

ISSUE 23 / DECEMBER 2019

PECB Insights

SUSTAINABILITY

CONTEMPORARY PROBLEMS NEED
CONTEMPORARY SOLUTIONS

LEADERSHIP

STANDARDS

EXPERTISE

TECHNOLOGY

BUSINESS & LEISURE

TRAVEL

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In This Issue

6 The Expert

Sustainability and ISO 14001

14 The Standard

Calculating the Value of the Environment with New ISO Standard

22 Leadership

Carlos Restrepo Oramas - Meet the PECB "Spanish Trainer of the Year"

30 The Expert

Sustainability and the Fourth Industrial Revolution - Where do Standards Stand?

38 Travel

How to Plan Your Trip to the German Christmas Markets


48 Technology

The Internet of Medical Things is Changing Healthcare - How Safe are These Devices?

52 Business & Leisure

Vienna: The House of European Power, Refinement & Joie de Vivre



An aerial photograph of a rugged coastline. The water is a vibrant turquoise color, contrasting sharply with the dark, jagged rocks that line the shore. The rocks are covered in patches of green and brown vegetation. The perspective is from directly above, looking down at the water and the rocky edge.

Progress is
impossible without
change, and those
who cannot change
their minds cannot
change anything.

GEORGE BERNARD SHAW



Sustainability and ISO 14001





Environmental sustainability is more important now than it has ever been. Climate change is real – it's been proven that this is a consequence of human activities, especially industrial ones, including deforestation, agriculture and the burning of fossil fuels. In addition to these activities, we've also been damaging the Earth's balanced ecosystem and biodiversity through air, water and land pollution for many years.

Taking action...

Climate change concerns and sustainability awareness are growing rapidly and more people are becoming environmentally conscious. A number of companies and countries have already committed to reducing fossil fuels and carbon dioxide emissions, as well as to engage with other environmental practices and initiatives.

While this is great news, it's still not enough, and raises a red flag for businesses that haven't yet addressed environmental matters. To meet the challenges of a changing climate and work to minimize its impacts and consequences that are already here, urgent actions need to be taken and businesses will need to change and adapt quickly to address these issues.

To embrace sustainability, businesses need a plan to take action and deal with these environmental issues, and ISO 14001:2015 – an International Standard that specifies requirements for an effective Environmental Management System (EMS) – provides a framework to address and manage the business's impact on the environment.

What is ISO 14001?

ISO 14001 is the most widely recognized environmental management system standard in the world. There are more than 300,000 ISO 14001 certifications in 171 countries around the globe.

Did you know that a country's level of participation in ISO 14001 is a significant predictor of its environmental innovation? ⁽¹⁾

The standard provides best practice methodology to minimize any negative impacts on the environment, while complying with applicable environmental laws and regulations, and continually improving in these areas.

It requires that the business:

1. identifies its environmental aspects;
2. determines their impact;
3. implements effective controls to minimize and, where possible, eliminate their impact, and
4. monitors and measures these to ensure continual improvement of its environmental performance.

Most people immediately think of this concept from the perspective of only reducing negative impact on the environment interacting with the business operations. However, this often also leads to the organization coming up with innovative ways to positively impact on the environment and make a difference to the ecosystems that interact with their business activities.

What are your business environmental aspects?

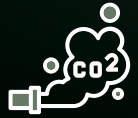
Environmental aspects are the ways that the processes of the business interact with the environment around it. Determining the environmental aspects of the business is a critical element of the ISO 14001:2015 Environmental Management System standard framework.

Here are some thought provokers to get started with when determining categories to consider and questions to ask for identifying the environmental aspects of a business:

⁽¹⁾ Lim & Prakash (2014). Voluntary Regulations and Innovation: The Case of ISO 14001. Available [here](#).

Emissions to Air

Can you quantify how much your vehicle fleet contributes to emissions? Do you vent chemically laden emissions outside your premises?



Releases to Water

Is there a possibility that uncontained spills or waste chemicals from your premises might drain into storm water or adjacent streams?



Releases to Land

How likely are your waste products to contaminate landfill sites?



Use of Raw Material & Natural Resources

Does your business rely heavily on cleaning agents or chemicals? Are you a hefty water user?



Use of Energy

Do your offices depend strongly on computers, lighting and air conditioning?



Energy Emitted

Is your core business blasting, drilling or engaging heavy machinery which may potentially impact on nearby fauna?



Waste & By-products

Does your office produce large amounts of waste paper or packaging? Is your company characterized by heavy by-product of plastic, scrap metal or laminate waste?



Physical Attributes

Is your business located in proximity to a nature reserve or characterized by large expanses of glass which might put some species at risk?



ISO 14001 and its benefits for business

Every company, large and small (industrial, manufacturing, services, or trade related), has an impact on the environment and therefore should be aware of how to manage, minimize or prevent those impacts.

For large corporations, an environmental management system which meets the requirements for ISO 14001 certification can provide a globally consistent set of environmental management procedures, yet allow each local office to identify its own environmental needs and objectives.

Of course, an organization can simply work to meet the requirements of the standard without necessarily getting certified. However, the big benefit of certification to the standard is that it holds the organization accountable to the continual improvement framework.

Ford Motor Company saved millions since becoming the 1st automaker to achieve ISO 14001 Certification for all its manufacturing facilities worldwide in 1998.

In “Ford & ISO 14001; The Synergy Between Preserving the Environment and Rewarding Shareholders” author Tim O’Brien chronicles the successful strategy of the world’s second-largest automaker in achieving independent certification of more than 140 enormously complex manufacturing facilities in 26 countries.

Having ISO 14001 certification to become more sustainable and environmentally responsible will not only be good for the planet and the future of humanity, but will also bring many benefits and add value to your business.

Aside from the obvious benefits for the future of the planet and humanity, here are the top four reasons your organization should become ISO 14001 certified:

1. You will gain competitive advantage and innovate more: Creative and innovative solutions to reduce the environmental impact of an organization’s operations can inspire new ideas and “open new doors” for competitive advantage and innovation within your business.



After years of expanding the use of solar energy throughout their stores and factories to increase the use of renewable energy for sustainable purposes, IKEA saw an opportunity to include solar panels in its product portfolio and started selling them for an affordable price in 2018 as part of its sustainable strategy.

2. You will save money, improve processes, and boost profitability: Research has found that adopting environmentally sustainable practices boosts efficiency and productivity within the business, which will lead to saving money through better use of resources, waste reduction and risk mitigation.

To give an example, conducting an electricity consumption analysis in your business will enable you to spot places where you're overusing energy. Then you would be able to address the issue and minimize energy waste and potentially save a considerable amount of money, year after year.

3. You will increase your business image and reputation:

Due to the growth of environmental awareness, recent research shows that people increasingly prefer brands that are engaged in environmentally sustainable initiatives. Organizations which are able to share and align with customers' values are more likely to build trust and loyalty. However, according to the United Nations, only 28% of people around the world believe organizations are doing enough for society and the planet. With that said, by demonstrating real commitment to being more sustainable and environmentally responsible, you will promote your business as environmentally friendly, improving its image and engagement with customers.

Since profitability and growth are not enough metrics to analyze businesses anymore, increasing your image and reputation when it comes to environmental actions and contribution to society also attracts investors, and increases shareholders and government trust in your organization.

Businesses will also benefit from certification to the standard when they need or want to demonstrate this commitment to stakeholders, or when they want to demonstrate this innovative and forward-thinking approach to their customers and their marketplace.

4. You will grow your business and market share: Many organizations that include sustainability in their business model will only do business with companies who are on the same page. Also, government bodies and international organizations might ask for an internationally recognized environmental certification in their contracts and tender requirements.

With the ISO 14001 certification your organization will be pre-qualified to bid for those deals and expand your operations and market share not only locally, but internationally as well.

Adidas started producing sneakers made out of recycled fishing nets removed from the Ocean. This is a great attitude to help the planet, but an even better marketing strategy to increase their image, as this action resulted in higher customer engagement and increasing brand visibility through spontaneous media.





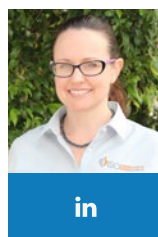
Our sustainable future

Some organizations and governmental bodies are not fully engaged with sustainable practices, arguing that the economy is more important and would be negatively affected by their introduction.

However, they lack to see that if actions are not taken now, there will be significant consequences for many markets and consequently across local and global economies, when organizations will have to adapt to the changes that are already happening and will continue to happen. Either way, ISO 14001 will continue to provide the framework to help businesses deal with this need for business adaptability due to environment and climate change. Sustainability is not only a current trend – climate change is a reality.

Embrace the Environmental Revolution; add value to your business, and save money. It's a win-win deal.

About the Author



Erica Smith

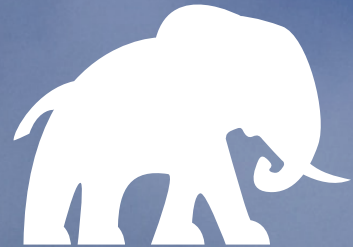
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PECB Certified Trainer, Lead
Implementer and Lead Auditor

Erica Smith has worked in the areas of Environmental, Quality and Occupational Health and Safety management systems, their certification and related risk management aspects since 2002. She is the Founder and Managing Director of ISO Certification Experts, a privately owned business which was established in Sydney, Australia, in 2007. The ISO Certification Experts team provides Management System Consulting, Training and Process Improvement services worldwide. Over her career, Erica has led many projects to develop and improve business management systems, often for certification readiness to the ISO Standards, as well as local standards and industry-specific requirements. Erica's industry experience is broad, including construction, electrical infrastructure, manufacturing, engineering, pharmaceutical, life sciences research, and professional services.

GLOBAL ENVIRONMENTAL



Indonesia will move its capital city as its current one is sinking.



One in four mammals is at risk of extinction.



Only 1% of China's 560 million city residents breathe air that is considered safe by the EU.



20 to 50 million metric tons of electronic waste are generated worldwide every year.



According to the World Meteorological Organization (WMO), the 20 warmest years on record have been in the past 22 years.

CRISIS – WHERE WE ARE



2019 was the second-warmest year on record.



A normal pair of jeans takes 900 gallons of water to make.



After oil and agriculture, fashion is the third most polluting industry in the world.



Every single day, 70 million tons of carbon dioxide are released into our world's atmosphere.



Plastic will never disappear: According to an article in Chemistry & Biology, "disposed plastic materials can remain in the environment for up to 2,000 years and longer."



