



## February 2019 Strategic Case Study Examination

### Pre-seen material



### Contents

	Page
Wearable Technology - Overview	3
The wearable fitness and activity tracker market	3
Key drivers of growth in the wearable fitness and activity tracker market	4
Latest development in the market	4
The background and history of Vita	5
Product launch timeline and Sales and Revenue graphs	6
Technology	7
Vita's products and services	8
Examples of visual displays on the Vita tracking devices	10
The manufacturing and sales processes	11
Competitive environment	12
Summary of key competitors	12
Vita's Market share graph	13
Extracts from Vita's Integrated Report – Mission/ Vision/ Value Creation	14
Extracts from Vita's Integrated Report – Stakeholder Engagement	15
Extracts from Vita's Integrated Report – Risk Register	16
Senior Leadership Team	17
Extract from Vita's Annual Report 2018 - Financials	18
Exhibits	21

## **Vita**

You are a Senior Finance Manager at Vita, a consumer electronics company. Vita designs and sells wireless-enabled wearable fitness and activity tracker devices that measure a wide range of personal metrics related to fitness and activity. Vita's headquarters are located in Newland, a prosperous northern European country, where a significant proportion of the population take an active interest in sport and a wide range of health and fitness activities.

You report directly to the Chief Finance Officer of Vita and advise on special projects and strategic matters.

Newland's currency is the N\$.

## Wearable technology - overview

Wearable technology is a term used for electronics that can be worn on the body, either as an accessory, or as part of material used in clothing. There are many types of wearable technology. For example: wrist-based fitness and activity trackers, smartwatches, smart shoes and clothing and virtual reality (VR) headsets. One of the major features of wearable technology is its ability to connect to the internet, enabling data to be exchanged between the device and a network, to enable detailed data analysis. The growing popularity of mobile networks has been one of the most important factors in the development of wearable technology.

The following case material focuses on the wrist-based fitness and activity tracker segment of the wearable technology market.

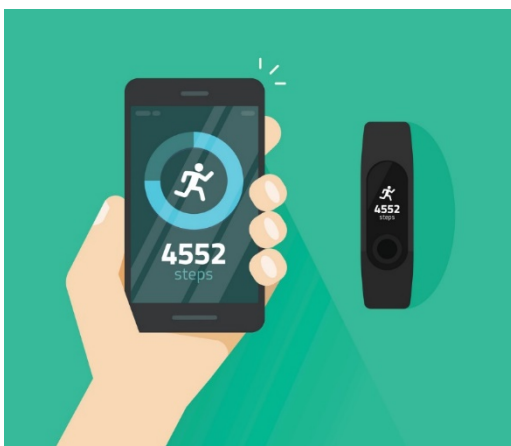
### The wearable fitness and activity tracker market



Wearable fitness and activity trackers are wireless-enabled devices that monitor and record a person's fitness and activity. They are designed to monitor and track activity-related metrics such as the number of steps taken, distance walked or run, calories consumed, active minutes and, in some devices, heart rate and sleep quality.

Military forces, medical professionals and some businesses (such as security services), have been using wearable technology for decades, but the private

consumer market has only recently taken off, largely through the success of wearable fitness and activity trackers. The first commercially available wearable devices designed for private consumers, developed in the early 2000s, were little more than step counters (also known as pedometers). However, the last 10 years has seen a phenomenal rise in the technical accuracy, usability, affordability and popularity of fitness and activity trackers.



Most fitness and activity trackers synchronise (sync) activity data to applications (apps) on smart devices, or data can be synced to a website on a computer. The apps and websites then present the users with their activity data in a range of graphical formats. They are exclusively designed to give users an insight into their overall activity and fitness progress. The apps and websites developed by the manufacturers of fitness and activity trackers also offer a social dimension to sharing fitness information with the tracker wearing community. These apps and websites often offer a community page, where users can challenge themselves and compete against other users or friends who use the same device. Much of the

appeal of fitness and activity trackers, which makes them effective tools for increasing personal fitness, comes from them making exercise fun and challenging. Use of an app can serve as a means of identification with a fitness community, where users can also choose to share their progress, pictures and achievements with that community.

It is estimated that, as at the end of 2018, there were over 150 million active users of fitness and activity trackers throughout the world. An active user is defined as “a registered user of a wearable fitness tracker device who, within the three months prior to the date of measurement, has an active subscription which has been synced with the health and fitness tracker, or has logged at least 100 steps with a health and fitness tracker”.

## **Key drivers of growth in the fitness and activity tracker market**

There are a number of factors that have contributed to the growth of the fitness and activity tracker market in the last ten years.

Firstly, the increasing use of smartphone-based fitness tracking apps is a key driver in the wearable fitness and activity tracker market. These fitness tracking apps offer enhanced levels of functionality, with designs and features that can help an individual to stay fit. Due to easy accessibility and low cost, consumers are becoming more inclined towards using these apps, in conjunction with fitness and activity tracking devices. Moreover, the fitness tracking apps are supported by all major smartphone operating systems, such as iOS and Android.

Secondly, in the last few years, many organisations have been conducting fitness and health awareness and management programmes, to reduce the costs in the health care system. For instance, non-profit organisations in Europe and North America have conducted various programmes to increase the awareness about health and fitness issues, such as the benefits of proper diet and exercise. This increasing awareness among consumers has boosted the demand of fitness and activity trackers.

Thirdly, the technology used in the latest fitness and activity trackers is far more accurate and sophisticated than the earliest models. Designs have become more lightweight and user friendly and are now seen as a fashion accessory for many users. The range of designs available and the wide range of functionality has meant that fitness and activity trackers have a wide demographic appeal and are used by males and females from 8 to 80 plus years.

## **Latest development in the fitness and activity tracker market**

The latest development in the fitness and activity tracker market has been the development of the smartwatch. Smartwatches connect to the user's phone using various wireless technologies, such as Bluetooth, Wi-Fi and GPS, and serve as a front-end for a remote system such as a smartphone.



A smartwatch allows users to read and respond to texts, see emails, use a range of wrist-based apps (often extensions of the smartphone apps themselves) and provide notifications from social media apps.

Many of the latest smartwatches developed since 2015 now include fitness tracking technology as standard. Exploiting the hybrid watch and fashion accessories smartwatch market is the latest major opportunity in the fitness and activity tracker market. More advanced smartwatches have also recently been designed to measure and monitor specific sporting activities, such as

running, cycling, swimming and golf.

