easyJet

2070

THE FUTURE TRAVEL REPORT

FOREWORD

I have spent all my working life in the travel business, from my beginnings as a tour guide in the mid-1980s to CEO of one of the largest and most innovative airlines in the world. From an insider's position, I have witnessed how much holidays and travel have changed - particularly when our own airline easyJet famously challenged the status quo for air travel nearly 30 years ago, ending an era of holidaying abroad being a preserve of the rich, and making flying affordable and accessible to all.

Innovation is in our DNA and we're always challenging ourselves to think big and look at how we can make travel even easier for people all across Europe, both today and for generations to come.

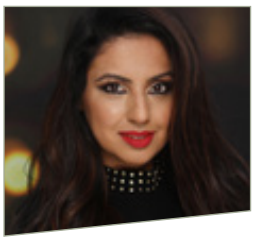
So, we've commissioned a panel of experts – academics, futurologists, and business advisors – to develop ideas and make predictions about how travel might look in fifty years' time, from choosing and booking your holiday to how the airport and flight experience may be transformed, and also looking at the accommodation people might stay in and the activities they could enjoy from travel in the 2070s. From biometric heartbeat passports, to 'time-travelling' holiday experiences in haptic body suits, holidays in 2070 are likely to be very different and therefore very exciting indeed.

One thing is for sure, the future of travel is bright. As the experts who compiled this report will show, the rapid advancement of new technology will be the driver for the next generation of travel over the next half century. In our early years, easyJet pioneered the use of direct booking via the internet for our customers, launching our first website in 1997, and today, we're working with industry leaders on hydrogen technology for zero-carbon emission aircraft that will transform the way we fly in the coming years.

Having seen such rapid progress over the last few years and given our history of innovation, I am incredibly excited for the industry's potential to revolutionise air travel whether that be making possible a future in which your heartbeat will become your passport, enabling the seats on your flight to adapt to your biology for ultimate comfort or smart hotels allowing us to configure our accommodation and meals to perfectly suit our tastes. My thanks to Professor Birgitte Andersen, Shivvy Jervis, Dr Patrick Dixon, Professor Graham Braithwaite, Dr Melissa Sterry and the team at Roland Berger who contributed to this report, and of course Dallas Campbell for helping to bring these exciting predictions to life.

Johan Lundgren,
CEO easyJet

EXPERT PANEL



Shivvy Jervis

One of Britain's 'Women of the Year' in 2021, Shivvy is a Futurist, trend forecaster and speaker who advocates for human-led innovation in the vital areas of digital advances, scientific developments and psychology. She only tests innovations with ethical and sustainable value.

Dr. Melissa Sterry

One of the world's most high-profile Futurists, Melissa consults to both private and public sector clients globally. Specialising in futures in the built environment, utilities, manufacturing, engineering and design, she has contributed to ground-breaking projects worldwide, including the UK, and Europe.

Dr Patrick Dixon

Chairman of Global Change Ltd, and has been ranked as one of the 20 most influential business thinkers alive today. He uses the word FUTURE as a mnemonic standing for "Six Faces of the Future" which will impact every large business: Fast, Urban, Tribal, Universal, Radical and Ethical.

Professor Graham Braithwaite

Professor Graham Braithwaite is Director of Transport Systems at Cranfield University, is a leading industry expert on safety, resilience, risk and reliability in transport and is the academic lead for the University's £67 million Digital Aviation Research and Technology Centre. In 2019, Graham led the University's successful bid for its sixth Queen's Anniversary Prize - for the University's flying classrooms and laboratories.

Nikhil Sachdeva

Nikhil is a Principal at Roland Berger, supporting their work into how the aviation sector can transition to sustainable technologies, from electrical propulsion to hydrogen and SAFs, and their potential for the aerospace and aviation sectors. Nikhil holds a Masters in Aerospace Engineering from Imperial College and an MBA from the Harvard Business School.

Birgitte Andersen

Professor Birgitte Andersen is Professor of the Economics and Management of Innovation at Birkbeck College, and CEO of Big Innovation Centre, a London-based think-tank. Through her work she combines thought leadership credentials, commercial flair, a proven entrepreneurial track record and business innovation experience. Her work is regularly published in peer-reviewed journals, discussed in the media and highlighted in national and international government reports such as the World Development Report, among others.