Calculating the Value of the Environment with New ISO Standard

How does an organization value the dependencies it has on the environment? There's a lot of information on what makes smarter sustainable strategies, but very little data. Now a new ISO standard provides the answers.

There is certainly no shortage of cost/benefit analyses that organizations can use to value environmental aspects and their impacts. But which ones should organizations use? The choice is immense and often confusing. To change that, ISO has just published ISO 14007, Environmental management – Guidelines for determining environmental costs and benefits.

Organizations need to know which environmental measures and strategies are economically sound. For example, valuing natural resources and performing environmental cost-benefit analyses are both strategically and tactically important steps in sustainable development programmes.

ISO 14007 will enable organizations to determine and communicate the costs and benefits associated with their environmental aspects, impacts and dependencies on natural resources. It tells organizations how to carry out cost-benefit analyses for different environmental options.

Martin Baxter, Chair of ISO/TC 207's subcommittee SC 1, Environmental management systems, explains. "There is a growing drive towards valuing natural capital, as well as a need to undertake a monetary assessment of an organization's environmental aspects and impacts," he says. "ISO 14007 helps in creating transparent and accurate data, which in turn may remove a hurdle for sustainable development – to understand the value of sustainability."

The new standard complements ISO 14008, Monetary valuation of environmental impacts and related environmental aspects, published in March 2019. It describes methods for valuing environmental aspects and impacts, providing the essential data that feeds into such cost-benefit analyses. Hence, the two standards dovetail with one another.

"Sustainability is about preserving human well-being for present and future generations. And well-being is closely linked to an economy where natural capital plays a critical role for the future," concludes Baxter.

ISO 14007 was developed by ISO technical committee ISO/TC 207, Environmental management, subcommittee SC 1, Environmental management systems, whose secretariat is held by SCC, ISO's member for Canada. ISO 14007 is available from your national ISO member or through the ISO Store.

Disclaimer:

PECB has obtained permission to publish the articles written by [ISO](#).

The PECB Insights Conference 2019 was held in Brussels on October 3-4, and “Information Security and Risk Management” was its subject matter. Its success resonated globally across the PECB Network, as the celebration of PECB’s values, mission and growth. This year’s conference proved once more that PECB Insights Conferences are gatherings of experts united by the same values and a vision of a better world.





PRE-CONFERENCE TRAINING COURSES

Certified Management Systems Auditor

The CMSA training course hosted course participants from all over the world who want to conduct audits on behalf of PECB.

ISO/IEC 27701 Lead Implementer

Thirty-two professionals from around the world attended the Privacy Information Management Systems training course, which was among the firsts in the world. The brand new international standard has attracted the attention of the community of professionals who deal with management systems globally.

PANEL DISCUSSIONS

The 150+ participants from all over the world engaged in the 16 discussion panels which were hosted by 70 high-profile professionals and moderated by 16 moderators. These sessions were the substance of the conference and included a variety of themes and topics, from risk management, to blockchain, information security, artificial intelligence, internet of things and so on. You can find all the panel discussion videos below.



PECB INSIGHTS 2019
CONFERENCE

October 3-4 | Brussels

→ **WATCH THE PANEL DISCUSSIONS**

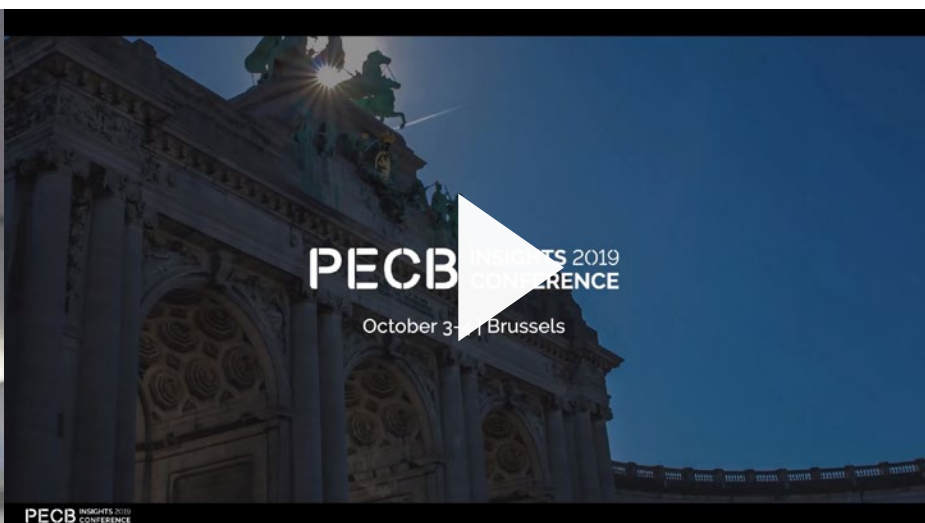


THE GALA NIGHT AWARDS CEREMONY



As every year, PECB recognized and awarded the best individuals and organizations that have shown an outstanding performance for 2019. This is the crown jewel of celebrating the successes of the PECB Insights Conference every year, and this time it was no exception. In [this](#) press release, you can find a full list of the awardees.

We want to thank every participant, panelist, moderator, awardee and staff member for a memorable conference. And with this, we will see you next year in... STAY TUNED!



→ **WATCH THE CONFERENCE AFTER MOVIE**



→ **CHECK THE CONFERENCE PHOTO GALLERY**

Until next year...

Carlos Restrepo Oramas

MEET THE PECB SPANISH TRAINER OF THE YEAR

Risk – a term that has taken such a universal dimension that every industry, organization and sector makes sure to pay attention and dedicate the right people to, and invest the right amount of resources in. And even though we are certainly surrounded by all kinds of risks our entire life, every day, in management, finance and banking, Risk Management has been established into theory and discipline long ago.

This year, the theme of the PECB Insights Conference in Brussels was dedicated to Risk Management and Information Security, as an ode to the importance of these two disciplines, but also as a reflection of the increased shared space that they occupy.

In light of the PECB Awards 2019, but also of the focus on Risk Management and the international standards which deal with risk, we had a conversation with a distinguished member of the PECB community – Mr. Carlos Restrepo Oramas – “PECB Spanish Trainer of the Year” for the third year in a row.

Mr. Restrepo Oramas is a System Engineering professional specialized in Auditing. Throughout 35 years of professional experience, he has obtained 17 international certifications in Auditing, Risk and Control and has worked in managerial capacities in prestigious international organizations, such as VISA Colombia, Superintendencia Financiera de Colombia (the supervising and regulating entity for the banking sector in Colombia) and Deloitte. Among other important professional experiences, it's worth mentioning that Carlos has been a member of the ISO Technical Committee 262 on Risk Management, which was mandated to review, update and publish in 2018 the ISO 31000 International Guidelines for Risk Management. Apart from receiving national press recognition and being a keynote speaker in various international Risk Management conferences, he has been nominated “Best Business Leader 2019” by the business newspaper “Portafolio”. Carlos remembers being a risk-oriented thinker since he was a child.

“I started being aware of Risk Management at an early stage of my life, when one develops the faculty to issue judgments about a possible desired future and decides the direction to be taken to reach that future.”





He says that he intuitively applied the Risk Management principles of ISO 31000 in all his daily activities. In his first job as a bank teller, he tells us that “...the risk matrix would be activated at the start of the workday...” and helped him take the right decisions and avoid mistakes when registering transactions, depositing cash or withdrawals. His first formal contact with ISO 31000 Guidelines was when he acted as a technical expert in the ISO Technical Committee 262 on Risk Management alongside other members from 57 countries.

Carlos came across PECB during his quest to offer recognized professional certification to his Latin America customers to acknowledge their knowledge and experience. This certification had to be provided and supported at an international level to justify the required investment in time and resources. “I then started an investigation, finding just a few options that met my expectations. I found PECB and contacted Bernard Boily, PECB Distributor for Latin America, who gave me the trust and support to start this great project that had an incredible success throughout Latin America.” – says Carlos.

He further continues: “The international recognition of PECB professional certifications has allowed me to expand my offering and train about 3,740 Latin American professionals in 16 different countries who have selected our courses since 2014. Additionally, the possibility of leveraging the different resources offered by PECB, such as their international conferences have allowed to keep me up to date on new topics of special interest with a global vision.”

Moreover, the PECB Senior Lead Risk Manager certification validates and recognizes Carlos’s knowledge and experience in risk issues in an objective and independent manner. This grants him a greater professional reach and generates new opportunities on a global level with a recognition and endorsement valid on five continents.

Carlos is the founder and leader of RESTREPO ORAMAS S.A.S., which is a company formed in Colombia to offer executive training services in Integrated Risk Management throughout Latin America. The outstanding level of satisfaction expressed by clients in each course offered has helped RESTREPO ORAMAS S.A.S maintain its leadership position in the region.



The company will shortly start offering consulting and auditing services with a group of professionals. These people, besides having solid theoretical management knowledge, have demonstrated decision-making experience in executive positions within recognized companies and the ability to apply their knowledge and lessons learned in a practical and efficient manner. When asked about RESTREPO ORAMAS S.A.S., Carlos says: “Our objective is to avoid unnecessary costs to companies and generate tangible results that create and protect value.”

The partnership with PECB brought prestige and international recognition to my company. This gave us the possibility to offer a world-class service for professionals having the desire and need to obtain a certification recognized on five continents.

For Carlos, when it comes to the tackling of risks in today's business world, the proper understanding of the maturity level of an organization with respect to Risk Management is of primary importance. One element is to promote continuous improvement, giving a positive connotation to the “scanning of the horizon” that recognizes patterns, trends as well as anticipate changes in the internal and external context. This allows identifying new opportunities to create greater value to the organization which is the main purpose of Risk Management. This goes beyond the negative connotation that has been historically given to risk by being perceived as an obstacle to business. Risk Management must become an effective tool for the decision-making process at all levels of the organization.

Moreover, leading-edge technologies, such as Big Data and Artificial Intelligence provide greater access to reliable and timely information and data. “Analysis of that information using predictive and prospective methods could permit identifying patterns and trends on the main variables involved in a given risk scenario. This allows reducing the level of uncertainty and subjectivity ingrained in the risk and improve the decision-making process at all levels of the organization.”



As mentioned, alongside the executive part of his Risk Management career including consulting and auditing, Carlos is also a very successful ISO 31000:2018 PECB Trainer. And, of course, the approach to these two worlds differs. According to Carlos, a good trainer works with passion and conviction. They show a deep respect for the client through a rigorous preparation of the material. This includes the development of real cases that allow the participants to go beyond the theory and to find solutions to real problems or concerns. The trainer must understand very well the purpose of the standard. They should have some years of professional experience with the standard to gather relevant lessons learned from successes and failures. “I think that being part of the decision-making process for the design, implementation, maintenance and improvement of a Risk Management System is an added value. The trainer should use a clear and simple language to transmit in a practical way each of the concepts involved in ISO 31000:2018.” – adds Carlos.