In 2018, global unit sales of smartwatches exceeded unit sales of fitness and activity trackers for the first time.

## **The background and history of Vita**

Vita was formed in 2011 by two friends, Rhea Turner and Gal Yaluz, who both studied Information Technology Management at the same university in the economically developed country of Newland. Rhea and Gal ran together as members of the university's distance running club and often talked of turning their interest in fitness into a business.

It was during one of many long runs together that they had the idea of developing wearable fitness and activity tracking technology that went further than the basic pedometers they had been using. They considered how useful it would be to have detailed information about their runs collected in an unobtrusive manner. Vita was founded to develop wearable devices that could offer that functionality.

Vita was initially financed by a low interest, new technology grant offered by the Newland government, and money borrowed from friends and family.

Vita's first fitness and activity tracker, the 'Liber', was launched in 2011 and took the form of a small clip-on tracker showing steps, distance, calories, floors climbed and the time.

Rhea and Gal sourced their products from two inexpensive contract manufacturers in Asia, which were also relatively new organisations. Vita has benefitted from an excellent collaborative relationship with these two companies since business inception and the businesses have grown and developed together.

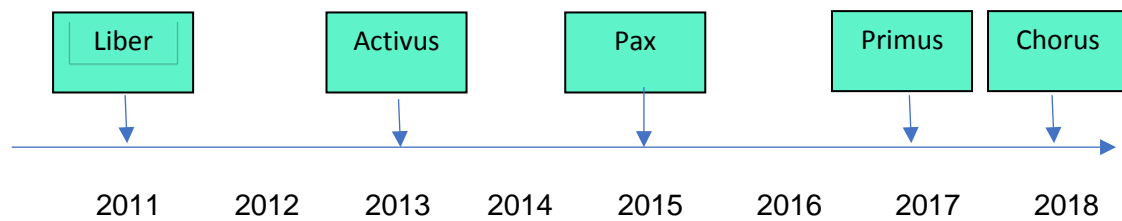
The Liber was a great success and sales grew rapidly and were global in nature. This enabled Rhea and Gal the opportunity to invest in developing a more refined fitness and activity tracker, the 'Activus', in 2013. This device offered GPS and higher levels of accuracy than the Liber and took the form of a wrist band. At the same time as the Activus was launched, Vita launched an accompanying website and app, so that customers could easily keep track of their fitness data over time. Vita's website and app are built around a 'control hub' model, highlighting key fitness and activity data which can be selected by the customer.

During the next few years, sales continued to grow and Vita expanded its operations accordingly. Two more fitness and activity tracker devices were launched (the Pax in 2015 and the Primus in 2017) and the app was further developed, to take on the form of a personal data management system. Fitness community building was also prioritised as part of the app and website development programme, allowing customers to share data with friends and the fitness community when logged onto the app or website.

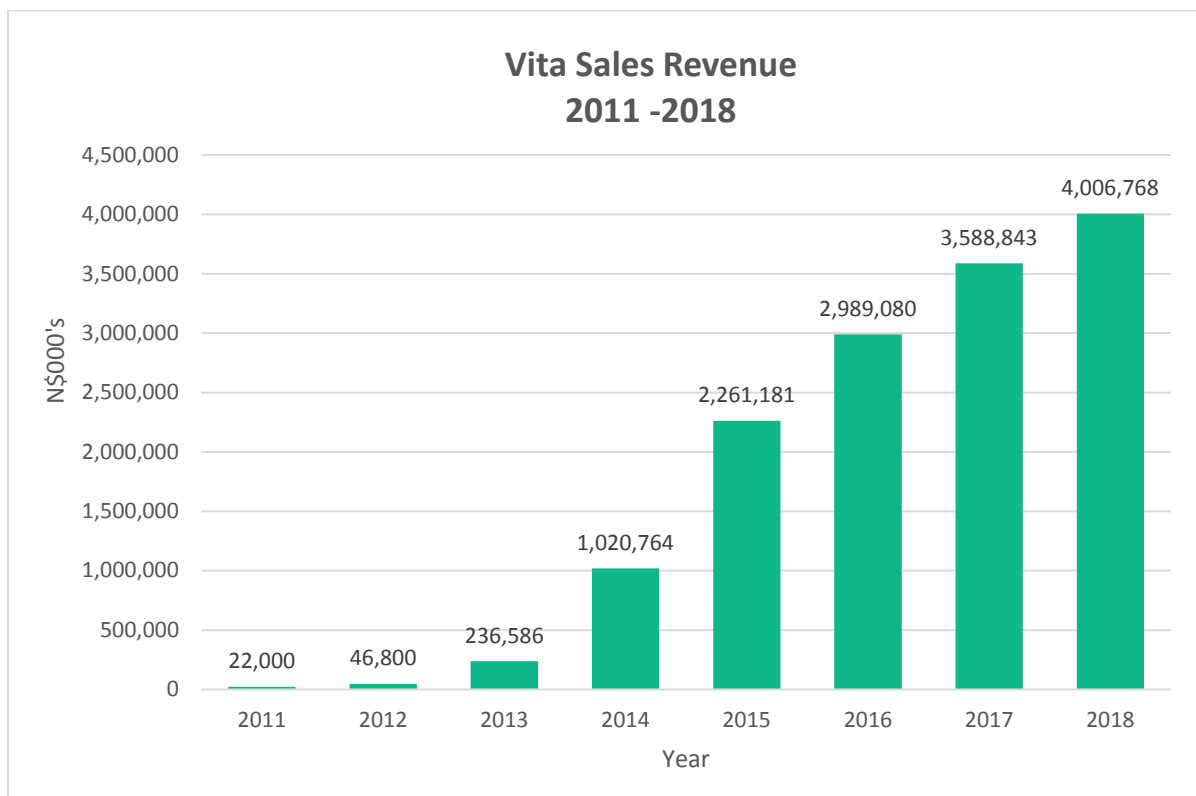
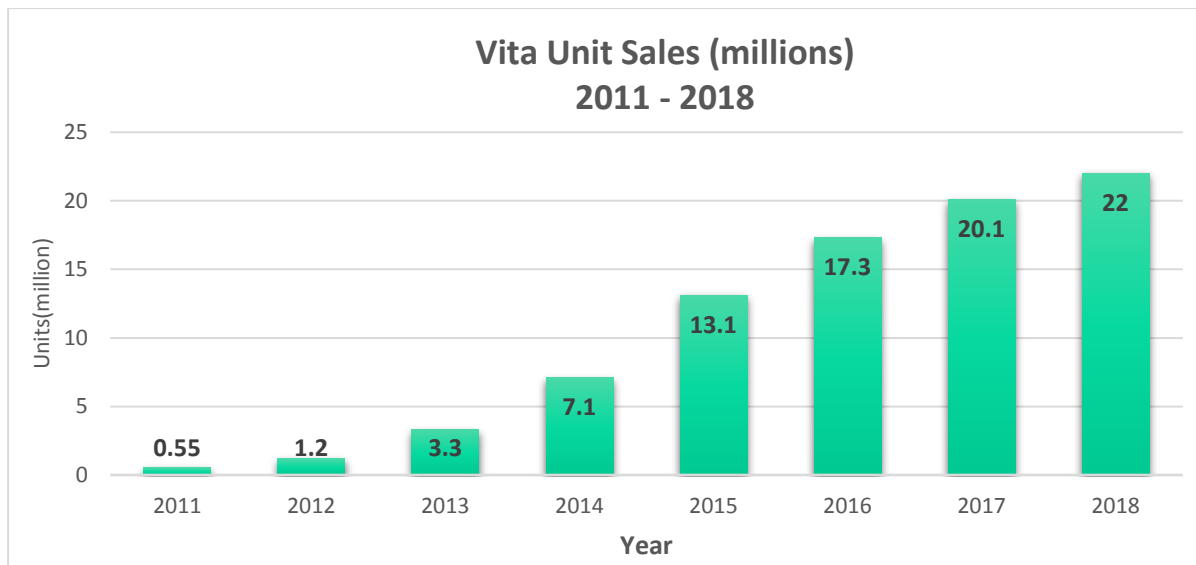
In early 2017, Vita listed on the Newland stock exchange, although no dividend has been paid since the listing.

