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ISO 22301:2019 What Will Change?

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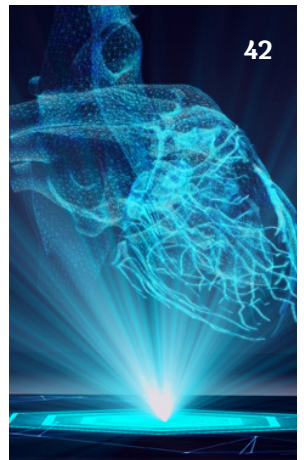
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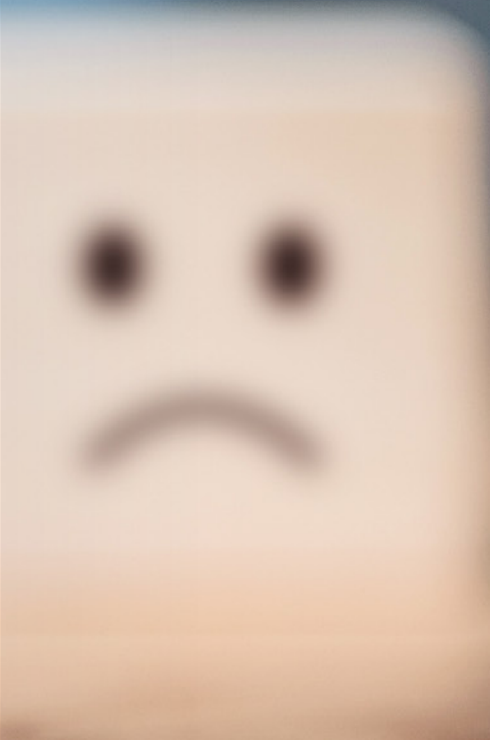
“

Great thoughts
speak only to the
thoughtful mind,
but great actions
speak to all
mankind

”

THEODORE ROOSEVELT

26TH U.S. PRESIDENT



PEOPLE

EXPERIENCE
THE NEW FEEL



AN INTERVIEW WITH THE MINDS BEHIND THE PECB REBRANDING

With the ever-changing nature of the marketplace, there is one immutable truth about modern-day business: every organization has to rebrand itself at some point. The brand forms the core identity of the business and it's more than simply the name of the company; it's a blend of all the values, characteristics and standards that are embodied by the organization.

During the Singapore Partner Event in March, we have launched the new visual identity of PECB, which was met with enthusiasm and excitement from the team and the participants. In this article we want to share that experience with you, and give you insights of the process behind the rebranding process. So we sat down with the masterminds behind this rebranding: The CEO of PECB, Eric Lachapelle, and talked about the overall rebranding, while with the PECB Vice-President of Training Development, Bernard Boily, we conversed about the new visual identity of the PowerPoint training courses.

PART I: PECB REBRANDING

1. What was the driving force behind the rebranding?

Eric Lachapelle: Well, considering the way that PECB has evolved over the years and the constant growth, we found that there was a need to visually refresh our brand so that it reflects accurately our mission, evolution and our offerings. With our growth, we saw the opportunity to expand our mission and provide our network and clients not only with quality service, but also with guidance and support to grow their market influence and reach of their services.

Upon the development of new PECB certification programs, new portfolios and new platforms, we felt the need to update the logo, color palette, corporate typeface, and the design of our training courses, to better reflect who we are today. Transitioning everything to the fresh new look was a very natural process and we learned a lot during it.

Our brand needs to represent who we are and our values: Integrity, professionalism, fairness and recognition.

2. What inspired the PECB's new look?

Eric Lachapelle: The passion for quality extends to our logo as well. We wanted to respect our history and remain true to where we came from. PECB has always been known for its clear-cut lines. So we didn't want to leave this behind. The logo is formed by one important component: clear-cut lines. We are a body made of parts, inseparably connected to each other. We are our Distributors, Partners, Trainers, Auditors, and Clients. All of us will always stay committed to education, unlocking potential and changing lives. While our brand did a really good job reflecting who we were in the early days, it was time to put forth a new look, feel, and voice that was more contemporary and sophisticated.





3. Does PECB's new look represent a shift in brand direction?

Eric Lachapelle: Absolutely. We used to be mainly oriented in providing training courses and now we are an organization that does not only provide training courses, but also platforms and unique certification programs. We needed a logo that exhibited that. It's fresher and more current in terms of design.

4. What were the biggest challenges of the rebranding?

Eric Lachapelle: PECB is made up of many platforms, applications and training services. When we created the new visual identity and the new logo, we had to keep in mind how it would be reflected in all of our platforms, applications and services, so when they do stand alone, they're beautiful logos and brands on their own, but when they're brought together, they are clearly part of one family.

This year, apart from the rebranding and the repositioning of our services, we actually worked on various new certification programs, such as the PECB program for software certification (AppCert), and the PECB certification for processes and team certification (TeamCert). We also introduced the brand new e-commerce platform: the PECB Store! So this was a challenging but yet interesting project with a lot of different elements but we did a great job of bringing them all together.

