500 of the obscure digital currency, he gave it up, and the entire hard drive containing his digital wallet full of bitcoin moved first to a drawer and then, years later, to a dustbin. But when Howells saw the news that Bitcoin had skyrocketed in value, he realised his mistake. But even after attempting to dig through more than a metre of garbage to find the drive, the R100 million worth of Bitcoin has never been recovered.

100 PURR SCENT



Calvin Klein's 'Obsession For Men' cologne might bring out the tiger in you, but it may not attract quite the crowd you were expecting. The popular men's scent is a hot favourite smell of tigers, jaguars and leopards, who are inexorably drawn to it. Its effect is so well known that it is often used in the wild to attract the big cats to cameras.







CALL
OF DUTY:
INFINITE
WARFARE
Xbox One,
PS4, PC
The absolute
iuggernaut

that has become the *Call of Duty* war-shooter franchise was not at all stopped in 2016. Despite stiff competition from other first-person shooters – *Battlefield 1* in particular – *CoD* still remains dominant. *Infinite Warfare* may be an acquired taste, but the inclusion of the remastered 2007 classic *Modern Warfare* in the special Legacy Edition release gave *CoD* the edge in the global market this time around

As expected, the new-look Modern Warfare has vastly improved graphics while still delivering a more traditional boots-on-the-ground combat. But in stark contrast, the new chapter, Infinite Warfare, expands on the future-war settings of other recent CoD releases and includes combat in outer space, sections in zero G, and more of the wall-running antics introduced in previous versions. Despite this, Infinite Warfare tries valiantly to stay true to its real-world roots, with many of the weapons and vehicles simply being variations of familiar items from earlier games.

SPACE TO GROW

The CoD fan base has been abuzz with controversy, with most of the debate among serious players trending against the futuristic outer-space theme. But before you rush and conclude Infinite Warfare is not the game for you, let's stop



to consider this more carefully. We reckon *Infinite Warfare* is a game packed with some pretty cool ideas for the future of the franchise.

The story campaign opens with a thrilling action film set sometime in the near future, where the battle between human factions spans the solar system. While the story itself is a predictable us-versus-them affair, it is an entertaining one nonetheless.

Variety is added to the otherwise linear progression with optional side missions, which players can choose to play in any order. These operations are accessed via a central hub on your ship (*Retribution*) and come in two flavours – air combat and ship assault. These side missions focus on gameplay elements that occur in the main campaign missions.

Gunplay and movement are generally satisfactory in the game, although competing shooters have certainly trumped *CoD* in some key areas here. The same can be said about the game's graphics. In-game, they are pretty decent, but are let down by the video cut scenes. It appears they are not always fully rendered by the game engine and that can be jarring when switching between scenes.

Call of Duty has always lagged behind Battlefield in the sound department, but Infinite Warfare has closed that gap somewhat, with the sound being the most immersive yet in a *CoD* game.

MULTIPLAYER MEH

Of course, for the vast majority of fans, *Call of Duty* is not a single-player experience. The whole *Infinite Warfare* package is only really complete with the ubiquitous multiplayer and fanfavourite Zombies modes included.

This year, Zombies mode sports an '80s theme, which proves to be a funny and refreshing change to the more serious traditional singleplayer campaign.

Sadly, it's the game's multiplayer that proves to be its biggest letdown. It's not an outright terrible experience; it just lacks innovation. Players after the more gritty realism of the older titles can simply change the rule set but, ultimately, *Call of Duty* needs to really do a refresh of the multiplayer format before the fans grow bored.

Infinite Warfare is another Call of Duty that cannot be called an outright winner. It innovates and stagnates in equal amounts, but it hangs on to the crown and is still worth your time if you are a first-person shooter fan.

Just be sure to buy the Legacy Edition to be reminded of the pure greatness that is *Modern Warfare*.

NEW BREED N/ORSI

Power, vice and vengeance are always a solid foundation for an organised-crime thriller

WORDS Sam Friedman



MAFIA III PS4, PC Xbox One

The third game in the *Mafia* series has a similar look to the epic open world that is

Grand Theft Auto, but feels very different. Unlike GTA, this game is strongly story-driven, employing organised crime as the logic for the game. You play as Lincoln Clay, a small-time crook working his way up in the underworld by tearing down the mobs that control the city.