Although Vita has enjoyed a period of high prosperity, annual sales growth is now starting to slow down, with the rate of growth from 2016 to 2018 significantly slower than in previous years. Rhea and Gal realise the importance of continually staying at the forefront by offering something new and innovative in the market and are considering the next steps they need to take to stay ahead of the competition. Vita's latest product, the Chorus, was launched mid-2018 and is an activity tracker aimed at children.

The following timeline shows the dates of Vita's new model releases:



The following graphs outline Vita's sales and revenue performance since its inception:



## Technology

Vita has developed a range of proprietary fitness tracking technology used within its devices.



Technologies include a finely tuned algorithm for step counting, which is designed to monitor motion patterns that are most indicative of people walking. The algorithm determines whether a motion's size is large enough by setting a precise threshold. If the motion and its subsequent acceleration measurement meet the threshold, the motion will be counted as a step.

In addition, a 3-axis accelerometer has been developed and built into the

technology, to track movement in every direction. An accelerometer is a device that turns movement (acceleration) into digital measurements (data), when attached to the body.

Two of Vita's latest fitness and activity trackers, the Primus and Pax models, contain Vita's latest proprietary technology, 'VitaPulse', which measures heart rate. Optical sensors shine light onto the skin to measure pulse through it. The light illuminates blood capillaries, then a sensor measures the rate at which blood is being pumped. This is used to measure heart rate.

Vita has also devised its own sleep tracking technology, whereby the fitness and activity tracker translates wrist movements into sleep patterns.

## Research and development

Vita spends vast amounts on research and development work, as innovation is critical to remain competitive in this highly dynamic marketplace. A key driver behind Vita listing was to raise the funds required to facilitate even higher levels of investment in research and development work from 2018 onwards.








## Vita's products and services

Vita's products and services combine fitness and activity tracker devices with software and services, to give its users the tools they need to help them monitor the progress towards their health and fitness goals.




## Vita's fitness and activity tracker range

Vita currently designs and manufactures five fitness and activity trackers which are designed to address the needs of a wide range of users, from those looking to simply improve their fitness by increasing their activity levels, to athletes looking to monitor all aspects of their performance. All of Vita's devices automatically track users' daily steps, calories burned, distance travelled, and active minutes, and display real-time feedback to encourage users to become more active in their daily lives. Some of Vita's devices also measure floors climbed as well as sleep duration and quality, and the more advanced products track heart rate and GPS-based information such as speed, distance, and exercise routes. The Primus also has more advanced features, such as the ability to receive call and text notifications from synchronised smartphones.

The table below outlines the product features of each of Vita's five current fitness and activity trackers.

	LIBER	ACTIVUS	PAX	PRIMUS	CHORUS
<b>Features</b>	Clip-on Light-weight	Multi-purpose tracker for all types of activity. Automatic exercise recognition	For Yoga/ Pilates workouts and meditation tracking	Multi-propose tracker and heart rate monitor. Built-in GPS Automatic exercise recognition	Children's Fitness and Activity Tracker (8+ years)
<b>In-built GPS</b>		✓		✓	✓
<b>Step count</b> 	✓	✓	✓	✓	✓
<b>Distance</b> 	✓	✓	✓	✓	✓
<b>Floors</b> 	✓	✓		✓	✓
<b>Active Minutes</b> 	✓	✓	✓	✓	✓
<b>Calories burned</b> 	✓	✓	✓	✓	✓



	LIBER	ACTIVUS	PAX	PRIMUS	CHORUS
Activity Tracker 		✓		✓	✓
Heart Rate 			✓	✓	
Sleep Tracker 			✓	✓	
Notifications		Reminder to move	Reminder to meditate	Reminder to move  Text and call alerts (synchronised to smart devices)	

## Software and services

Vita's software and services, which include the mobile app and website, provide users with fitness and activity data and motivational and social tools.

### Vita mobile app and website

Vita offers all of its users access to its mobile app and website, where users can access a personalised activity data control hub, featuring a user's fitness data that synchronises automatically with, and displays data from, the user's fitness and activity tracker. The control hub provides users with a wide range of information and analytics, including charts and graphs of their daily activity and overall fitness progress. Both the mobile app and website are free and work with all of Vita's fitness and activity tracker models. Vita regularly updates and enhances its software to improve the information users receive.