WHERE TO THIS YEAR? THE DESTINATIONS OF THE FUTURE.

Forget the printed holiday brochure, or even scrolling through Instagram to inspire your next holiday. When deciding your holiday destination in 2070, bionic and Meta previews will allow you to physically experience your next escape. Next generation reality tech will let you 'try before you buy' from your own living room.

We'll immerse ourselves in potential holiday scenarios, by being able to stroll along the beach to feel the sand between our toes, plunge into glittering swimming pools at our resort, hike a mountain trail or wander into town for a glimpse of local nightlife.

"Just as you try on clothes in a store today, or listen to music samples online before you decide to buy, customers will be able to explore and try out holiday destinations in the online metaverse before making a purchase, as virtual reality experiences and VR glasses become more widely available in daily life," says Professor Birgitte Andersen, the CEO of Big Innovation Centre. "It will benefit those who have limited time or financial options and need to make a better, educated choice."

And we won't necessarily be heading for that traditional sun and sand holiday resort or city break. Your choice of destination could be far more varied and exciting than anything you might be tempted by now.

Fancy a moonwalk?

By 2070, the destination of choice for the adventurous could be literally 'out of this world'. According to innovations forecaster Shivvy Jervis, within thirty to fifty years we can expect short space-based holiday trips to become a reality. That could include astronaut-experience holidays to the Moon itself, with moon-buggy rides, space-suited excursions to explore craters and getting a very different holiday. Who's for low-gravity volleyball?

Subterranean Hotels

Expect hotels like never before when it comes to our destinations of the future. As we seek to explore new places and stay in increasingly diverse surroundings, we will be staying in subterranean or underwater hotels off the coast of traditional resorts.

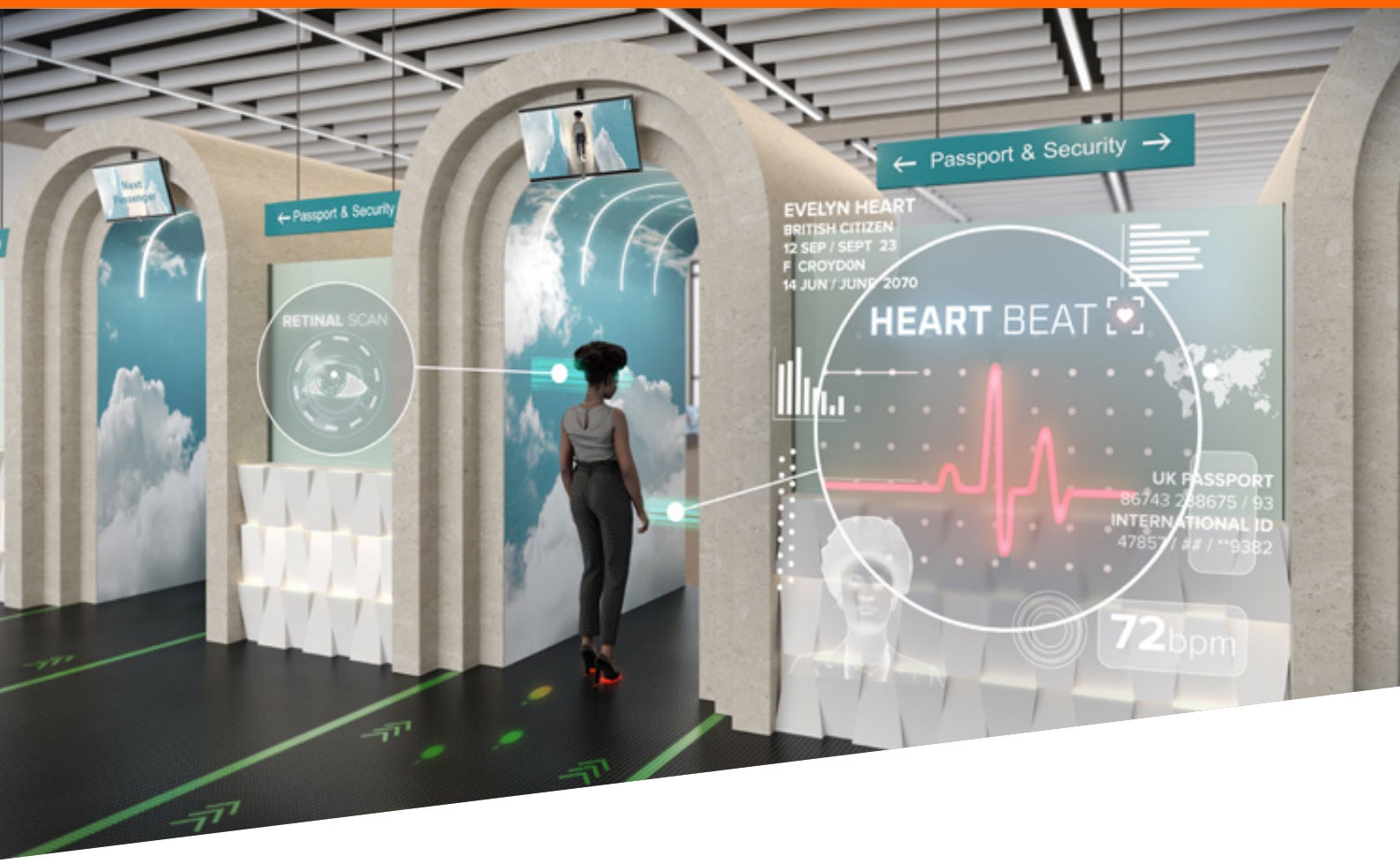
Shivvy Jervis suggests, “an aquatic paradise where your bedroom window looks out onto shoals of fish swimming by.”

