



# 5 TECHNOLOGIES DISRUPTING SPA AND WELLNESS

The spa and wellness world is being rocked by tech disruption right now.

The COVID-19 pandemic has forced businesses to innovate and change the way we operate, now and probably forever. But the pandemic is only one factor in what was already a changing world, and has simply pushed us towards the accelerated adoption of certain technologies. Many were well on their way to widespread adoption, or at least widespread niche popularity, while others have been given an unanticipated boost thanks to sudden need and demand.

Whatever the reason, those who don't keep up with these rapid developments may find themselves left behind. There was a time when some areas of spa and wellness could still afford to be somewhat resistant to technological advancement, but that time is gone.

Here are the five technology trends disrupting spa and wellness, and why they deserve your attention.

## **VIRTUAL REALITY (VR)**

Virtual reality (VR) is finding many applications in healthcare, spa, and wellness.

Studies are finding that VR may be an effective treatment for pain relief. For example, researchers at the University of California, Los Angeles, conducted an experiment on 120 hospital patients and found that playing virtual reality games or relaxing in a virtual nature setting reduced their pain symptoms. VR is being used in hospitals for women in labor and for children undergoing uncomfortable procedures, while the Virtual Reality Medical Center in San Diego is using VR exposure therapy in combination with biofeedback and cognitive behavioral therapy as a treatment for pain, phobias, anxiety, and stress. VR apps are also being developed for pain management, to be used in combination with other treatments.

For the everyday user, VR apps, such as Guided Meditation VR, allow you to place yourself in various exotic and relaxing locations. And now that headsets

are more affordable, these technologies are accessible to more and more people.

When it comes to spas, VR experiences allow the guest to be "transported" to calming locations, often in combination with meditation and mindfulness exercises. Kohler Waters, for example, offers a virtual reality pedicure in its spas, combining a foot and leg exfoliation with a guided meditation using a VR headset. Guests can personalize the experience with a selection of VR options to improve breathing and mindfulness.

Another spa and wellness VR offering is Natura Bisse's Mindful Touch Facial, which combines Natura Bisse's facial and body treatments, Virtual Reality, mindfulness and the power of touch to offer a unique treatment at luxury spas. Taking the concept to the fullest extent, Esqapes, in Los Angeles, is an all-VR spa where "fantastic, beautifully crafted, virtual environments" are paired with massage "to transport your mind

and body to another place."

On the workout front, you'll find concepts like ICAROS, a workout system consisting of a device, a controller and a VR headset that fuses health-science and gaming technology to enhance body and mind performance. The system allows you to choose between immersive workout experiences such as flying, diving, or free falling.

Virtual Reality is opening the door on new worlds. This tech allows spas to offer new, exciting, and immersive experiences to guests, expanding the landscape of possibilities.



### **ROBOTICS**

So far, robotics' role in healthcare has been somewhat limited to areas like eldercare and cognition. Companion robots like PARO the seal, and others, are designed to keep seniors, as well as Alzheimer's and dementia patients, company. Robots have also been tapped to help with things like pill dispensation and other mundane tasks in elder care homes.

Massage robots have also been developed in recent years, like Emma (Expert Manipulative Massage Automation), who started working in Singapore's Novahealth TCM Clinic in 2017. Emma, developed by AiTreat, has a highly articulated arm with soft massage tips that mimic the human palm and thumb, and that replicate the traditional acupoint massage known as "tuina." At the time, Emma's developer Albert Zhang said the robot would address the manpower shortage and issues of consistency in treatment quality in the healthcare industry.

"Using Emma will open up low-cost treatment alternatives in countries where healthcare costs are

high," he said, "especially when compounded by an aging population with a growing demand for chronic pain management treatment."

Another example is the Wheeme, developed by Israeli scientists in 2010, for home use. BackHug, a therapeutic massage device and app, recently hit the market, as did LEROU, which mimics the action of temple massage. Massage robots, however, have not yet seen widespread adoption. In 2018, Erica Orange, of Future Hunters, told Spa Executive, "I don't foresee a future in which people will want to get massaged by a robot. We forget the powerful impact of human touch, and the uncanny valley will be a tough hurdle for people to get past — especially in a spa setting where they are disrobed and more vulnerable."

But, with the advent of COVID-19 that may change, and

interest in these robotics and other contactless treatment options may increase. Case in point: though not a robot, Hyperice has recently launched contactless massage treatment options that will be used in several spas at Four Seasons Hotels and Resorts properties.

Meanwhile, Blue Ocean Robotic's UVD disinfection robots have been in a game changer in hospitals. This sounds like something that may spill over into hospitality, where companies are also using robot butlers. And restaurants may soon be using robot servers in order to attract diners back over the next couple of years.

Robotics will provide options for social distancing in areas where this is typically not an option, as well as take over menial tasks, freeing up team members and service providers to focus on tasks that require human attention.



## **ARTIFICIAL INTELLIGENCE (AI)**

Artificial Intelligence will allow businesses to further personalize the guest experience and support customers and customer relationships in new and intriguing ways.