A key to the success of being “PECB Spanish Trainer of the Year” for three years in a row has been the ability and capacity to create in each of the training courses an environment of trust, respect and active participation. This allows each participant to freely raise their concerns, share their opinions and experience in a calm way and help identify possible solutions to real cases raised by them.

In Carlos’s words: “People who dedicate themselves to this profession must recognize their responsibility to stay up to date and analyze critically each of the traditional paradigms in order to question the way things are done. They must also identify new trends to ensure greater efficiency and effectiveness in Risk Management. Another key element is to recognize that each participant has their own experience as valuable as ours and generate cognitive synergies that allow each assistant to find their own solutions with our help as coach and facilitator.”

RESTREPO ORAMAS S.A.S and PECB established a professional partnership in March 2014, when Carlos signed a contract with Bernard Boily, the Distributor of PECB in Latin America and Iberia. “Since then – Carlos says – he and his team have given us all the support needed to expand to 16 Latin American countries, strengthening the PECB image through the high quality of our courses.”

I chose PECB because of their level of support and their international recognition. In addition, PECB appealed to me because of its promotion of continuous improvement in their services, of the development of long-term relationship based on trust and because of

our common objectives of strengthening the culture of risk management and the implementation of effective processes in different types of industries.

Carlos expresses that the PECB support, products and services inspire trust to his clients and have received recognition on a global scale due to their high quality level. “I would like to take this opportunity to publicly thank PECB for their valuable support that has allowed our company to fulfill its proposed objective. Since 2014, we aim at fostering a risk management culture in 16 countries of Latin America by offering high quality executive training programs.”

But commitment to success and professionalism are personal traits, and reflections of one's character. Carlos says that “the values and principles inculcated at home by my parents allowed me to grow personally and professionally. I am also galvanized by the dedication and commitment of Luz Myriam Restrepo, my sister and business partner,

to make our objective of promoting the culture of risk management in the 16 countries of Latin America a reality. Values, on the other hand, play a major role in the formation of credibility and professional reputation, and when asked about three values of success, Carlos says: If you ask me to choose only three values, I would say the following:

Honesty: Deliver a consistent message about what the trainer has done, thinks and knows about Risk Management. This generates trust and credibility with the audience.

Respect: Recognize the abilities and experience of each course participant and listen to their concerns, in order to develop synergies and find solutions.

Responsibility: Deliver the best service by constantly staying up to date and providing an interesting combination of theory and practice during the training courses.



And with that message, we would like to congratulate every PECB Awards 2019 winner, and thank every other certified individual, Partner, Distributor, Trainer, Auditor and Auditee for being the best ambassadors of the PECB values. The PECB family is trusted globally thanks to them.

Microsoft Businesses Obtain the ISO 37001 Anti-Bribery Management System Certification by PECB

→ [Read more in the press release](#)



Sustainability and the Fourth Industrial Revolution

WHERE DO STANDARDS STAND?

BY JULIAN KUCI, PECB

The Expert



Last year, on [World Standards Day](#), ISO and the IEC put the spotlight on the Fourth Industrial Revolution, its fundamentally disruptive technologies and the role of international standards in these developments. Indeed, standards can have (and have proven to have) a decisive role in helping, and at times contribute to directing, the course of major global developments. But while developments on

Artificial Intelligence, Deep Learning, Internet of Things (IoT) electric cars, Blockchain, nanotechnology, robotics and biomedical technology make the headlines every day, long-term sustainability also occupies a significant space in this discourse – as part of the technological innovations of the Fourth Industrial Revolution, and to a certain extent as a concern regarding precisely these technologies themselves.

History has shown that revolutions of a global scale in technology and industry have had their inevitable impact on environmental sustainability, and humanity was able to understand and feel those impacts only decades later. The Industrial Revolution was truly a remarkable historic event which brought to existence a real, substantial global middle class, among other things.

But the popularization of the engineering marvel of the combustion engine and other carbon-emitting technologies, atop being revolutionary and pivotal to the progress of humankind have had their negative impacts. And we came to understand these impacts only decades later.

By the same token, the unknown environmental impacts of the Fourth Industrial Revolution concern experts and practitioners, including those in the standards' industry. That is why the ISO and IEC have concentrated their focus on this issue on the 2018 World Standards Day.

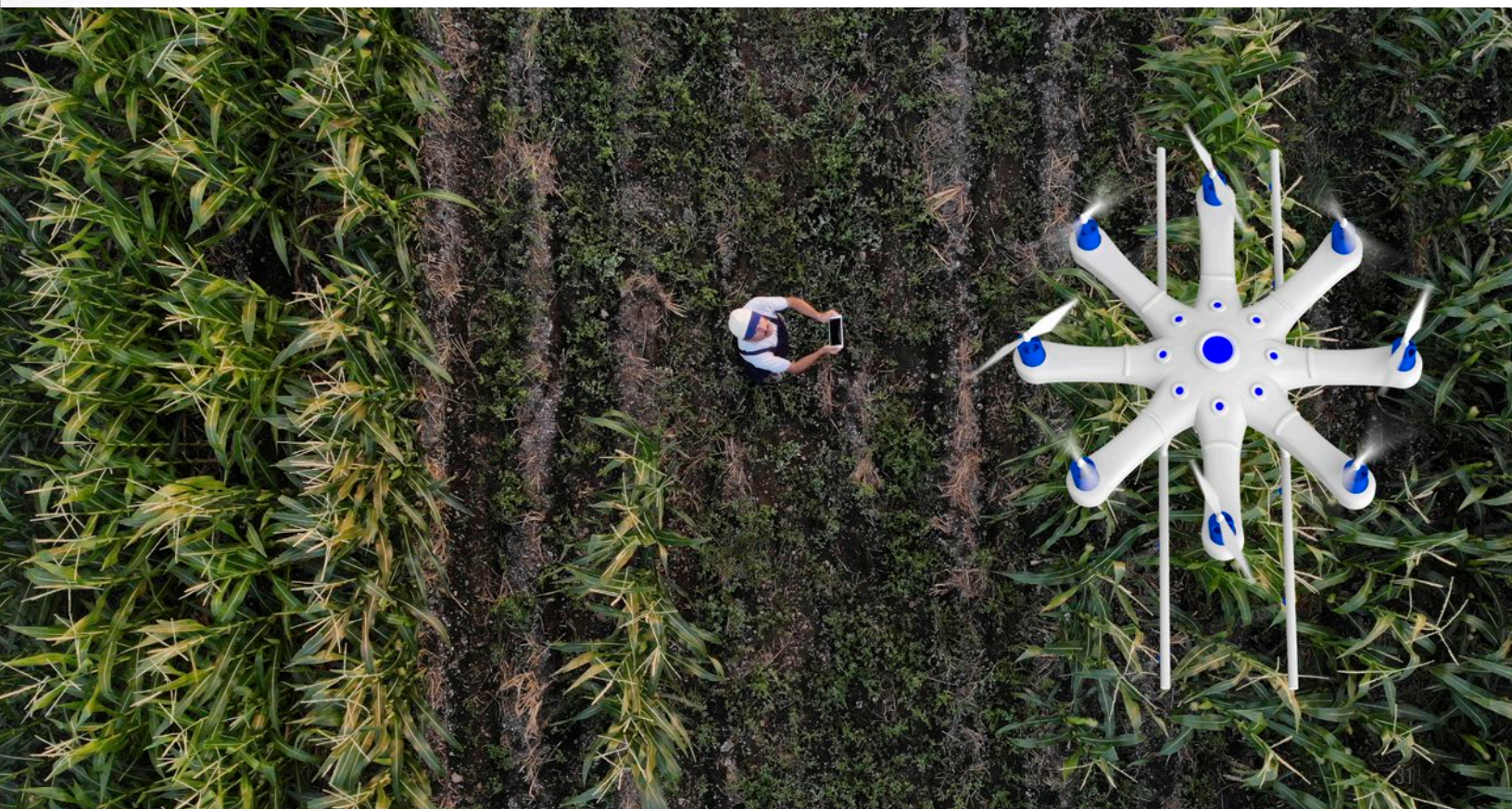
The Role of Standards

The world of standards is not indifferent to the development of revolutionary technologies – in fact the opposite is true. Hundreds of technical committees work every day to come up with internationally agreed standards on the standardization of the management of many aspects of sustainability in a world which is fundamentally changing every day.

Most notably, the introduction of the ISO 14000 family has had a real impact, not only in setting internationally recognized criteria on environmental management, but also on three other important matters: (1) bringing environmental management and sustainability to attention on an international scale, (2) raising the bar for sustainable management, and (3) concretizing sustainable management on a micro organizational scale.

That is to say that with the introduction of ISO 14000 standards, sustainable management was not anymore an ethereal idea of how to be more efficient and environmentally conscious, but it was a tangible, implementable set of requirements which made sense to be implemented at the level of one single organization, big or small, of every industry. In other words, while being universal in its applicability, the ISO 14000 family, and ISO 14001 most notably, is a set of conditions which make sense to the micro logic of one organization.

While this is a characteristic of most ISO standards which are not industry-specific, the development of ISO 14001 has been pivotal because, especially in times of radical changes and technological developments, it was the first time that such importance was put on effective environmental management on a global scale, with a universal language, but applicable and adequate to the micro-level rationale which truly interests each organization.



Innovating Sustainably

Sustainability in and of itself has a dual meaning when it comes to its place in the Fourth Industrial Revolution. Going back to the point that throughout history, we have learned that we must keep long-term sustainability in mind at times when technological and industrial developments of a global scale take place, we must ensure that innovation and business development are conducted in a sustainable manner.

Frankly, there has been no better time in human history to develop business and innovate sustainably. This is where the two aspects of sustainability converge in the face of the Fourth Industrial Revolution: we treat it as a concern, but also as a means of innovation.

In the technical and day-to-day business operations, this is when international standards on sustainability, like ISO 14001 come to play a role. An organization can implement an ISO 14001-based environmental management system and not only make sure to minimize the carbon footprint and operate eco-consciously, but also be more efficient, reduce losses and have a blueprint for identifying areas for continuous improvement.