Out in the desert or in mountain retreats - subterranean hotels will enable us to experience some of the traditionally uninhabitable and most remote locations, down underground! Subterranean hotels will be built into the fabric of the earth to be at one with the environment and to be super energy efficient. These hotels will become more common as the travel and tourism industry will respond to demand for experiences beyond and under the land.

Healthful holidays

Health tourism has been with us since Roman times, from taking in the mineral waters in Bath to the grand European spa resorts of the 18th and 19th centuries. But as the stresses and strains of life accelerate through the 21st century, you can expect to see many more holidays promoted as destinations for health. From forest bathing to Wim Hof style immersion in frozen lakes, nature is increasingly seen as balm for the soul and cure for the body. You could find that by

2070, some holidays are seen as so healthful that your doctor will not only advise you to take a break but be able to write a prescription for a mountain retreat or a week in a calming Costa Rican jungle resort.



GETTING THERE: JOURNEYS OF THE FUTURE

You've chosen your destination, you're on your way to a relaxing holiday. By 2070, that journey is going to feel very different, say our experts: smoother, faster, and wonderfully easy.

Travel to and arrival at the airport could be an altogether more integrated experience, with every airport and major city enjoying streamlined and rapid transport links. "85% of travellers in many countries will arrive by electric-powered public transport, including autonomous (self-driving) vehicles," says Dr Patrick Dixon, Chairman of Global Change Ltd. You might even travel to the airport via e-VTOL – electric vertical take-off and landing air taxis that whisk you from home to airport. "At least 250 companies are already developing these short-hop vehicles," he explains.

Your pulse is your passport

Worries about paperwork – did I remember to bring the tickets, where's my passport – will have vanished. By 2070, all ticketing and identity documentation will be digital. Each individual's biometric data, stored securely in the cloud and available globally, will have replaced passports – not just fingerprints or retina scans, but even your heartbeat, as everyone's 'cardiac signature' is unique.

There will be no queues for check in or security – in fact, there will be no apparent barriers to hold you up. "Airport security infrastructure will be incredibly sophisticated," says BioFuturist Dr Melissa Sterry, "but at the same time less obtrusive." As you walk into the airport, facial recognition software will have noted your arrival, identified you, matched you with your booked flight and sent messages to your personal devices like a phone or smart watch to direct you onwards. Your baggage, with smart data tags embedded in your suitcases, is automatically unloaded from train or taxi and sent directly to the right aircraft, undergoing biological, chemical and imaging scans on the way. "'Going 'through security' or 'passport control' will be meaningless terms," says Dr Dixon. "You will not be aware of any sort of checks, but you too will be scanned and tracked as you move through the airport."