### Other services

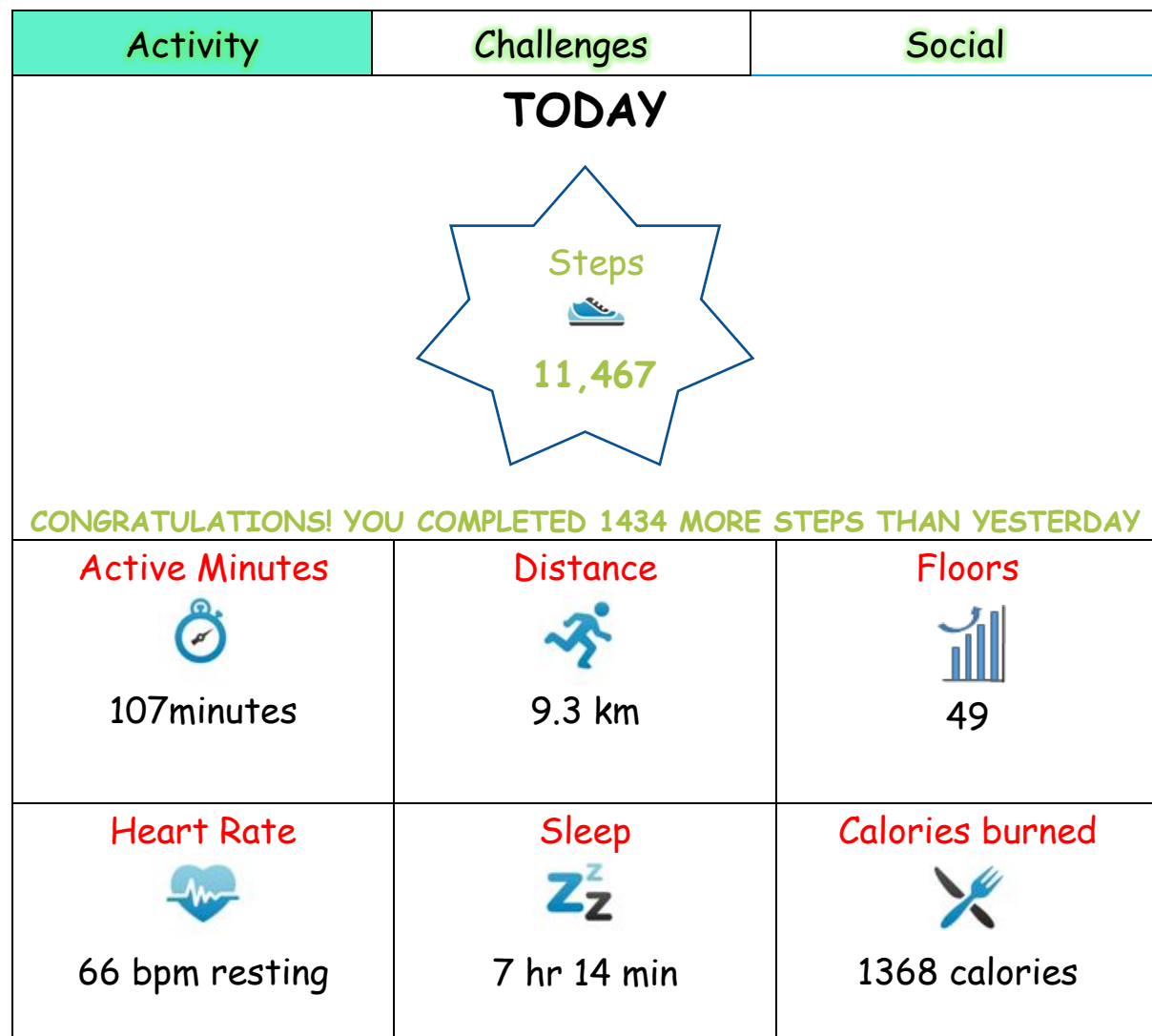
Vita recognises that a key aspect of sustained good health and fitness is to stay motivated. Vita encourages its users by delivering real-time feedback, including notifications, updates, and personal and community fitness challenges and workouts.

The mobile app and website also offer users social features that allow them to view and participate in a social feed and to receive and provide support from other users through specific health and fitness groups, such as running, yoga, cycling and healthy eating.

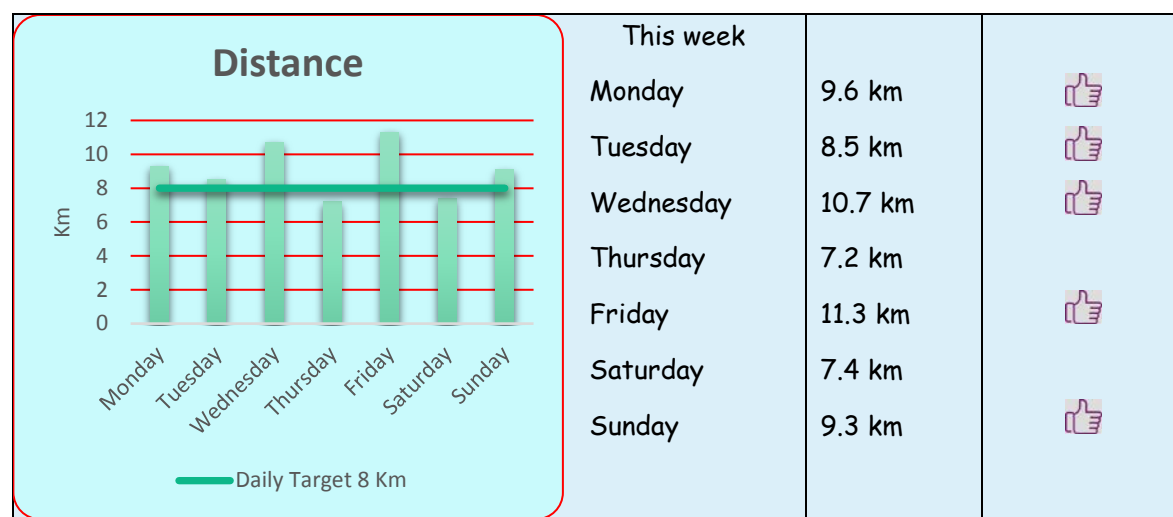
Users can securely share their health and fitness information on an opt-in basis with friends, family, and other parties and compete against each other on key statistics through daily or multi-day fitness challenges. In addition, users can choose to share their data with thousands of third-party apps and through social networks on an opt-in basis.