Merging Realities

Another important and interesting meeting point of the impact of the Fourth Industrial Revolution and importance of sustainability is the increasingly shared space between virtual reality and corporeality. The first thing that comes to mind when we think of this dimension is virtual simulation. And indeed, the amount of carbon footprint that is minimized thanks to the ability to conduct tests of various types virtually are very significant. This is possible on account of the developments in virtual reality, which is also an important aspect of the Fourth Industrial Revolution.

But the most striking meeting point of the virtual and physical realities is not from an engineering and heavy industry standpoint. Rather, the aspect that most businesses and individuals feel every day is data. The ability to produce information directly from the consumer, even though it has its privacy concerns (which ISO standards address as well, for instance through ISO/IEC 27701) has an enormous, positive but little discussed impact on sustainability.



Businesses do not have to conduct field research, which depending on its scope can require massive physical resources, which ultimately have a considerable carbon footprint.

Everyday technologies, such as The Cloud, which was science fiction not that long ago, enable common platforms to connect business, services and products globally and instantly. This unprecedented interconnection of the physical reality and virtual reality has contributed to a great minimization of pollution.

The connection of the user experience and product has opened new, previously unimaginable ways to receive insights on the direction of the business. And this leads us to the next important point.

SUSTAINABILITY THROUGH THE FOURTH INDUSTRIAL REVOLUTION



Machine learning is enabling smart grids to be more predictable and have less environmental impacts, **contributing to renewable energy.**



Data-driven farming, crop yield prediction and precision agriculture is contributing to more sustainable usage of the land, **improving productivity and minimizing waste.**



Greenhouse gas emissions are being reduced by the increased usage of electric cars, smart traffic lights, on-demand shared transport, autonomous vehicles and smart parking.



The ocean is being studied with AI technology. This is identifying better areas for sustainable fishing and it is helping schedule effective patrols. On a larger scale it will help monitoring coral bleaching, species reduction and give us a bigger and more precise picture of the ocean life.



Machine learning improves air filtering and purification by forecasting and real time monitoring air pollution. Systems have been developed where data is processed and pollution levels are detected through smartphone pictures sent by users, which in turn will notify communities and neighbourhoods to adapt their behaviour to the forecasting.



Ambitious global projects, such as the “Ocean Cleanup” project are making possible the largest ocean cleanup in history through innovative technologies. Phase one of the project was successful – the enormous nets are cleaning massive areas of the Pacific, and the **goal is to clean 90% of the oceans and recycle the plastic collected.**







The Socio-Commercial Value of Sustainability

It is through these means of information and fast communication that the movement on eco-sustainability has become global. It has become a priority for younger generations, who are proving to be more common cause-oriented. So the social value of being a green organization does not really need an explanation. On top of the internal aspect, which is effectiveness and waste and loss minimization, there is an external aspect as well, which is that of public scrutiny. In this sense, environmental management systems based on international standards serve as a reflection of professionalism and seriousness of the organization... but of the brand as well.

Here comes the commercial aspect of being sustainable. The brand that proves to be socially responsible from an eco-sustainable point of view is more likely to attract clients who care about such aspect. And the number of these clients is growing rapidly, not only because of the gravity of the issue of global sustainability, but also because they can get informed and communicate instantly, because we are living in the Fourth Industrial Revolution.

**It is no secret that there is,
in fact, a market for sustainability.**

Even though it seems an unlikely triangle, the Fourth Industrial Revolution, sustainability and international standards are connected more than ever in this ever-changing global technological landscape and environmental degradation.

Implementing and maintaining an environmental management system, especially those based on the now-famous ISO 14001 is a truly encapsulating response to a deteriorating climate, because it is the embodiment of making a global impact while acting on tangible, micro level.

An environmental management system is a reflection of the organization's professionalism, systematic social responsibility, and it is indeed a form of showing that the organization is truly competitive in the 21st century market, which is a very different one from 10, 15 years ago.

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HOW TO PLAN YOUR TRIP TO THE **German Christmas Markets**

Pictures of European Christmas markets have made us wander every holiday season. The fairy lights, the light snow, the food and the mulled wine mugs have all created the perfect illusion of Christmas. Whether you are religious or not, visiting Christmas markets is a magical experience that will boost your festive spirit!



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Münchberger
Früchtebrot

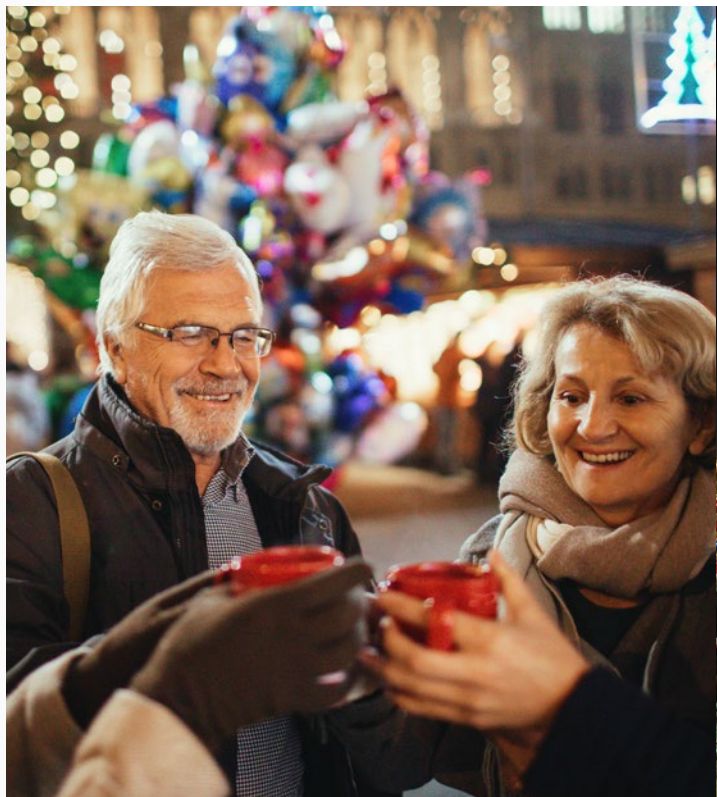
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First of all, what is a Christmas Market & how long does it last?

These holiday markets are very popular in Europe and have started to get more popular in the rest of the world. They originated in Germany around the Middle Ages, think 1300s. These markets are traditionally held in every town square, and highlight traditional food, drinks and seasonal items in open-air stalls accompanied by music and shows.

The markets start around the last week of November until Christmas Eve. Don't expect the markets to be open after December 24th! So do plan your vacation before! In big cities, there are very few markets that remain open until the 30th. These markets are the very few exceptions. Each market has its own personality, some have arcades and kids rides, some have skating rinks, to name a few activities.

Why go?

If you love the holiday season, this is the perfect trip for you! The Christmas markets are for adults and kids alike. While they do have many kids' activities, a lot of the markets

are tailored for adults. As only a portion of the events is dedicated to buying Christmas things, they are foremost dedicated to bringing people together and having fun. The markets are about having a good time around delicious food and drinks. Instead of going to a bar or a restaurant during the season, Germans go out to the markets and meet with friends.

Where can you find them & which one to choose?

The markets are located in every city and town, Germans go crazy about celebrating Christmas. Major cities have more than one, for example, Berlin claims over 70 markets and Munich has over 30. Some major cities have also thematic markets, like the Pink Market in Munich which is an initiative from the LGBTQ community. To get the full experience, do more than one market as they all have a unique touch!

Do spend some time to search what you want to do in Germany and then include the markets into your itinerary. Germany is a country that is very rich in history, so think about the markets as your bonus activity for the night. Or you can search what appeals to you personally in these markets: is it food, scenery or history? Then, plan your trip around that. You will probably find the best fit for you with the vast array of choices!

Best timing?

The markets open throughout the day and close around 10 p.m. but the best time to go is in the evenings, this is when the fairy lights go on and they add a magical atmosphere. Beware that some markets can get incredibly crowded. If you want to avoid the crowds, it will probably be best if you go during weekday or early in the evenings. If you really don't like crowds, it will probably be better if you find smaller markets.

A good time to go could be during events, live music or parades. I would suggest googling the name of the market and checking what activities they offer during your visit so you can enjoy a complete experience.

Food & drinks

The best part of the markets is its variety of food! Be sure to go to the market thirsty and hungry! Each town and region have their own food specialties so be sure to taste them all! If you are exploring different regions in Germany during your trip, this is the best way to try all the local cuisine. Also, you will have some trouble finding these local dishes elsewhere.

You will find anything from an immense variety of sausages, Kartoffelpuffer/Reibekuchen (or potato pancakes), Stollen cake, fried potatoes, Lebkuchen a German traditional gingerbread, Schneballen dough balls, pretzels to name a few.

There are multiple stands around the markets that prepare food so be sure to spot at which kiosks you want to eat during your first round.

Glühwein (mulled wine) is the primary beverage of the markets. It's red wine heated with spices like cinnamon and cloves along with lemon and sugar. The Feuerzangenbowle is another popular drink where they add sugar caramelized by burning rum. If alcohol or mulled wine is not your thing, you will find hot fruit punches, hot chocolate and hot cider.

Most hot drinks are poured into ceramic mugs, and you can either keep the mug or you bring them back and get reimbursed a small fee (normally from 0.50 euro to 2 euro). However, I will highly recommend keeping the mugs and to collect them! Each market creates new designs each year and they make a great souvenir!



Psst:
The cookies are great
presents to bring
back home!







Christmas decorations

The majority of the kiosks sell Christmas decorations and ornaments. These are the perfect souvenirs and gifts to bring back to your family and friends. Most of the items are made in the country and each town has its own handicrafts too. Therefore, if you see an ornament that you like, buy it right away as you might not be able to find it in the next city.

The Christmas Pyramids (Weihnachtspyramide) are unique items that tiered candle carousals turn by the power of the heat of small candles. They come in different sizes and are beautiful. Or you can get more mainstream items like nutcrackers or nativity scenes.

What to wear?

If you're used to extremely cold winters, the temperatures will seem reasonable to you. However, do expect to be out at least two hours so be sure to dress warmly! I will suggest dressing in layers, having a good jacket, gloves, scarves, toques and mittens! I live in Montreal (Canada) and I found that outfit tailored for Canadian fall was ok, I was warm enough for the occasion.

Have comfortable shoes! Most markets are standing room only. There are very few chairs or benches for you to rest. If you have mobility issues maybe think about visiting for a short period of time.

Getting around Germany

Germany has a great transportation system whether you decide to use trains or rent a car. If you decide to travel by train, there are many multi-day passes that can work for you. If driving in the autobahn is one of your dreams, then this is your chance to drive around the famous highways without speed limits.