Professor Birgitte Andersen agrees, and goes one further to say, "To track luggage and goods, the digital passport will be combined with trip information and suitcase identification."

Lose the extra baggage

"Eventually," says Professor Graham Braithwaite, "the need to take a big suitcase could disappear completely. Instead of taking clothes on holiday,

all you'll need is your measurements!" A recyclable clothing service at your destination using 3D printers could revolutionise the holiday wardrobe. "Simply provide your destination with your measurements via a body scan before you fly and, upon arrival, find a wardrobe filled with outfits in your exact size. When you leave, clothes can be recycled and reprinted for the next tourist. Not only will this reduce the stress of packing, holiday fashion becomes more sustainable."

Relax before Boarding

Despite the lack of queues, you'll still probably want to arrive early at the airport, because that will be where the holiday experience starts. "The airport of the future will become a destination, a place customers want to spend time in," suggests Professor Braithwaite, "similar to Singapore's Changi Airport today." Part shopping mall, part leisure facility, robot-supervised play parks will allow you to safely leave the kids to enjoy themselves while you shop, eat, or enjoy a massage from a cyber-masseuse.

You'll probably be using digital crypto-currency from the moment you leave home, issued by your holiday provider, says Professor Birgitte Andersen of Big Innovation Centre, London. "Cryptocurrencies have no transaction costs or bank exchange rates, and they are used worldwide and without borders. Customers will incur less expense while spending money abroad as a result."

This will do away with the need to buy local currency for wherever you travel. Using crypto-coins, you'll be able to book and pay for your duty-free purchase at the departure airport, or on the plane, and it will be waiting for you at the arrival terminal, removing the need to fly heavy bottles across the world.

Buckle your seatbelts

Once aboard the aircraft, you'll be able to enjoy the flight in a totally new way.

"Biomimetic design – copying efficiencies found in nature – will revolutionise aircraft seating and comfort," says Dr Melissa Sterry. "Currently, seats are standardised partly for safety reasons, but innovation in materials science will see the creation of lighter yet stronger materials, for a tailored comfort experience at the same time as maintaining safety." Seats will no longer be 'one size fits all', but you will be able to book the kind of seat most appropriate to your body type, accommodating your height and build. Smart materials could cater for your personal temperature preferences, cooling you down or warming you up, and include antimicrobial elements for enhanced hygiene.

"Expect continuing investment in innovative and more efficient aircraft design", says Dr Patrick Dixon. With zero carbon emission hydrogen aircraft engine

technology already being successfully tested by the likes of British aerospace manufacturer Rolls Royce, and on track to come into operation for short-haul operations like easyJet's in the coming years, by 2070 passengers will have been travelling on zero emission aircraft for a number of years.

Futurist Shivvy Jervis is confident that further design improvements such as blended wing bodies will create more cabin space. "You might no longer be sitting in a tube-shaped space," she says. "Some aircraft of the future could be more like a luxurious hotel in the sky, with plenty of legroom, lounges to socialise in, in-flight bars – for *all* passengers, not just First Class."

Your Inflight Entertainment

As technology makes the on-board experience more customisable, you will increasingly be able to choose what you want and what level of service you are prepared to pay for. "Personalisation will be key to your travel experience in the future," says Shivvy Jervis, "including inflight food. We already have machines that can take the basic protein building blocks and create different foods on demand. You will be able to choose whatever you fancy to eat on board, and have it set before you within minutes.

What you do during the flight could be very different. No more seat back screens, but a more futuristic kind of device could beam movies straight before your eyes. We'll be beyond the world of VR headsets, with holograms and advances on television tech making inflight entertainment thoroughly immersive.

Dr Melissa Sterry sums it up: "The journey itself will be something to be savoured, as much a part of the holiday experience as the arrival at your destination," she says. So sit back, relax and enjoy your flight.