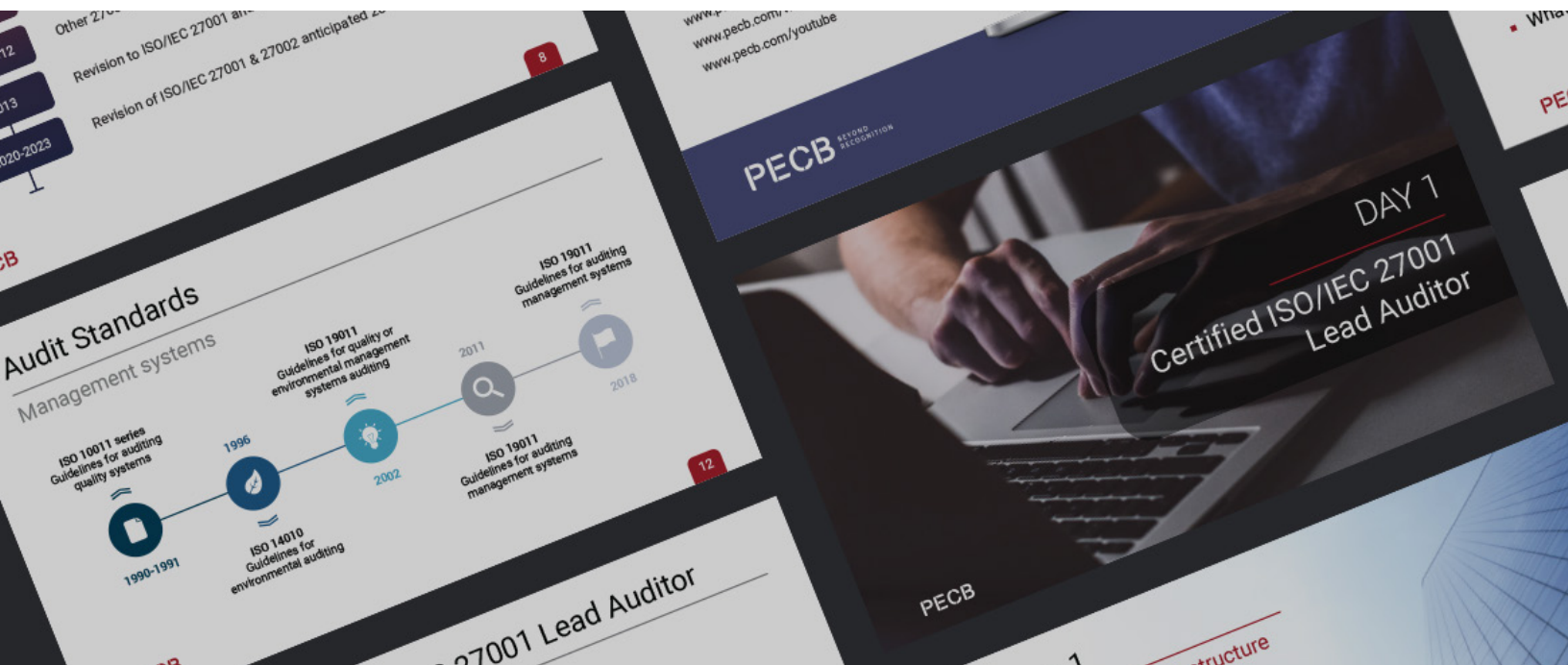
5. What was the best moment during the process of the rebranding?

Eric Lachapelle: The PECB team kept everyone excited and interested by working toward a big reveal with sneak peeks along the way. It was a crazy process that involved a lot of early mornings, late nights and hard work!

The greatest moment was revealing it! The feedback from the employees and audience was positive, and we were thrilled.



PART II: A NEW VISUAL IDENTITY FOR THE PECB TRAINING COURSES



1. What is the importance of changing the visual outlook of the training courses?

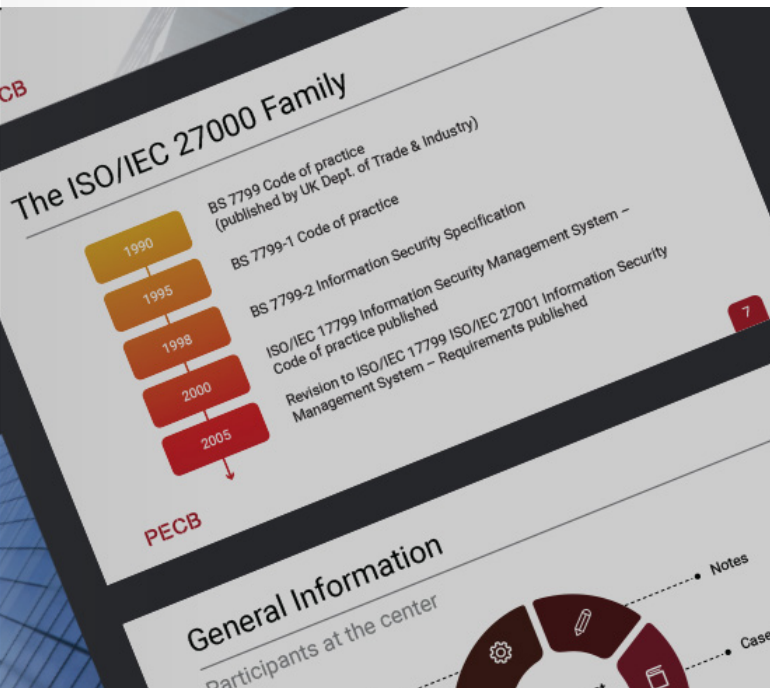
Bernard Boily: It's a fact that learners respond to visual information faster compared to text only materials. Visuals are like power boosters in the learning process. Visual representations are an effective way to better communicate the key concepts and engage learners throughout the course.

We had multiple and fruitful meetings and we decided that the content and the design of the training courses should be even clearer and more concise, providing a stimulating addition to the spoken words. As we were changing the logo and corporate colors of PECB, we thought it would be a great idea to also go along and use this opportunity to change the design of the slides that everybody sees when they are attending PECB training courses.

We wanted to do that for a couple of reasons: first, to use this opportunity to align the training course design with these new colors and the new logo, and second, we wanted to also align the courses with the current design trends, in order to be more appealing to the clients and the audience.