The backstory for Lincoln is told in documentary format. He returns home from the Vietnam War only to have his family killed by a head mobster - Lincoln himself is left for dead. Of course, he survives, and teams up with CIA agent Donovan to take down the top crime boss, Sal Marcano. The gameplay centres on breaking down all of Sal's rackets, which will weaken him by forcing him gradually into bankruptcy. Even the side missions in the game contribute to this end goal.

PERIOD PIECE

The gameplay is smooth and positive. Gunplay feels realistic and you feel as if you genuinely have total control of the character's actions, especially since there are multiple ways to go

about completing missions. You are able to call in weapons, vehicles and someone to stash your money with. Another interesting dynamic is how you handle the three underbosses below you. Manage them wisely or they may turn against you. Also, keep in mind the game is set in the '60s. As a young black man, you shouldn't be too surprised if the police are checking you out and regularly siding with your enemies.

The story takes place in the openworld map of New Bordeaux, in 1968. The city is very diverse, with rich and poor areas and a swamp called the Bayou (it's all loosely based on New Orleans). There is a ton of licensed music from the '60s, including songs such as Jimi Hendrix's 'All Along the Watchtower' and Sam and Dave's timeless 'Hold on I'm Comin".

The animations are beautifully done and the cut-scenes, both cinematic and in-game, are some of the best we've seen, and the voice acting is authentic. Overall, the graphics are very good and the customisation options added in the first update to the game allows you more ways to marvel at its realism.

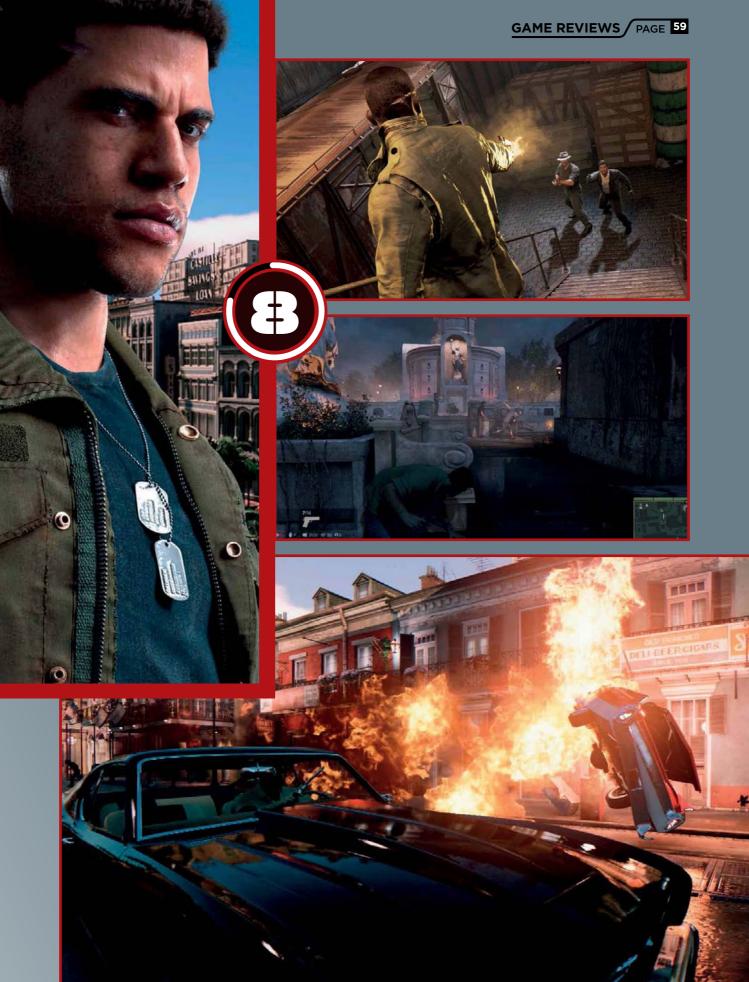
CALLING IT

There are many different ways to approach missions and, when paired with the different weapons to use and different favours you can call in, this all amounts to many hours of fun.

The game has had a few updates since its launch, and these added changeable outfits, new guns and cars, and street races. It also fixed a number of bugs, which improved the game immensely, but it remains single-player only.

With the early issues all fixed, amazing graphics, good gameplay and a strong story to move things along, we rate *Mafia III* a strong buy.









XCOM 2

XBox One, PS4. PC

Since we lost the war, some 20 years ago, there remains little hope for

humanity in a world now occupied by an alien civilisation. And that's where you come in.