## Examples of visual displays on the Vita tracking devices

Vita's control hub can be accessed through both the Vita app and website.



Users can access more detailed activity information and graphics on long term performance by clicking on any activity icon in the control hub screen. For example:



## The manufacturing and sales processes

Manufacture of Vita's fitness and activity trackers is outsourced to two contract manufacturers, 'HJM' and 'Force', both located in the Asian country of Golandia, which assemble Vita's tracker devices in their facilities. The components used in Vita's tracker devices are sourced either directly by Vita or, on Vita's behalf, by the contract manufacturers. Component suppliers are located worldwide.

Vita's operations staff coordinate relationships with the contract manufacturers and component suppliers. Outsourced manufacturing enables greater scale and flexibility at lower costs than could be achieved if Vita established its own manufacturing facilities. The contract manufacturers and component suppliers are evaluated on an ongoing basis, including an assessment of whether to utilise new or alternative contract manufacturers or component suppliers to improve capacity and performance.



Vita has an excellent relationship with the two existing contract manufacturers. These organisations have grown alongside Vita and have been supportive and helpful when operational issues have arisen. For example, they extended credit terms to assist with cash flow difficulties in the early days of Vita and, more recently, have rearranged production schedules to support Vita's growth when inventory has run low. In return, Vita has provided help and advice to both contract manufacturers over the years, supporting the growth and expansion they required to meet Vita's ever-increasing demand.

Vita is aware that both suppliers are near to full capacity and it may need to investigate a third source of supply in the future, if the two current providers cannot expand their production capacities further.

Vita works with third-party distribution and logistics partners that deliver its products to multiple locations worldwide. This allows Vita to manage order fulfilment time, reduce shipping costs, and improve inventory flexibility. A small proportion of Vita product sales are made directly through the Vita website.

## Sales Channels

Vita sells its full range of products through three primary sales channels:

### 1. Retail channel

Vita sells its products in retail stores located in over 40 countries. It focuses on building close relationships with retailers, working with them to sell its products in a compelling manner.

### 2. E-Commerce retailers

Vita's products are sold on global e-retailer sites, in addition to the e-commerce sites of retailers.

### 3. Consumer direct channel

Vita sells its products directly to customers through its own online store, Vita.com

## Competitive environment



Vita operates in a highly competitive environment. Fitness and activity trackers have become extremely popular over the last ten years and the market has grown rapidly in this time. High market growth and good profit margins have attracted many organisations to operate in the market and rapid continual improvements in technology create a dynamic and challenging competitive marketplace.


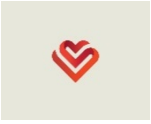
In recent years, competitive rivalry has further increased with the evolution of smartwatches, offering many of the functionalities of fitness and activity trackers, as well as having additional capabilities that fitness and activity trackers do not. Smartwatches are attractive to premium 'wearables' customers and present a real threat to companies selling top of the range fitness and activity trackers.

The distinction between what constitutes a fitness and activity tracker and what constitutes a smartwatch is becoming difficult to define. This presents both opportunities and threats to the current incumbents of the market. Fitness and activity trackers that add more of the functions of a smartwatch are growing in popularity, as customers increasingly demand more from wearable products.

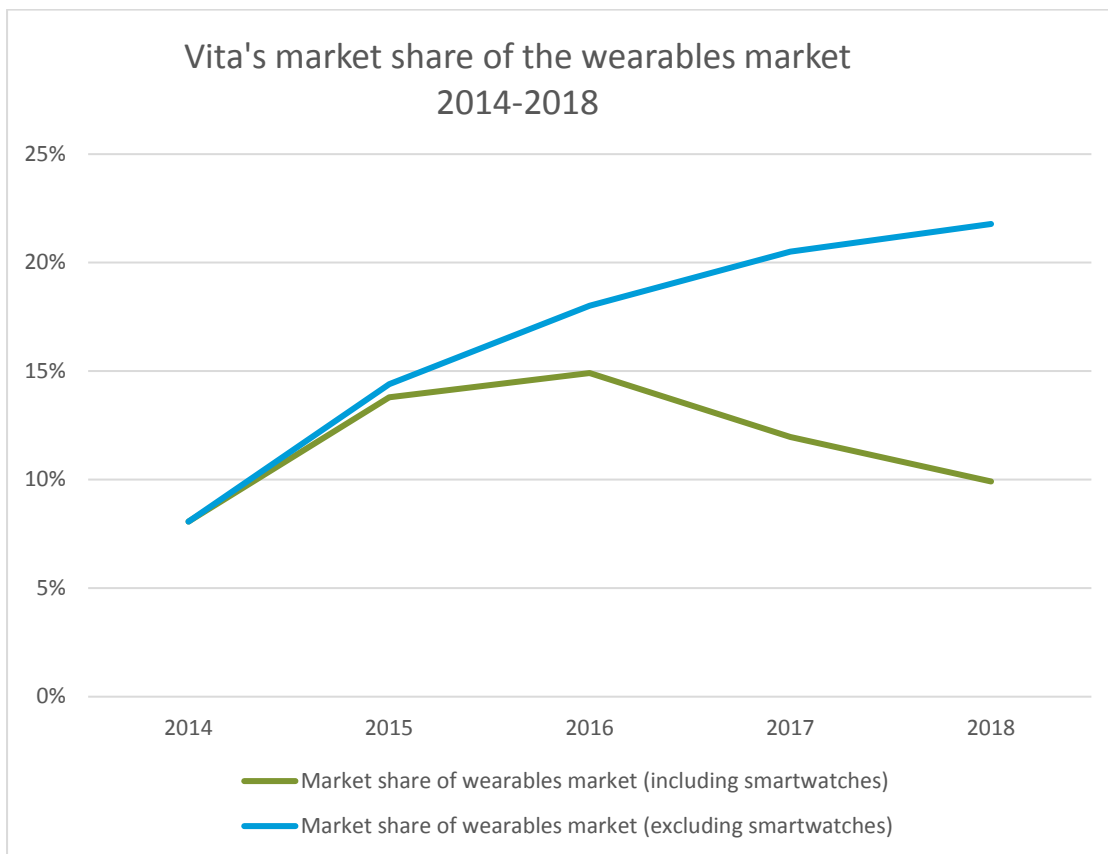
At the more basic end of the market, the competitive pressure is just as severe. Budget products from Asia are popular and offer customers a good entry point to the world of fitness tracking.