2. How would the Partners and the end clients of PECB benefit from the newly designed training courses?

Bernard Boily: Apart from the fact that the design will be more appealing to the audience, it will also be something that is going to be easier to work with, and that will allow the communication of the content of our courses to be conducted more effectively. Moreover, we thought that the end clients and partners would benefit from the new format of our courses. We changed it from the previously standard 4:3 aspect ratio to 16:9, which is the aspect ratio that you will find on an HDMI



screen, and most of our partners now are using HDMI screens or HDMI projectors for presenting our courses. We wanted the visual content of the courses to cover the entire space on the screen which is obviously more interesting for the audience.

3. How did the transition take place?

Bernard Boily: Actually, the project started back in September, and the first thing we had to do was to talk to our Distributors and to our Partners, to understand what they would prefer to improve in our training courses. Based on the comments and feedback we received, we established a series of high-level ideas and criteria and we set up a design team here at PECB that worked on several aspects of the design. We also had an outside panel of Distributors and Partners to review what we were doing, to know if we were going on the right track, and if this design was meeting their expectations.

Once we achieved that, we "froze the design" and then came the massive effort of taking all these courses and transitioning them to the new design, which is quite a significant undertaking, because, as you know, we have a deep and vast portfolio of training courses. What we've launched back in March 14 in Singapore is the top 10 training courses, the ones that are some of our best-selling courses, initially in the English version. We will now apply this new design to the French, Spanish and other languages versions of these training courses. During the next following months, the rest of the portfolio will also be transitioned to the new design.

4. What were the biggest challenges you encountered during this transition?

Bernard Boily: On several aspects, design is a matter of personal preferences. Which font do you prefer, which color fits better with what color, where should things be located on the slide, how do you present the page number, which alignment should be used and so on. We had a lot of discussions within the design team and with our outside panel to ensure that the redesign will be appreciated by most people. The discussions were sometimes fairly intense but always interesting.

5. What are your expectations regarding the end result of this transition?

Bernard Boily: I expect and hope that the people attending our training courses will be delighted with what they will see. I strongly believe that it is going to be easier to deliver PECB training courses. Finally, I expect this new course design is going to help our network of Partners and Distributors, and help position PECB as a top quality brand. As an additional note, it is worth mentioning that I came here at PECB back in September. I had been working very closely with PECB for several years and I am now working with the team here and this is a group of fantastic people; they work very hard. They have a bunch of crazy ideas and they are a great team to work with. I sincerely believe that it is because of who they are and their commitment that we were able to successfully achieve this transformation.

Dear CEO: While Training is an Important Step, Culture Transformation is the Solution

Leadership



As a 30-year HR and workforce management expert, a former global chief diversity & inclusion officer for several major organizations, and a certified leadership coach, I speak from experience when I say that training is not the cure to responding to poor decisions made by management, or to public outrage when revelations of bad behavior go viral and threaten your company brand.

In my consulting firm we often receive calls to conduct a number of training programs, ranging from leadership development to diversity, inclusion, unconscious bias, anti-harassment, team effectiveness, trust building, and other similar topics. The majority of the time, these requests are a direct response to some unfortunate incident, such as a lawsuit (or the threat of one), increased employee complaints, high disengagement or turnover, or a response to a company crisis featured in the national news that has generated protest and public outcry.

Companies Rush to Training

In recent months, companies such as United Airlines, Facebook, Wells Fargo, Nike, Mattel, General Motors, Starbucks, and Uber have been faced with crisis after crisis that have forced them to address issues related to their culture. Last year we saw a rush to training when Starbucks was forced to address racial bias issues that occurred in one of its stores and involved a front-line supervisor. Starbucks closed 8,000 stores to hold mandatory training for its entire workforce. Many companies, including some of those listed above followed suit by mandating Diversity & Inclusion and Racial bias training. To address the company's large-scale and fundamental culture problems, Uber piloted a corporate education program like that of a university model. In the first few months of its launch, more than 6,000 out of Uber's 15,000 employees signed up to take the classes in leadership and strategy.

I do applaud companies that are at least willing to take such bold moves as closing all of their stores to educate staff through mandatory training. I also give credit to companies that are at least willing to do something to address the issue - such as terminating the employment of the violators, airing new commercials as a PR campaign to reinvent their brands, and hosting "listening tours". However, I do wonder what happened after the training was concluded and employees went back to work. My response to clients in these types of situations is that a few hours of training, a 60-second commercial, or a one-hour focus group won't result in behavior, attitude, or mindset shifts.

The reality is that training is not the fix. Culture transformation is the solution.

Training should not be the first step, nor should it be the only step. If the necessary systems are not in place to drive sustainable change, this huge investment of training time, money, and resources will be deemed a futile exercise. It's what happens beyond these activities and in the culture of the company on a daily basis that will make the difference.



What is Workplace Culture?

The topic of corporate culture has been active in some organizations for decades, but it is now a global issue as more institutions are addressing organizational health. Culture consists of the norms, values, behaviors, and attitudes that the company rewards or holds in high esteem.

In a recent article published in [Harvard Business Review](#), culture was described as being like the wind: "It is invisible, yet its effect can be seen and felt. When it is blowing in your direction, it makes for smooth sailing. When it is blowing against you, everything is more difficult."

Company culture can make or break your brand and reputation among customers and top talent; it can impact employee productivity, engagement, creativity, and retention; and it can affect bottom line profits and company success.