XCOM 2 is a turn-based tactical shooter set in 2035. You take up the mantle as leader of a depleted elite military and scientific organisation known as XCOM (Extraterrestrial Combat Unit). In the first XCOM, you fought to defend planet Earth against the alien invasion. In XCOM 2, you lead this guerilla force, doing everything in its power to make the occupation of your home planet as uncomfortable as possible for your foreign hosts.

The turn-based gameplay means you issue orders, in turn, to each member of a squad of four to six

people, each with their own weapon proficiencies and special skills. Squad members gain experience over time, but the physical and psychological stresses of war may force them to sit out some rounds. It very quickly turns out that managing an inventory of resources, research and personnel is the real key to success.

Think of it as a game of interactive,

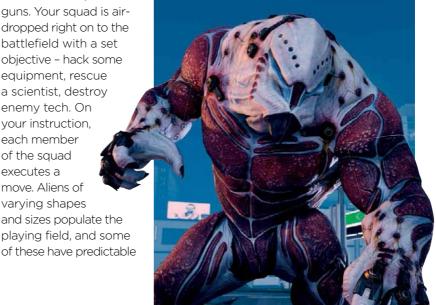
futuristic chess, but with guns. Your squad is airdropped right on to the battlefield with a set objective - hack some equipment, rescue a scientist, destroy enemy tech. On your instruction, each member of the squad executes a move. Aliens of varying shapes and sizes populate the playing field, and some

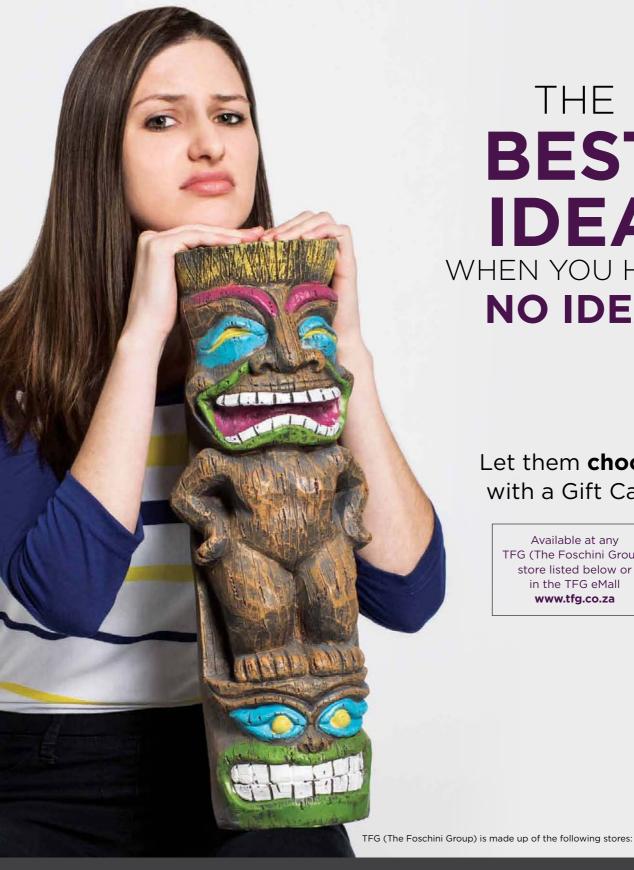
behaviour while others are a little more erratic. You can only move a certain distance and perform a few actions each turn. Oh, and there's almost always a ridiculously tight time limit. See? Just like chess!

It sounds complicated, but the tutorial system guides you through it all, seasoned XCOMer or not.

Thrown into the action with a squad of battle-hardened guerilla fighters, my melee combat specialist died almost immediately - a result of my badly thought-out orders. Turns out these characters die permanently, so I needed to manage my skin jobs a little better.

I found the game's graphics looked slightly dated, but not bad at all, and it certainly plays well. So, XCOM 2 is certainly something quite different, even for picky strategy-game fans. It may also help prepare some of us for the inevitable arrival of our alien overlords.