BEING THERE: THE HOLIDAY ACCOMMODATION OF THE FUTURE

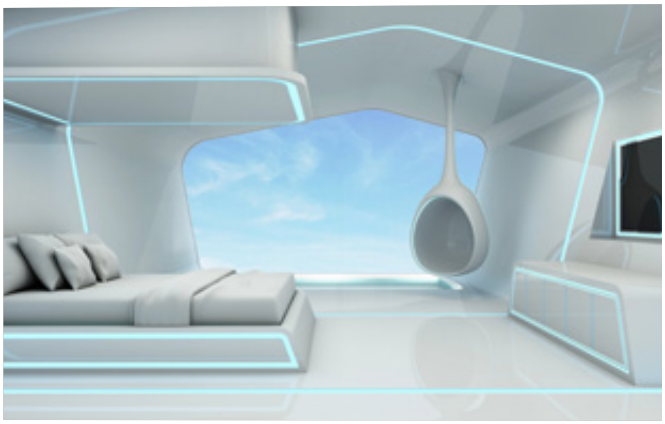
It's 2070, and you've just arrived at your holiday destination. What can you expect? How different will holiday accommodation and services be? Are we looking at robot concierges, supersmart hotel rooms, with artificial intelligence (AI) anticipating every need?

Some of these trends are already with us. Shivvy Jervis points out that at The Mandarin Oriental Hotel in Las Vegas, for instance, guests may be greeted by Pepper, a robot with a pleasant, welcoming 'face' and high computational ability. The FlyZoo hotel chain in China uses a fully automated approach, guests interacting only with robots. Will the hotel of the future still offer a personal touch?

Adaptive hotels

The answer is yes – and more so than ever, says Shivvy Jervis – aided invisibly by smart tech. In her view, infinite personalisation is the way of the future.

Your holiday provider could supply you with a digital holographic personal concierge, waiting to greet you in the lobby to tend to your every need. Before you even get to the hotel, signals from the driverless car that picked you up at the airport will alert staff you're on your way, so you will be checked in remotely and someone – human or robot – will be ready to offer help with luggage. We have long ago moved on from keys to cards to open your hotel room, but, in the future, you won't even need that, says Ms Jervis. The door will recognise your face and unlock the room for you, just as facial ID now unlocks mobile phones.



It will be possible to choose your room's décor to suit your own tastes. Greeted by your favourite playlist as you walk into it, your room will be instantly customisable. Blue walls for calm relaxation? Yellow to fire you with energy? A menu of scents to perfume the air? A bed adjusted to the exact softness you like? "Think of the hotel itself as one single AI-meets-human organism that controls all aspects of your stay, customised to your preferences," she says. "A digital

virtual room assistant (think Super-Alexa) will greet you and help you with anything from ordering a new towel to suggesting a place to eat and making a reservation for you."

Will 'room service' be literally that – a smart hotel room that is able to run your bath for you to the perfect temperature and prepare any recipe you want, using a built-in 3D printer? That's entirely possible, says Shivvy Jervis, and as you return from the beach you'll use your mobile phone to start the process, just as some use phones now to turn up the central heating or switch on their smart oven when they're on the way home.

Thanks to 3D printing, the breakfast buffet will be transformed. A digital menu where you can type in what you want, from omelette to kedgeree, pancakes to a fry up, the buffet of 2070 will provide you with a holiday breakfast of dreams.

The design of new hotels will change too, in ways that respect the planet. "The most forward-thinking architects have already envisaged ways to do more with less space," says Dr Sterry. "Hoteliers need to be able to shape-shift their facilities to meet wide-ranging customer demands. Rooms could be separated by movable walls, to divide a double room into two singles, or expand it into a family room to accommodate two adults and their children, depending on demand." Such adaptability could mean the end of the 'single supplement' that penalises solo travellers, while fold-down beds and pull-out furniture will make smaller spaces more flexible and feel bigger.

Human Powered Hotels

Hotels' reliance on traditional, carbon-based energy sources will continue to fall, says Dr Melissa Sterry. Self-generated energy such as rooftop solar panels or wind turbines already powers some, but it is possible that the hotel of the future could be powered by... YOU, as the building harvests energy from its guests.

Extraordinary as it may seem, energy generated by our bodies' movements is becoming increasingly a possibility – and that doesn't mean you will have to run on a treadmill or pedal an exercise bike to keep the light on in your hotel room! The first generation of devices that can harness the power of our footsteps, such as Pavegen flooring, has already been developed. A composite tile connected to an electro-magnetic generator can convert a single footstep into two to five joules of off-grid energy. Dubai is installing 93 kilometres of kinetic pavement that will generate clean power.