Employees are demanding, at the very least, our workplaces to be more inclusive, welcoming, and respectful; that they create a sense of belonging, and be free from harassment. For some companies with legacy cultures and others that have existed for more than a century, this is an extremely hard change management process. But it's necessary in this era of demographic shifts, where the global workforce and marketplace are much more diverse, multicultural, and multigenerational, and works more virtually and flexibly. So how does this happen? How do you really move the needle beyond training activities?

I have seen the greatest success in working with my clients to move the needle when they are willing to implement a more comprehensive and robust strategy, rather than a quick fix. So here are my proven steps to successfully transforming culture.

12 Strategies for Achieving a Sustainable Culture Transformation™



Assess your culture.



Revise your policies, procedures, and strategic plan.



Establish core values.



Communicate continuously.



Change the people who don't want to change.



Replace archaic belief systems.



Integrate inclusive behaviors into all organizational processes and practices.



Offer learning and development resources.



Lead by example.



Practice sound decision making and problem solving.



Institute accountability systems that reward inclusive behaviors and that reinforce your company values.



Sustain the culture by operationalizing all of the above strategies through continuous innovation and transformation.



The strategies presented above are not ranked in any particular order, but when we are working with our clients, we always recommend that they start at the "Assess" phase. This is the most critical step in the process because it uncovers and reveals the current state of the company and establishes how much ground work needs to be done. In this first step we conduct a S.W.O.T. analysis, stakeholder interviews with internal and external personnel, a culture audit, and leadership assessments (individually as well as with the senior management team as a group); we also administer employee surveys, and conduct focus groups with staff. Determining in what order to implement all of the other steps will depend on the company's resources, appetite for change, the pace that they can or are willing to take, and the amount of work ahead. Of course, the last step in the process should be the "Sustain" phase, because it is important to ensure that all of the work that has been implemented has some stickiness. Ongoing process improvement, evaluation, course correction, and innovation should become a way of life in order to sustain the work.

Culture transformation takes time, effort, energy and commitment. The process is not a sprint; it's a marathon and must be approached with a real sense of urgency in order to create the future state.

Culture is Everyone's Responsibility

Culture is everyone's responsibility, but I have seen the greatest success in culture transformation when leaders at the highest level in the organization take the lead and walk the talk. Every leader and employee in the organization should be held accountable for living the values of the organization. Don't be the company that has regrets for not making necessary culture changes because it would take too long and cost too much. I imagine that the many companies, the workplace cultures of which have come under scrutiny in recent months, all wish that they did not have to deal with culture transformation in the

public's eye and under such adverse circumstances. It's bad for their brands and bad for their business and, unfortunately, I'm sure that they will continue to have plenty of company.

My advice and coaching to all CEOs, presidents, chief HR officers, and boards of directors is to heed this call for culture transformation and not just use training as a Band-Aid and a quick fix in hopes that these problems will go away with the changing news cycle. Use the steps listed above and make the commitment to see this as a strategic imperative and an act of innovation and reinvention that will result in long-term business success.



About the Author

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Dr. Shirley Davis, CSP, is a corporate executive, global workforce management expert, certified leadership coach, and master of reinvention. She works with leaders at all levels and has worked in more than 30 countries on 5 continents; she delivers more than 80 speeches a year. She brings a high-energy, high-content, and high-value message to audiences all around the world. With more than 30 years of business experience in a variety of senior and executive leadership roles with Fortune 100 companies, Dr. Davis' expertise lies in providing solutions and strategies for achieving leadership excellence and in building high-performance and inclusive workplace cultures in which all talent can thrive.

Between Profession & Family

THE STORY OF DANIEL SEID, A PECB CERTIFIED ISO/IEC 27001 MASTER

Leadership





Looking back over the last decade, it's remarkable how much PECB's network has achieved and advanced professionally. Such advancement is not only a result of our training development and deliverables, but also of the ways by which we've been able to provide assistance and guidance to many of our members around the world. Seeing the great importance of distinguishing highly experienced professionals, PECB has introduced the Master Credential Scheme. This credential is given to individuals who have made a major contribution in their professional field and brought multiple benefits to businesses and society.

Such commitment inspires us and is one of the reasons why we had a lovely conversation with Daniel Seid, a PECB Certified ISO/IEC 27001 Master, who has an extensive - 30 years to be exact - experience in security. He explains his passion for his work as a "geekish" curiosity to find out how things work; he likes to break things apart in detail, trying to understand how things are interconnected and how things work together:

"For me it started with IT systems and servers, now it's more like large corporations and soft skills."

Daniel first and foremost is a family person, who alongside his wife has raised their lovely identical triplet daughters and thus, during his 30 years of working in security, Daniel has exercised his profession mainly in Sweden, but has also had assignments abroad. His first five years he worked in various (physical) security guard assignments, after returning from the compulsory army service. Later on, Daniel worked for more than 10 years in offensive security and penetration testing as a project leader.

He has worked for specialized security firms as a security consultant and has been employed by governments, municipalities and state-owned companies. He recently started his own company after serving for more than five years as CISO at "Svenska Spel," in charge of upholding triple organizational security certifications for the company and prior to that, he worked for three years as IT, Risk and Security Manager at Karolinska University Hospital.

Since Daniel started his own company, he constantly evaluates his work in retrospective, through his clients, peers and with the help of the feedback from attendees of trainings that he provides. In his current jobs as an information security auditor, information security teacher, data protection officer, and CISO, he makes a difference in changing the mindsets and perceptions on information security by explaining how information security is another tool in the arsenal that businesses have to reach their overall goals. In his company, Daniel encounters a lot of challenges and enjoys achievements every day.

His work experience has led him to build a system for data protection similar to PIMS, "Privacy Integrity Management System", named "Personal Information Management System". He knew it would take some time for the working draft of ISO/IEC 27552 (PIMS, Privacy Integrity Management System) to be finalized and officially released, so instead he built his own PIMS that handles people, processes, procedures (as he learned from the PECB ISO/IEC 27001 Lead Implementer training course) and now this system is fully operational at a private healthcare provider.

