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The Fast-Forward Tech Stack for 2024

The Hotel Yearbook Technology 2024

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Engineering A Sustainable Future: Empowering Change In The Hospitality Industry

Tech Stack

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Synopsis

In this article, Accor's Deputy CTO, who also heads the IT Strategy & Performance team, outlines Accor's commitment towards sustainability in business operations, citing the potential of technology in addressing global challenges. They have been instrumental in eliminating single-use plastics, working towards achieving net-zero emissions, and driving substantial change across the hospitality industry. Accor's sustainability strategies, embedded at all levels, have led to a majority of employees being trained in recognizing and addressing the industry's environmental and social impact. Accor Tech, under their guidance, focuses on reducing the direct carbon footprint of their information systems and innovating "Tech for Green" solutions. The significant projects for 2023 include a transition to cloud computing, a new sustainability reporting tool, and pioneering energy reduction technologies in hotels. The tech-driven initiatives are not only poised to lower their environmental impact but also resonate with an increasing number of stakeholders prioritizing sustainability.

I decided to study engineering when I was in high school and have always been fascinated by maths and by the excitement of solving problems. Engineering works on rigorous scientific principles and natural laws: that's what makes it both so challenging and so rewarding.

For me, technology is in a really great position to help find solutions to sustainability challenges, although, of course, more fundamental social and economic changes are an equally important part of the picture.

I am Deputy CTO at Accor, also leading the IT Strategy & Performance team. Our Accor-wide sustainability strategy is founded on science: we aim to contribute to a Net Zero World, bring our absolute emissions to zero and play our part in preserving the natural environment and resources. We are determined to make our business model truly sustainable, by acknowledging the implicit limitations of Planet Earth, and embedding this recognition at the heart of everything we do.

Put simply, we need to dramatically transform the way we operate and innovate and make some difficult, disruptive changes.

Accor prides itself on being best in class, and we are now even more committed to change expectations working across the whole hospitality industry to create a truly diverse and sustainable future. Globally, the challenges we face are shared: working together is the only possible solution. Of course, our personal commitment and our leadership matter, but I believe our IT teams have a key role to play in championing the changes we need to make.

Over the past few years, Accor has made significant commitments to real change. We eliminated single-use plastics from hotels. We also set our sights on achieving net zero by 2050. In 2021, we set an ambitious emissions reduction target of -46% by 2030 (Scopes 1 & 2) validated by the Science Based Target Initiative in line with the Paris Agreement.

For change to really take hold, it needs to become real and achievable across every part of the business - from front-line to our Corporate offices. This is why our Chief Sustainability Officer reports directly to the CEO and, in 2022, 97% of colleagues across the world followed a 6+-hour School for Change online training, ensuring they are fully aware of the challenges and possible solutions to the industry's environmental and social impact.

Adopting sustainable practices is basically just the right thing to do. However, it is also an opportunity for our industry to become more resilient. If we don't monitor, control and improve performance, we risk the foundation of the business: inaction could potentially cost USD2-4 trillion globally in lost revenue over the coming decades. Indeed, sustainability issues also impact our relationship with a growing number of stakeholders, from guests to B2B partners. According to a recent Booking.com study, 75% of travelers factor sustainability into their accommodation choices. Similarly, 70% of Accor's global strategic accounts have committed to Science Based Target sustainable criteria, and more and more B2B clients are prioritizing sustainability when they ask for proposals.

As an industry, tourism and hospitality takes its toll on the environment: total greenhouse gas emissions stood at approximately 5.2 giga tons per year in 2019 and may rise by as much as 20% by the end of the decade. This represents a substantial 9-12% of total global emissions.

At Accor Tech, we work on two distinct areas of environmental impact. Firstly, the direct carbon footprint of information systems is estimated at about 2%, and **Green IT initiatives** address this immediate area of concern. These emissions lie directly within our control as a tech team. We also work to create innovative **Tech for Green** solutions that help reduce the remaining 98% of emissions across the business, especially those within Operations.

In 2023, we have three specific areas of focus: the continuing Move to Cloud, the implementation of a new sustainability reporting tool, and our leadership on innovative energy reduction technologies in hotels.

Move to Cloud is central to the Green IT strategy. One of its benefits is a substantial reduction in the climate cost of resources. The potential to share storage capacity and optimize energy usage makes a significant impact on emissions.

We estimate a reduction of 80% on the carbon footprint of servers, just by taking them off premises. For tech teams, there are many advantages to Cloud technology, but the positive impact on the carbon footprint confirms this as **a happy win-win for tech, the environment and the business.**

It is a guiding principle of Strategy & Performance that 'what gets measured gets done' and accurately **measuring emissions is an area where technology can make a significant contribution to achieving Accor emissions targets.**

By the end of 2022, over 70% of our hotels had implemented a new sustainability reporting tool. Water and energy use can all be tracked using supplier invoices, effectively using technology to make day-to-day emissions measurement much easier. Hotels now know what energy they use, can set realistic goals and see the impact of changes they make.

So, as a hotelier, once a server has moved to Cloud and the hotel has implemented a new sustainability reporting tool, what additional solutions can tech offer?

With a significant proportion of emissions coming from hotel Operations – especially from guest rooms – tech and the IoT have a solution: **smart thermostats**. These automatically sense room occupancy and atmospheric conditions to calibrate heating and air-conditioning. Pilots indicate a 35%+ reduction in energy use. This is a positive outcome for tech and the climate, while also reducing energy consumption and the resulting costs for our hotel owners.

One of the additional challenges faced by any industry is how to embed sustainability into every facet of project planning and implementation. Our approach has been to establish sustainability as an Accor Tech OKR (Objective and Key Result), ensuring it remains central to every decision made.

This year, we are adding a tech component to Accor's very successful School for Change, raising awareness of the climate cost of tech in all our hotels and offices and sharing how every employee can contribute to lessening its impact.

Sustainability is, by definition, a work in progress. **Despite the global and industry challenges ahead**, I am truly optimistic. Techies are, by nature, problem solvers and many tech people and scientists are working hard to find solutions to address sustainability challenges. At my own level, I am committed to working across the industry, with my peers, to find and share solutions, using tech as a powerful enabler.



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Christine Choquel has held the position of Accor Deputy Chief Technology Officer since January 2022. She shares oversight of technology services for Accor's global hospitality businesses with the CTO. Her role is focussed on technology governance and strategy.

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