

Mathieu Letombe

Withings is bringing medical-grade tech into people's homes

Jessica Ennis-Hill

Mapping women's training to their menstrual cycles

Adrian Hon

The creator of Zombies, Run! on the power of storytelling

LAURENT PETIT

The co-founder of the Active Giving app is using fitness to help the environment





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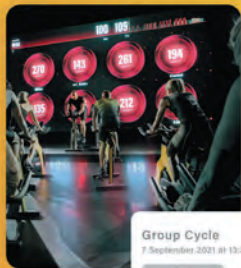
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PAY



Group Cycle
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Group Cycle
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BOOK

12 places available

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Two-way coaching

Content providers have been hugely active in the fit tech market since the start of the pandemic. We expect the industry to move on from delivering these services on a 'broadcast-only' basis as two-way coaching becomes the new USP



Does the acquisition of VAY by Nautilus confirm we're at the dawn of a new era in fit tech? We think it does.

VAY is a specialist in AI and motion capture and its proprietary technology enables computers to understand human movement using cameras, such as those built into smart phones.

VAY then provides personalised, AI-driven feedback on reps and form, in real-time, to coach the user and improve their exercise outcomes.

Nautilus plans to integrate VAY into its JRNY platform to offer coaching and form tracking and expects the upgrade to enable it to scale JRNY to the point where it represents 20 per cent of revenues by 2026.

Before the acquisition, VAY was system agnostic, but it's not yet clear whether Nautilus will share VAY or keep it solely for its own use.

Up to this point, the majority of digital fitness offerings from both B2B and direct-to-consumer providers have deployed a one-way model – either live or on-demand – where participants 'consume' content but have little or no engagement with the provider.

Even where some level of interaction has been possible, this has primarily been set up for general engagement and has not typically delivered technical coaching to the user.

We're now expecting other content providers to graduate from a broadcast-only model to a two-way coaching model as rapidly as they can.

The fit tech sector is growing fast, with investments announced seemingly every week, making it a highly competitive market.



The acquisition of VAY enables Nautilus to deliver live feedback

We expect content providers to move to providing two-way coaching as rapidly as they can

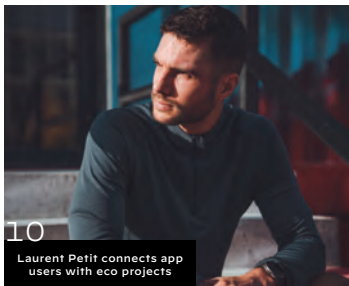
As a result, it's ever more challenging for companies to gain a clear competitive advantage – and build a strong investor story – in this space.

The advent of increasingly sophisticated AI is bringing technical coaching within the reach of more fit tech content suppliers and as a result, we expect two-way services to emerge as a new and powerful USP for the early adopters, as the drive to stay ahead continues.

There will be a race to acquire businesses such as VAY that can deliver ready-made solutions, heralding a new period of disruption in the fast-emerging fit tech sector.

● More www.fittechglobal.com/VAY.

Liz Terry, editor, FitTech @elizterry



© KAHN/USEA

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Laurent Petit connects app users with eco projects



© AURO

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Pattabiraman created Auro



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Jessica Ennis-Hill is helping women to better understand their monthly cycles



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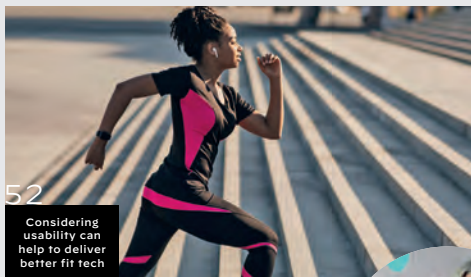
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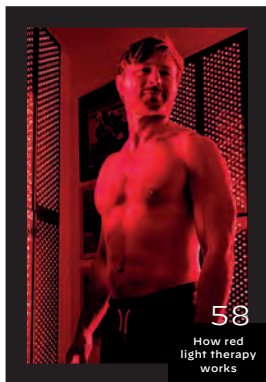
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FitTech PEOPLE



The future of sports and fitness are dependent on the climate. Our goal is to positively influence the future of our planet by instilling a global vision of wellbeing and a sense of collective action

Laurent Petit Co-founder, Active Giving

What is Active Giving?

Active Giving is a social fitness platform for good, which enables individuals to improve their personal wellbeing while contributing to the wellbeing of our planet. With the Active Giving fitness app, users can log their fitness and sport activities to support social and environmental projects.

By rewarding calories burned or kilometers covered with trees planted, Active Giving creates a sense of stewardship towards oneself and towards the planet, while promoting forward-thinking companies that seek to create positive brand awareness through sustainability-related marketing campaigns.

Active Giving wants to inspire people to live active and eco-conscious lives, engaging them in physical activities that not only benefit their own health but also the health of our planet, as these two are fundamentally linked.

Where did the idea come from?

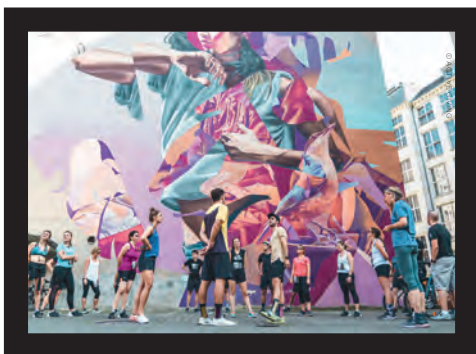
Back in summer 2018, I organised my third solo cycling tour through Europe, and this time I wanted to raise awareness and money for a social project. I realised that it was quite difficult to manage such a campaign while cycling and to engage people in giving money for a cause they perhaps

didn't feel connected to, or didn't have the financial resources to support.

While on my bike – I was cycling around 150kms a day – I thought, what if I could ask my community to cycle (or be active) with me from any place in the world, so that their activity, rather than a financial donation, could contribute to a cause. That's when the idea of creating Active Giving came to me – to create a platform where physical activities can be turned into funding to support causes.

And how did you turn this idea into a reality?

As a sport and fitness enthusiast, I have always been amazed by the power of sport to unite and bring communities together. I've created different communities in the running and fitness scene in Berlin, Germany. So I started to organise events such as Urban Art Run, where we were collecting kilometers or calories burned and exchanging them into funds for different charitable



Petit organised Urban Art Run, which inspired the Active Giving app



Laurent Petit aims to inspire people to lead an active and eco-conscious life



- organisations with the support of brand and corporate partners.

I also created a campaign on Instagram in summer 2019, which, for every fitness activity result shared in an IG story with the tag @active.giving, I would plant a certain number of trees. This went viral in Germany and some other countries – and after presenting the idea and winning during a Techstar Sustainable Start-up weekend, I realised it had the potential to become more. Then I gathered a team and we started to work on what became the Active Giving app, which was launched in 2020.

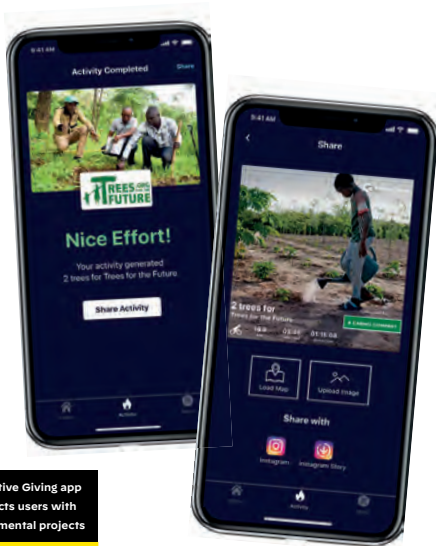
Tell us about the financial model

The Active Giving app is free for the users and works as a marketing platform for forward-thinking brands and companies who wish to support the active lifestyle of our users, while contributing to green projects.





The Active Giving app connects users with environmental projects



“Users can choose from six different projects to fund with their activities. They can also create their own team

Our app offers brand and logo placement to companies when a user starts and completes an activity in-app. Part of the revenues that Active Giving generates through logo placement is then invested into different social and environmental projects. The other part is invested into the company's operations.

Apart from helping to fund environmental projects, what are the benefits for users?

Users can choose from six different projects to fund with their activities. Meanwhile, our Team functionality allows users to create their own team and challenges – this a tool that is aimed at creating more awareness about our planet and the importance of maintaining good health within a specific community.

By joining Active Giving, users have access to our network of

#activators – our ambassadors – and can take part in Active Giving virtual classes and events as well as receiving affiliate benefits from our partners.

Our amazing community of users has now passed the bar of 225 million calories burned, and has helped to plant more than 50,000 trees with their fitness activities.

Do you plan to add more features or to upgrade?

Yes, it's in our DNA to improve our services and product. We are planning to enable more interactions between users on the app, connecting users from all around the world. We'll onboard new not-for-profit partners and allow users to financially support the projects they choose. We will

also allow more integrations for our partners' offers as well as integration with other fitness trackers.

What are your future goals for the app?

Our goals for the app are to become the daily companion of every individual wanting to maintain good health and have a positive impact on the world. We would love for the app to be integrated with worldwide sport competitions and organisations. The future of sports and fitness are dependent on the climate and the conditions of our living environments. Our goal is to positively influence the future of our planet by instilling a global vision of wellbeing and a sense of collective action. ●



We don't just create the technology and bail – we support our clients' ongoing hybridisation efforts

Adam Zeitsiff CEO, Intellivideo



Before joining Intellivideo, Zeitsiff led the resurgence of Gold's Gym

Can you give us an overview of your career background?

I've spent my 25-year career leading various organisations in the fields of technology, fitness and other multi-unit business environments. I'm all about accelerating company growth through strategy, innovation and execution.

Prior to joining Intellivideo, I served as the global president and CEO of Gold's Gym, and I'm proud to have led its resurgence as the world's most recognised fitness brand. Now with Intellivideo, I'll be drawing upon all my years of fitness technology and club operating experience to put us in a leadership position as a trusted partner to gyms and health clubs worldwide.

What attracted you to the CEO position at Intellivideo?

Intellivideo is the perfect home for me at this stage in my career, given my multiple experiences as an entrepreneur in the technology sector, along with my passion for digital transformation – particularly in the fitness space. For some time now, I've been a vocal advocate for the 'hybridisation' of fitness clubs.

Just as all marketers like to be omni-channel in their approach, fitness businesses need to do the same in delivering their services, in order to remain relevant in the ever-evolving digital world we now live in. Intellivideo is making that digital approach to fitness more feasible than ever for the fitness industry, and I'm excited to be a part of leading this continued digital transformation at a time when it's really become a necessity for the future of fitness.



Intellivideo aims to help fitness businesses remain relevant in today's digital world



Intelivideo works with clients to develop digital platforms that enhance member experience

What is Intelivideo?

Intelivideo is a video-on-demand, live streaming and digital platform for gyms, health clubs and fitness businesses. Our end-to-end solution creates a robust digital subscription offering to complement bricks-and-mortar fitness facilities and services. Ultimately, we provide the means for fitness brands to enhance their member experiences with state-of-the-art digital technology.

We specialise in client services, including fitness content strategy, marketing and engagement. It's important to understand why people join and, more importantly, why they stay, so we don't just create the technology and bail. We support our clients' ongoing hybridisation efforts, collaborating with them to help create the most effective fitness business model possible for the modern age.

What has Intelivideo's journey been up until now?

Intelivideo began as a brandable subscription video on demand platform. While on-demand content can serve as a healthy business option for many industries, we noticed it

“ We give our clients new revenue streams that can counteract the negative effects of mandated shutdowns of their physical clubs

was especially valuable for the fitness industry, as members were already using online content to work out, despite the fact that many leading fitness brands were not yet offering any video options.

As a company, we've focused on the health and fitness industry for the past three years and have built a strong foundation as a leader in this space.

What impact can Intelivideo have on a fitness club's business?

As numerous clients have told us, the impact our services can make on a brick-and-mortar club business is profound, in many cases it's been the key ingredient to helping them stay afloat during the global pandemic.

By developing digital fitness platforms with them, we give our clients new revenue streams that can

counteract the negative effects of mandated shutdowns of their physical clubs. And best of all, this trend won't be limited to a pandemic environment – the 'new normal' for fitness businesses will be a hybrid of in-club and digital offerings.

What are your plans for Intelivideo's future?

Since taking on the CEO role at Intelivideo back in October last year, I have focused on rapidly expanding our sales, marketing and success teams to help accelerate growth. We doubled our revenue in 2020 compared to 2019, and we project we'll do the same in 2021 if we continue at the rate we're going. Our team is focused on embedding ourselves into the fitness industry ecosystem, and we have a clear path for long-term success. ●



When you're undertaking fitness activities, unless you're on a stationary bike, in most cases it's not safe or necessary to be tied to a screen, especially a small screen

Anantharaman Pattabiraman CEO and co-founder, Auro

What was your background before co-founding Auro?

I was an algorithmic trader for Goldman Sachs, where I spent 11 years before starting Auro. Since childhood, sports and fitness have been my passion and I've played all kinds of sports including cricket, football and badminton.

How did the idea for Auro come about?

While I was at Goldman Sachs, I really struggled to find as much time for team sport and instead took a keen interest in running. I was looking for a coach and I struggled to find a good one that would work around my ridiculous schedule. I had been exposed to the boutique fitness class concepts in London and I wanted to bring the boutique style of training and motivation to people like myself, who need it on demand.

I wanted to build a consumer-focused product that would bring best-in-class training and technology and deliver this at scale with personalisation.

How did you and Karthik Narayanan come together to co-found Auro?

Karthik and I are distant cousins and we have known each other since childhood, having been in the same school as well. He had gone on to work

for a bunch of great tech companies including Qualcomm and Samsung so I knew he would be the right partner for me in this venture.

What exactly is Auro?


Auro is a connected fitness/wellness app. We provide on-demand classes in 11+ categories for fitness or wellness for the home, gym or outdoors, with

new classes every week. The classes are led by experts in their field – you can train with ex-Olympian Ben at home using body weight or go for a guided run with our triathlon coach Lucy, or just find your zen with Michael in a meditation class.

Music is such a key aspect of a fitness class and most products just make you listen to stock music. We



Pattabiraman was an algorithmic trader at Goldman Sachs for 11 years



Auro provides users with audio instruction from Olympians and expert trainers

work with our trainers to make killer playlists, similar to a boutique studio class, but if you don't like our music then you can overlay your own from Spotify, Apple or Amazon music.

We also connect with 20+ devices so you can track all your metrics in real time and really understand your progress with Auro.