Necessary documentation such as policies, guidelines, and instructions along with specific risk analyses and file registers have been produced and top management and key persons in the company are involved. This custom built PIMS is still being further developed, and Daniel highly recommends any organization to use such an approach for a systematic and strategic approach regarding continuous improvements with respect to the GDPR.



DANIEL'S ROAD TO STANDARDS

When it comes to successes, Daniel has a lot to tell. But being a father to his daughters is on the top of his chart. Second, is having designed and built their family home: Daniel did the complete architecture of two houses with Google SketchUp. He also became the project leader, financier and legal contractor for the individual construction working specialist teams that he negotiated with. Third, according to him, is starting his own business and receiving the ISO/IEC 27001 Master certificate.

When we asked Daniel to map out his way up to standards and information security, half-jokingly, Daniel talks about becoming this grumpy old man complaining about the younger generations having it so much easier with all the available resources nowadays, like higher education access and security certification courses. People now argue online which certification is the best. That was not the case when Daniel started the professional career in Information Security.

Nowadays, there are, for example, offensive security courses with constant professional online support and virtual safe labs or step-by-step instructional videos on YouTube. Laptops today are on steroids! Actually, Daniel started looking around 1999 for some kind of branch standards, on general security demands. Especially relating to procurement issues on both services and devices because he had a need for a documented and systematic approach to reoccurring security issues. This need led Daniel to find out about BS 7799, the predecessor of ISO/IEC 27001.

At that time he was switching between penetration testing and strategic information security. He figured that if he could manage to crack all passwords in an organization, it was often because of the fact that back then there were no efficient security controls in place. The deeper cause was the lack of awareness from the top management because of a lack of proper or reasonable

resources available for the staff to properly protect the assets. Daniel has personally seen IT managers many times claim that "our technical staff has our IT under control" until he showed the IT manager personally and practically how insecure their IT infrastructure was - i.e. he cracked their personal login password and showed them the result. "That's why I have used the last years mainly focusing on ISO/IEC 27001."

Daniel sees the standard's certification as a form of quality mark. Regardless if it's a personal certification or a business certification, quality marks business growth. It also fosters innovation and constant improvements. With a joking tone, Daniel says:

"There might exist some fine pilots without a license but I would prefer to fly with one that has a pilot certificate."

It is the same case in the information security industry. "Certified businesses should be given precedence when considering partnerships, in products and in service deliveries. I prefer to do business where there are some rules that are in place that also are vetted by an independent party. For me, my personal certifications open doors to interesting opportunities."

Daniel is a firm believer that standards set and provide a well-known security baseline. "That does not mean that a certified business is "hack-proof." But it does mean that the certified business has an independent quality assurance of a common set bar, based on the best security practice. And as such that can be measured and compared to other KPI's for the internal business goals, and, against the competition."





HOW HAS THE ISO/IEC 27001 MASTER QUALIFICATION SUPPORTED DANIEL'S CAREER?

"I get noticed and have an advantage when it comes to new interesting offerings from possible new clients in Sweden and abroad as well as peers in my business (that also help me advance my career) that I probably wouldn't have had without this certificate. I continuously learn new things that will also be benefiting my existing clients, and having satisfied customers is probably the best support one can have for his/her career."

With the digital revolution going on, businesses are producing, managing and storing more data than ever before. This data is not anymore just raw material, but the reflection of an organization's ability to save it and transform it into useful information that can unlock a world of opportunities. The rapidly increasing digitalization of industries and the society in its totality is changing production methods and how we work in general.

So Daniel's advice for those who are seeking a career in Information Security is: "If your heart and mind are into security, the ins and outs of security - not only for the paycheck - just go for it. There is so much to learn and try to understand or even grasp. It's endless. Never stop, but take pauses and always try to move forward. Never, ever, stop learning."

"There are people out there who are younger, smarter and faster than you, find them, follow them and learn some more."



ISO Standards Support Health for All

At least half of the world's population still do not have full coverage of healthcare services. Even more, where you live in the world can have a dramatic impact on access to these services. Many families are forced to choose between healthcare and other life-giving necessities, like food or housing. It's no surprise then that the theme for this year's World Health Day is Universal Health Coverage (UHC) – without discrimination.

Healthcare is a fundamental human right, and it's one that ISO doesn't take lightly. With 14 technical committees dedicated to the field of health and well-being, standards in this sector allow healthcare systems to compare services, exchange information, aggregate data and protect patient privacy.

Achieving healthcare for all means engaging stakeholders from every sector. This includes patients, clinicians, doctors, manufacturers, scientists, policy makers, and so on. Healthcare touches all of our lives and the benefits of a system that works for everyone are numerous: healthy children can go to school and learn, and healthy adults can go to work and earn. Long term, this leads us to greater economic stability.

Yet, creating healthcare systems that work is no small feat. We need all hands on deck and international standardization offers the proper platform for stakeholders to join together and create collaborative solutions that yield big results. "Standards born out of international consensus should become the linchpin for global regulation in healthcare," says Alexey V. Abramov, Head of the Federal Agency on Technical Regulating and Metrology of the Russian Federation. He continues: "We need to overcome our contradictions to make decisions that improve and support healthcare worldwide... for present and future generations."

ISO's technical committees have been hard at work formulating standards that protect the health and safety of patients all over the world. For example, ISO/TC 210, Quality management and corresponding general aspects for medical devices, has produced 31 standards relating to quality management of medical devices, helping ensure the safe design and performance of medical products. In addition, ISO/TC 215, Health informatics, develops standards that allow data to flow freely between systems. Such interoperability will have lasting impacts on how patient information can be transferred from one system to another in the future.