The skincare industry is making good use of AI and machine learning,

combining dermatology with data to create bespoke product offerings. A growing list of companies is offering made-to-order skincare solutions based on data that is typically gathered through questionnaires that ask about individual skin type, as well as environmental.

The products are created using algorithms that choose the right ingredients and formula to fit the customer's needs. Moreover, using machine learning and user feedback, the algorithm can evolve the product if the user's needs change.



Proven Skincare, for example, has created the Skin Genome Project, a comprehensive skincare database that can analyze product information, real-people testimonials, scientific publications, and water hardness, humidity level, and UV index based on location. Using questionnaire responses, the database purports to sift through this information to select the best ingredients for a person's skin.

Atolla is another example. Founded by a Massachusetts University of Technology (MIT) engineer in 2019, the brand supplies users with testing kits to measure their skin's hydration, oil, pH, and absorption, and then sends them a face serum calibrated to their needs.

L'Oréal has also joined the Al revolution, using Augmented Reality and deep learning to create a digital skin diagnostic tool for consumers that evaluates and addresses the signs of skin aging. The technology's first application, Vichy SkinConsult AI, launched in January 2019 in Canada.

Beyond beauty, more applications for AI are to be found in mental health and wellness, including chatbots like Woebot, an AI-powered, interactive smartphone app designed to support users in managing distressing thoughts and feelings using principles of Cognitive Behavioral Therapy (CBT). Wysa is a similar app created to help with behavioral and mental health issues, like depression and anxiety.

Al will soon find its way to the forefront of wellness through these and other inroads, elevating personalization to new heights and beyond.

#### **WEARABLES**

Wearable technologies combine data and AI with biosensors. The most popular of these is probably the Fitbit, which tracks movement, sleep, energy burn, and more, and has wide appeal because it offers users insight into and the feeling of control over their health. This is likely followed closely by the smart watch. But there is much more to wearables.

Smart clothing, designed to boost health and monitor biomarkers, is flooding the research and development space. Nadi X, for example, is activated yoga apparel designed with embedded electronics that use vibrational feedback to guide the wearer through yoga practice like an instructor. And Athlete Recovery, from Under Armour, is a clothing line that absorbs heat from the body and reflects it back onto the wearer's skin as Far Infrared light, said to enhance relaxation and encourage muscle recovery. Sensoria fitness socks track the alignment of your feet when walking or running and the Neviano swimsuit alerts you when UV levels are high and more sunscreen is needed.

Some wearables focus on women's health, like the Ava Bracelet, which tracks fertility and hormonal cycles. The Elvie is a tampon-like device that connects to a smartphone app to provide workouts for your pelvic floor muscles, which can aid with bladder and bowel control, and recovery from childbirth, and Elvie also makes a wearable breast pump. The Livi is a device designed to offer relief from menstrual cramps. Fitbit and Garmin also offer menstrual trackers.

Smart jewellery can detect a person's mood and help monitor for stress and anxiety, while the Muse headband monitors brain activity during meditation. Also fascinating are smart tattoos. MC10 is a company that has created a stretchable, digital tattoo-like device, thinner than a human hair, that can "sense, measure, analyze, and communicate information" about the wearer. Researchers at Harvard and MIT have also developed color-changing tattoo ink to monitor hydration and blood sugar.

Spa and wellness is in an excellent position to make good use of these technologies. As more people come to them with devices they've been using to track their body metrics, analysts can use this data to curate personalized guest experiences. This will help usher in a new era of health and wellness in which spas become one-stop shops for achieving wellness goals.

On a more controversial note, the advent of COVID-19 has also precipitated a rise of wearables, as employers and governments are asking – or mandating – that people use devices to collect health information and detect or log people's activities and proximity to one another.

#### **SOFTWARE**

Business management software has become an important part of spa operations. One of the most obvious examples is online and mobile booking. As millennials are now a larger segment of the wellness market, these options have become requirements, because this cohort does not like to make phone calls. People have also grown accustomed to booking at their own convenience and are increasingly put off by limitations like having to book during business hours or leave a voicemail and wait for a callback.

But software is so much more than online booking. With spa business management software, spreadsheets and manual record keeping are things of the past. Software takes care of menial tasks, tracking everything from revenue and occupancy to individual team performance, payroll, and inventory. What once took hours, or even days to complete, now takes mere minutes, freeing up time for managers and directors to focus on the guest experience. This means having the opportunity to elevate this experience to previously unattainable heights.

Software helps manage yield and track turn away, allowing managers to efficiently optimize revenue. It

helps manage gift card sales and maintain customer relationships through loyalty and membership programs, and helps you keep in touch with guests by sending communications, like satisfaction surveys.

A good cloud management software will also safely guard your guests' information and guarantee HIPAA compliance. In this day and age, you don't want to be keeping paper records that can get lost or be vulnerable to internal breaches.

In the new post-lockdown era, software will grow even more in importance, as remote check in and payment options, and digital intake forms, will facilitate physical distancing and reduce unnecessary human contact.

These technologies will help spas maximize revenue, develop better guest relationships and create better experiences. Spas will play a larger role in people's health and longevity and technology will facilitate this deeper relationship.

To be a part of this future, businesses will want to get on board with many of these technologies now.