Why did you choose to create fitness instruction without a screen?

When you're undertaking fitness activities, unless you're on a stationary bike, in most cases it's not safe or necessary to be tied to a screen, especially a small screen.

When you run, do burpees, meditate or even do yoga, it's not a great experience to keep squinting at a tiny screen. Even when you do yoga in a studio, chances are you will never see the coach unless you're at the front.

We do understand that for many users, particularly those that are new to fitness or new to a particular discipline, they will need some visual assistance, so all of our posture-based classes offer video guides which are designed to help users to master the moves before they jump into the class. However our belief is that once you start the class, your trainer should be able to guide you completely, solely through vocal instruction.

Our mantra for users is 'stop squinting, start sweating'!

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Since 2018, we've grown to 170,000+ users in more than 50 countries. I'm so happy to see that we're helping so many people

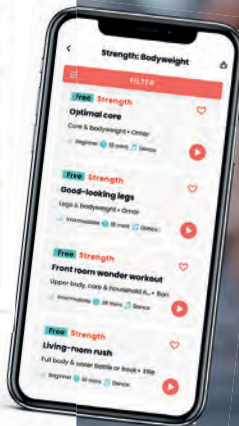
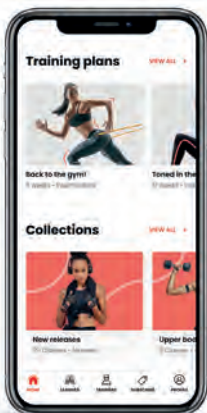
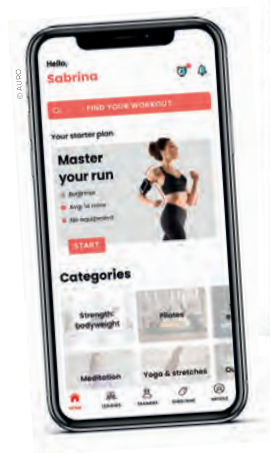
How has Auro evolved and grown since you launched in 2017?

We launched the product in 2017 as a video livestreaming product and then we relaunched in 2018 as an audio product. Since 2018, we've grown to 170,000+ users in 50+ countries.

We have large diversity in our userbase, be it age, sex, geography or income. We're reaching a wide base of users and I'm so happy to see that we're helping so many different people.

We started out with just running classes but now we have nearly 700 ▶

The app features training sessions in 11 categories, from running to meditation



“

COVID-19 has accelerated the growth of digital substantially; I believe there will be multiple winners in this category

- classes across 11 categories, with everything from walking, to strength training, to meditation, to sleep.

How do you keep the content fresh and interesting?

We're recording content every other day and there are new classes being released every week – that's one of the key value propositions for our members. There's always fresh content to look forward to.

Since we started we've significantly expanded our offering based on

requests from our customers – recently we added stair climber workouts for the gym, stress relief and sleep classes for those dealing with the effects of the pandemic, and pilates classes for those with bad backs from sitting on a chair all day at home.

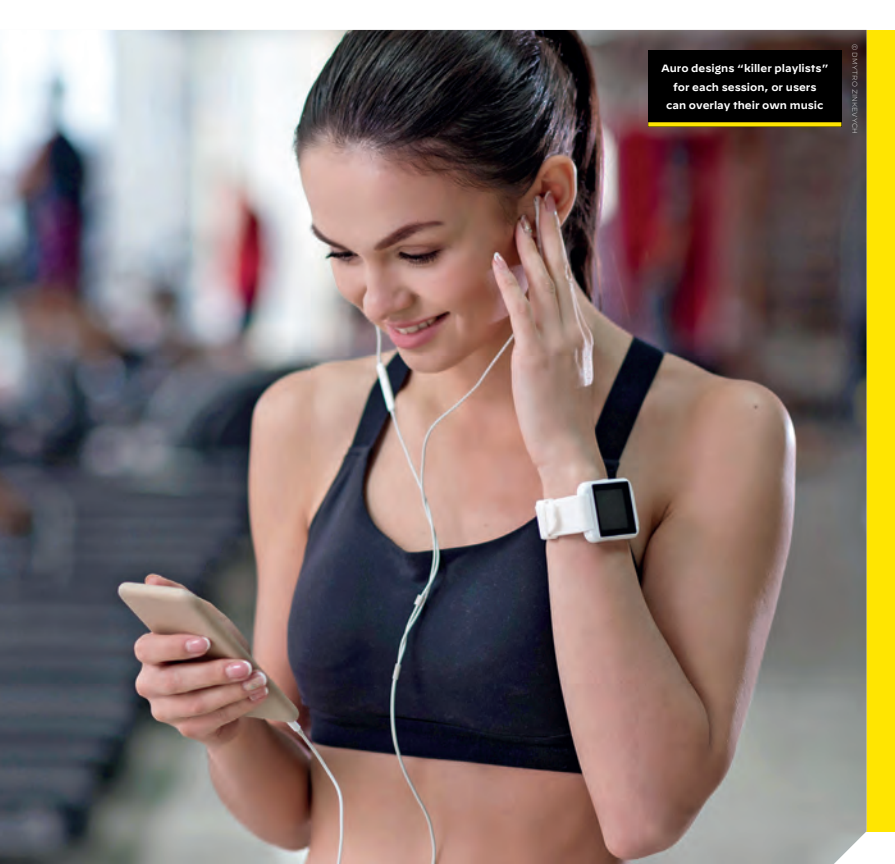
Tell us about Auro's newest features and upgrades. Why were these priorities?

Last year, we added running tracking for all our outdoor runs so users can track their pace, distance, route and

time splits all from inside the app. So when you can see a threshold run, you can actually see in real time what that threshold pace is and see it improve as you progress.

We have also added integration with Apple and Amazon music so users can overlay their own playlists from these services with the voice of the coach.

These were both driven by requests from our consumers – requests play quite a significant role in terms of shaping new product features and class content for our business.



Auro designs “killer playlists” for each session, or users can overlay their own music

© DAMIRTO ZAROVICH

What technologies do you use to personalise and optimise the service for individual users?

We use recommender algorithms that take user data, their preferences, their previous consumption and consumption of other users with similar goals to personalise the content and programming for the users.

We are also seeing an increasing percentage of users using wearables to track their workout metrics and we’re working on some big upgrades that will allow us to use their wearable data to

further personalise the workouts to the fitness level and goals of users.

What’s the average length of time that users continue their membership for?

Ninety per cent of our users stick around for at least a year, with a significant percentage of them staying with us for longer. We’re still quite a young company but if the response from our existing users is any indication, our retention numbers are very, very good.

What are your plans for Auro?

There are 60 million gym members in Europe and 100m+ others who are physically active so the opportunity is massive. We want to grow our subscriber base by 10 times over the next two years. As ambitious as that sounds, I believe that’s totally possible.

COVID-19 has accelerated the growth of digital substantially and today’s consumer is much more conscious of their health and overall wellbeing. I believe there will be multiple winners in this category. ●



We noticed a big gap in the market – customers needed better insights but also recommendations on what to do, whether that be customer acquisition, content creation, marketing and more

Mike Hansen Managing partner, Endorphinz



Hansen says Endorphinz noticed a big gap in the market

What is Endorphinz?

Endorphinz is a full-service fitness streaming agency that helps fitness brands and fitness creators to go online, develop engaging content and monetise and grow their business. We're a fully-integrated horizontal service provider, offering all the services needed to be successful online.

Tell us about the company's journey

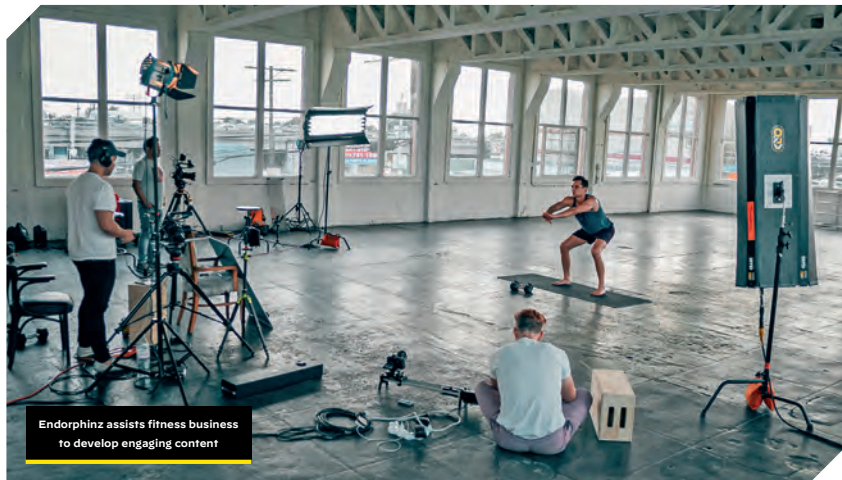
Our journey started with people first; we built the company with experts in each vertical, from strategy to platform development to content creation to digital marketing. We then doubled down on content and built up a content suite model to get studios production-ready, providing every creative content service one needs. We ensured flexibility in the content production side with onsite, remote and post-production support.

We've since released Endorphinz.AI, which is our platform to help businesses operate and optimise these businesses. We noticed a big gap in the market – customers needed to have better insights but also recommendations on what to do, whether that be customer acquisition, content creation, marketing and more.

We built the platform to be that primary tool that customers use to run and scale their business, as it not only provides the insights but also predictions and recommendations that we can help them execute faster.



Endorphinz.AI provides insights, predictions and recommendations



**Endorphinz assists fitness business
to develop engaging content**

“ We built the platform to be the primary tool that customers use to run and scale their business

How was it developed?

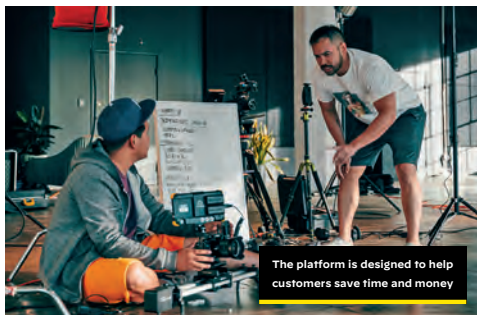
The platform was developed with an AI development group and our team of experts to focus 100 per cent on fitness streaming.

The biggest challenge we're facing with this is that not all platform groups are created equally and there are a lot of gaps in the data that we have to work through, as one of these customers might have between six and eight different databases with data that is applicable to their business.

What measurable differences could Endorphinz.AI make to a client?

One of the main things we've seen is huge savings in time. The original way customers would go about this would be gathering reports, and then if they had time they would have to analyse these reports to see what it all said.

They also save money, as previously they would have to call a consultant, such as us, to ask for recommendations. Now they save that money and don't have to spend as much time with us to make these decisions.



**The platform is designed to help
customers save time and money**

How do you plan to keep improving this side of the business?

We have a product roadmap that will expand our AI-driven recommendations and then in the not-too-distant future we will move into a service that assists in the execution of those recommendations.

How is Endorphinz.AI different from competitors?

Endorphinz.AI is 100 per cent focused on fitness streaming, so we have a more in-depth knowledge base. We started on this in 2019 before COVID-19 was around, so we had a head start on this market shift and gained insights both before and during COVID. ●

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The background of the entire poster is a blurred photograph of a gym. In the foreground, a laptop is open on a light-colored table. The text is overlaid on this image in various colored boxes and angles.

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FIBO.COM

The introduction of Fiit studio classes and Fiit pods helps us to bring immersive fitness to our members around the clock

Barney Harrison

The Gym Group launches interactive HIIT studios in partnership with Fiit

The Gym Group has extended its partnership with digital fitness platform Fiit, becoming the first budget gym operator to offer its members a

hybrid club-in-club option.

Seen as a merging of the world of digital fitness and traditional brick-and-mortar health clubs, the deal will see the introduction of the first Fiit Pod interactive fitness studios in the UK.

Launching at three flagship Gym Group clubs – Oxford Street and White Hart Lane in London and Altrincham in Cheshire – the new offering will be the first time Fiit has been accessible outside of the home and within the walls of a health club.

New technology

The Fiit Pods will offer group HIIT training with Fiit equipment and bodyweight group classes scheduled throughout the day, accommodating up to 20 people per class.

Fiit will be deploying its newly-launched interactive fitness technology, which creates a fully interactive fitness experience.

While the interactive in-gym experience is already available on spin bikes, this will be the first time in the UK that live-streamed leaderboards will be available for HIIT workouts within any gym, according to the partners.

It is the latest example of how the pandemic and consumers' shifting training habits are influencing the way fitness operators look to attract, engage and retain members.

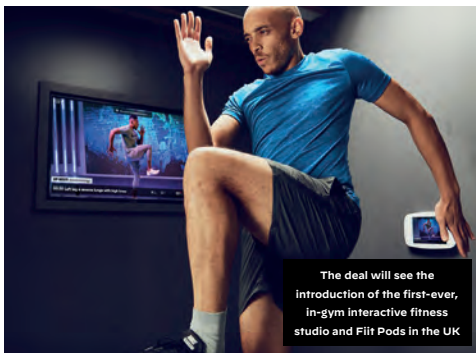


PHOTO: THE GYM GROUP

The deal will see the introduction of the first-ever, in-gym interactive fitness studio and Fiit Pods in the UK

The pandemic has resulted in a large percentage of gym members seeking hybrid solutions which provide convenient access to workouts – at home, in the gym or on the go.

Breaking down barriers

Barney Harrison, CCO of The Gym Group, said: "Our purpose as an organisation is to break down the barriers to fitness for all.

"The introduction of Fiit studio classes and Fiit pods helps us to bring expert instruction, added motivation and an immersive fitness experience to our members around the clock.

"We have worked hard to be in a position to be the first UK gym operator that can host the Fiit live

leaderboard HIIT classes alongside its extensive library of classes."

Fitness for all

Dan Shellard, CEO of Fiit, said of the partnership: "We're hugely excited to be rolling out the UK's first interactive studios to the nation.

"As we continuously seek to transform the lives of many by providing a credible and affordable solution to working out anywhere, this is a natural evolution of our ongoing partnership with The Gym Group."

The existing partnership between Fiit and The Gym Group has seen Fiit being made available – at home – to those with a Gym Group membership.

■ **MORE:** <http://lei.sr/b0i6s>



PHOTO: CLAUDE

During the quarter, Garmin launched its Forerunner 945 LTE, bringing real-time tracking features to its premium GPS running smartwatch

Garmin grows fitness segment

Garmin recorded quarterly revenues of more than US\$1bn for the first time – helped by a 40 per cent increase in revenue from its fitness segment.