With over 1400 standards related to health, the standardization community plays a tremendous role in support of United Nations Sustainable Development Goal No 3 (SDG 3), which aims to "ensure healthy lives and promote well-being for all". People-centered care is intrinsic to UHC, meaning people have access to high-quality health services in a timely fashion, regardless of their location in the world and without suffering financial hardship.

Disclaimer:

PECB has obtained permission to publish the articles written by **ISO**.

ISO 22301:2019

What Will Change?

The first edition of ISO 22301 was launched in May 2012. It was the first truly internationally accepted standard on business continuity, and it consists of requirements to implement a Business Continuity Management System according to ISO Annex SL. As such, it stood in line with its prominent predecessors such as ISO 9001 and ISO/IEC 27001.



When ISO/TC 292 (ISO Technical Committee 292 on Security and Resilience), its workgroup WG 2 – responsible for this standard – first asked within the community about the need to update it, there was astonishingly little response. We, as members, could not believe that nobody had the intention or desire to update this international standard. However, all of a sudden, the interest exploded and the respective Project Team within WG 2 was challenged within an unprecedented volume of change requests concerning ISO 22301:2012.

As of now, several modifications were integrated into the current DIS (Draft International Standard), and the process is not yet finished. During the revision process, a number of developments had to be observed. As ISO 22301:2012 was the first in a series of standards on business continuity developed by this TC, care had to be taken to synchronize modifications with the central glossary of this TC (ISO 22300) and auxiliary standards (technical specifications, TR) developed after 2012 (e.g. standards on organizational resilience, business impact analysis, etc.).

Here is a summary of current modifications and similarities as compared to the original version:

- The PDC model diagram was deleted, as diagrams are hard to standardize and typically lead to endless discussions and interpretations.
- Clauses 4 to 10 cover the components of PDCA, as before.
- There are no normative references in this document.
- The terms and definitions were updated to include the ISO Online Browsing Platform and the IEC Electropedia; both are web-based information platforms.
- In clause 3 “Terms and Definitions” several terms were modified, redefined, removed and added. Major changes include:

Terms	Status
consequence	introduced
disruption	introduced
emergency	introduced
impact	introduced
information	introduced
likelihood	introduced
management	introduced
measurement	introduced
planning	introduced
protection	introduced
recovery	introduced instead of “RPO, RTO”
resilience	introduced
review	introduced
supply chain	introduced
training	introduced
BCM	removed
BCP	removed
document	removed
infrastructure	removed
invocation	removed
MAO, MTPD, MBCO	removed
risk appetite	removed
BCMS	redefined
prioritized activities	changed to "prioritized activity"
product or service	slightly modified
testing	replaced by the term "test"

The list above might seem tedious perhaps, but it reflects the new way of how the community sees this particular aspect of the standard, and the project team received numerous comments on this clause.

- Clause 4 “Context of the organization” received only minor modifications. The project team tried to create introductory sub-clauses at the beginning of each clause. As such, for example, sub-clause 4.1 is an introduction to clause 4 and sub-clause 4.2.1 (general) is an introduction to sub-clause 4.2.
- Clause 5 on leadership was streamlined.
- Clause 6 on planning was enhanced, focusing on business continuity objectives and planning to achieve them (6.2). A new sub-clause on planning changes to the BCMS (6.3) was introduced.
- Clause 7 on support was streamlined.
- Clause 8 (operation) took a lot of time to modify, as expected, addressing the core of the matter of business continuity. While the structure of the sub-clauses was not modified a lot, new additions to the content were heavily discussed and, hopefully, improved to better suit the requirements of the practitioners who use this international standard. For example, sub-clause 8.2.2 “Business impact analysis” was enhanced and a reference to ISO 22318 (supply-chain continuity) was added. Notes referring to the terms MTPD and RTO (both removed from the clause on terms and definitions) were added. Sub-clause 8.3, formerly called “Business continuity strategy” was renamed “Business continuity strategies and solutions”, highlighting (in 8.3.2) the need for the identification and selection of strategies and solutions. Clause 8.4 (formerly called “Establish and implement business continuity procedures”) has been renamed to “Business continuity plans and procedures”, focusing on “Response structure” (8.4.2), “Warning and communication” (8.4.3), “Business continuity plans” (8.4.4) and “Recovery” (8.4.5). A sub-clause on “Exercise program” (8.5) replaces the sub-clause formerly called “Exercising and testing”.
- Clause 9 on “Performance evaluation” and clause 10 “Improvement” were streamlined, also taking into account the new requirements by ISO on how these clauses should look in order to be aligned with all ISO system management standards.





In today's business landscape there is a rising need to address the complex range of threats that can damage business operations. As such, the capability of an organization to continue operating during a disruption has never been more important, and it's no surprise that update of ISO 22301:2012 as the leading international standard for Business Continuity as well is very important to practitioners, professionals and businesses worldwide.



About the Author

Dr. Wolfgang H. Mahr

Owner & Managing Director at continuuuity

Dr. Wolfgang Mahr has over 25 years of experience in consulting and project management in ICT and during the last 20 years has specialized in the field of Business Continuity Management. He is experienced in IT governance, information security, business management, marketing, account and product management, in professional education as an author of educational content and international public speaking. Dr. Mahr has extensive experience in the international environment, and in organizational, process and technology consulting. He worked for companies of various sizes. He has several professional publications, a blog, a video channel and lectures at international conferences in support of the exchange of ideas and further development of current BCM issues.