THE **BEST** IDEA

WHEN YOU HAVE **NO IDEA**

> Let them choose with a Gift Card

> > Available at any TFG (The Foschini Group) store listed below or in the TFG eMall www.tfg.co.za

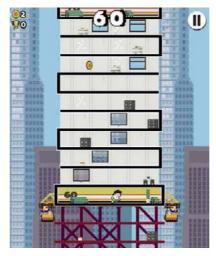
@homelivingspace AmericanSwiss CHARLES & KEITH colette donna @home FIX Fabiani. FOSCHINI **DUESOUTH** EXACT G-STAR RAW MARKHAM MAT & MAY NEXT SODA RE Sportscene STERNS TOTAL SPORTS J

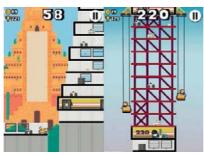


HIGH RISERS Free, **Android, iOS**

Endless-running titles are a staple in mobile gaming,

with pretty much every other game seeing you sprinting, jumping and dodging for your life. Fortunately, High Risers puts a slightly different spin on proceedings. Players simply control a character, jumping up as many levels of a high-rise building as possible, but with the character automatically running from side to side. The kicker is that some levels of the high rise have no walls, so you'll need quick reflexes and great timing to keep your character alive and the climb going. No, it's not the most sophisticated game, but it's perfect for killing some time. The simple 16-bit graphics are cool and the nagging in-app purchases are, thankfully, minimal.











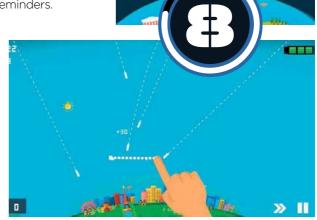
LINE DEFENSE Free, **Android. iOS**

A rather fun take on 1980's Missile Command, Line

Defense has you protecting a city from projectiles by drawing lines to block and deflect them. Things quickly ramp up in difficulty after a few levels, though, thanks to tons of projectiles - and boss battles.

These end-level fights often see an Arkanoid influence, as you try to deflect shots back to the boss. And as far as bells and whistles go, Line Defense offers you lovely, judder-free visuals, a killer soundtrack and several fun minigames in the package. The game's main downside, as is so common, is the in-app purchase reminders.







STEP UP

Top activity trackers, compared

MANAGE YOUR CHILD'S

SCREEN TIME

Charge your phone

FASTER

BRAIN-POWER APPS

Puzzles, quizzes and general knowledge

FACE OFF

Video-calling tips and tricks

MORE POWER TO YOU

Solar energy and battery backup for the home

PLUS...

- Hacking your life
- Tech terms explained
- Top games reviewed



laptop

Even at a time when miniaturised tech is often hailed as the peak of technological achievement, there is still a lot to be said for the full-size laptop. The screen is bigger, the keyboard is far more comfortable and dissipating heat isn't a critical problem. On this model, the 15-inch screen is 4K ultra-HD, so the image quality outclasses almost every other laptop at this price point, and the near full-size keyboard is a treat to work on. It even has a proper number pad, ideal for doing real office work.

Combined with the high-spec Nvidia 960M gaming graphics, though, the nice big screen also makes this a proper gaming rig, and the DVD drive (so seldom seen these days) makes loading games that much easier.

What's missing?

Don't be fooled by the metallic finish. It's actually plastic panels all round. The graphics chip is a top performer from 2015, but it's good for another two years, probably.

Verdict

This good-looking machine is also backed up with a full complement of top-drawer specs, from a UHD screen to gaming graphics and a speedy SSD drive. For the digital omnivore who can only buy one PC, this is priced well above your typical business laptop, but it's a steal for a full-specced gaming PC.

i7, 15.6", 4K UHD screen, 8 GB RAM, Nvidia GeForce GTX 960M, 250 GB SSD, 1 TB HDD, 3 × USB, 1 × USB Type C, $383 \times 260 \times 29.9$ mm, 2.53 kg, Windows 10 R22 000



Smart gear for the digitally enhanced lifestyle





It also contains an activity tracker, so vou can keep tabs on your child's physical activities through the day.

ALCATEL MOVETIME TRACK & TALK kids' watch

It's a tragic reality that we live in dangerous times for children, but here's a full-featured techological solution to what can often be an emotionally charged problem. This bright and funky watch for children contains a SIM, which allows you to keep close tabs on your little ones, wherever they are. By pressing a single button, they can call any of the five people listed directly from their watch. Another function lets you send each other simple voice messages, much like via Whatsapp. And in an emergency, a single long press on the SOS button will keep dialling down a list of trusted adults until someone takes the call. It also simultaneously sends out the GPS location of the distress call, which is displayed on a map on your phone. and keeps updating the location

until the crisis situation has passed. Another feature lets you set up a safety perimeter up to 1 km around your child's location, at school or at home. If the device moves beyond the safe zone, you're alerted.