Reporting its Q2 2021 results, Garmin said the growth in its fitness arm was driven by strong demand for its cycling and advanced wearable

products. As a result, operating income from its fitness business increased by 62 per cent.

During the quarter, Garmin launched its Forerunner 945 LTE, bringing real-time tracking features to its premium GPS running smartwatch.

Designed to add a safety element, the watch is designed to allow runners to send for help, if necessary, and stay connected without their phones.

In total, Garmin reported Q2 revenues of US\$1.33bn – up 53 per cent from the US\$880m recorded in Q2 2020.

■ **MORE:** <http://lei.sr/a7O7t>

Operating income from Garmin's fitness business increased by 62 per cent

Arena secures US\$5.2m funding

Fitness startup Arena Innovation has secured US\$5.2m worth of seed funding, as it looks to launch its robotically-assisted resistance training product to the market.

Investors include Wellness Holding, the investment office of the founders of Technogym, Courtside Ventures and Powerhouse Capital.

Angel investors also included Equinox Group co-founder Lavinia Errico, Anthony and Joe Vennare of Fitt Insider, New York Jets wide receiver Braxton Berrios, and Russ Angold, co-founder and former CTO of Ekso Bionics.

Founded in 2020, Arena offers a portable, robotic fitness platform developed by specialists in hardware automation and exercise.

With the aim of revolutionising strength training, the platform weighs



PHOTO: ARENA INNOVATION

The robotic fitness platform is capable of generating more than 200 (91kg) pounds of resistance

around 60 pounds (27kg) and is capable of generating more than 200 (91kg) pounds of resistance.

Users can control the resistance and follow workout classes via an app.

■ **MORE:** <http://lei.sr/q8S6p>

myFitApp chat

myFitApp has launched a new chat function to its streamed fitness content, making it easier to create communities online.

The tech firm, which markets itself as a hybrid business platform for club operators, will now allow users to chat live with instructors, enabling them to ask questions. In return, instructors have the opportunity to offer feedback during and after the workout.

Users can also chat to other participants.

■ **MORE:** <http://lei.sr/w3F8R>

TRX ups digital

TRX has launched a redeveloped version of its TRX Core digital platform, designed to help fitness professionals and PTs run their businesses better.

The TRX Core allows PTs to communicate and train clients, generate leads, earn Continuing Education Credits (CECs) and scale their business beyond brick-and-mortar health clubs.

It also has continuing education programmes.

■ **MORE:** <http://lei.sr/A2p3l>

Myzone-TRX deal

Myzone has signed a partnership deal with TRX, which will see the wearable tech firm become the heart rate monitor partner of the suspension training specialist.

The deal will see both Myzone and TRX communities being offered deals on new accessories.

David Stalker, CEO of Myzone EMEA, said: "Myzone and TRX have gone hand-in-hand for years in many gyms around the world.

"With heart rate and suspension training so mutually beneficial, it made perfect sense to partner up."

■ **MORE:** <http://lei.sr/G5o8t>

We're seeing more demand for concise, informative content on wellness

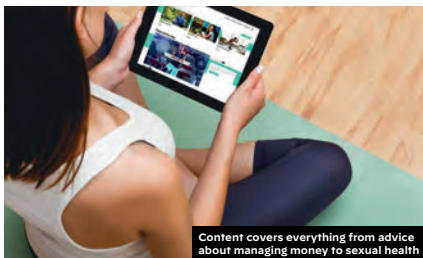


PHOTO: WEXER

Content covers everything from advice about managing money to sexual health

Wexer launches into wellness with Mind123

Digital fitness content provider Wexer is launching a new wellness resource on its connected Web Player.

Called Mind123, it will focus on wellness rather than exercise.

Created by the team behind Move123 – which offers virtual workouts across the Wexer ecosystem – the new channel will aim to help people achieve all-round wellness.

Mind123 content – all of which is video-based rather than audio

podcasts – is delivered in either three-, six-, nine or 12-minute films to make viewing easy at any time of day.

The content library spans six categories: health, nutrition, beauty, self, wealth and relationships.

Wexer's global head of content Morten Andersen said: "We're seeing more demand for concise, informative content on wellness and Mind123 delivers on this. It makes important wellness education easily accessible

to everyone, delivering it to users in bite-sized pieces."

Mind123 will launch initially with a selection of 30 pieces of content, exploring a wide range of topics – such as managing stress, intermittent fasting, debt and credit cards, processed foods and faking orgasm.

"The quality and scope of information available in the Mind123 education library is world-class."

■ **MORE:** <http://lei.sr/m5i8a>

Apple moves into the group exercise market

In a major move against the gym market, Apple has revealed a number of upgrades to its Fitness+ platform, coinciding with the launch of its new Apple Watch Series 7 and iPhone 13 products.

Among the additions is a Group Workouts feature, which will enable subscribers to exercise alongside their friends via FaceTime or group message.

We're introducing new workouts that bring Fitness+ users more options to stay active and motivated

Jay Blahnik, Apple

Other new features on the Fitness+ app include the introduction of guided Meditation sessions and Pilates.

Apple will also significantly expand the app's reach geographically.

Currently available in six countries, the US\$9.99/month service will make its debut in 15 new countries this year – Austria, Brazil, Colombia, France, Germany, Indonesia, Italy, Malaysia, Mexico, Portugal, Russia, Saudi Arabia, Spain, Switzerland and the UAE.

Jay Blahnik, Apple's senior director of Fitness Technologies, said:

"We're excited to be introducing new workouts that bring Fitness+ users more options to stay active and motivated, plus immersive guided meditation experiences that are easy to fit into your day.

"With new ways to work out together or alone – and coming to more countries – we can't wait to welcome more people to Fitness+."

■ **MORE:** http://lei.sr/r6m7B_F

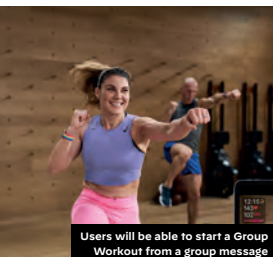
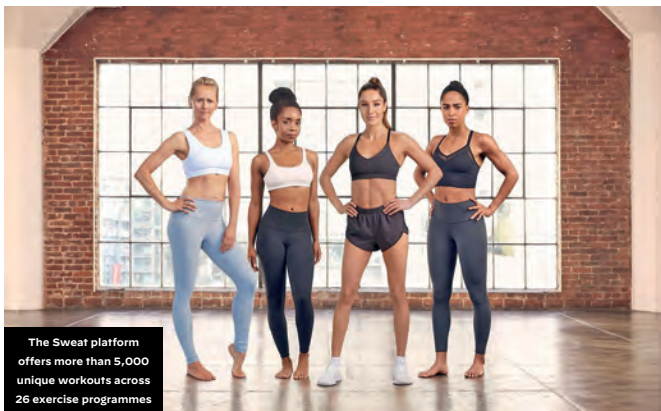


PHOTO: APPLE

Users will be able to start a Group Workout from a group message



iFIT makes big move in digital fitness with acquisition of Kayla Itsines' Sweat app

ViFIT Health & Fitness has acquired Sweat, the popular, female-focused fitness platform set up in 2015 by Australian fitness trainer and entrepreneur Kayla Itsines and co-founder Tobi Pearce.

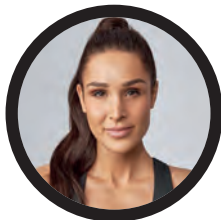
The deal is believed to be worth around US\$400m and will see Sweat become a standalone brand in the iFIT portfolio – which already includes the iFIT digital platform, commercial equipment provider Freemotion, home fitness brands NordicTrack and ProForm and strength line Weider.

The Sweat platform offers more than 5,000 workouts across 26 exercise programmes, including HIIT, strength, yoga, barre and Pilates.

The Sweat app has been downloaded more than 30 million times since its launch and in 2020 it generated around US\$99m in revenue.

All content generated by Sweat will now be available on the iFIT platform.

The move is part of iFIT's strategy to provide an omnichannel fitness experience, delivering content from its iFIT digital platform across health clubs, at home and on the go.



iFit's acquisition has opened the door to an exciting new future for Sweat

Kayla Itsines

It also comes just weeks after iFIT completed a rebrand, changing its name from Icon Health & Fitness, which it had held since its launch more than 40 years ago. Founded in 1977, iFIT is one of the world's largest manufacturers of exercise equipment.

According to Scott Watterson, CEO and founder of iFIT, the acquisition will provide opportunities for iFIT

and Sweat to collaborate on content development, resulting in an increased range of exciting fitness experiences.

"Kayla, Tobi and the team at Sweat have built an incredible brand and community of fitness enthusiasts," Watterson said.

"This acquisition extends our market reach into new geographies, demographics and fitness preferences spanning both home and commercial markets globally."

Kayla Itsines, Sweat co-founder, said: "I'm so excited to start the next chapter in Sweat's journey and join the iFIT family of brands."

"iFIT is a global company that will invest in Sweat to strengthen our member experience, they will also help us expand into other countries and help to diversify our workout content, which is so exciting."

"iFIT's acquisition has opened the door to an exciting new future for Sweat where we can deliver greater variety, choice and value for women."

"I will still be your trainer and all of our programmes are not changing or going anywhere."

■ **MORE:** <http://lei.sr/q2N9f>

Ojmar's new OCS SMART enables hands-free locking

Ojmar has launched OCS SMART, a next-generation smart lock that can be controlled via a mobile phone, tablet or smart watch using Bluetooth technology. It pairs with the OCS SMART app, to increase the ease of installation and usage.

In addition to the touchless features via Bluetooth, the lock has a keypad backup. The battery lifespan of the lock gives up to five years of use before changeout is required. The keypad is crevice-free and waterproof, allowing for an easy and efficient wipe down of the lock surface.

The lock is equipped with a wide range of manager- and user-programmable features, including

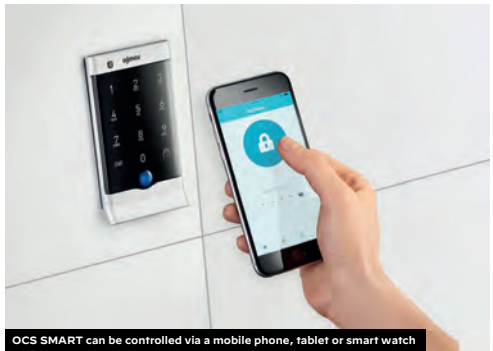
Ojmar's OCS SMART allows your locker system to become truly hands-free

Aitor Elorza

private and public settings, audit trails, rental durations, scheduled automatic openings, and the ability to allocate lockers via QR code or permits.

Aitor Elorza, Ojmar's sales and marketing director, said: "OCS SMART allows your locker system to become truly hands-free."

■ **MORE:** <http://lei.sr/A0J6H>



OCS SMART can be controlled via a mobile phone, tablet or smart watch

Asensei platform allows connected coaching

Digital fitness coaching firm Asensei has released an API platform which allows developers of connected fitness products and apps to add motion capture and real-time connected coaching to their products.

As well as tech providers, the new "Asensei.ai" platform has been designed for health clubs and studios wanting to enhance their digital strategy, and equipment providers looking for a connected solution.

The platform includes four elements:

- "(App)arel": A technology that adds motion capture to everyday sports apparel.
- Coaching kit: software development kits to connect (app)arel to apps and equipment.
- Technique library: A dataset of exercises and sport-specific movements, coaching cues, common faults, progressions and regressions.
- Blueprints: Template UX and code for common coaching use-cases that accelerate time to market.

According to Bill Bugar, Asensei chief technology officer, the system has been "trained" to understand and teach everything from rowing, yoga, pilates, bodyweight exercises, mobility exercises, strength training and TRX.

This, Bugar said, will help accelerate the time to market.

"We want to make it as easy as

possible to deliver interactive coaching experiences," Bugar added.

"We believe coaching is the missing ingredient in connected fitness, and we're now offering it as a set of cross-platform APIs."

The platform will be a hosted service with usage-based pricing.

■ **MORE:** <http://lei.sr/Mljiv>



As well as tech providers, the new Asensei.ai platform has been designed for health clubs and studios wanting to enhance their digital strategy

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Until now, completing a complex analysis of human motion has usually required technical expertise in data scripting and reporting

PHOTO: XSSENS

Xsens set to make its high-end motion analysis tech available for physical activity practitioners

Physiotherapists, fitness coaches and other physical health practitioners will be offered access to leading motion analysis technology normally only available to top universities and elite sports clubs.

Dutch tech firm Xsens – a 3D motion tracking tech specialist – is making its services available to practitioners for the first time, allowing them to improve their understanding of a client's physical health with easy-to-read data which informs objective rehabilitation and care.

Until now, completing a complex analysis of human motion has usually required technical expertise in data scripting and reporting, often unavailable to specialists in physical health care.

While high-end universities and research facilities require Xsens' full motion capture suit and MVN software to conduct larger research, independent professionals only need specific data and less processing.

Xsens' new MotionCloud takes care of the processing, with automatic reporting designed to display the data in multiple formats tailored to each user's respective industry.

The system is able to provide a full report and graphs, and a digital recording of an avatar completing the movements is generated and stored on the Xsens MotionCloud platform.

As part of its plans to expand into the new area of business, Xsens has also launched a new Automatic Reporting service, which is able to instantly present complex movement data in an easy-to-read report using its online MotionCloud platform.

Data can be accessed from anywhere

by connecting to MotionCloud.

Peter Hartman, product manager at Xsens said: "This is more than a feature launch, we're aiming to connect to an entirely new community of professionals and provide the most precise inertial motion capture technology on the market in a format that is both accessible and functional."

"The added depth motion capture brings to physical health care, sports and ergonomics is far beyond anything possible by observation alone – it will significantly expand the service offering of our users and improve the well-being and physical health of people everywhere."

■ **MORE:** <http://lei.sr/P109P>

We're aiming to connect to an entirely new community of professionals

TGO launches online fitness platform

The Great Outdoor Gym Company (TGO) has launched a digital fitness platform. The outdoor fitness equipment provider's new TGO-Activate.com service offers a range of health and wellbeing courses.

The workouts have been designed to help people address lifestyle diseases such as Type 2 Diabetes, improve their mental health through movement, and to spend time in nature.

Each session has been designed so it can be completed at any location – whether at an outdoor gym or at home – with the aim of helping people incorporate movement into their everyday lives.

Classes include a six-week Type 2 Diabetes Programme by Kesson Physiotherapy, developed in partnership with Diabetes UK.