Not only green energy, but literally green, hotels in the future will incorporate nature into their indoor environments. We know that natural green spaces are good for our physical and mental health, and this trend will encompass much more than a pleasant hotel garden or a potted plant in the lobby. Hotels will strive to bring the outside indoors, built around natural features such as waterfalls, while artists working with technology will be able to create theatrical experiences that imitate the outdoors – clouds drifting high above your head as you check in, or a refreshing, cooling rain shower in the lobby.

Getting About

You won't need to worry about navigating local transport networks or car hire while on holiday, says Shivvy Jervis. In fact, there will be no need to have a driving licence: rental cars or e-VTOLs (electric vertical take-off and landing aircrafts) will be fully autonomous electric vehicles taking you wherever you want to go, dropping you at your destination without any worries over how to get there or where to park.

For those struggling to communicate in the local language, technological solutions will also break down those barriers, meaning tourism becomes a truly immersive and even more engaged experience with the communities we visit. Rather than having to peer in bright sunlight at Google Translate on your phone screen, you will have an in-ear device that translates for you in real time, allowing you to interact and speak the local lingo.

WHAT WE'LL DO ON OUR HOLIDAYS: ACTIVITIES & EXCURSIONS

Day one. Waking up at your destination, and the holiday stretches enticingly ahead of you. But by 2070, what will you actually do, day by day?

As we move through the 21st century, rapid advances in digital technology, will drive holiday innovation, as well as more of a desire for "the unusual, the exotic, and the immersive"

The lust for "adventure and authentic local experience," and how we do this sustainably, says Dr Dixon, will dictate the nature of holiday activities in 50 years' time.

Artificial intelligence will also play a role in our holiday escapades. AI will 'match' you with the right kind of holiday, the right travel companions, and the right activities. Just as the data collected today when you visit a website allows online companies like Instagram or Amazon to make recommendations for what to view or buy, the perfect day out will be determined for you by artificial intelligence (AI). A trip in a mini-sub to explore the sea bed? Hoverboarding, flyboarding or E-foiling on a nearby beach? Activities like these will have become widely available on every beachfront over the coming decades.

Time Travel for History Buffs

The easiest way to immerse yourself adventurously in a holiday excursion will be via augmented reality. For those who like to visit historical sites, "Augmented reality – overlaying digital information onto the real world – will create unforgettable, intense experiences," says Shivvy Jervis.

Haptic suit technology will recreate the past for history-loving holidaymakers, enabling them to experience the sights and sounds of Socrates debating in the ancient Agora below the Acropolis at Athens, a Stone Age winter solstice at Stonehenge, a bustling medieval market in a French town, and many other historic events.

Imagine visiting the Vatican city in the 16th century, to watch Michelangelo in his gravity defying painting of the Sistine Chapel ceiling, or seeing the Colossus of Rhodes looming above every day life in Ancient Greece; AI will allow you to personalise the content, the style, what questions you want answered, and there will be child-friendly alternatives for younger visitors.

Dr Melissa Sterry tells us. "Forms of MR – mixed reality – will overlay images on the landscape to visually reconstruct what happened there: a famous battle, the troops surging around you, being sat amongst the cheering crowd at the very first Olympic games. In darker locations, this could be in the form of a projected hologram, while in bright light you might wear a lightweight headset or glasses. Haptic suits could intensify the experience, to make you feel with every fibre of your body that you are actually there, experiencing it just as they would have all those years ago.

Underwater Seafaris

Associated with marine park resorts, subterranean and floating water hotels all over the world will mean the emergence of 'sea-fari' excursions by mini-submarine to watch and experience deep-sea wildlife.

These seafaris will take us far closer to marine wildlife than is currently possible. Clear submarines will offer whole viewing panel windows for tourists to be up close and personal with sharks, fishes and deep-sea animal divers. Hear the sights and sounds of underwater unlike ever before!

Above the Water

Today's banana boating and surfing will go to a whole new level by the time of 2070. Hoverboarding, flyboarding or E-foiling on a nearby beach? Activities like these will have become widely available on every beachfront over the coming decades - providing thrill-seekers and sunbathers with the opportunity to get activity on the sea like never before.

Not quite walking on water, but jet packs on the shore will also allow us to skim over the sea, making jet-skiing seem like a relic of the past.