Every 15 Seconds: A Story of Destroyed Lives

Every 15 seconds, somewhere in the world, a worker is killed and another 150 are injured. A new international project has estimated that work-related accidents and illnesses account for 4% of the Global GDP. In the EU, this is EUR 476 billion every year. The cost of work-related cancers alone amounts to EUR 119.5 billion.

Work is full of challenges. Staying safe shouldn't be one of them, so says the International Labour Organization (ILO) which is celebrating its 100th anniversary this year. Founded in 1919 in the aftermath of World War I, the ILO works to bring together governments, employers and workers to set international labor standards and promote decent work. In 1969, on its 50th anniversary, it was awarded the Nobel Peace Prize in recognition of its work. Yet, as you'll read, there is still much work to be done in order to improve health and safety; the moral, economic and (in some territories) the legal imperatives to 'do something' continue to demand business owners' and managers' attention.





Do something: April 28, 2019

Launched in 2003, the seventeenth World Day for Safety and Health at Work takes place on Sunday, April 28, 2019. The Day was declared by the ILO to promote the prevention of occupational accidents and diseases globally. World Day for Safety and Health at Work is an awareness-raising campaign that is "intended to focus international attention on emerging trends in the field of occupational safety and health and on the magnitude of work-related injuries, diseases, and fatalities worldwide."

The World Day for Safety and Health at Work will trigger a series of worldwide events and activities which will continue throughout the rest of the year around the theme of safety and health and the future of work. These will celebrate and build on the wealth of knowledge accumulated over 100 years, as well as preparing economies to face, appreciate and adapt to the changes brought forward by the challenges of future workplaces - major changes such as technology, demographics, work organization and climate change. To coincide with this, the ILO will launch a global report, sharing the story of a hundred years in saving lives and promoting safe and healthy working environments.

April 28, 2019, is also International Workers' Memorial Day, an annual event where workers and their representatives commemorate those killed, injured or made ill by their work and campaign for improved health and safety in workplaces. The Day is recognized by many governments across the world, with workers often wearing purple 'forget-me-not' ribbons. The numbers they are commemorating make for grim reading.



Accidents at Work

According to [International Labour Organization](#), every 15 seconds, a worker is killed at or by their work. Every day, that's 6,300 people dying as a result of occupational accidents or work-related diseases – more than 2.3 million deaths per year. In addition, 317 million accidents occur while working every year – over 150 every 15 seconds. Across the world, the number of people dying from work-caused cancer adds to those dying because of work accidents.

It is estimated that at least 742,000 people die for this reason worldwide every year. Many of these incidents and exposures result in extended absences from work, disrupting processes, orders and profits.

According to [European Agency for Safety and Health at Work](#), the human cost of this ongoing adversity is vast and the economic burden upon organizations of poor occupational safety and health practices is estimated at 4% of global Gross Domestic Product each year.

World Day Against Child Labor

Six weeks after the World Day for Safety and Health at Work, on June 12, 2019, World Day Against Child Labor will join with the ILO campaign to improve the safety and health of young workers and put an end to child labor. This [campaign](#) aims to accelerate action to achieve the sustainable development goal of safe and secure working environments for all workers by 2030, and of ending all forms of child labor by 2025. Most readers will likely find the numbers here quite shocking. [The United Nations](#) has identified 152 million children worldwide who must work so they and their families can survive. About half of them – 73 million children worldwide – perform hazardous work – toiling in mines and fields, exposed to pesticides and other toxic substances, carrying heavy loads or working long hours. Many suffer lifelong physical and psychological consequences. Engagement with either or both of these campaigns can provide your organization with new opportunities to energize (or re-energize) its workplace safety and health program. Here's how:

Occupational Health and Safety

Occupational health and safety (OH&S) is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. The goals of OH&S programs include creating a safe and healthy work environment. OH&S may also protect co-workers, contractors, customers, the public and others who might be affected by the workplace and its hazards.

One year ago (March 12, 2018), a new international standard for Occupational Health and Safety Management Systems was published by the International Organization for Standardization (ISO) – ISO 45001:2018. Based on the common Deming Wheel cycle of planning, doing, checking and acting for improvement (PDCA), this was the first ever ISO standard for OH&S. ISO 45001 was designed to align and integrate with other commonly used management system standards such as ISO 9001 (for Quality Management Systems) and ISO 14001 (for Environmental Management Systems).