The workouts have been designed to help people address lifestyle diseases

PHOTO: THE GREAT OUTDOOR GYM COMPANY

By working together, we can use the power of movement for good

There will also be TGO Circuits by ITV star Marvin Ambrosius, yoga and a special course focusing on sustainable living called Fit42030.

The online courses cost £2.99 with packages starting from £11.99.

Revenues from the service will be used to plant trees in NHS hospital grounds and the National Parks as well as raise money for charities.

TGO founders Georgie Delaney and Matt Delaney said they came up with the concept for the platform after recognising

the recent rise in outdoor exercise.

"This is just the beginning and moving ahead we are looking for more influencers and activators within the fitness space, who want to do more for the planet and charities," said Delaney.

"By working together, we can use the power of movement for good."

TGO has a network of more than 2,000 gym installations worldwide, including around 800 free publicly available in the UK.

■ **MORE:** <http://lei.sr/i6s5t>

Motosumo enters US market with live classes

Motosumo has launched a dynamic interactive platform offering live, instructor-led classes which can be joined by anyone on a stationary bike.

Motosumo is now available in the Apple App and Google Play stores and via Motosumo.com and features interactive games with live fitness

Real-time interaction makes the experience feel like an in-person class

metrics, global community interaction, and expert support.

The platform taps into the motion sensors inside smartphones to measure a range of performance metrics, fully independent of any branded equipment.

Kresten Juel Jensen, CEO and co-founder of Motosumo, said: "Real-time interaction with instructors and teammates makes the experience feel like an in-person class with the added fun of live leaderboards and interactive features like emojis and 3D races."

The new platform coincides with Motosumo launching its services onto the US market, as it looks to tap into the growing at-home fitness sector.

Jensen added: "The introduction of Motosumo in the US represents our next step in shaking up the connected fitness cycling category and opening access to all who want to participate."

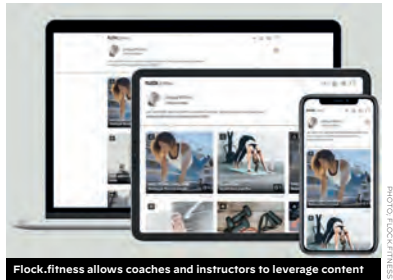
■ **MORE:** <http://lei.sr/6p5d7>



The platform taps into the motion sensors inside smartphones to measure and report a range of performance metrics

PHOTO: MOTOSUMO

We wanted to create a brand that embodies bringing people together



Flock.fitness allows coaches and instructors to leverage content

PHOTO: FLOCK.FITNESS

Flock.fitness to match creators with subscribers

A new digital fitness platform looks to offer fitness instructors, coaches and influencers a regular income stream by providing them with subscribers and a dedicated “fan base”.

Flock.fitness allows coaches and instructors to leverage the content they create, front load work and earn a recurring income by setting up a subscription offering on the platform.

Flock will then connect the creators with subscribers and give the latter

access to workouts with their favourite instructors. Through Flock, creators will be able to post workout videos to subscribers and take payment through one app.

At launch, Flock will be invite-only and creators will need to join a waiting list for early access and to become exclusive “Founding Creators”.

The platform is the brainchild of co-founders James Dowell and Janaya Wilkins, who both turned to

online workouts during the pandemic lockdowns in 2020.

“Many in the industry are struggling to adapt to the changes enforced by the pandemic,” Dawell said.

“We wanted to create something different, a brand that embodies bringing people together no matter where they are.

“Flock provides a smoother workout experience for all involved.”

■ **MORE:** <http://lei.sr/Q8Z4M>

Beachbody trading on New York Stock Exchange

The Beachbody Company Group has completed a three-way merger with connected fitness specialist Myx Fitness Holdings and Forest Road Acquisition, a special purpose acquisition company.

Following the deal, the combined company – named The Beachbody Company – went public and began trading on the New York Stock

This marks an important milestone in Beachbody's mission to help people achieve their goals

Carl Daikeler

exchange mission to help more people achieve their goals and lead healthy, fulfilling lives. As a public company, we aim to accelerate our growth and introduce many more people to our proven fitness and nutrition solutions.

“With this transaction, we will deploy capital to grow our platform, add connected fitness hardware through the acquisition of Myx and continue to create the most innovative in-home fitness content.”

Daikeler will continue to lead the company and the Beachbody On Demand platform.

Jon Congdon, Beachbody's co-founder and Openfit's CEO, will continue to lead the Openfit digital platform, and Heberto Calves will remain in his role as president of Myx, reporting to Daikeler.

Forest Road's strategic advisor Kevin Mayer will join the company's board of directors.

■ **MORE:** <http://lei.sr/D9K0I>




PHOTO: BEACHBODY

Beachbody currently has around 2.8 million total digital fitness subscribers

Exchange (NYSE). Beachbody is the parent company of the Beachbody On Demand streaming platform and the live digital streaming platform Openfit.

The combined business will add significant cash to the balance sheet, designed to position Beachbody to deliver growth in the digital fitness space, while scaling the Myx business and expand the merged business internationally.

Carl Daikeler, co-founder, chair and CEO of Beachbody, said: “This marks an important milestone in Beachbody's



More than a third of US consumers own a smartwatch or fitness tracker personally

PHOTO: SYDIA PRODUCTIONS

Deloitte study: 58% of US homes now have a smartwatch or fitness tracker

Fifty-eight percent of US households have a smartwatch or fitness tracker, and 39 per cent of consumers own one personally.

The figure comes from the Connectivity & Mobile Trends 2021 Survey by Deloitte, which shows how the pandemic has had a clear effect on people's physical activity habits. Among device owners, 14 per cent bought their smartwatch or fitness tracker since the start of the pandemic.

The largest use among the devices reported is for health and fitness (55 per cent), primarily to measure steps and athletic performance, track heart health, and monitor sleep and calories.

Among those interested in wearables, 39 per cent listed cost as the primary reason they haven't bought one – a considerably larger percentage than other factors.

Yet, more seem to see the value of wearables, especially for health and fitness – 27 per cent of those who don't have a smartwatch or fitness tracker in their household are interested in buying one, up from 24 per cent before COVID-19.



PHOTO: DELOITTE

Innovation should focus around the essential elements of daily life to help people thrive in their crowded homes

Jana Arbanas

Sixty per cent of users claim to not be particularly concerned about the privacy of wearable-generated data.

The increased popularity of digital fitness – and increased use of wearables – is also having an effect on

the way healthcare is delivered.

Jana Arbanas, vice chair, and leader of Deloitte's US telecom, media and entertainment sectors, said: "As wearables advance to record more discrete health, fitness and wellness data, their ability to support health care providers will likely grow, along with many users' desire to share more of this data with their providers."

"The pandemic was a giant beta test of behaviors that broke down barriers, removed distance and prioritised health and wellness."

"Our survey revealed that people are willing to adopt new products and services even while adjusting to challenging circumstances in these trying times."

"This is placing more pressure on companies to innovate even faster."

"As we've seen throughout the pandemic, this innovation should focus around the essential elements of daily life to help people thrive in their crowded homes – underscoring the simple fact that technology and invention, ideally, are about supporting human needs."

■ **MORE:** <http://lei.sr/Y8x00>

MATHIEU LETOMBE

CEO at Withings

Withings is known for pioneering uncomplicated, connected health devices. But how does the company compete with new players entering the market? Its CEO talks to Steph Eaves about bringing medical-grade tech into people's day-to-day lives

Can you tell us about the Withings story – so far?

In 2008, Withings was created by a small team of engineers and the company officially launched the first ever connected scale in 2009. Following this launch, Withings rolled out a range of connected health devices, including a wireless blood pressure monitor, an under-the-mattress sleep monitoring system and the first activity tracker to be integrated with an analogue watch.


In 2016, we were acquired by Nokia to form Nokia's health division, but in 2018, our original founder, Eric Carreel, brought the company back under the original Withings name.

Since then, we've been focused on bringing medical-grade, clinically validated devices into the home to provide consumers and their physicians with accurate and regular patient-generated data.

Today, we've built the largest ecosystem of connected health devices, which are covered by 45 technical patents and a portfolio that monitors more than 20 vital health parameters, including blood pressure, weight, sleep, heart rate, activity, ECG and more. ►



One of Withings' newest products, the ScanWatch detects both AFib and overnight breathing disturbances

A portrait of a man with a beard and receding hair, wearing a beige sweater, against a light blue background. The man is looking directly at the camera with a slight smile. The background is a solid, light blue color.

Letombe has been
part of the Withings
team for 10 years
and is now CEO

At Withings, we're improving the way both
patients and the medical community are
able to monitor, identify and understand
health levels and issues

We're ultimately bringing health monitoring technologies from the doctor's office into the home, to help patients and their physicians make life-saving changes

Tell us about your own journey within Withings

After graduating from Cachan with a bachelor's degree in robotics, I joined Withings in 2011 as the company's first customer support agent. From there, I continued working in customer support, ultimately leading the team and building the quality and customer support functions in France and the United States.

When Nokia acquired Withings in 2016, I joined Nokia Digital Health as the quality and customer service director. Now it's back under the Withings name, I'm CEO.

I've been proud to be a member of such an innovative company for almost a decade and really believe in the company's vision of creating beautifully designed devices that people can easily incorporate into their daily lives to manage and take control of their health.

At Withings, we're truly improving the way both patients and the medical community are able to monitor, identify and understand health levels and issues. It's great to be part of such an important company.

What is the big picture now?

We're focused on being the bridge between patients and their physicians through our medical-grade, clinically validated devices.

In the early days of Withings, we created connected health devices that helped consumers understand their health levels and reach their health goals through beautifully designed, simple-to-use devices.

While we're still committed to creating devices that are user-friendly and built into

products that people are comfortable with using on a daily basis, we've expanded our focus to actually help patients and their physicians understand and identify serious health issues early. Additionally, we're focused on working with the wider medical community, including institutions, payers, researchers, disease management programme directors and coaching platforms, to provide them with the medical-grade data needed to offer more personalised care and create lasting healthcare solutions.



Withings designs all its products to be user-friendly and simple, with long battery lives





The new feature 'Vascular Age' was developed by cardiologists to provide an easy-to-understand assessment of arterial health – just by stepping on the scale

Letombe says Withings is committed to getting all its products medically validated in each market

► **How do you compete with the big tech companies, and all the new wearables flooding the market?**

We design all our products to be non-intrusive and simple to use. Whether a customer is tech-savvy or a tech novice, our products are easy to live with. We've accomplished this by creating devices that have long battery lives so that people don't have to worry about charging them daily.

In addition to our products having a beautiful design aesthetic, they also provide people with medical-grade technologies that they can use to monitor serious health conditions like AFib and

sleep apnoea. We're ultimately bringing health monitoring technologies that people would typically find in a doctor's office into the home, in order to help patients and their physicians make lasting and sometimes life-saving changes.

We clinically validate all our products and ensure they have the certifications needed to confirm their medical-grade capabilities.

Tell us about your latest technology

We have some new technologies that we're very excited about. One is ScanWatch, the first clinically-validated hybrid smartwatch to detect both AFib and overnight breathing disturbances. Developed with medical experts, it also monitors activity, heart rate and oxygen saturation (SpO2). It's Withings' most medically advanced wearable – ScanWatch is advancing the field by helping people improve their overall health and detect prevalent, yet underdiagnosed cardiovascular and sleep conditions. Like our other devices, it boasts a battery life of up to 30 days and is built into a traditional analogue watch design.

The company is
dedicated to making
each product
aesthetically pleasing



PHOTO: WITHINGS

We've also announced a new cellular device range that includes the Body Pro smart scale and the BPM Connect Pro blood pressure monitor. Thanks to their cellular connectivity, they work right out of the box without any installation required, which makes remote monitoring easier.

Finally, we just rolled out a new feature on our Body Cardio scale. 'Vascular age' was developed by cardiologists to provide an easy-to-understand assessment of arterial health – just by stepping on the scale. It shows people how their cardiovascular health compares to the norms expected for their age.

How much R&D goes into one product?

Our devices are clinically-validated and offer medical grade monitoring capabilities. We design our devices in conjunction with medical experts and validate them through clinical studies with leading hospitals and health institutions to ensure their capabilities. Additionally, our devices are CE and FDA-cleared before they hit their local markets.

How hard is it to get your products approved in different countries?

It's taken some time to learn the different medical validation process for each location. However, we're committed to getting our devices medically-validated, so it's been a process we're happy to have gone through.

I think ultimately the main lesson we've learned is how to navigate the process for each location, which moving forward will be helpful for us as we continue to validate devices.

What's Withing's design philosophy?

We understand that in order for people to truly understand their health and make lasting changes with the help of our devices, our products have to be designed to seamlessly fit into their daily routines. If they find a device to be complex to use, cumbersome or have to constantly worry about keeping it charged, they're not going to keep using it.

To encourage long-term use, we aim to design beautiful products that people want to





The Sleep Analyzer provides medical-grade sleep monitoring and insights, and detects sleep apnea

We've found 90 per cent of Withings users continue to regularly use their scales after one year and 50 per cent regularly continue using them after 10 years

- continue to use. We've found that the key is for our products to be aesthetically pleasing and to have long battery lives. Also, by building our technologies into everyday products, such as a set of scales, our customers are comfortable using our products from the very beginning.

Tell us about your under-mattress sleep tracking mat

Designed with sleep experts, Sleep Analyzer is a clinically-validated, unobtrusive sleep tracker that utilises the most advanced tech and sensors to monitor and analyse sleep, as well as to detect sleep apnoea, which is a highly prevalent and underdiagnosed disease. It's currently available in Europe and has CE mark for medical devices.

The main difference between Sleep Analyzer and our other devices that monitor sleep is that it doesn't need to be worn. The sleep tracking mat simply has to be set up once and placed under a mattress to provide medical-grade sleep monitoring and insights. When users wake up each morning, they can view a wealth of sleep insights in the accompanying Health Mate app – including if any sleep apnoea episodes occurred during the night.

How long do people typically stick to using their devices for?

We've conducted research on how our products' design and insights impact long-term use. We've found that Withings has very high retention rates thanks to the devices' long battery lives, connectivity and simple setup.

One interesting data point we've found is that 90 per cent of Withings users continue to regularly use their scales after one year and 50 per cent of users regularly continue using them after 10 years, which is impressive by industry standards.

Will the pandemic change our relationship with health tech?