Booking flights and asking for time-off from work

I would suggest hunting for deals as early as September. We all know that traveling during Christmas can be very expensive. Try to be as creative as possible while researching for your trip. For example, we decided to land in Belgium, rent a car there and drive to Germany as it was cheaper than to land in Germany. Plus, we got the chance to visit another country!

Another great option will be to do a weekend getaway or a day trip to the markets if you are incorporating this activity into a bigger European trip.

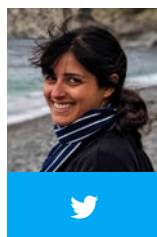
A lot of your coworkers will want to request time off during the holiday season too so be sure to ask for your time off in advance! Also, if well planned, you won't have to ask for any or very little time off. A lot of the offices close between Christmas and New Year's Eve so if you are lucky, some years Christmas Day falls on a Monday so you have 10 days off without using your vacation days!

Other Useful Tips

Bring Cash! Most of the stands are cash only so be sure to go to the bank before!

Bring your camera! The markets are very photogenic and you will have to take a picture at every stand. Be sure to have enough space on your phone or in your camera.

About the Author



Mel Schaffer

Mel is a usual 9to5er with a passion for travel. She created BRB Travel Blog for the wannabe nomads, for those who want to explore the world but have full-time jobs and cannot go on vacation for 3 months in a row. Like you, Mel has 2 weeks of vacations and during her long meetings at work, she daydreams about my next destination. With BRB Travel Blog, she helps professionals bring travel into their cubicle and inspire them to take those vacation days!

The Internet of Medical Things is Changing Healthcare

HOW SAFE ARE THESE DEVICES?

Technology



The face of the healthcare industry is changing. With the advent of Internet of Things technologies (IoT), in-body and wearable medical devices are now capable of reporting patient statistics in real time, administering medicine, autonomously delivering corrective stimulus and more.

Patients receive alerts on their smartphones when their glucose levels drop, doctors are notified if a patient misses a scheduled dose of medication, and apps can even help predict the onset of a major depressive episode.

This is the world of the Internet of Medical Things (IoMT), also called healthcare IoT. Comprised of medical devices and applications linked to healthcare IT systems via WiFi, smart health devices eliminate some of the need for human to human interaction and human to machine interaction when reporting patient vitals and other health-related events. Cloud-based data storage systems provide ample room for stats and are accessible by medical professionals.

According to a 2016 [report](#) by Allied Market Research, the size of the worldwide IoMT market is predicted to reach US\$136.8 billion by 2021. In 2018, there were already [3.7 million](#) smart medical devices in use and this number is expected to rise in line with the accessibility of health wearables and an aging global population.

In 2017, around [60 percent](#) of global healthcare organizations had already implemented IoMT tech. Frost & Sullivan, a market research firm, suggested this number would rise by 27 percent by 2019.

IoMT devices offer patients a means of tracking their own health at home, administering medication schedules correctly, and sharing vital data with healthcare providers. Medical professionals receive reliable statistics and information that can be used to manage patient conditions with efficacy. Large banks of trustworthy online health data could also make a valuable contribution to ongoing medical research. The possibilities are only just beginning to be explored and the future is sure to hold exciting discoveries and tools that completely revolutionize the way we view and provide healthcare. But while we stand on the brink of these changes, there are several urgent concerns that need to be addressed regarding both data privacy and device security.

IoMT Safety and Physical Security

We can imagine IoMT security as a two-part issue. Of primary concern is a patient's physical safety — security experts have already [warned](#) that pacemakers are vulnerable to hacking. One device, made by Abbott's, was recalled by the American Food and Drug Administration (FDA) but the warning came only after a [significant number](#) of devices were installed in Australian patients.

The very same factors that make remote-access embedded IoMT tools desirable (low cost, small size, remotely accessible) are those that leave them prone to cyber-attacks. Most embedded IoMT devices lack the power and memory capabilities to support full cryptographic security or encryption. On the latter point, because these devices are not secured, they must [rely heavily on encrypted WiFi to protect users](#). Access controls are also affected by the lack of power.

Another complicating aspect is that patients and doctors may be more drawn to convenience and easy access than to tightened security. Remote monitoring, the very thing that makes smart pacemakers and other embedded health devices so attractive and important to ongoing IoMT technologies, means an added vulnerability.

While many with a vested interest, including Abbott's, attempt to downplay the risks involved, some very tangible physical threats are present. At the time of writing, there hasn't been a reported attack on a person's embedded medical device. But security experts warn that it's possible, if not out of malice, then in an attempt to extort money. Ransomware, which threatens victims with data theft unless they pay heavy fees, is on the rise.

In a very valid point, Matt Green, a John Hopkins professor specialized in cryptography, [argued](#) that the threat is real but may not play out the way people imagine: "This whole "nobody will hack pacemakers, the world isn't Homeland" ignores the threat of extortion attacks on manufacturers."

Some citizens express concern. In a 2007 move that largely preempted the wider conversation, Dick Cheney, then Vice President of the United States, had his pacemaker modified to avoid attacks.

Password protection, or a similar authentication method, is problematic as well. If only authorized people can access devices, this presents a complication during medical emergencies. If the patient and their primary care doctor are the only people who know the credentials, emergency staff may struggle to gain access and urgent treatment could be delayed.

Not only pacemakers are vulnerable. Any medical device that is connected to a network is exploitable. This includes MRI machines, electric wheelchairs, and insulin delivery devices. Researchers Billy Rios and Jonathan Butts, who work for QED Security Solutions, went as far as developing an app that can kill people to make a point about the flaws in Medtronic's MiniMed and MiniMed Paradigm insulin pump lines. A step they took only after their warnings to Medtronic went unheeded.

IoMT and Data Security

The other threat, while not quite as insidious as physical harm, comes a close second. All the collected health data generated by medical devices provides hackers with a desirable target — one that they have not ignored.

In 2016, 16 million patient records were stolen from healthcare providers in the US. Across the Atlantic, Britain's National Health Service (NHS) suffered a severe blow to its systems in 2017 when a ransomware attack locked the computers that manage patient data and booking systems.

We can imagine that top-level administrators did indeed feel like weeping when they discovered that the WannaCry virus would cost them 19 million pounds sterling. In contrast, the hackers made very little in ransom.

One might wonder why hackers would turn their attention to governmental services when far more lucrative targets exist. It's always possible that the aim is to create havoc as opposed to generating wealth. Antagonists from hostile foreign governments may see health services as a key part of a nation's infrastructure, one that could provide a path to other critical areas.

As frightening as threats to physical security and data security are, there is no reason to fear technology. As we stand, there is little point advocating for a return to simpler, less-connected devices and data storage systems — the world doesn't work like that anymore and sacrificing advances in healthcare seems a high price to pay. Instead, technology must rise to meet the new wave of challenges.

Protecting Healthcare

Most attacks targeting healthcare systems are missile attacks. These provide an element of protection for the antagonist and leave very few traces. Despite limited recourse, missile attacks have the ability to cause major damage.

To mitigate the potential of harm and to protect their systems, most organizations providing healthcare services have started taking serious protective measures including building layers of cybersecurity into their IT strategies. Hospitals should heed these newer standards and implement them as well to protect users and data banks at the delivery level.

That said, like anything tech-related, once one problem is solved or addressed, another is likely to rear its head. Perhaps in the future we might see a new industry emerge, one that is centered around protecting IoMT devices and healthcare data en masse.

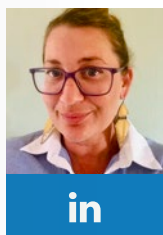
Even with such an industry in place and when we consider that these systems are designed by humans for humans, we must allow for the possibility of human error.

No matter how informed and well-trained healthcare staff are on the latest threats, a single click on one nefarious attachment and malware can infiltrate a whole system and possibly interrelated systems as well.

An additional complication is that organizations and healthcare providers may play down incidents out of fear of legal or financial repercussions given that the responsibility for securing systems falls on their shoulders. If under-reporting is already taking place, the threat level could be much greater than we think.

Even worse, if organizations have paid hackers to avoid facing up to the issue, this could prompt a rise in similar or copycat attacks.

The key to better healthcare security lies in providers and organizations understanding the extent of the threat and taking firm measures to guard against it. Manufacturers of IoMT devices should take note of and act upon warnings they receive from third-party security experts. Some transparency is needed, too; patients with embedded devices have the right to know the security status of the tools inside their bodies, before an attack occurs, not after the fact.



About the Author

Summer Julian

Freelance Tech Writer at [TurOnVPN](#)