What's missing?

The four watch buttons make for more confusing operation than is necessary, we felt, though at least the SOS button is clearly labelled as such. The watch can't really be customised to distinguish it from those of siblings and friends.

Verdict

Your child need never know about your safety precautions. Let this

be a special gift they received so that they can tell the time. It's a well-thought out device, clearly designed by actual parents, not lab technicians. It's colourful and tough and a much more practical solution than a smartphone, and at a pretty low price for complete peace of mind.

GPRS, GPS, 1-inch monochrome screen, activity tracker, IP65 (splashproof), 4-day battery (claimed) R1 100



obsessive attention to detail with every component installed. Sure, raw horsepower goes a long way, and this system has more than enough of it, but only by optimising the digital flow through every single piece of your rig can you approach peak performance. That includes the 120 Hz 4K ultra-HD screen with a five millisecond response time, the latest cutting-edge RAM tech and the highly specialised cooling system (it uses five heat pipes and three unique fans to cool CPU and GPU separately). We also particularly enjoyed the perfectly sprung keyboard, an easily overlooked, yet critical component. Engineered by top

gaming brand SteelSeries, it does all of the cheesy flowing rainbow patterns, but flick a few switches on the control panel and it's back to business, with grouped action keys and recorded macro functions.

What's missing?

In spite of that advanced cooling system, the machine still gets very hot indeed, almost untouchable in places, and that can't be terribly good for your circuitry - or your peace of mind.

Verdict

With this package, MSI went and set itself a whole new kind of target: to make a top-end gaming system exactly as sleek and compact as any ultraportable business laptop (called an ultrabook). It's truly an extraordinary feat, packing many hundreds of raging horses into a brushed-aluminium body that's just 2 cm high, but that's what makes this such a thoroughbred, and now the benchmark to beat for gaming notebooks. Nicely done.

i7, 17.3" 4K UHD screen, 16 GB RAM, NVidia GeForce GTX 1060, 250 GB SSD, 1 TB HDD, 4 × USB, 1 × USB Type C, 412 × 285 × 20 mm, 2.43 kg R37 000



SOHO BACK SUPPORT

Almost everyone who has worked on computers more than a decade is familiar with nagging back pain. After expensive therapies, special chairs and stretching routines, this remarkably simple solution grants almost instant relief, and that's no exaggeration. The two back plates move independently to support your spine and keep your posture. Fitting the device is simplicity itself. Position the support against your backrest, and then simply slip the elasticated straps around the back of the chair. Then, just sit down for some pleasant relief across your lower and middle back, and even in the shoulders.

What's missing?

It prevents you from sitting back deeply in the chair, or from rocking, for that matter.

Verdict

It's difficult to believe one device this simple can provide support for such a wide range of back ailments, but that was exactly our experience testing with a number of Computer Back sufferers. So if you're struggling through every work day, know that relief is at hand, and not too costly.

Two sprung back plates, ventilated fabric covering R990. medsport.co.za

the muscles in the arm, shoulder and neck slowly relax as your arm glides back and forth from mouse to keyboard. Easing this muscle tension then allows your body to gradually return to a more correct working posture.

What's missing?

They're quite obtrusive in your desk space, especially if you end up with two. for left and right forearms.

Verdict

Made in Finland, this is an extremely strong build with a lot of serious engineering behind it. You might not be able to avoid long stretches behind the PC, but looking after your health is still in your reach.

Aluminium with genuine leather support pad, dual hinge R2 100, medsport.co.za





GEARS OF WAR 4 JD FENIX LIMITED EDITION XBox One controller

Gears of War pioneered the cover-based-shooter gaming genre (using objects in your environment for shelter in a firefight), but that didn't stop your body armour from taking a right pounding. The newest instalment of the game tracks the story of JD Fenix, the son of legendary supersoldier Marcus Fenix, and the detailing on this controller reflects his famously battle-scarred armour.

Being an Xbox-exclusive game means this controller has been tweaked precisely for the kinds of cold-blooded close-quarters encounters demanding quick and precise finger work to cycle through weapons, shoot from cover and go hand-to-hand in melee combat.

Vibration feedback is now available directly through the triggers and, for the first time, you can plug any headset of your choice into the controller.

What's missing?