The COVID-19 pandemic has made a lasting impact on the entire medical community. Practically overnight, it caused medical professionals and institutions to adapt and adjust to offer telehealth options to safely connect with and monitor patients. This has led to medical professionals tapping into our range of connected health devices to offer remote monitoring of their patients.

Additionally, consumers have learned the value of monitoring their health from home.



PHOTO WITHINGS

Whether it's checking their temperature daily before leaving the house or tracking their blood pressure to avoid a trip to the doctor's office, we've seen people start to use connected health devices more at home than before the pandemic.

Long-term, I think this trend of remote patient monitoring and people using connected devices to track their health outside of the doctor's office will continue. This will help people identify issues early and better understand their daily health levels, which is valuable to both patients and their physicians.

What are your plans for Withings?

We plan to continue to bring clinically-validated monitoring capabilities to simple-to-use devices. Our customers can expect new features and insights to be added to our range. Additionally, we plan to expand our work with medical professionals, researchers and institutions to make sure that they have access to helpful insights that allow them to make real improvements for healthcare around the world. ●

A non-wearable device, the Sleep Analyzer is placed under a mattress and provides insights via an app



PHOTO WITHINGS

Refining augmented reality

London boutique The Refinery has created an avatar-led digital fitness offering called ALFI, which utilises augmented reality (AR) to demonstrate movements. Zoe Bertali, one of the co-founders of the gym, tells us more

Where did the idea for ALFI come from?

In 2018, boutique fitness was booming, but it seemed to be London-centric and we wanted to bring the experience to other locations in the UK. We were at the time considering the possibility of opening more bricks and mortar sites, however we believed that in order to really grow our brand and reach more people, we needed to move into the digital space.

We also wanted to be able to offer huge amounts of classes very quickly at the touch of a button. With the logic and method we have created, we can bring a new discipline to the app with hundreds of classes in around 6-8 weeks. Live video filming of this type of content would take much longer.

Why do you think an avatar is a great way to deliver fitness instruction?

In the age of endless selfies, people are under pressure to look 'perfect', live their 'best' life, always be 'busy', do the latest exercise in the coolest places, be seen constantly, experience everything, eat this, don't eat that... It's no wonder people are crumbling

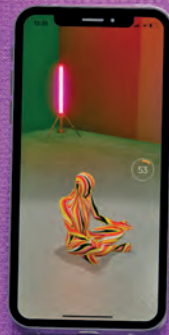


Zoe Bertali, co-founder
of The Refinery

under the pressure and that mental health issues, stress and depression are on the rise.

Although some people may be inspired by apps showing the perfect body doing the perfect yoga or fitness practice, for most it is unattainable and inaccessible. With Refine with ALFI, it's what's inside that counts – the glow comes from within!

Using an avatar rather than a human instructor will allow The Refinery to bring new content to the app more quickly



6

We developed an algorithm that would be used to build the classes intelligently from a minimum of 10 minutes up to 90 minutes. We then filmed our instructors using 3D motion capture

Building resilience and strength from the inside gives people the space to reconnect with what's really important – grounding them in the moment, which has a tremendous calming effect on the entire nervous system, strengthening the immune system and the body's ability to heal itself.

How did you develop ALFI?

We started with the two most popular disciplines at our The Refinery studio – Yoga and HIIT. We then developed and built a logic algorithm that would be used to build the classes intelligently from a minimum of 10 minutes up to 90 minutes.

We wanted the classes to be seamless, so for yoga the challenges came when we had to think about all the potential transitions between each posture and sequence. We then filmed our instructors doing the exercises using 3D motion capture. This information was then translated onto our avatar using the Unity gaming engine.

How did you design the avatar?

Initially we had the concept of making the avatar a big furry monster, but we realised that the movement and form would not be seen



ALFI will eventually offer you the possibility of having your personalised PT up close and personal. It also allows a 360-degree view of all the poses

- as clearly. We therefore developed the avatar to be a neutral humanoid shape. Eventually we may introduce the furry avatar, for fun!

Can users customise the avatar?

We're able to introduce a lot of features, such as different avatars, accessories, and outfits. We will eventually have a lot more shapes and sizes as we grow the app.

Why did you decide to make the app AR compatible?

We were fascinated with the possibilities of using AR technology, as we felt that most other fitness apps don't give you such a personal experience. With our app, ALFI will eventually offer you the possibility of having your personalised PT up close and personal. It also allows a completely unique way of working out by offering a 360-degree view of all poses and the class.

Will users need to wear AR glasses?

AR hardware is just around the corner! The glasses are now much more like a pair of reading glasses, so you put them on and you are able to interact with your phone without the use of a static screen. This means that ALFI will be in the room with you and you will be able to see the moves in life size.

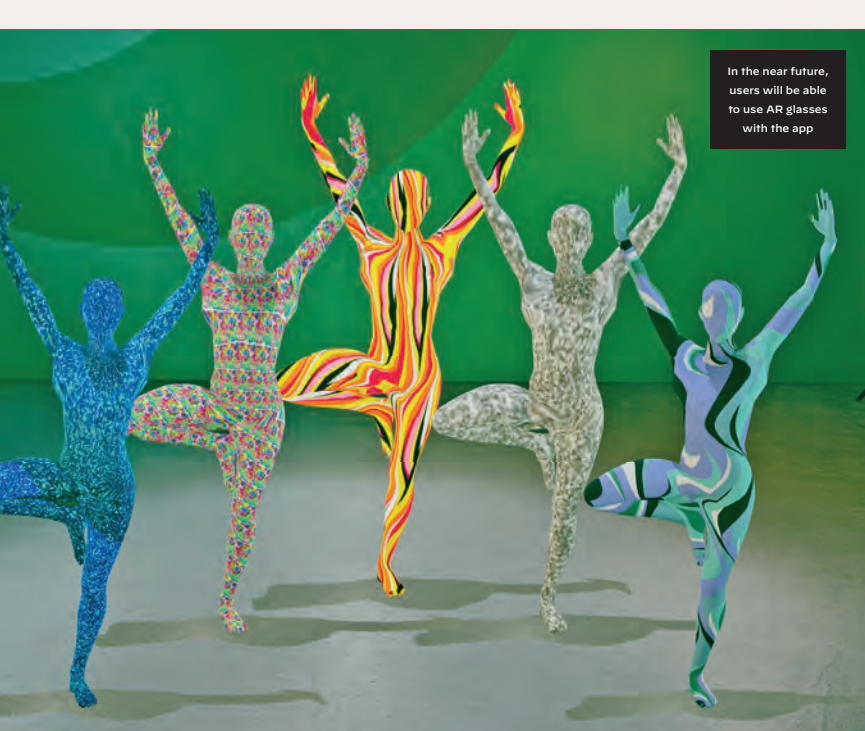
Take a look at our teaser AR app to get an experience of this. AR is much more accessible for fitness than VR as it is less immersive and therefore you remain fully aware of your environment around you.

How do you create bespoke classes for the user?

In either Yoga or HIIT you are able to take a studio class which has been set up for you, or you can build your own class. Within the algorithm there are different levels



Bertall says the app will complement members' in-studio training



In the near future,
users will be able
to use AR glasses
with the app

of intensity and also focus areas, so, for instance, you could build a 20-minute Power Yoga class that has a focus on hips.

How will this digital offering complement your in-club offering?

The fundamental objective of ALFI is to inspire and motivate the individual to create a health and fitness routine that makes them feel better from the inside out. We very much see the app as a complement to members' in-studio training programme. We will offer our members the app as a way for them to stay engaged if they are away from home, or unable to get to the studio.

Tell us about the tokens and charity aspect of the app. Why did you decide on this feature?

We created the token system as a way to still be able to offer social collaboration and recognition for the user. We use virtual rewards

for achieving goals – you can use the tokens to buy classes, gift to a friend or give to charity. We wanted the karma element of giving something back when you are doing something amazing for yourself – taking care of your health!

What are your future plans and goals for ALFI?

We will be adding more disciplines in the next 12 months – including Pilates and Body Conditioning. We will also be developing new avatars and environments.

How do you think AR will change the fitness industry?

It will allow on-demand flexibility with the ability to recreate a studio experience with a personal touch. ●

Refine with ALFI is available now in the Apple app store

Jessica Ennis-Hill
won Olympic gold for
Great Britain in 2012
in the heptathlon



JESSICA ENNIS-HILL

Founder Jennis

Jessica Ennis-Hill is on a mission to close the gender data gap in health research. Her app, Jennis CycleMapping, is designed to help women understand their cycles and how to train during each different phase. Steph Eaves speaks to Ennis-Hill to find out exactly how it works

Tell us about Jennis. What is it?

On the surface it's an app that uses a blend of tech and content to help women map their training to their menstrual cycles.

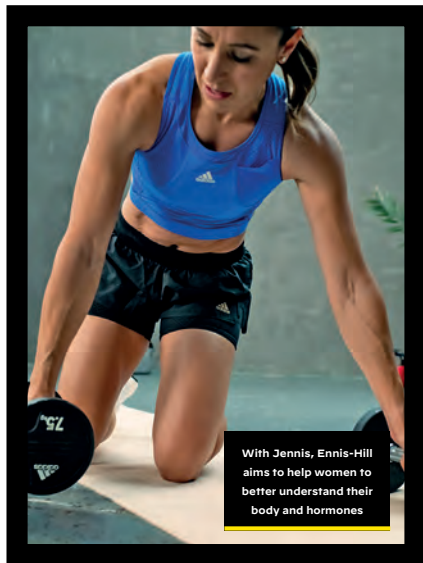
Lots of fitness programmes are shaped by male data, so we use the latest female physiological intelligence to help women tailor their workouts to what's going on in their cycle. This means they get bigger training gains and work with their hormones, rather than against them.

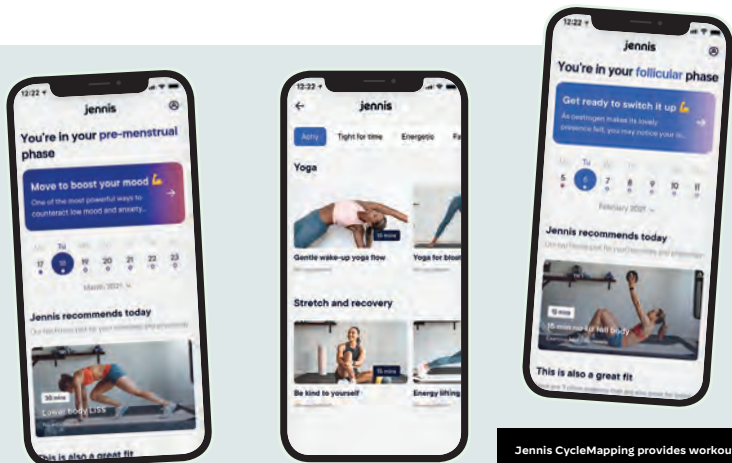
But, really, Jennis is about us thinking much bigger. There is a huge gender data gap when it comes to women's health, with just 8 per cent of studies exclusively featuring female participants. So, our big brand ambition is to close the gender data gap by doing our own research, then help women at every life stage understand their body and hormones better. We're really excited about how we can make a difference in this space.

Where did the idea come from?

The original idea for Jennis came about after I was pregnant with my son Reggie. At the time, I was looking for quality advice on how to stay active through my pregnancy and looked out to the wider world for help. I was really shocked by how complicated and contradictory all the sources were.

I was lucky enough to have an elite team of physios and physiologists around me who could





► help. But the seed was sown. I knew that after I retired, I wanted to create a platform to help women get trusted advice about their hormones and physiology. At the time, I didn't know what form that would take, but I knew I wanted to give women access to my network and the information and guidance I was lucky enough to have, to do what's right for their bodies.

When did you launch? How has the app evolved and grown since then?

We launched back in 2019 and since then we've evolved on every level. Initially we were using agencies to help us plan and build, but we've taken everything in-house. It enables us to be so much more agile, and we're testing and iterating much faster as a result. We also ended up rebuilding the app and changing the programming language it was built in – all stuff that I never ever thought I would need to think about when I was competing professionally.

Why is there still such a huge data gap in women's health?

A woman as part of a clinical trial can be seen as too complicated, which is why we're often left out of them. Men have a fairly simple daily rhythm of sex hormone fluctuation, where testosterone is highest in the morning and slowly declines over the day. This then repeats daily.

Women, in contrast, have a month-long ebb and flow of cycle hormones. The challenge here for health studies is that when you test a woman at one time in her cycle, she might not have the same response as she would have at another time in her cycle. This difference makes us expensive and complicated as trial participants. Because of this, lots of scientific studies leave women out.

What kind of experts are behind Jennis?

There are a whole team of experts across different fields – physios, physiologists, engineers, PTs. Plus, we reach out to lots of other experts for our body literacy content – sleep experts, hormonal nutritionists, psychologists etc.

Tell us about the new CycleMapping programme – how does it work?

When you sign up, you go through a quick questionnaire, which helps us understand your fitness goals, cycle length, period and pre-menstrual symptoms and your fitness level.

From here, we'll be able to pinpoint where you are in your cycle and make training recommendations based on the hormone profile of the phase that you're in. Each day you'll then be served a new selection of workouts, plus daily insights that help you work with your hormones at that point in your cycle.

Women have a month-long ebb and flow of cycle hormones. Because of this, lots of scientific studies leave women out

Ennis-Hill says she improved her body literacy as a result of pregnancy and cycle mapping



Jennis worked with former EIS head of physiology Dr Emma Ross to create CycleMapping

► Can you tell us a bit about the research behind CycleMapping?

From a Jennis point of view, we worked very closely with physiologist Dr Emma Ross. She used to be head of physiology at the EIS (English Institute of Sport) and has been working in this field for decades.

From her input and the studies she shared, plus our own tests with Beta users, we created the CycleMapping programme.

In terms of results, there are lots of studies that show how training in this way can reduce negative cycle symptoms and build lean muscle more effectively – and from our own Beta testers we are getting lots of interesting results around reduction in period symptoms; higher motivation to train and weight loss experienced by women, but these are all very early anecdotes.

Do you use CycleMapping in your training?

Yes, I have been CycleMapping and was one of the early testers of Jennis CM and I have found it really helps me understand my moods a lot more – I can tune into the way I feel alongside the four phases of my cycle, and then train or rest accordingly.

I have found too that when I am premenstrual I recognise this more now and actually listen to what my body wants instead of trying to push through the symptoms. As an athlete I thought I was in tune with my body but pregnancy and now CycleMapping has really improved my own body literacy.

What key features are included in the app?