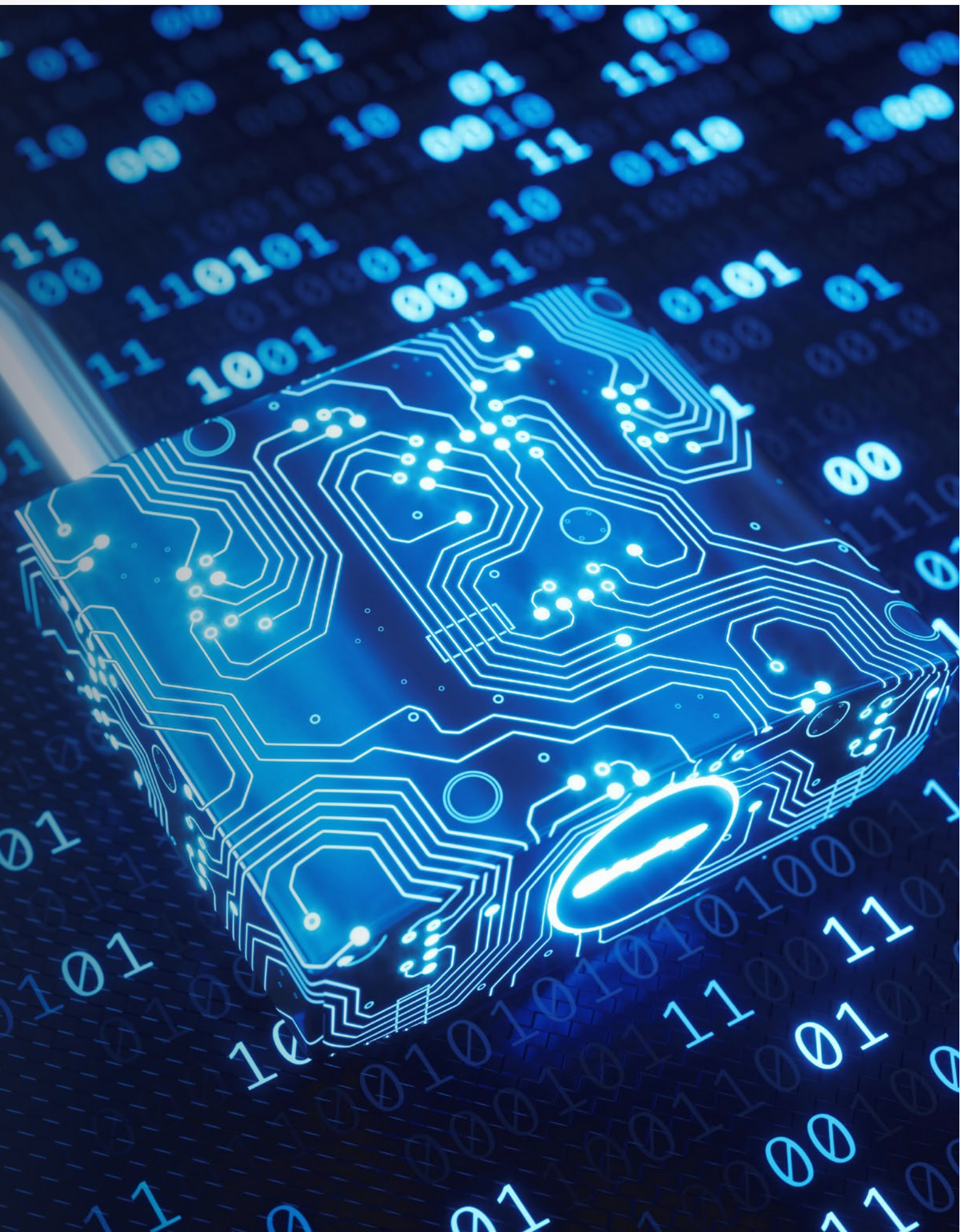
Summer is a New Zealand writer with an interest in internet happenings and the ways in which we digitize our lives.

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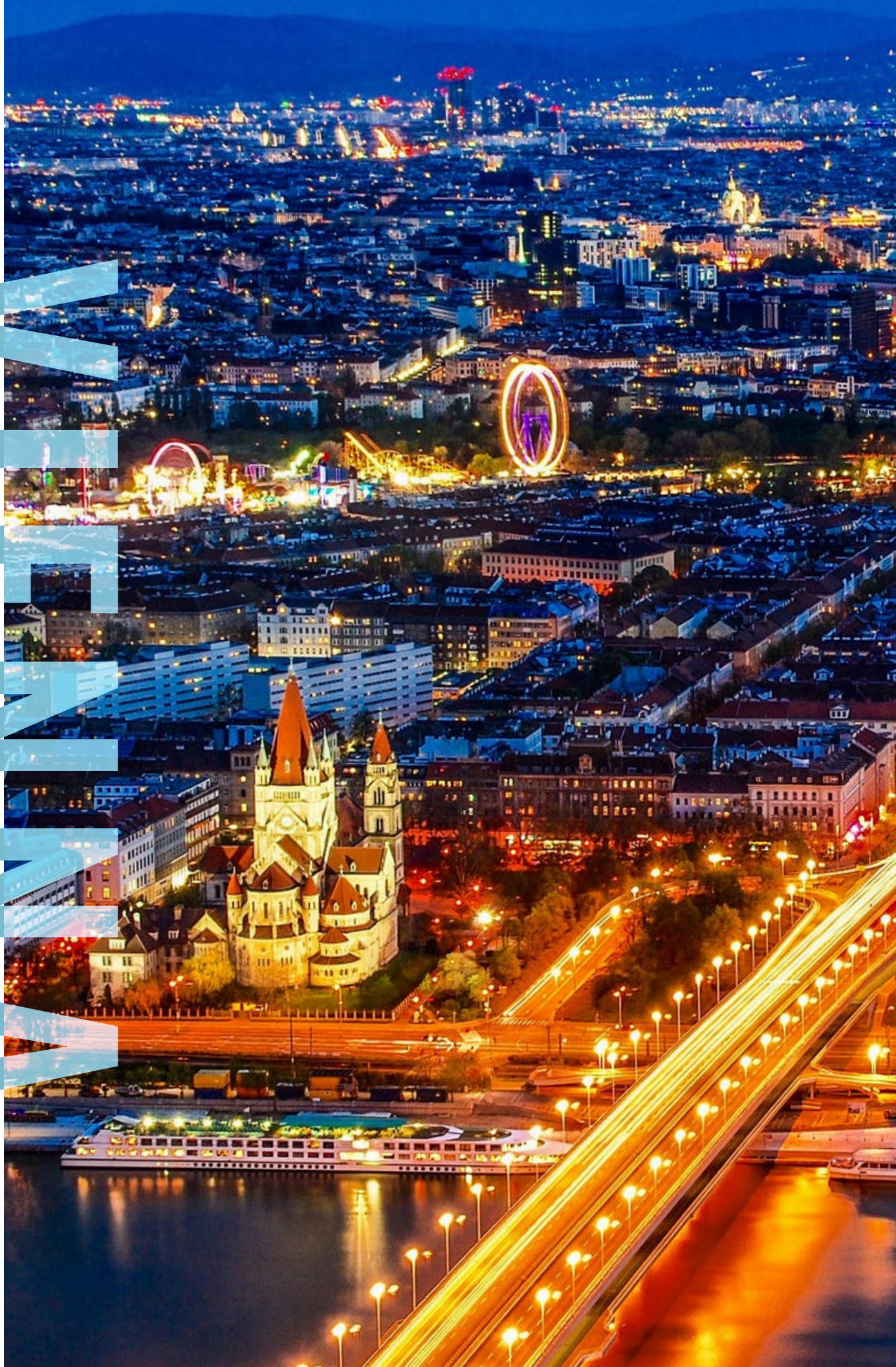
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There is a special kind of veil of fascination upon Vienna. Perhaps because it's a city full of life, but yet not as loud and noisy as other big cities such as London or New York; its architectonic treasures of the 600 years of the Hapsburg rein are a time machine which gives the city its sophistication, its charm and fascination.

Beyond being an international touristic destination, it is no accident that Vienna has been on the top of the lists of best-living cities in the world. In some of them, like the Mercer Quality of Living, Vienna has been the best city to live in the entire world for a past 10 years. This comes as no surprise because, as every Viennese (especially expat) would tell you, the city is very well connected through one of the top transportation systems in the world, by connectivity and price. The Austrian capital is also a very safe city, with ample recreational spaces, favorable economic environment and housing, one of the best education systems in the world and an effective public health system.



TRANSPORTATION

The U-Bahn (underground train) is an underground system which will bring you almost everywhere in the city. Then, there is the S-Bahn (suburban trains) for transportation from the city outskirts. Like many other European cities, tickets can be found at tobacconists or from vending machines. In case you require further information, info centers can be found in the main terminals at Karlsplatz, Praterstern, Westbahnhof, Stephansplatz and Hauptbahnhof. Prices vary from €2.20 for a single ticket, to €48.20 for a monthly pass, and everything in between. A very convenient option is the Wien-Karte (Vienna Card), which can be purchased online, in main stations, at the airport or in hotels. Through the Wien-Karte you (and a child up to 15 years old) are entitled to 48 or 72 hours of free travel on all public transport, discounts in a number of museums, cafes and shops.

ACCOMMODATION

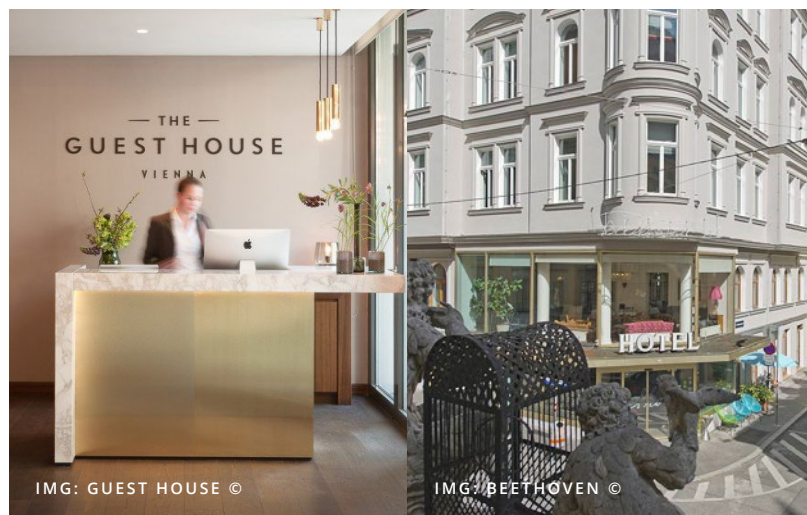
Hotel Imperial – Built in 1863 for the Prince of Württemberg, Hotel Imperial is a true palatial building. With its royal décor, it's fit for a king. With its ceremonial location on the Kärtner Ring, the hotel is a few steps away from every major attraction and amenity. As for the prices, they almost double during high season.

Do & Co – Centrally located at the Stock-im-Eisen-Platz, Do & Co is a one-of-a-kind hotel which offers the best of old and new Vienna. Famous for its post-modernist style, Do & Co sits in the Haas Haus, which was designed by Hans Hollein, a famous Austrian architect. The hotel has views of the historic center, Stephansplatz, the Gothic Cathedral and is a ten-minute walk to the Museums Quartier, the Albertina, the Hofburg Imperial Palace and many other Viennese attractions.

The Guesthouse – Situated at the Albertinaplatz, the Guesthouse is a former youth hostel, transformed into a premium hotel. It shares the same location with Albertina Museum, Augustiner Church, the Opera House and Hofburg. While you can walk almost to every historical site in the city, the Burggarten, parks and trams or the U-Bahn, you can also take a horse-drawn carriage, which are stationed just opposite the hotel and tour the center in true Hapsburgian style.