Noobs, beware: the buttons don't light up like they do on a standard Xbox controller.

Verdict

Aside from a few obvious cosmetic changes, this controller offers little practical support for most games. But for Gears fans, this is a piece of collectible memorabilia that bestows instant bragging rights.

Enhanced D-pad, vibrating triggers R1 300



LITTLE LOGBOOK mileage tracker

This GPS dongle plugs into your car's cigarette lighter and tracks every journey from the moment you turn the ignition key. But the power of this product is not in the hardware, but in the reporting software. Plug that GPS dongle into a USB port on your PC and it will import a treasure trove of business-travel data that you will need for expense claims and tax filings. The power of the software is in its ability to quickly and easily sort all your trips into categories, with each route being conveniently displayed on a map, and to output that to a report that's designed to be fully compliant with SARS' rules and regulations.

What's missing?

It uses up the socket you need for your phone's car charger.

Verdict

The software presents a pleasant, unintimidating dashboard that is remarkably simple to use, making this a real must for mobile workers and executives spending a lot of time on the road. These could be standard issue for fleet managers and business owners too.

GPS dongle, USB adapter plug R1 000, littlelogbook.net

DID YOU KNOW?



All TFG Account customers are **AUTOMATICALLY** Rewards members



ŢĘ.

Earn and redeem Rewards at all the stores listed below:



BUYER'S

PHONES

1 Huawei G8 32 GB

Replacing our previous mid-price hero, the G7, this latest incarnation comes with a generous 5.5" screen and a whopping 3 GB RAM, the most important spec to keep your phone flying. The metal body and reasonable price clinched this topvalue deal for us. R5 500

2. LG K10

For an entry-level phone, it comes with great specs, a brilliant screen and excellent build quality, and feels secure in hand. And we've always been big fans of moving the buttons out of the way on to the back of the phone. R3 900

3 Xiaomi Redmi Note 3

This is great value for a big-screen phone in a full-metal body with some oomph under the hood. With a sharp 5.5" inch screen, 2 GB of RAM and a massive 4 000 mAh battery, it's gaming-friendly too. R3 800

4 LG Stvlus 2

With its massive 5.7" screen, this phone is great value, especially if you don't need top-end processing power. We liked the tough plastic body and large 3 000 mAh battery, plus the stylus is a nice touch. R4 300

5 Xiaomi Mi5

It's easy to see why the relatively new Chinese brand Xiaomi has done so well around the world. This model has top specs, a superb camera, 3 GB of RAM and a pin-sharp screen, and it's particularly well built. R8 000

ACCESSORIES

1 Outdoor Tech Buckshot Pro

VIEW

Like a Swiss Army Knife for mobile users, this gadget is a punchy, rubber-clad, weatherproof Bluetooth speaker that also doubles as a powerbank. Then, plugging the USB torch attachment into the front, it becomes a multifunction LED flashlight. R1 000

2 Microsoft Universal Mobile Keyboard

This is the keyboard that'll pair seamlessly across platforms. The detachable, magnetically latched cover doubles as a stand, making it a real every-day product. R1 000

3 Romoss Rolink

It's a delightfully simple solution to the common problem of how to work with a mix of Apple and Android products. This clever cable has a plug end that's fully reversible to work with either Lightning or microUSB devices. R200

4 Skross MUV USB plug

Whether for work or pleasure, travelling with your tech is a pain. This Skross device will make charging abroad easy, with two USB ports and a series of sliding adaptors that allow it to be configured for use in 150 countries. R550

5 Logitech Z533

This simple 2.1 speaker set delivers 60 watts of pounding bass with clear highs, and comes with a convenient, oversized volume control dial that rests on your desktop and doubles as a hub for connecting your phone. R1 800

The top gear tested and compared on features, price and build quality by the experts at Tech

HEADPHONES

1 Sennheiser Momentum 2

Audio experts agree that these oversweat the price. You're investing in a decade of pure aural pleasure. R6 610

2 Skullcandy Smokin Buds 2

Skullcandy buds deliver excellent sound, a

3 Sennheiser HD 202 II

What a pleasure! These boring-looking this list. R630

4 Skullcandy Grind Wireless

This streetwear brand has matured. swapping its crazy colours for better build quality. This subtle design caught us off guard

5 Happy Plugs Deluxe Edition

The gold finish makes a strong personal the handmade drivers deliver a detailed and balanced sound that is much better than the