I think the onboarding questionnaire is really important, as that helps us personalise the plan each user gets. The feedback functionality is also really crucial. By interacting with that, we can tweak people's plans – shifting the sessions if their cycles change, reacting to changes in symptoms and so on.

What are your future plans for Jennis?

To be honest it's really hard to predict. There are definitely areas that I would like us to move into, but we're very much going to be led by our consumers and what they want. ●

To be one of the first to try Jennis CycleMapping, visit cyclemapping.jennisfitness.com to register (Apple and Android versions both £14.99 per month).

There are lots of studies that show how training for your cycle can reduce negative cycle symptoms and build lean muscle more effectively



Jennis uses onboarding questionnaires and feedback to personalise plans

HOW USABLE IS YOUR PRODUCT?



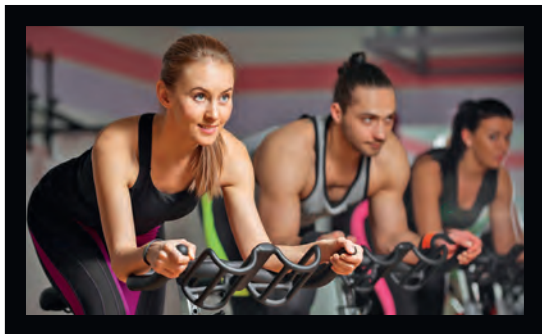
Your fit tech product might be a game changer, solving problems or creating new possibilities for clients, but none of this will matter if it's not easy and enjoyable to use. Industrial designer Nick Chubb explains why usability is key, and the factors to consider when designing your new product

Usability is all about the quality of interaction between people and products. It's a key part of what makes a product successful and an aspect of product design that deserves detailed consideration.

Think of the interface on a fitness tracker, the strap design of an HR monitor, the seat adjustability on a cycling machine, the assurance

of wireless earphones or the grip design of different handle attachments on a cable machine.

Ever felt like some products and pieces of equipment feel safer to use, more comfortable, more premium, effective or simply more intuitive? A lot of this comes down to effective usability, and the way we approach it during the design phase can help deliver better products that enhance user experience (UX) as much as possible.



SHUTTERSTOCK/ROMANISO

Something as simple as seat adjustability on an indoor bike can affect a user's experience



Developers must
commit to truly
understanding
user needs

A 'use error' is any
situation where the
outcome is different
from the intention.
Wherever we can,
we're looking to
remove potential
use errors

SHUTTERSTOCK/POSTOCKSTUDIO

Experience beyond safety

Anticipating the safety needs of a product in the fitness sector is really important. Good usability design eliminates risk. However, safety is only one half of usability. The other half is not so much about meeting regulatory requirements, but building in pleasing user interactions from the very beginning and making the product more satisfying to use.

We know that in today's world of tweets, comments, online reviews and forums, positive word-of-mouth within the community is essential if a product is to have long-lasting success in the market. There are many factors that contribute to a successful fit-tech product, but a commitment to enhancing user experience and truly understanding user needs at their very core is a foundational part of that.

The impact of good usability

When usability is applied poorly during the design process, this creates what we call 'use errors'. A use error is any situation where the outcome is different from the intention. Wherever we can, we're looking to remove potential use errors.

Let's say you went to reduce the intensity of something, but ended up turning it off completely, which wasted time and interrupted your activity. Or you complete a workout only to realise your HR monitor wasn't connected properly.

In other cases it could simply be a matter of comfort or just not understanding how to use a product. These can create a different outcome from what was intended by the user and result in frustration and annoyance. In other circumstances, as mentioned, some use errors could result in serious harm. ▶

When every type of user has been considered, mapping out the experience journey for each user and listing all interactions in as many different use environments as possible is a good exercise

► Important considerations for good usability design:

1 Drop your feelings for the current format

This is more to do with mindset, but an important one to embrace. To design a product with the best UX possible, the overall format and architecture of the product must be driven by insight and a total understanding of the context of the product's use. This ensures that the user experience is prioritised and can be enhanced with the freedom for the design to go in any direction, rather than being restricted by any existing beliefs or chained down by a desire to stay close to the current format of established products.

Innovation doesn't tend to happen when there's a strong feeling to lean towards many characteristics of historic models, without a clear user-centred justification. A strong desire to question every aspect of what went before is more likely to result in great product design.

2 Every stakeholder must be appreciated

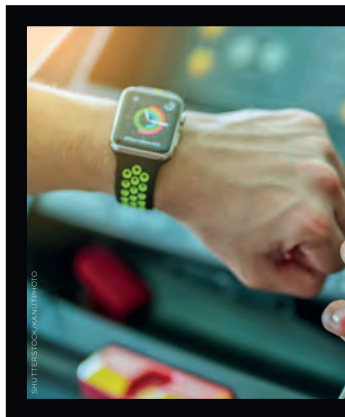
To enhance the user experience as much as possible, it's important to consider every type of user. We call them 'stakeholders', which isn't just the people who are invested in a financial sense but includes anyone who is affected by the product.

For instance, who uses it? Who cleans it? Who assembles it? Who delivers it? Who maintains it? Who sells it? Who doesn't use it but has to live with it? The list goes on. The products with the best user experience consider all interactions from all stakeholders, not just those involving the primary user.

3 Anticipating the entire experience journey

When every type of user has been considered, mapping out the experience journey for each user and listing all interactions in as many different use environments as possible is a good exercise to go through. Having this visibility of all interactions helps to see the bigger picture and also helps identify opportunities to simplify user steps in the experience journey.

This is difficult to do when you don't have all the information analysed and mapped out. This approach is proactive and can bring significant value. The reason it's so valuable is that poor user experiences usually find their way into products because the task of doing a detailed analysis either doesn't get done or gets pushed back in the development process until usability issues start to present themselves. By this time, it's too late and you end up fire-fighting and making decisions quickly in isolation without the proper time for thorough analysis and robust thinking where you consider how one decision impacts other aspects.





The design of the product should have the freedom to go in any direction, rather than being restricted by existing beliefs





SHUTTERSTOCK/LESTUDIOS

Fit tech products should be inclusive for people of different ages and abilities

4 Think about human senses

Another key element in usability is to consider all human senses and their limitations. Missing the sound of an alarm on a product could be linked to the age of the user group, the potential of hearing loss or the volume of background noise in the environment where the product is used.

Another example could be memory. If there are too many steps to remember in a user task or too much information needed to be recalled when moving from one screen to the next in a digital app, then this can cause use errors.

Fit tech products must seek to be as inclusive as possible. Physical fitness can still be of incredible importance to people who suffer from blindness, deafness and other disabilities – therefore inclusive design is also an important part of effective usability.

Refining quality through iterative development

Usability should be considered at all stages during the design, so that use errors can be reduced and interactions can be improved. Some of the ways we do this is through affordances that

give cues to the user such as shape-coding, resistance forces, size differentiation, universal symbols and orientation cues, etc. Refining the quality of interactions through expert review of prototypes, user trials, interviews, observations and a full commitment to understanding the areas for improvement through a rigorous process of development is paramount.

As new technologies become available, brands in the fitness industry will be faced with the challenge of truly understanding whether this technology has a meaningful application for their users or not. If it does, a deep consideration of usability is incredibly important for the adoption of that new technology, to ensure it meets user needs in a positive way and doesn't introduce hurdles and resistance through poor usability design. ●

About the author:

Nick Chubb is the lead industrial designer at IDC, designing consumer products, electronics and medical devices for some of the world's leading brands. He has a 1st Class Masters Degree in Product Design and acts as product design advisor at Arts Thread. nickchubbdesign.com



Two-way interactive live streaming service from **venueserve fitness**

Venueserve's **white label** fitness platform launches **live two-way interactive streaming** for one-to-one or one-to-many training sessions - perfect for today's blended gym memberships, online group workouts and personal training.

Give your customers a personalised, interactive fitness approach through our safe, secure platform.

The two-way audio and visual live streaming allows trainers to build an online community with meaningful engagement that delivers comprehensive feedback and support.

Venueserve Fitness keeps your fitness brand and your members working out together, no matter where or how they choose to train.

Add value to your offer with flexible memberships for new and existing customers through Venueserve Fitness.

Why is Venueserve Fitness a good fit for your customer?

- ▶ Live audio and visual two-way streamed classes with the instructors they know and love
- ▶ Access to a huge bank of pre-recorded virtual classes
- ▶ Online booking for group workouts or 1:2:1 sessions through the platform
- ▶ Branded content that looks and feels like your club
- ▶ Maintain and grow relationships and customer engagement
- ▶ A secure platform gives customers and instructors peace of mind
- ▶ A live streamed alternative when classes are full

CONTACT

▶ +44 (0) 207 112 8078 ▶ sales@venueserve.com ▶ <http://fitness.venueserve.com>

Put on your RED LIGHT

Red light therapy promises a variety of benefits, including better recovery, skin rejuvenation and increased energy, but is it all too good to be true? Fit Tech spoke to Bryan Gohl and James Strong of Red Light Rising, and Wes Pfiffner of Joovv to find out more



Gohl and Strong
are co-founders of
Red Light Rising



How does red light therapy work?

BG/JS: Red light therapy (RLT) is an extremely easy to use, zero-touch, non-invasive form of light therapy that all people can use, that harnesses the powerful healing qualities of red and infrared light. This kind of light, which actually also comes from the sun, is able to penetrate the human body and in doing so, stimulates an increase in cellular energy production and also causes a release of natural anti-inflammatories into the bloodstream.

WP: Light therapy uses LEDs to deliver red and near infrared (NIR) light to a person's skin and cells.

Light intake is crucial for our health. It's essential for our cellular function and energy production, just like water, sleep, and the nutrients from food.

Wavelengths of healthy light stimulate the mitochondria and help us create vital ATP energy more efficiently, with less inflammation and oxidative stress gunking up the process. That can have a wide range of positive health effects.

What are the benefits?

BG/JS: The benefits are huge! For athletes we see an increase in strength gains, an increase in hypertrophy



Professional athletes use Red Light Rising's devices to increase gains and decrease recovery times

For athletes, we see an increase in strength gains, an increase in hypertrophy gains, better endurance and faster recovery after workouts

gains, better endurance, faster recovery after workouts, longer time to failure, more reps, decrease in the onset of DOMS (Delayed Onset Muscle Soreness), reduction in joint pain, better recovery from head injury, reduction in the likelihood of injury, and the list goes on.

For general health we see mood improvements, energy increases, more optimal hormonal balancing, skin healing and rejuvenation, cognitive function improvements, reduction in pain and swelling, deeper and better quality sleep and there are also benefits to eye health.

WP: In terms of fitness and recovery, light therapy treatments have several mechanisms of action on the muscle cells, such as improvements in cellular ATP energy synthesis, glycogen synthesis, oxidative stress reduction, protection against exercise-induced muscle damage and the addition of new myonuclei supporting muscle hypertrophy. All of these beneficial effects of light therapy promote improved physical performance and enhanced post-exercise recovery.

Professional sports teams like the San Francisco 49ers use Joovv light therapy to help



Wes Pfiffner is
director of business
development at Joovv

▶ their athletes respond to stress and damage more efficiently and effectively. Light therapy treatments improve blood flow to problem areas and help address the inflammation that comes with injuries and strain.

Tell us about red and near infrared light therapy – what's the difference? Should people use one or both?

BG/JS: Yes! People should definitely use both. They are different kinds of light but the main difference we should know about is the depth of penetration. Red light is only able to penetrate the body to a depth of about 1cm, so the red light is what benefits the skin, hair and nails.

The infrared light is able to penetrate the body to a depth of about 5cm in certain areas and this is the light that will benefit the bones, the blood, the muscles and joints, the brain and everything else deep inside the body.

WP: Red and near infrared (NIR) light have been widely studied and found to be the most beneficial wavelengths when it comes to Photobiomodulation. Generally, all light consists of different wavelengths, which are measured in nanometers (nm).

Red light therapy devices provide red light in the mid-600nm range and near-infrared light in the

mid-800nm range. Red light is visible and ideal for skin health and other surface concerns, while near infrared light is invisible to the naked eye and can penetrate deeper into the skin and cells, for greater rejuvenation and healing benefits.

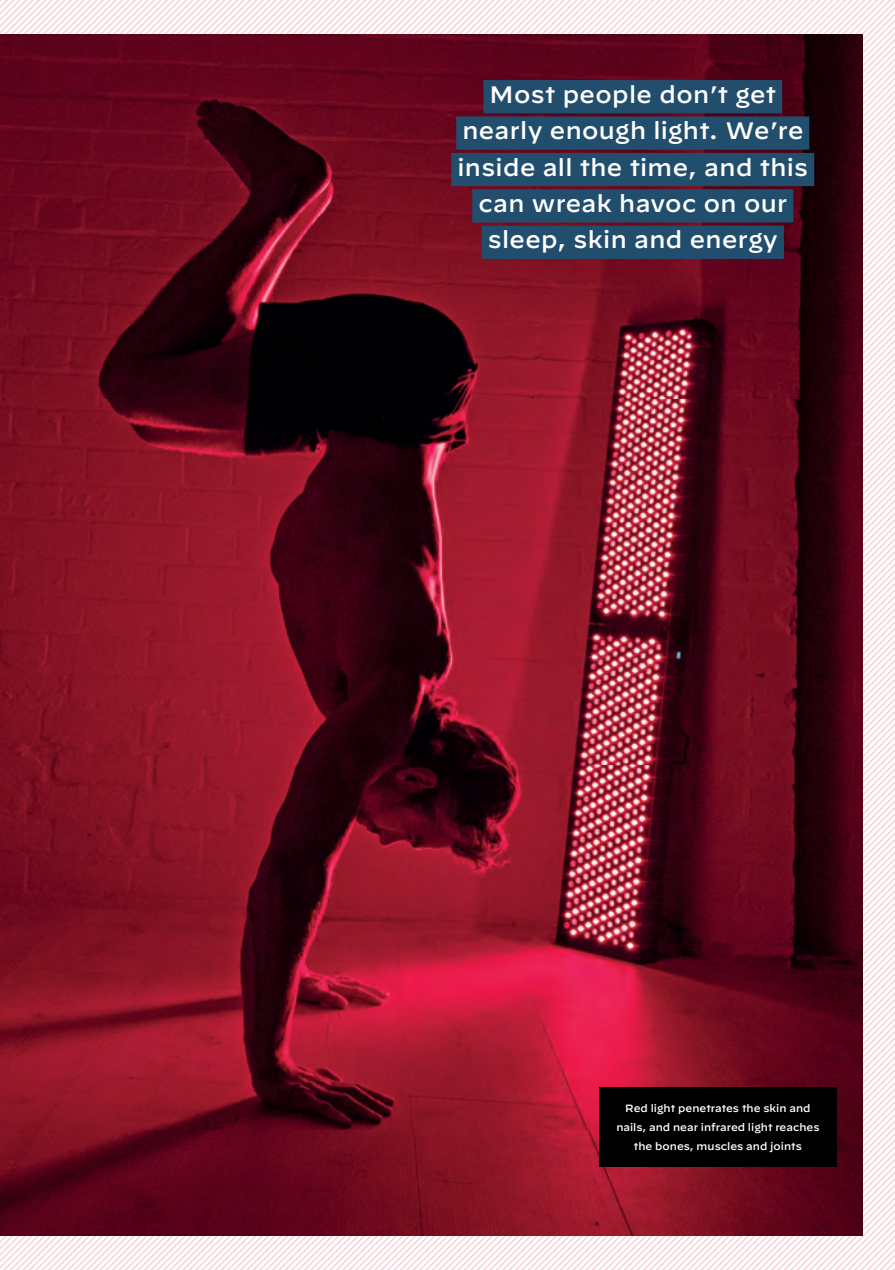
How often should people use red light therapy and for how long?