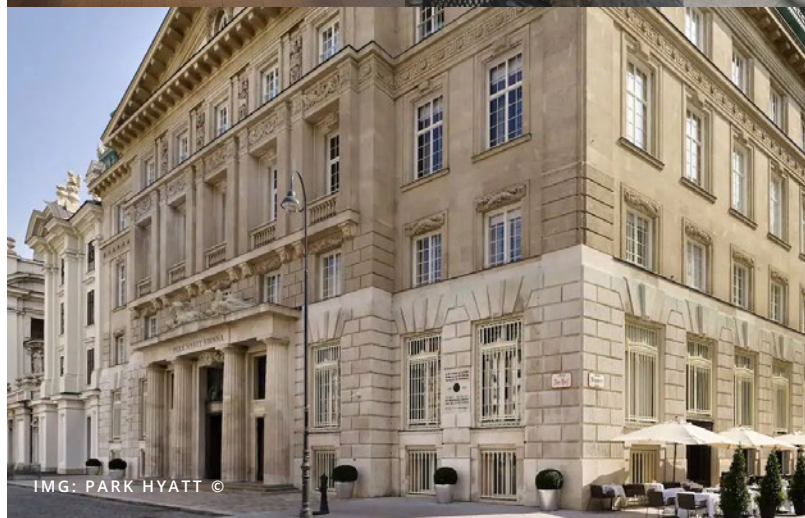
Park Hyatt Vienna – Park Hyatt Vienna is a crown jewel of Viennese hospitality. Sitting in all its architectural glory in Vienna's 1st district (Innere Stadt), Park Hyatt Vienna offers world-class accommodation and gourmet cuisine. Just a three-minute walk to Café Central, a five-minute walk to Hofburg (Imperial Palace) and filled with Hapsburg gems, Park Hyatt in Vienna is a true treat!

Hotel Beethoven – The name of this hotel is not accidental. Ludwig Van Beethoven himself lived and composed in a building just opposite the hotel, at the Theater an der Wien. It is there that the famous opera Fidelio was composed, and thus the hotel proudly holds his name. Hotel Beethoven is a charming boutique hotel, completely revamped to reflect an exquisite neoclassical style. If you wish to be close to all the major interesting Vienna sites, but are not a great fan of street noises, Hotel Beethoven is a perfect choice.



IMG: GUEST HOUSE ©

IMG: BEETHOVEN ©



IMG: PARK HYATT ©

There is so much to do and to see in Vienna that entire books could be written about it, and in fact they have been written. However, for relatively short visits where work and meetings occupy perhaps most of your day, there are some must-see sights.



ATTRACTIONS

Schönbrunn Palace (Schloss Schönbrunn) – The Hapsburgs' main summer residence, the Schloss Schönbrunn is a gracious royal palace. The building is a massive palace which has 1,441 rooms and is considered an epitome of rococo. The palace is open every day from 8:00 a.m. to 6:30 p.m.

Historic Center of Vienna (1st District) – The 1st District of Vienna is a historic constellation of different eras, from the Middle Ages, to the Golden Ages of the Hapsburg rein, to the neoclassical 20th-century architecture. It is one of the most visited sites in Europe, and for good reason. The Innere Stadt, as the locals call it, is the Old Town of Vienna,



and as such is filled with gothic, neo-gothic, baroque and neoclassical-style buildings. The area is roughly 371 hectares (1.43 square miles) and is home to more than 24 places of interest, among which the Albertina, the Lutheran City Church, the Museum of Art History and that of Natural History, the Burgtheater, the Graben and many more.

Vienna State Opera (Wiener Staatsoper) – The world-famous opera house which is located on the Vienna Ringstrasse (inner circle, 1st district) and hosts over 300 performances every year, while it has a capacity of 1,739 seats and another 567 people can stand. The captivating building is of a typical renaissance style, but was actually built from 1861 to 1869 from architects pertaining to the “Renaissance Revival” movement – a 19th-century architectural association.



Maria Theresa Square (Maria-Theresien-Platz) – Empress Maria Theresa was the only female ruler of the Hapsburg Empire. The square was named in her honor and it is surrounded by magnificently curated French gardens. The Maria Theresa Square joins the Museums’ Quartier (Museumsquartier) with the Ringstrasse. The square is bounded by two sides from two almost identical gracious buildings: the Art History Museum (Kunsthistorisches Museum) and the Natural History Museum (Naturhistorisches Museum), both of which are also a must-see in Vienna.



Belvedere Palace (Schloss Belvedere) – The Belvedere Palace is the perfect place to blend Viennese art and history. It is in fact two palaces in one, and it is a splendid masterpiece of baroque architecture. The palatial building complex is located in the third district of the city, and was a project of the renowned royal architect Johann Lukas von Hildebrandt, who was appointed by Prince Eugene circa 1697 to lead the colossal project.



Imperial Palace (Hofburg) – Sitting in the heart of Vienna, the Hofburg has been the house of the most important ruling dynasty in the history of Europe – the Hapsburgs, who ruled Europe for 6 long centuries. To this day, the Hofburg is the center of the government in all its pomposity, and as you’d expect encloses a lot of history, tradition, art, grandiosity and mystery.

Other interesting places to visit in Vienna are the Schönbrunn Zoo (Tiergarten Schönbrunn), the Vienna Wine Walk (Nussberg), which is a famous walk along the Viennese vineyards in the outskirts of the city; the Museums Quarter (MuseumsQuartier); Vienna Woods (Wienerwald); the historic city market, Naschmarkt; the Albertina; the University of Vienna; the Giant Ferris Wheel (Wiener Riesenrad), and so many more.

RESTAURANTS

Because it is so international, but also an important metropolis since the Middle Ages and thus has a lot of tradition, when it comes to restaurants and food Vienna has it all. From traditional to fusion, international and Mediterranean cuisine, it is easy to find a good restaurant, bistro or buffet in Vienna.



An interesting fact is that while all other cuisines are named after countries (i.e. Italian cuisine, French cuisine), Viennese cuisine is the only one in the world to be named after a city.

Restaurant Steirereck - It is very probable that when looking for first-class Viennese restaurants, the first one you will come across is Steirereck. This is a two-Michelin-star restaurant which is intimately nestled in Stadtpark. Steirereck is famous for its typical Viennese dishes, but serves contemporary and international cuisine as well. The wine cellar is home to an extraordinary collection of more than 35,000 bottles of wine, which has helped the restaurant make it in the "Elite Traveler top 100 Restaurants in the World".

Fabios - When it comes to Mediterranean fine dining, Fabios is a must. Famous for the creative twists to classic dishes, Fabios has a reputation of one of the best gourmet restaurants in Vienna. The interior of the restaurant adds to its culinary elegance and makes the whole experience a memorable one.



IMG: SILVIO NICKOL ©

Walter Bauer – A well-known restaurant in Vienna for its welcoming and warm atmosphere, Walter Bauer is a family-run restaurant that has been serving its guests for 20 years. The consistently excellent cooking and service have earned the restaurant a well-deserved Michelin star. At the helm of the kitchen is still Walter Bauer himself, who is a known and loved figure in Austria. The stacked wine cellar with the finest Austrian wines completes this cozy and classy restaurant.

Silvio Nickol Gourmet Restaurant – A suave gourmet restaurant located in Palais Coburg, Silvio Nickol has earned two Michelin stars. Its famous contemporary and innovative dishes include caviar with beet, king crab with salsify, watercress and Jerusalem artichokes, tarragon and sheep's cheese and many other mouth-watering plates.

Neni Am Naschmarkt – For a more relaxed and laid-back meal, head to Neni Am Naschmarkt – one of the best restaurants in the historic Naschmarkt. It is a stylish all-day eatery which serves Middle Eastern food in all its style. From Shakshuka to Ibaneh, all the exotic dishes are served beautifully, and this is probably the best place for brunch in all of Naschmarkt.

Vienna is a true European gem which has justly gained the reputation as the best city in the world to live in. And a lot of factors contribute to this prestigious title.

The Austrian capital has taken the face of a true international metropolis, while carefully preserving its historical glamour, baroque and rococo architecture, gothic and neo-gothic heritage, neoclassical buildings. It has also made sure to continue its tradition and keeping its stature as an international music hub, heart of Renaissance, and so much more.

So, whether your business trip to Vienna will last only a couple of days or a couple of weeks, there is always something to do in Vienna, especially during Christmas, when the city turns into a dreamy, light-filled exquisiteness and the Christmas markets, big and small, can be found everywhere.



IMG: NENI AM NASCHMARKT ©



10 Sustainable Christmas Gift Ideas



The increasing pressure of time in the race against Climate Change has more and more people routinizing eco-friendly and sustainable lifestyles, or at least certain aspects of them. The festive season is no exception. Whether it's alternatives to single-use plastic, clothes or traveling, big and small manufacturers are producing a vast pool of products with sustainability in mind. Here are some fresh, sustainable ideas for 2020.



1. Organic Bamboo Toothbrush

Toothbrushes made of plants, mainly bamboo, have become popular in many families. The positive sustainable trend has its roots in the fact that it has been found that toothbrushes are one of the main plastic pollutants of the oceans. They look way cooler, too – so, a very cool, useful and sustainable gift for Christmas.

2. Reusable Bottle

From simple, glass or aluminum, to high-tech self-cleaning technologies, reusable bottles have made a spectacular comeback. Not only because of their practicality and the ability to keep your drinks cool or hot, but also as a response to single-use plastic, which is suffocating the planet, on land and in water. Another good reason to buy a reusable bottle to someone is, besides staying hydrated, to remind that special person of you every time they use it.



3. A Sustainable Trip

Even though it might sound unusual, there is actually a spurge of eco-friendly traveling. The ways of doing it vary from coral reef sightseeing, to eco-conscious accommodation, more environmentally friendly means of transportation, packing reusable items, spending money locally and making sure your animal experiences are cruelty-free. There are plenty of travel agencies which offer all of this in packages, so you don't have to think about all the logistics.



4. Reusable Straws

It's no news that plastic straws are very harmful for the environment. However, the replacement options are plentiful and you can make a practical, usable and well-thought gift. From stainless steel, to silicone, biodegradable paper or glass, there are abundant choices of materials. A reusable straw is a gift which not only is very useful, but also a daily reminder that in the U.S. alone it is estimated that half a billion plastic straws are used daily, and their small size makes them extremely problematic, primarily for marine life.



5. BRAVE Backpack – Brick

The Brave Backpack is probably the best proof that you don't have to sacrifice sophistication for the sake of sustainability. A suave and charming backpack offered in a variety of colors, which really redefines the idea of recycling and sustainable use of materials. Its nylon lining is 100% recycled, and the interior has a zipper pocket, smartphone pocket and is very practical for a 13" laptop.

6. OneNine5 Washbag

Eco consciousness is perhaps best reflected in sustainable traveling. Even though there is not yet a viable eco-solution to long distance traveling, one way to help the planet would be to use sustainable materials when you travel. The OneNine5 washbag offers the possibility to have an organized, fashionable, yet sustainable voyage.