## Summary of key competitors

 <b>Funfitt</b>	Funfitt was one of the first organisations to launch wearable fitness and activity trackers and was the market leader in terms of units sold and market share performance in 2018. Funfitt has excellent sales growth performance every year and continually invests in product development. In 2016, Funfitt successfully launched "Funwatch", a smartwatch with highly innovative health and fitness tracking capabilities. The Funwatch has been highly successful, although Funfitt has struggled recently with product recall issues, which has damaged profit performance significantly. In 2018 Funfitt made an unsuccessful bid to acquire Gopher-IT. The Competition Authority in Funfitt's home country blocked the bid on the grounds that a combined company would be anti-competitive.
 <b>Clown</b>	Clown has been selling low cost fitness and activity trackers since 2014. Although Clown has dominated sales in Asian markets, products have been less popular across the rest of the world. Clown offers two models of brightly coloured fitness trackers that are inexpensive to buy. Clown generates new sales by regularly launching fresh colours rather than new product capabilities.

 <b>Gopher-IT</b>	<p>Launching in 2015, with a focus on smartwatches with technologically advanced capabilities, Gopher-IT products are high quality with a good reputation for reliability and performance. Gopher-IT invests heavily in research and development to be at the forefront of innovation. Gopher-IT sales performance has grown rapidly, presenting a serious challenge to Funfitt as market leader.</p>
 <b>Smart Heart</b>	<p>Smart Heart is a recent entrant to the wearables market, focusing only on smartwatches, and showing an impressive ability to steal market share since its inception in 2016. Smart Heart uses highly interactive mobile phone applications to support use of the fitness capabilities of its smartwatches.</p>

### Vita's market share graph



## Extract from Vita's Integrated Report

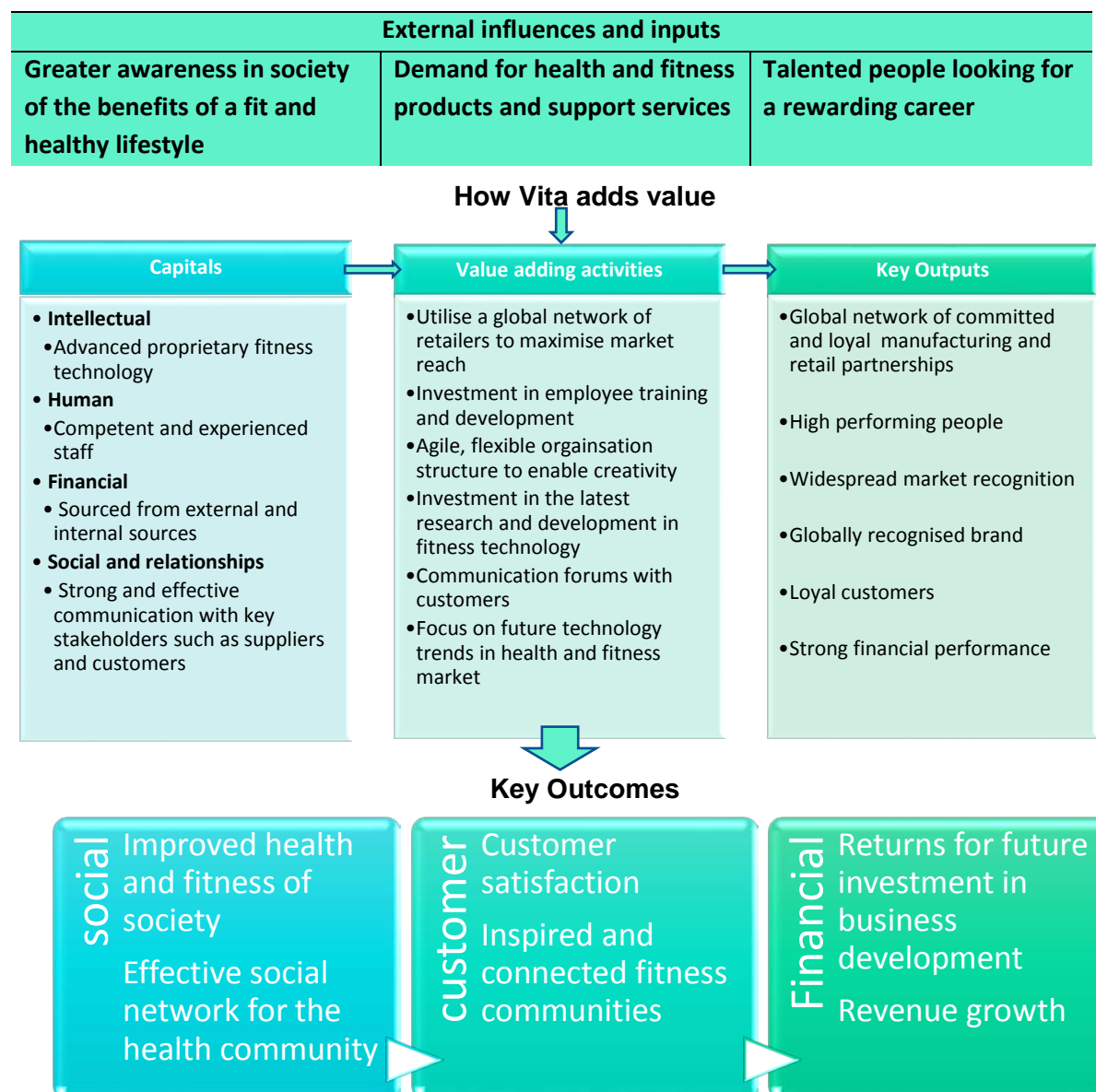
### Our Mission

To design and deliver fitness and activity trackers that motivate people of all ages and abilities to achieve their health and fitness goals. Our mission is to empower and inspire people to live healthier lives and make healthy choices through smart technology.

### Our Vision

Our vision is to be a leading global health and fitness social network organisation, dedicated to transforming people's attitudes towards health and fitness. We want to empower users to become healthier and more active throughout their lives. We aim to do this by developing innovative and accessible products and by playing a leading role in transforming the health and well-being of the global community, through our social networking facilities.