BG/JS: For the best benefits people should use RLT at least five days a week – sunrise and/or sunset is best and depending on which type of device they have, anywhere from five minutes to 25 minutes will deliver them a sufficient dose of this light energy.

WP: The most important factor is consistency. Each session is typically only 10 minutes per treatment area – increasing to a maximum of 15-20 minutes for any symptomatic areas – however, beyond that, the evidence points to diminishing returns since cells can only absorb so much light at once.

How much reliable evidence is there to support the use of RLT?

BG/JS: There are now thousands of studies showing positive outcomes for RLT from all over the world. The evidence is reliable but science doesn't stop. ▶

A man is performing a handstand in a room with white brick walls and a light-colored wooden floor. He is wearing dark shorts and is illuminated by a strong red light. To his right, a tall, rectangular light therapy device with a grid of small lights is emitting the red light. The overall atmosphere is monochromatic red.

Most people don't get
nearly enough light. We're
inside all the time, and this
can wreak havoc on our
sleep, skin and energy

Red light penetrates the skin and
nails, and near infrared light reaches
the bones, muscles and joints

Light therapy has been studied and tested in over 1,000 peer-reviewed trials, demonstrating a wide range of benefits

I would like to see more understanding about how to treat the brain and cognitive decline with RLT. So many studies show that RLT has fantastic benefits for all types of brain health but some studies shine the light on the forehead, some on the top of the head, some at the temples and some at the base of the neck. I'd like to see a discovery for the best place to treat the brain with RLT.

WP: Light therapy has been studied and tested in over 1,000 peer-reviewed clinical trials over the last few decades. These studies have demonstrated a wide range of health benefits in various settings, with few associated side effects or risks.

Beyond light therapy's better-established health benefits, there are a number of emerging clinical areas where light treatments are showing promise. Some of these emerging areas include hormone and thyroid health and further studies are warranted.

What do you most want people to know about RLT?

BG/JS: RLT is such a powerful therapy and our goal is to make it accessible for everyone, from the stay-at-home parent to the pro athlete to the person suffering with some kind of illness. We are all human, and regardless of how we spend our days, RLT can make almost everything much better.

WP: Most people don't get nearly enough light. We're inside all the time, especially in the winter – and during the pandemic – and that lack of daily light intake can wreak havoc on our sleep, skin, and general fitness and energy. Adding light therapy is a really simple, convenient way to ensure your body and cells are getting the light they need to thrive. ●



Red Light Rising aims to make red light therapy accessible for everyone

DOUBLE YOUR REVENUE

***without doing any extra work,
simply by turning on a light.***



RED LIGHT RISING



PREMIUM RED LIGHT THERAPY DEVICES

ZERO Touch Treatment. EASY To Operate.

Red light therapy is a zero touch, easy to operate treatment which has been shown to **eliminate aches and pains, improve performance, speed up recovery and deepen sleep**, all in as little as **20 minutes per treatment**.

Find out how **Red Light** can help You and your Clients.



For more information visit www.redlightrising.co.uk

Premium Red Light Devices for commercial installations in gyms, health centers, corporate facilities and wellness centers. Bespoke packages available.

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KILIAN SAEKEL

Light, sound and vibration are being used by A-Champs to make training more effective and fun for amateurs and pro athletes alike. CEO Kilian Saekel speaks to FitTech about the power of multisensory stimulation

Tell us about A-Champs – what's it all about?

At A-Champs we're concerned that people of all ages don't move enough to stay happy and healthy. And that's why we've recently developed an interactive home training system that's more fun and effective than any other way of training. It works body and brain at the same time and turns any training into a playful experience.


It's a platform that features sports science-based training programmes and games – these are delivered through interactive sensor pods that come with light, sound and vibration. Through the app, the users can select different training content for all members of the family. These include: fitness programmes, active games and sports-specific training that lets you train like a pro athlete. And the cool thing is, you can even compete with others from all over the world via the global leaderboard.

Where did the idea for A-Champs come from?

My whole career I spent developing and manufacturing sporting goods in China. When my wife got breast cancer a few years ago it made us much more aware of how important it is to take care of ourselves and our health. Lifestyle and physical activity play a crucial role in staying healthy and fit. So once we got through with all her chemotherapy and rehab we decided to start a business to help families to stay fit, and that's how the idea for ROX came up.

What was your first product and how did you develop it?


From the very beginning we have been producing solely ROX. The original idea was to recreate the Super Mario game in real life, where kids run between interactive light blocks to get points. ▶



A-Champs is a platform that
delivers sports science-based
programmes and games through
interactive sensor pods that
come with light, sound and vibration

Kilian Saekel is the
co-founder and
CEO of A-Champs

ROX is fully customisable and can be adapted for any age or ability



With ROX Home, we're now targeting families who want to work out at home but who are bored with traditional ways of home training



According to Saekel, top sports coaches report that ROX Pro makes athletes work harder and longer

- Overall, kids and parents loved the concept and experience, but we found that it was very difficult to market it as it required lots of customer education.

However, sports coaches immediately saw the value in our product. At that time training based on the reaction to light stimuli started to become a hot topic in pro sports, as sports science realised that this kind of training helped to improve crucial mental capacities – like sensory capacities, reaction, decision making, perception and concentration/alertness – of players.

The problem was that until then all available light training solutions were extremely expensive, not user friendly, and based on an old-school technology.

Based on this feedback, we developed our current product, ROX Pro, to be a smart training assistant for everybody in the game of training people. It's the only interactive training system on the planet that not only comes with light, but also with sound and vibration – this is 'multisensory' stimulation, and it's much more versatile and effective than pure light-based reaction training.

By now some of the biggest and most famous sport clubs and coaches use ROX Pro to create more effective and engaging one-to-one sessions with their athletes.

Who's your target audience?

Our core target audience for the last 18 months has been performance coaches, personal trainers, amateur sports trainers, physical therapists and PE teachers.

With our new version – ROX Home – we are now targeting families who want to work out at home but who are bored with traditional ways of home training.

How customisable are your products?

The best thing about ROX is the fact that they are fully customisable. They can be integrated into any kind of training, at any place, and help people of all ages, fitness levels and abilities to get effective and engaging training done.

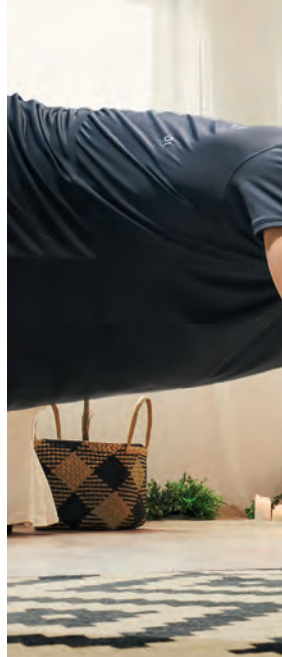
We have interactive content for fitness (HIIT, Family Fitness), active games and sports specific training so that you can train like a professional athlete in many different sports categories. All our programmes are developed by coaches and sports scientists who have worked with and for some of the biggest global athletes and teams.

Every interaction with the ROX is measured, so our users can also track all their sessions, either via the in-app analytics or via the cloud-based dashboard.





Users can track their progress and compete virtually using the ROX app



By putting focus on tapping different lights and sounds while doing gruelling planks, you stop focusing on the pain

The ROX Home interactive sensors can be used in a variety of settings



A-Champs uses play and competition as key drivers in its products

► **Have you done any scientific research into the impact your products have?**

Our proprietary MSNP training methodology was developed by a team of sports scientists and coaches around our unique multisensory stimulation function.

Currently we're working with Victoria University in Australia on a big research project to showcase the performance improvements in athletes and daily life.

How does gamifying fitness create better results?

It's a key piece! But according to our experience, gamification will only have lasting effects if it is more than just earning badges in 'boring' training sessions. In our case we have two levels of gamification: first, we create training experiences that are fun and playful. By putting focus on tapping different lights and sounds while doing gruelling planks, for example, you stop focusing on the pain and you'll be surprised how quickly 45 seconds can be over.

And then the more traditional gamification kicks in: in the app all results can be monitored and you can even compete virtually with people from all over

the world. The competitive beast pushes the bar and makes sure that you don't miss the next session.

What's really cool is that this doesn't only work for regular people in their home training. Even coaches of world-leading athletes report to us that integrating the ROX into their training helps to make athletes work harder and longer because they either want to beat their high scores or those of their teammates.

Do you have any plans for future products?

At the moment our focus is on the launch of our ROX at-home edition. On top of that we will soon launch the Cardio Cage – the ultimate 360-degree interactive training experience. It features our ROX Pro technology in a 'Thunderdome style' cage and delivers game-changing sports- and position-specific training as well as fully functional HIIT workouts for individual and partner training. Sports performance academies, as well as gyms around the world, are lining up to get a piece of the action!

We're also currently taking part in the Techstars SportsTech Melbourne accelerator programme to bring the ROX training experience to Australia. ●



ZOMBIES, RUN!





ADRIAN HON

Zombies Run! is one of the most enduring fitness apps, with half a million users getting active while engaging in 'missions' against the zombie apocalypse. Its co-creator spoke to Steph Eaves about the power of story

What's your background?

I originally trained as an experimental psychologist and neuroscientist at Cambridge, Oxford and UCSD (University of California San Diego), but I was always interested in games that mixed storytelling with the real world. Shortly after I started a PhD at Oxford, I left to help found Mind Candy in 2004, a games company in the UK, and a few years later I co-founded Six to Start, which specialises in games that combine storytelling and the real world, and which I still run today.

How did your training in neuroscience influence your approach to fitness games?

I think it's a mistake to take scientific research and try to apply it directly to fitness solutions or gamification – the reality is far messier than the headlines or even scientific papers would have you believe! But it did teach me about the importance of repetition and training and addiction; that while it's easy for people to fall into bad habits, humans are fundamentally always good at learning and can learn to adopt new behaviours. The problem is that everyone's different and there's no one-size-fits-all solution! ►

Zombies, Run!
launched in 2012 and
has 500,000 players



Hon trained as an experimental psychologist and neuroscientist at Cambridge, Oxford and UCSD

► What did you envision when you began Six to Start?

We'd hoped to make games and do consulting for big companies like the BBC, Disney and Microsoft, and then use what we'd learned and the money we'd made to make our own games.

We were very successful in the first step and won lots of awards including Best of Show at SXSW, but the market was extremely competitive and it was very hard for a small company like ours to make a profit, so it took much longer than expected for us to get in a position to launch *Zombies, Run!*

How did the idea for creating immersive fitness games come about?

I've always wanted to make games that help people achieve their goals. Since I was a kid, I enjoyed games like *Mavis Beacon Teaches Typing* and *Dance Dance Revolution*. It's a shame there aren't more, and it's a shame that most educational or instructional games are so boring

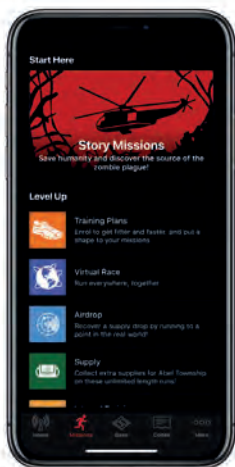
or ineffective, so making one for fitness was obvious for me, especially as I started running a lot when I was at university.

You're best known for *Zombies, Run!* but what other fitness games have you made?

Zombies, Run! was our first proper fitness game, launching in 2012, which we quickly followed up with *Zombies, Run! 5K Training* later that year. At the end of 2013, we launched *The Walk*, then in 2014 we had the *Superhero Workout*, *Step Buy Step: A Pedometer Adventure*, and *Dungeon Runner: Fitness Quest*. Finally, in 2017 we launched *Racelink*, our white-label running app for charities and non-profits.

Tell us about *Zombies, Run!* – where did the concept come from?

It came from two places: firstly, I'd always wanted to make a running game for smartphones, and I knew that there was a great opportunity to rely on audio gameplay



Zombies, Run! has multiple storylines and several years' worth of content

and storytelling to avoid runners having to look at their phone all the time.

Secondly, our co-creator and lead writer Naomi Alderman had just joined an online running group, and when asked what they wanted to achieve, some said they wanted to lose weight or get fit, and one person said they wanted to survive the zombie apocalypse! I groaned when I heard that, since even in 2011 it felt like zombie media was everywhere, but we realised it was a great premise for a game that was all about running.

Did you work with fitness experts?

We worked with fitness experts to design our Zombies, Run! 5K Training plans, and we always consult fitness literature when we design other training plans and features like zombie chases that mimic high intensity interval training. But I think there's a danger in relying too much on experts and literature as ultimately we need to make sure this all meshes well with fun gameplay and storytelling and technology.

How have you improved Zombies, Run! over the years?

We've added a ton of new content and missions – we have something like 500 missions and

I knew there was an opportunity to rely on audio gameplay and storytelling to avoid runners having to look at their phone all the time

WHAT IS ZOMBIES, RUN!?

Only a few have survived the zombie epidemic. You are a Runner en-route to one of humanity's last remaining outposts. They need your help to gather supplies, rescue survivors, and defend their home.

And you have another mission – one they don't know about...

HOW IT WORKS

- Walk, jog or run anywhere in the world.
- Hear your mission and music through your headphones.
- If you're chased by zombies, you'll have to speed up!
- You'll automatically collect supplies to build up your base.