7. Refillable Lipstick

An estimated one billion lipstick containers end up each year in landfills or get recycled. This is your chance to impress the important women in your life by buying them a refillable lipstick which is not only eco-friendly, but can be refilled when it's finished with a different bullet of color. There is a variety of cosmetic brands which offer this option now!

8. Reusable Coffee Cup

From innovative materials, to thermal isolation, or just simple stainless steel or aluminum, reusable coffee cups have made a great return, and for a good cause. We use them every day, and as such the amount of plastic that comes from one-time use plastic coffee cups is hazardous, to say the least. Think of a coffee lover and buy him/her a reusable cup, it will truly make for a great gift.



9. Zero-Waste Manmade Leather Wallet

A luxurious leather object does not have to come from animals. Car manufacturers, famous designer brands, etc. are increasingly using manmade leather that does not get hot or cold. This leather can come from different fibrous sources, such as pineapple waste. A wallet is a very useful and thoughtful gift, but it can also carry the message of a sustainable presence for a prosperous future. This way you make sure the wallet is durable, looks nice, is cruelty-free, zero-waste, and sustainable.



10. Hemp Clothes

Hemp is the strongest fiber found in nature. Before industrialization, hemp was the plant of choice for making paper, clothes, and for many cultures it served as food too. The uses of hemp vary from building materials that are fire-resistant, to clothes and paper. It takes an incredible amount of water and other resources to produce a piece of cloth, thus hemp clothes are an ideal gift for those who care about the planet and the resources we are borrowing from our children. Moreover, hemp clothes are three times stronger and more durable, lighter and more absorbent than cotton.

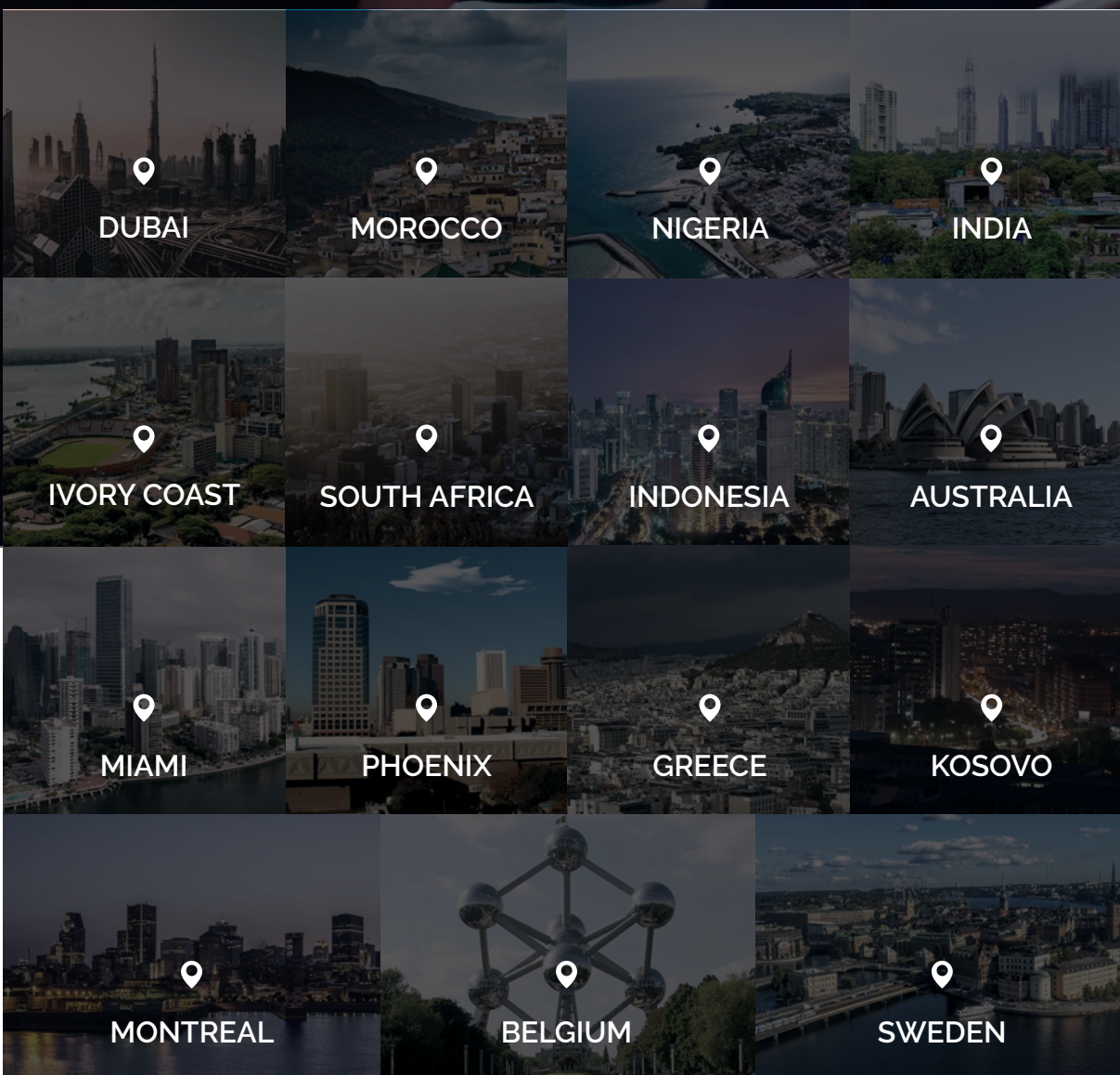
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Course	Language	Status	
ISO/IEC 27701 Foundation	English	New!	→
ISO 22301:2019 Transition	English	New!	→
ISO 37101 Lead Implementer	English	New!	→
ISO 37101 Lead Auditor	English	New!	→
ISO 37001 Lead Implementer	English	Updated	→
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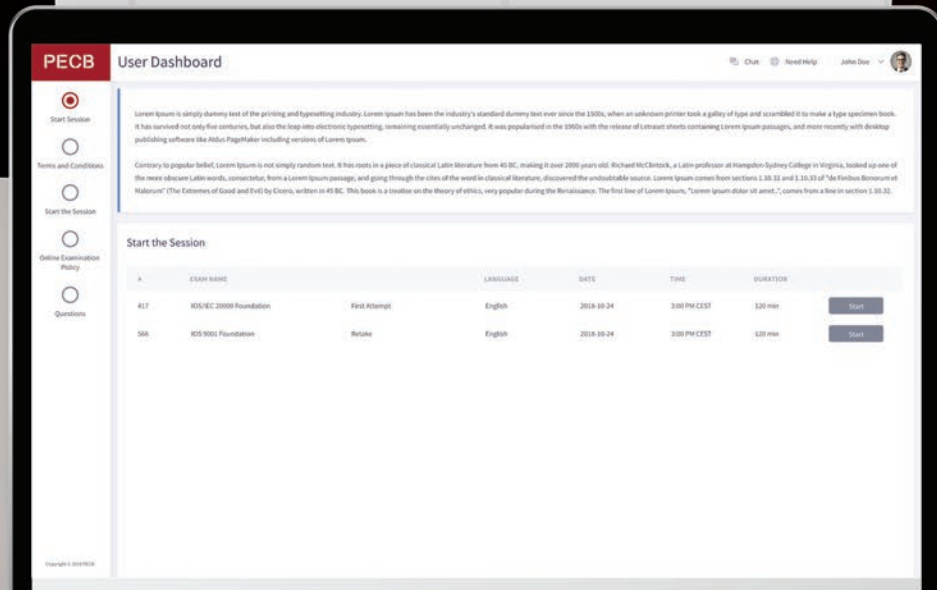
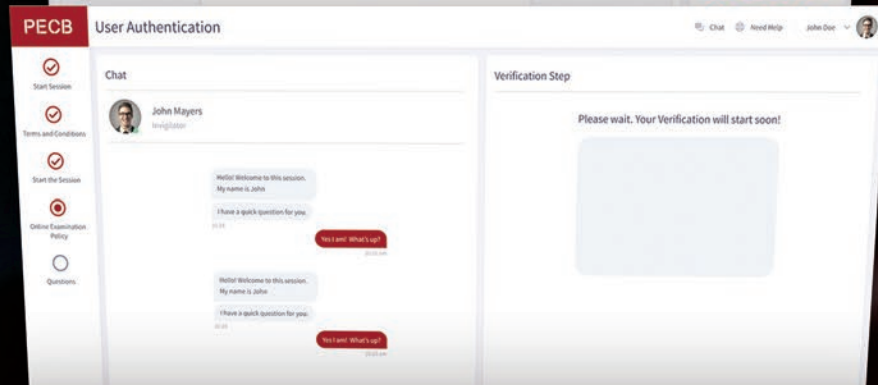
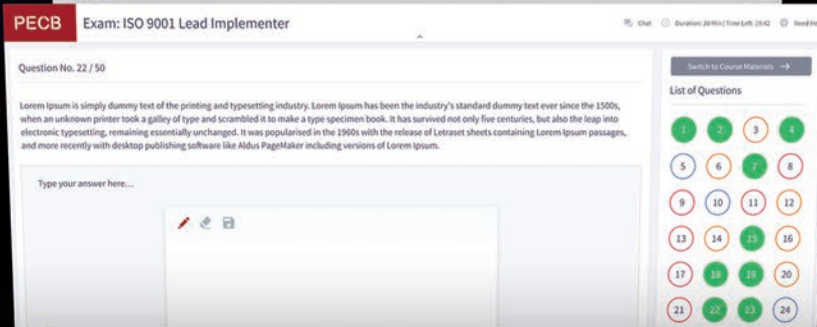
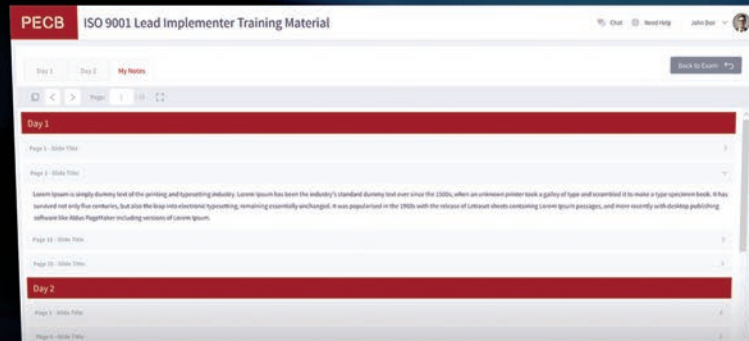
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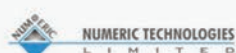
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