### Vita's value creation model



## **Our shareholders**

Our shareholders provide us with the financial capital to finance our future growth. Over the last two years we have built a strong relationship with our shareholders, through regular investor meetings, our annual general meeting and financial reporting. Our corporate website also now contains a detailed section of information for investors, which is updated quarterly. We aim to maintain a strong relationship of trust with our shareholders, as we strive to continue to grow the business.

## **Our people**

We strive to be considered one of the best employers in our industry. Vita encourages an atmosphere of openness and the mutual development of all our people without hierarchy. Talent management is crucial to ensuring both employee happiness and organisational success: without the freedom to make mistakes, learn, develop and evolve, our people cannot continue to develop market leading products with world class innovation.

An open-door policy for all employees ensures communication remains continual and of high quality. We want our employees to be inspired, adventurous and unafraid. This ensures that ideas continue to flow. We believe this approach is why Vita boasts one of the lowest employee turnover rates in the industry.

## **Our customers**

We aim to offer the highest quality products and services to our customers. We train our retailer partners to understand our products in detail so that they can offer our customers the highest levels of support and guidance during the buying process. Our website offers detailed information about all of our products and services and our customer care helpline is in operation seven days a week. We value highly the input of our customers and regularly carry out customer surveys through our app and website to gain on-going feedback and ratings on our products and services.

## **Our suppliers**

We have built strong relationships with the suppliers of our components and final manufactured products. This has enabled us to maintain reliable quality and delivery of products to our customers. We achieve this relationship through supplier relationship management meetings and regular visits, performance audits and reports, and technology conferences. It is vitally important to nurture our suppliers and ensure we look after them as much as they look after us.



## Extract from Vita's Integrated Report - Risk Register

To create long term value, we must anticipate the risks that may threaten our development and maintain an on-going dialogue with our internal and external stakeholders to identify these risks. Our risk management strategy is designed to drive better business decisions. We review the effectiveness of our risk management through the Audit committee. Updates to our risks and mitigation plans are made as necessary. The risk register utilises a scale whereby 5 represents high risk and 1 represents low risk.

Risk description	Likelihood	Impact	Overall	Mitigation Actions
Slowing sales growth rate due to <b>intense and increasing competition</b> in the marketplace, particularly from smartphone and smartwatch options.	5	5	25	Continue to assess the external environment for the activities and products of competitors, noting relative market share performance. Continual investment in research and development activities is vital to enhance products and remain leading edge.
<b>Litigation</b> from users of Vita products. This is most likely to arise from claims about product irritation, or product inaccuracies, and could lead to costly legal action and reputational damage.	2	4	8	Robust product testing remains central to our ethos with immediate investigation and response to any claims about issues with product safety or accuracy.
Changes in the <b>global economy</b> could impact sales and profit figures. Fitness and activity trackers are a non-essential discretionary spend and, hence, sales are negatively affected by deterioration in the global economy. Exchange rates movements also affect profitability.	3	3	9	We assess the global economy continually to look for signs of potential issues in the countries we supply and will remain alert to the requirement to ensure our product offering and pricing is appropriate to economic conditions in the countries in which we sell. Exchange rate issues are largely mitigated by our hedging activities.
<b>Data security</b> presents an ongoing challenge. The database that underpins all our information provision could be vulnerable to loss, disruption, theft or misuse.	3	4	12	Our database is managed and protected by a robust and experienced third-party supplier, which has significant systems to protect the security of our data.
Our marketing activity utilises <b>social media</b> . We are always at reputational risk if bad campaigns or publicity arise through social media.	5	1	5	We monitor our social media interactions constantly with dedicated resource and take quick action if negative publicity arises.
<b>A low inventory or stock out situation</b> arising from the two key contract manufacturers operating at near to full capacity.	4	4	16	This risk is continually assessed, and conversations with our two contract manufacturers are ongoing to ensure they can continue to meet our demand. It is clear that we may need to source a third supplier/rethink supply at some point in the near future if demand for units continues to grow. Other potential manufacturers are plentiful, although would be unlikely to deliver the seamless working relationship achieved with the current manufacturers.

## Senior Leadership Team



**Gal Yaluz, Chief Executive Officer, Co-Founder**



**Rhea Turner, Chief Operating Officer, Co-Founder**



**Darryl Menuhin, Non-Executive Chairwoman**



**Paul Pau, Chief Finance Officer**



**Guy Lynch, Chief Technology Officer**



**Rifat Talukder, Chief Marketing Officer**



**Bibi Rainbow, Head of Human Resources**



**Daisy Clements, Non-Executive Director**



**Bob Flint, Non-Executive Director**



**Pamela Simmons, Non-Executive Director**

## Extracts from Vita's Annual Report 2018 – Financials

The following information has been extracted from Vita's financial statements for the year ended 30 September 2018:

### Vita PLC

#### Income Statement

For the year ended 30 September 2018

	2018 N\$000	2017 N\$000
Revenue	4,006,768	3,588,843
Cost of revenue	(2,478,018)	(2,416,062)
Gross profit	1,528,750	1,172,781
Other operating expenses	(1,474,491)	(1,019,231)
<b>Operating profit</b>	<b>54,259</b>	<b>153,550</b>
Net interest received	229	3,102
<b>Profit before tax</b>	<b>54,488</b>	<b>156,652</b>
Income tax expense	(10,898)	(31,330)
<b>Profit for year</b>	<b>43,590</b>	<b>125,322</b>

## Extracts from Vita's Annual Report 2018 – Financials

### Vita PLC

#### Statement of Financial Position as at 30 September 2018

	2018 N\$000	2017 N\$000
<b>Non-current assets</b>		
Property, plant and equipment	48,071	46,338
<b>Current assets</b>		
Inventories	407,345	364,064
Trade and other receivables	1,127,164	950,601
Cash and cash equivalents	51,604	190,691
	1,586,113	1,505,356
<b>Total assets</b>	1,634,184	1,551,694
<b>Equity</b>		
Share capital	56,366	56,366
Retained earnings	514,410	470,820
	570,776	527,186
<b>Non-current liabilities</b>		
Loans and borrowings	22,766	19,861
<b>Current liabilities</b>		
Payables < 1 year	1,040,642	1,004,647
	1,634,184	1,551,694