Holidays That Enable

Forms of innovative clothing could enable some people to enjoy a more active holiday than they can today. Lightweight exoskeletons and other wearable bionic devices are already being developed to reduce metabolic load and muscle strain for people such as construction workers, whose work involves heavy lifting. Similar wearables could help those who need support with mobility safely explore and extend their range.

Shivvy Jervis is convinced there is a niche market to be explored by 2070 to further open the world up for everyone. "There are more than a billion people in the world who have some form of disability," she says. "By 2070, we can expect tailored holidays, with some providers choosing to specialise in this area. Think autism-friendly hotels and exoskeletons for getting out and about – why should anyone miss out on the fun and pleasure of being outdoors in nature?"

Again, advances in digital technology and AI will make booking such holidays simpler and more personalised.

IN CONCLUSION...

A summary from lead expert, Professor Birgitte Andersen

In my role as CEO of Big Innovation Centre and as a Professor of Economics and Innovation, I have learnt how emerging technologies and research can open up new possibilities and enable us to explore our world in ways we have only dreamed of. Humanity has grown so accustomed to frequent beneficial advances in tech and engineering, that it can become easy to take for granted how far we've come in the last 50 years.

Think back to 1973 – smartphones were a thing of wildest dreams, 'Google' would have seemed like a made-up word, and laptops were still almost a decade away from being invented. It's unfathomable to us now to have lived in a world without these core technologies that are so fundamental to our being. So, when looking forward to the next 50 years, the potential possibilities for growth and development in innovation and technology for travel are endless. This report shows that the world is set to drastically change, and the travel industry, how people connect and enrich their lives, is a large part of that.

With 90% of Brits excited or intrigued by what technological advances could mean for the future of travel, this report demonstrates how travel and tourism will change immeasurably. The predictions in this report paint an incredible picture for what is to come. I have no doubt that with the speed with which modern science progresses, we could be seeing some of these predictions come to life even before 2070.

The report shows new technologies will play a prominent role and shape how we choose a destination, how we will travel there, what our accommodation will look like, as well the experiences we will have when we get there. As some of the experts in this report agreed, we can expect that bionic haptic suits, Metaverse and mixed reality will play a large part in creating 'try before you buy' holiday previews. This will revolutionise the way we travel, allowing us to see, hear, smell and feel a destination before we book our flights to ensure it's the perfect fit.

Once we choose our destinations, the experiences we'll have once we arrive will make today's jet-skiing look like ancient technology. The idea of time-travel interested me – being able to bear witness to events that we could previously only read about in history books – as well as existing experiences being amplified one step further than they are today like surfing, which will become hoverboarding and E-foiling.

What this report does incredibly well is delve deep into every possible aspect of travel, to give a high-quality analysis of the future, but also of how current tech will evolve into greater things. For example, Shivvy Jervis paints a very compelling picture of what adaptive, smart hotels of the future could look like. Whilst some of the more standard software is already in place, such as Alexa-style room assistant, the additional level of personalisation that is predicted to be on offer goes above and beyond. Room décor suited to your taste, a mattress with your preferred firmness, and the room set to your ideal temperature – it's a fascinating concept that really grabbed my attention.

Alongside my own research, my fellow report contributors have created a detailed exploration into what could be possible if we continue to invest in scientific development and innovation, and in 50 years' time, I'm intrigued to see how many predictions have become a reality.

A final word from TV presenter Dallas Campbell, who unveils the report's predictions in a new video

Reading this report was a fascinating glimpse into the future of air travel. As a writer and TV presenter I've been reporting on innovations in the transport sector and experienced first hand the rapid development of astounding new technologies for over 20 years.

Travel is set to change in all sorts of ways - we'll be able to go to previously unattainable destinations, experience adventures that were previously lost to history, and personalise every aspect of our trip.

The technology available to us en route to our destinations will provide new levels of ease and individual comfort: from biometric passports, to fully adaptable ergonomic plane seats and incredible advances to in-flight entertainment. Even before we reach 2070 technology will continue to push the boundaries of what's possible. Being involved in this report has given me a ticket to the future of travel and I for one can't wait to be able see the Hanging Gardens of Babylon before enjoying a 3D printed meal!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