- ▶ workouts now, which would take years for a new player to get through. Most of that is in our main 'zombies' storyline but we also have 'New Adventures' that are comedy, romance, sci-fi, fantasy, factual, you name it. Then we have features like virtual races, location-based running, leaderboards, milestone emails – we're adding things every month.

What are the challenges with creating a game like this?

There are so many! Our half a million players have an insatiable demand for new stories and workouts, so our writers are always busy filling those. It's not just a question of "grr, there are more zombies coming!", we have to make gripping, thrilling stories that will keep people coming back day after day.

Then we always have new features and devices we need to support, like smartwatches and Apple Healthkit and Siri, which takes time to develop. Finally, all smartphone apps need to be constantly maintained since they'll otherwise

basically stop working within a year or two as new versions of iOS and Android are released.

How long do users stay with the game, on average?

A lot of people just try it once and leave, but most people stay for months if not longer. We're strong believers in the importance of storytelling and gameplay to keep people engaged and motivated to run on that rainy Sunday morning.

Who are the target audiences for your fitness games?

I know it's a cliché, but it really is everyone. We try not to design games for a specific audience because we think that a great game can be fun and accessible for everyone.

Do you think online fitness classes, etc, could benefit from incorporating elements of story, adventure and game?

Oh absolutely. We have so many ideas for different kinds of exercises, some of which will

OTHER GAMES BY SIX TO START

Tell us about 7 Minute Superhero

We were one of the very first apps to automatically detect users' exercises via a phone or tablet's front-facing camera combined with machine learning. It was tricky to do and tricky to combine with gameplay and storytelling.

What did you learn from the journey of 7 Minute Superhero?

The whole '7 minute workout' fad was huge at the time and we thought that if we made a better, more advanced, more customisable, more fun version, we'd have a lot of success. It didn't quite work out that way – I think people actually wanted something simpler and easier to play, ultimately! You live and learn.

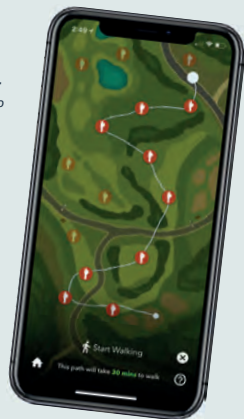
Tell us about The Walk

The Walk was created with the NHS and Department of Health. They trusted us to make a compelling game and while we consulted with their health and medical experts and read the scientific literature on walking and motivation, they generally left us alone to get on with it!

What have you learned from developing The Walk and seeing how people use it?

The Walk has been pretty popular and has a great community. It's clear there's demand for ways to make day-to-day walking more fun and interesting, but it's tricky from a game and user experience design perspective to know when to weave the story and gameplay into people's day. With running, you can have an intensive, all-consuming experience for 30-60 minutes, but people walk throughout the day and we don't want to annoy people by interrupting them with phone alerts and story clips. I suspect that new technology will make this easier in the future.

Six to Start developed The Walk with the UK's NHS





“The fitness industry has a lot to teach us about how to exercise safely and effectively, but they also have a lot to learn about how to use technology, gaming and storytelling

make it into Zombies, Run! I know there are some online fitness classes that use elements of role playing but it's hard being a great storyteller AND a great fitness instructor.

What are you working on at the moment?

We're 100 per cent focused on Zombies, Run! We want to keep improving the core zombie-centric gameplay and storyline while also experimenting with new kinds of stories and workouts.

Last year we launched a free series of home bodyweight workouts within Zombies, Run! called The Home Front, which was super fun, and I think we'll do more of that in the future!



What advice would you give the general fitness industry?

Incorporating story and gamification can have a huge impact. Zombies, Run!, Pokemon Go, VR fitness games, Nintendo's Ring Fit Adventure – these are played by millions of people already!

The general fitness industry has a lot to teach us in terms of how to exercise safely and effectively and how to motivate people on a personal level, but they also have a lot to learn in terms of how to use technology and gaming and storytelling effectively. ●

DIGITAL COMMUNITY

Matt Stebbings of SLT Group talks about the creation of their Community Portal, a new platform that aims to help anyone to get active, whether that's inside or outside of SLT's facilities

What is the SLT Group Community Portal?

SLT Group Community is a virtual online community where users can interact with one another and find vital services in the local community. These services include: adult weight management, smoking cessation, mental health and wellbeing, physical health and more.

Through the SLT Group Community portal users can connect with like-minded people with similar barriers to physical activity and join specific groups such as mental wellbeing support, diabetes support, cardiac health support and pre- and post-natal support, to name a few.

The community can connect users in new ways and help each other through their own health and wellbeing. They can create new and fun opportunities to improve their own health and wellbeing, simply by connecting and communicating with one another.

The portal also allows users to connect with other support networks run by our trusted partners, such as One Life Suffolk. All of the support groups have dedicated and qualified health professionals on hand to answer questions and users can share experiences with others. A problem shared is a problem halved.



Stebbings is community education manager at SLT



PHOTO: SLT GROUP



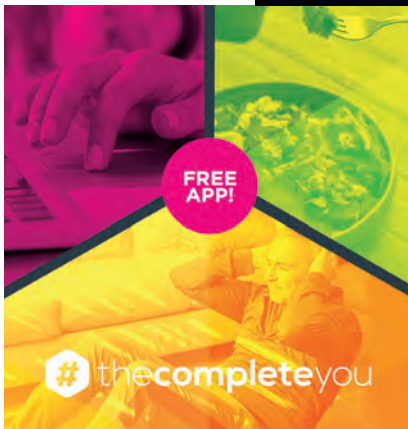
The new portal aims to attract people who want to become more physically active

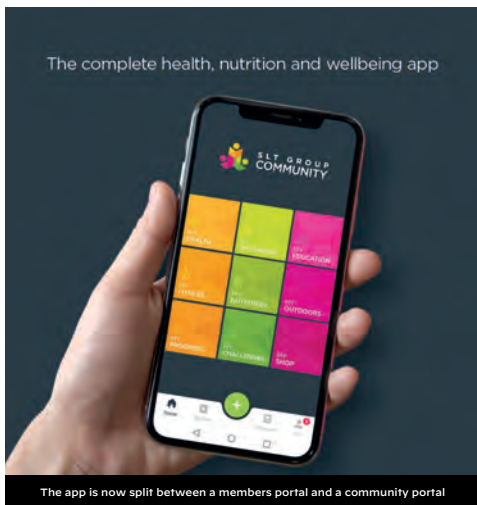
How does this fit with SLT's #thecompleteyou app?

Our community portal is an addition to the #thecompleteyou app – we've harnessed the power of our already successful #thecompleteyou app to bring users a new way of interacting, learning and improving their health, wellbeing and education all in one place.

The original #thecompleteyou app was a facility-based app but the community bolt-on is aimed at anyone wanting to become physically active both outside and inside our facilities.

Our #thecompleteyou app is now split between our facility members portal and the new community portal. We're utilising the traditional model to still actively engage our members using the site-specific portals within #thecompleteyou. Meanwhile, the community portal enables users to sign up and access free content, community groups, local like-minded people and more. Users can also upgrade to our PRO service which includes additional nutritional support and home workouts.





The app is now split between a members portal and a community portal

The community app is a way for people to interact, engage and participate from home or outdoors

► How did the Community Portal come about?

The SLT Group Community is an idea that was discussed before the pandemic, to help our local community become more physically active in and around their community. We understand that many inactive populations do not feel comfortable setting foot in a fitness facility, so the community app was a way for people to interact, engage and participate in physical activity and wellbeing activities from home or in a community setting. When the first lockdown was put in place, it became apparent very quickly that this app was needed sooner and so it was implemented during the first part of lockdown.

How was the app designed?

The app was developed by Virtuagym. We have now been working with them

for a number of years and see them as a trusted and successful partner.

The two pronged approach of the facility-based portal and community portal allows us to interact with our current paying facility members and also to begin to reach the wider community. The mobile strategy allows us to engage with users across the county. Our community portal allows us to reach those people who perhaps need extra support in making positive lifestyle changes.

What features help to bring people together?

The virtual online community is where users can interact with one another and find vital services in the local community. Users can connect with people who have similar barriers to physical activity and they can join specific groups such as mental wellbeing support,





The portal allows users to connect with each other and with partner organisations

diabetes support, cardiac health support, pre- and post-natal support, and more.

Users can create new and fun opportunities to improve their own health and wellbeing, simply by connecting and communicating with one another. The portal also allows users to connect with other support networks run by our trusted partners. All of the support groups have dedicated and qualified health professionals on hand to answer questions and users can share experiences with others.

What are your goals for the app?

The aim of the app is to grow it nationally to encourage other local communities to get involved. We also want to grow our health partnerships and incorporate others into the app so that it can become the one stop shop for all health, wellbeing and education for the nation. ●

PHOTO: SHUTTERSTOCK/NEWAFRICA



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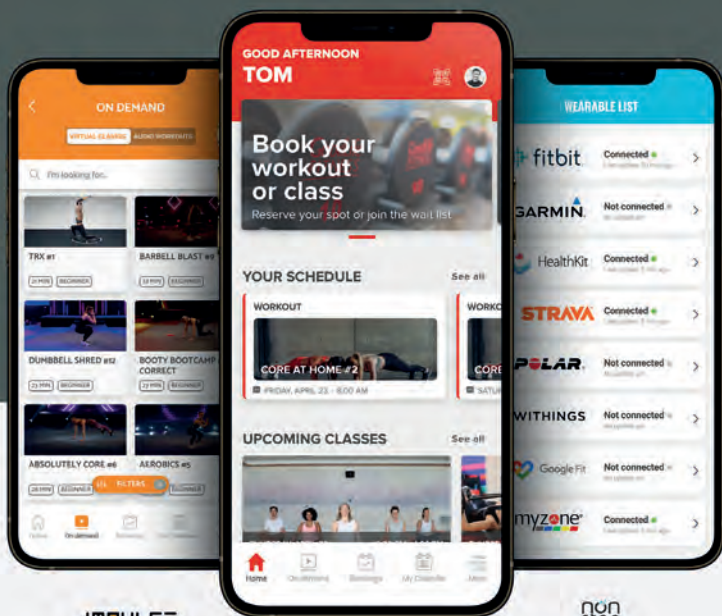
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A vital connection

NonStop Gym, Switzerland's no frills gym chain, has appointed FunXtion to create its member training app

NonStop Gym, a chain of 24/7 clubs in Switzerland, has partnered with FunXtion to create NSG Training, a fully branded member app that extends brand influence beyond the walls of its facilities and enables members to access pre-loaded workouts and training plans anytime, anywhere.

"NSG Training has enabled us to maintain a vital connection to members despite our facilities being closed due to Covid-19. Even when our clubs fully re-open, the app will continue to provide a valued service, helping members to fit training around busy lives rather than the other way around," explains Ellen Berg, founder and CEO of NonStop Gym.

"We've looked for the right partner for quite some time, in order to get the right content through to our members. When I met the FunXtion team it was clear that we shared the same view of brand communication and content creation in order to inspire and motivate members.

"Through a partnership with FunXtion, we have been able to get a fully custom-branded app up and running within a few months, providing a vital service to members when they need it most. The FunXtion content enables us to motivate members with a good selection of exercises and tailor made training programs. It's definitely outside of our expertise and we would not have achieved this on our own."

SEAMLESS INTEGRATION

The app, which is available in German, French and English, went live early February. The focus for NonStop Gym is now on encouraging as many members as possible to download the free app, available in both iOS and Android format.

Mendel Witzgenhausen, CEO at FunXtion, says: "Members now expect their gym to offer a digital solution. This is not going to end with the pandemic. For people to commit to a training plan long term, exercise needs to be seamlessly integrated into their daily routine. For this to happen, there needs to be a high degree of flexibility in terms of accessibility to professional, trusted, fitness content. Investment in a wraparound provision is no longer a nice-to-have, it is now the base level expectation of most members."

NSG Training integrates FunXtion's extensive library of with- and without-equipment workouts and training plans, enabling NonStop Gym members to train wherever they are, whenever they like. Via the FunXtion portal, members can also access motivating challenges to encourage them to push themselves and engage in friendly competition with other members. This is the start of the digital journey for NonStop Gyms and one which can now evolve with the needs of its members.

For more information about FunXtion, visit: www.funxtion.com or for more information about NonStop Gym www.nonstopgym.com





SHUTTERSTOCK/ANBARANJANA

Monitoring mental health

New technology uses advanced machine learning to monitor patients' mental health between visits to their medical providers

Researchers at Texas A&M University have developed a smart-device based electronic platform to help patients manage their mental health between appointments. The technology continuously monitors the patient's state of hyperarousal, which is one of the signs of psychological distress.

The platform can read facial cues, analyse voice patterns and integrate readings from built-in vital signs sensors on smartwatches to determine if a patient is feeling anxious or depressed.

The technology not only enables patients to better manage their mental health, it could also allow medical providers and counsellors to monitor how their patient is tracking.

GAP IN SERVICES

Dr. Farzan Sasangohar, assistant professor in the Wm Michael Barnes '64 Department of Industrial and Systems Engineering, explained: "The platform was inspired by our previous work on monitoring hyperarousal events among combat veterans. We identified a twofold gap in providing mental healthcare: firstly, underutilisation of mental health services, potentially due to emotional numbness and stigma; and secondly, lack of monitoring capabilities in between therapeutic sessions. The platform is our contribution to address these gaps."

Non-intrusive sensors in wearable technologies such as smartwatches are used together with advanced machine learning and data analytics techniques to detect patterns associated with mental health anomalies. In addition, novel technologies such as facial and voice sentiment analysis are utilised.

The platform provides a suite of therapeutic tools, such as breathing exercises, mindfulness, community support, telecare, automated messages and location sharing.

GAME CHANGING TECHNOLOGY

Results from initial testing of the technology suggest a high level of acceptance, adoption and compliance among users. There was also a high level of perceived accuracy for the detected events.

"I think this technology will be a game-changer," said Dr Sasangohar, "since it not only raises mental health awareness and keeps users in the loop about their current state, but it also provides timely intervention to deal with acute issues, preventing them from becoming chronic."

"I firmly believe the future of mental health care belongs to self-management technologies. Technology can play a big role in feeding providers with key objective information related to mental health and by providing timely, discreet and on-demand therapeutic interventions." ●



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monitoring accuracy both at the Club and in the open air



ACTIVITIES & PAYMENTS

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BRAND CUSTOMIZATION

fully customizable platform and HR monitors