## Extracts from Vita's Annual Report 2018 – Financials

### Vita PLC

#### Statement of Cash Flows for the year ended 30 September 2018

	2018 N\$000	2017 N\$000
Operating profit	54,259	153,550
Depreciation	27,015	20,690
(Increase) / decrease in Inventories	(43,281)	(97,343)
(Increase) / decrease in Trade Receivables	(176,563)	(199,810)
Increase / (decrease) in Trade Payables	56,272	281,336
<b>Net cash (outflow) / inflow from operating activities</b>	<b>(82,298)</b>	<b>158,423</b>
<b>Finance costs</b>	229	3,102
<b>Taxation</b>	<b>(31,330)</b>	<b>(35,525)</b>
<b>Proceeds from listing</b>	<b>0</b>	<b>53,000</b>
<b>Capital expenditure</b>	<b>(28,748)</b>	<b>(19,535)</b>
Net loan movements	3,060	(86)
<b>Net (decrease) / increase in cash and cash equivalents</b>	<b>(139,087)</b>	<b>159,379</b>
Cash and cash equivalents brought forward	190,691	31,312
<b>Cash and cash equivalents carried forward</b>	<b>51,604</b>	<b>190,691</b>

### Note excerpts

#### *Research and development*

Research and development expenses (included in other operating expenses) increased by N\$354m from N\$287m in 2017 to N\$641m in 2018. This was due to a significant planned increase in headcount dedicated to research and development work, overheads, prototype work and the travel and third-party expenses associated with our extensive and growing research and development operations. All research and development costs were expensed.

#### *Dividends*

Vita follows a policy of high levels of reinvestment and has never paid any dividends. We intend to continue this policy and have no plans to pay any dividends at present.

#### *Payables < 1 year*

Payables < 1 year includes short term debt of N\$1.321m in 2018 and N\$1.165m in 2017.

## Are health and fitness management programmes set to revolutionise the workplace?

### Online Technology Insight

Businesses around the world have been lining up to fit their employees with fitness and activity trackers. Thought of as an employee benefit, they're handed out as part of company-wide health and fitness management programmes, where teams of workers can get together and compete on daily, weekly and monthly challenges. The aim is to encourage fit and healthy employees.



Be it steps, number of calories burned, or miles covered, personal fitness data can be used by individuals and business managers to help encourage more active lifestyles and motivate improved personal performance. The theory is that a healthier workforce is a happier workforce and, therefore, is more productive - a win for the workers and a win for the company. Not too dissimilar to the ideas behind company exercise regimes

that are characteristic of Japan.

In a similar development, several state health departments in the North American country of Larland have collaborated with Funfitt, the world's leading fitness and activity tracker manufacturer, on health and fitness management programmes within a number of its hospitals. In an attempt to tackle the high rates of obesity and inactivity of hospital staff, Funfitt is providing hospitals with not only their fitness and activity tracker devices, but is also providing a tailored data management and analysis service, presenting the hospitals and staff with a wide range of performance metrics. This includes programme participation levels and engagement data, proportion of employees meeting, exceeding, or falling below programme activity goals, activity level trends, group reporting on steps, floors climbed, active minutes, and distance and online motivational and coaching tools.

It would seem that the next big thing in fitness tracking won't be the hardware itself. It's more likely to be a shift towards a focus on providing detailed analysis of the data collected from the devices, to produce meaningful health and fitness feedback to inspire users to reach and maintain their long-term health goals.

# Newland Times

Global Business News

## Fitness tech firm facing legal action

**Clown, the Asia based fitness tech firm, is facing legal action after being accused of putting customers in danger with ‘wildly inaccurate’ heart rate readings.**

Clown, one of the leading global names of wearable fitness technology, sells wearable gadgets that claim to track various data including the number of steps taken, calories burned and heart rate. A lawsuit brought against the company by a number of users in North America claims that its fitness and activity trackers ‘consistently mis-record heart rates by a very significant margin, particularly during exercise’.

The wrist-based trackers use basic technology to measure changes in blood flow, which are then converted into heart rate data. The claimants accuse the company of misrepresenting its products through its advertising, where it claims that the gadgets ‘consistently record accurate heart rates’.

One claimant, who had been advised by his doctor not to exceed a heart rate of 150bpm due to health problems, claims that his device misread his heart rate by as much as 25bpm.

Clown strongly denies the claims stating: “We stand behind our heart rate technology and strongly disagree with the statements made by the complainant and plan to vigorously defend the lawsuit”.

The company goes on to claim that its trackers provide better heart rate data than gym cardio machines, but also states that its products are for measuring fitness stats and shouldn’t be treated as medical devices. It states: “It’s also important to note that trackers are designed to provide meaningful data to our users to help them reach their health and fitness goals. They are not intended to be scientific or medical devices”.



## Smartwatch market research news.

The Wearable Tech Research Institute (WTRI) published a research report earlier this week on the global wearable fitness tracking devices market and predicted that the market is expected to grow at a double-digit compound annual growth rate (CAGR), forecast till 2022. WTRI also noted that fitness smartwatches are seeing significant growth, while continuing to deliver consistent sales volumes over the past few years.

Chief Researcher at WTRI, Pablo Jiminez, stated 'It is clear that smartwatch manufacturing companies have recognised the success of performance fitness devices and have implemented more and more fitness features into their own smartwatches to broaden their appeal'. He continued, "There is currently an air of cautious optimism among smartwatch makers, especially as sales of fitness and activity trackers appear to be slowing."

WTRI also reported that smartwatches designed to allow parents to track their children, which is primarily an Asian phenomenon at present, are a growing smartwatch segment in volume terms. Jiminez commented, "We've witnessed healthy growth in the kids watch segment in Asia and expect that growth to continue for some years to come".

## Wearable Tech – Health blog

### Could your wrist save your life?

New developments in the technology available to fitness tracker companies could soon mean that the small and insignificant piece of plastic on your wrist tracking your daily steps could save your life!



This may sound like fanciful science fiction, but 'Gopher-IT', a leading provider of wearable fitness tracking technology, is currently undertaking studies into technology that will allow their wrist-based devices to detect changes in blood sugar levels. This could be useful in detecting diabetes in the general population.

Gopher-IT CEO, Sandra Choo, notes, "At the moment we focus on basic health metrics, such as heart rate. We hope that, in the future, we will be able to offer customers so much more than this, detecting changes in blood sugar levels that will drive our users to visit the doctor for further tests. This could help the management of Type 2 diabetes, a global health problem."