TELEVISIONS

1LG 49UH600T

This big-screen UHD TV costs less finishes of more pricey models. It's backed up with a full range of ports and both LAN and WiFi connectivity, and powerful audio performance to boot. R9 000

2 Samsung 55K6000

and uses the new Tizen operating system with a great range of apps, including Netflix. R12 000

3 Hisense ULED55T910

This is the latest tech from Hisense. image quality is better than on other sets in this price range and the audio is also strikingly good. R25 000

4 Hisense 50K390PAD

These locally made TV sets come with great features, WiFi and plenty of HDMI ports. The OS can be a little clunky, but the standard Hisense four-year warranty gives you peace of mind. R10 300

5 LG43LF540T

connectivity options, and only one day in and day out. R6 000















MY PASSPORT LUMEN 1 TB EXTERNAL HARD DRIVE

FITNESS GEAR

1 Garmin vívoactive HR

The upgrade to our previous charttopper, this model delivers GPSdriven data for multiple sports, activity tracking and smartwatch-like notifications, now with heart-rate monitoring. A little less elegant than its predecessor, perhaps, but far more practical. R5 200

2 Fitbit Blaze

It's still a great fitness tracker with a solid phone app, but now it tracks your sports (in a fairly basic way) too. Best of all, it's a properly stylish watch for everyday wear, with continuous heart-rate monitoring and a five-day battery. R4 000

3 Xiaomi Band Pulse

A band for beginners, this good-looking tracker covers all the basics, from step count to sleep tracking, and even rudimentary heart-rate monitoring. Plus it's a fraction of the price of its closest competitors, R400

4 TomTom Spark 3 Cardio Music

This is the full package, with sophisticated GPS data for serious sport nuts, heart-rate monitoring and day-to-day activity tracking. Unique is 3 GB of storage to play music via your Bluetooth earphones. R4 000

5 FitBit Charge 2

As the replacement for the excellent Charge HR, this one has a bigger screen to display a wider range of stats, and in more detail. It can track more sports than before and the phone app is especially good. R2 700

WIRELESS SPEAKERS

1 Samsung R7 Wireless 360°

We're typically not swayed by pretty things, but we found the audio engineering in this stylish sound pod superb. It delivered exciting, detailed sound across many genres of music, played both loudly and softly, using its special diaphragm to spread the sound around our living space. R5 500

2 Outdoor Tech Turtle Shell 3.0

It's fully waterproof and it floats, and the angle-cut shapes aren't just a funky design: they distribute the sound throughout your living space. This latest model gets plenty loud and also doubles as a power bank to charge your devices. R1800

3 UE Megaboom

Ultimate Ears' high-end audio design meets South African socialising standards in this waterproof pool-party-starter. Mega volume, mega bass, and all at the highest end of sound quality. Add the 20-hour battery life and it's a winner. R5 000

4 Volkano Bazooka

This lightweight package delivers a rough, but surprisingly big sound by making use of clever acoustics in its tube-like design. There are plenty of connection options, as well as a nifty shoulder strap and decent price point to boot. R600

5 JBL Charge 2

It's not pocketable, but it trades off its bigger size against a much phatter sound, with bass you can feel. The 6 000 mAh battery offers 12 hours of playback, plus it works as a neat portable phone charger. R1 600



NEW





For only R4.50 per month charged to your store account, you can receive SMS alerts sent to your cellphone every time a purchase of more than R100 is made using your store account card, providing you with detail on the value of the purchase made on your store account, and when and where it was made.



Stay informed. Stay Alert. Always

Interested?



To activate, simply SMS "FA_TECH" and your store account number to 43183 standard SMS rates apply.

Terms and Conditions apply and can be viewed on our website at http://www.tfg.co.za/campaigns/tfgfraudalert

@home @homelivingspace AmericanSwiss Charles & Keith colette Donnaclaire

DUESOUTH EXACT Fabiani. FOSCHINI G-STAR RAW MAY NEXT SODA & Sportscene STERNS TOTALSPORTS



NEW YEAR'S DAY CAME and went, and the day after that, and the day after that, and still I held fast to my resolution, which was to walk 10 000 steps every day with my FitBit tracker strapped to my wrist. Happily, the rules of the game say you do not have to accumulate all the steps in one go, so it is usually early evening by the time I feel that little bzzzt and lift my wrist to look at the tiny display with its blaze of colour and congratulation.

When that happens, I feel no qualms about pouring myself a drink by way of reward. I step into the kitchen, whip out the needed ingredients and haul out my drinkmaking machine.

It's a bullet-shaped device, with a motorised standing base, a clear plastic top, and a detachable set of starfish-shaped blades in the middle. The NutriBullet. It has only one purpose: to turn my fruit and vegetables into slush.

Which brings me to my other resolution: to eat five helpings of fruit or vegetables per day. And failing that, to drink them.

The rich scent of the sliced fruit coalesces and rises – sweet, tangy, slightly acidic. I glance at the recipe on the app on my phone, though I am not really following it to the fraction; it's not that difficult to prepare a smoothie, and there is room for improvisation, as there is in jazz. So I decide, for today, to leave out the spinach leaves.

Instead, I sprinkle a handful of blueberries on top of the medley, then a few ice cubes, and a couple of swishes of cold coconut water from a can. It swirls into a frothy tidal pool at the bottom. Finally, a sliver of fresh ginger, a sting of greenish-gold sharpness nicked from the gnarled root.

I then crown the cup with the extractor blades, flip the whole thing upside-down, and slot it on to the base.

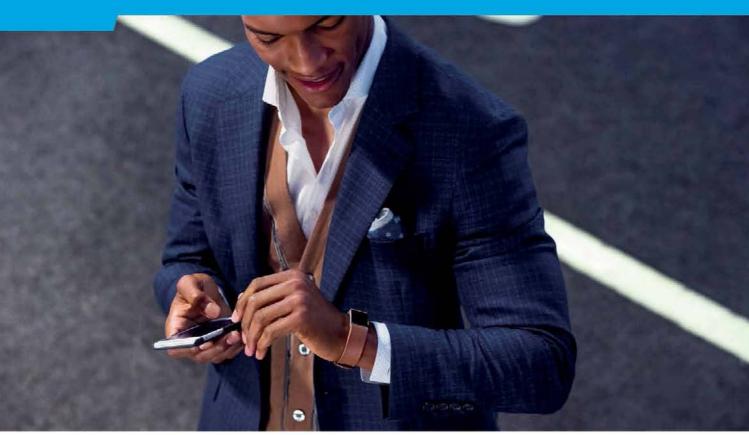
It jolts into action, the motor flinging all the fragments of fruit upwards into the spinning blades with a furious centrifugal force.

The ice cubes clatter and splinter, and I watch, mesmerised by the droning rhythm, while the mixture pulps into a pink-purple liquid dotted with black seeds.

There is a magic to the process, an alchemy that transforms one set of elements into another, and I feel like Dr Victor Frankenstein, wide-eyed in his laboratory in the lightning-storm, as I twist the cup to the right to stop the racket.

The mixture - my blueberry-apple-peach-ginger smoothie - gloops into the glass, and as I take the first sip, that icy rush of fresh fruits in fusion, I think to myself, this is what tech should bring to life. Make it simpler and smoother, and significantly easier to stick to our resolutions. •

TOTALSPORTS







Available at selected Totalsports. While stocks last, E & OE.

Make every beat count.

Make every beat count with Fitbit Charge 2™

A heart rate and fitness wristband that automatically tracks all-day activity, exercise and sleep, keeps you motivated with advanced fitness features and displays real-time stats.









































YOUR THROWDOWNS.

Go into battle with Corsair's totally synced, high performance RGB gaming devices.

STRAFE RGB

MECHANICAL KEYBOARD

THE WORLD'S FIRST MECHANICAL GAMING KEYBOARD WITH EXCLUSIVE CHERRY MX RGB SILENT SWITCHES.

SCIMITAR RGB

MOBA/MMO GAMING MOUSE

FEATURING BEST IN CLASS 12,000 DPI SENSOR AND KEY SLIDER. CUSTOMIZE YOUR COMFORT BY ADJUSTING THE SIDE BUTTONS TO YOUR GRIP.

VOID RGB

WIRELESS DOLBY 7.1 GAMING HEADS UNRIVALED COMFORT, EPIC IMMERSION, AND TRUE MULTI-CHANNEL AUDIO.



www.frontosa.co.za

JHB: (011) 840-5700, CPT: (021) 561-7200, DBN: (031) 566-2793, EL: (043) 007-0300

SEE THE FULL
CORSAIR RGB LINE AT
CORSAIR.COM/RGB