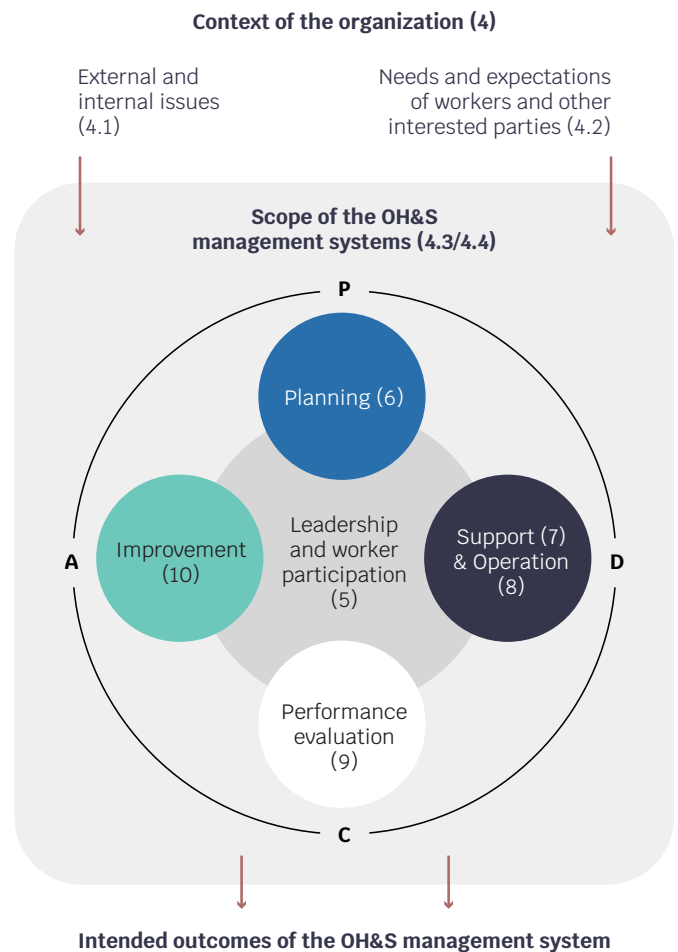


FIGURE 1 – ISO 45001:2018



According to [ISO](#) there are over one million companies and organizations in over 170 countries certified to ISO 9001. Action research by the author and others confirms great affinity for ISO 9001 in many supply chains, such as automotive, aviation, rail, utilities and local governments.

In many cases, it has become a foundational expectation when tendering. Likewise, there has been phenomenal growth in the adoption of ISO 14001.

300,000 companies in 171 countries around the world are [ISO 14001](#) certified. ISO 45001 is showing early signs of similar growth.

Many organizations – and their supply chains – have found that by using the structure provided by ISO 45001, they can invigorate the necessary leadership and worker participation into their approach to OH&S. The structure it brings provides architecture and linkage to (unfortunately) often disjointed risk assessments, workplace inspections and incident investigations.

Planned internal (and external) audits enhance your own managers' performance by independently identifying opportunities and inefficiencies, with the goal of making your organization more productive, profitable, safer and healthier to work. Managers working with employees to predict and prevent injuries and losses can change the culture in an organization – many organizations known to the author have used OH&S as the trigger for such change. An OH&S culture is one in which the right to a safe and

healthy working environment is respected at all levels, where employers and workers actively participate in securing a safe and healthy working environment where the highest priority is accorded to the principle of prevention.

As Lao Tzu, the founder of Taoism suggested, every journey starts with a single step. Will April 2019 be the start (or the renewal) of your OH&S journey?

DO SOMETHING!
TEN IDEAS TO GET
YOU STARTED



1. Look at the ILO centenary [website](#).
2. Check free [Memorial Day resources](#).
3. H&S professional body IOSH (Institution of Occupational Safety and Health) has free resources and access to an [expert panel](#) to help you prevent workplace cancers.
4. Raise awareness on safety and health amongst the workers – you'll find around 30 short, educational films. [These films](#) were made to be used freely for education, training and awareness. The universal language makes them suitable for all audiences.
5. For a simple management first step, organize and conduct a health and safety committee meeting. Get workers from each department together to discuss the key issues and to devise a prioritized action plan. Ask a senior manager to chair it and endorse the minutes.
6. Walk the workplace with 'fresh eyes' – let the workers know what you're doing and ask them what they think the main hazards are.
7. Review the incident, accident and absence records for your department or organization – do you really know what's going on?
8. Use 5-7 above to create or update an OH&S policy – set out your priorities. Call a meeting and brief the workers. Give them a copy and tell them what you're planning to do.
9. Hold a contest of suggestions for safety and health improvements. As a prize, fund the best ideas (you'd fund good business ideas anytime, right?).
10. And why not take a look at ISO 45001:2018? Your competitors might be doing this, seeking advantage when tendering into your supply chain. Every journey starts with a single step.



About the Author

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Stephen Asbury is the author of six books on safety and risk management for Routledge Taylor & Francis, and the founder and CEO of [AllSafe Group Limited](#). He is a Chartered Fellow of the Institution of Occupational Safety and Health (CFIOSH), a Chartered Environmentalist (CEnv) and a Professional Member Emeritus of the American Society of Safety Professionals (ASSP). In a development to his career, Stephen is writing the autobiography of ex-F1 racing driver Martin Donnelly.

The Use of National Cybersecurity Practices for Building Proper Cybersecurity Management Programs

THE CASE OF ESTONIA



Estonia is known as a pioneer in building e-country solutions. Some examples are e-government solutions, e-identity, e-voting, etc. My intention is to add to this list cybersecurity-related solutions, based on the fact that Estonia holds the number one position on the National Cyber Security Index (NCSI) ranking. I am not going to explain what this index is, how countries are ranked and what methodology is used - this explication is available at the [National Cyber Security Index](#).

M My story is about how to use this achievement for building better cybersecurity programs. I am highlighting some tangible cybersecurity best practices based on ISO/IEC 27032 - Cybersecurity Management standard and provide some examples from the Estonian case of national solutions, which may be interesting also internationally.

Compliance with Laws and Regulations

Less than year ago Estonia implemented the Cybersecurity Act, which provides the requirements for the maintenance of network and information systems, essential for the functioning of central and local government's network and information systems, liability and supervision as well as the basis for the prevention and resolution of cyber incidents. Also, other laws and regulations may be considered, like the Critical Infrastructure Protection Act, baseline information security requirements for government institutions, financial services security regulation, obligations of internet service providers, data protection regulation, etc. For cybersecurity management, the laws and regulations may be helpful for initiating cybersecurity programs inside organizations.

Awareness and Training

When it comes to cyber-trainings, the Cyber Hygiene training program is the best option, and it can be organized quite easily for all employees. In Estonia, cybersecurity is also taught at university level, and the biggest technical university is currently proposing international cybersecurity master programs.

Framework of Information Sharing and Coordination

The government of Estonia has established the National Information System Authority (CERT-EE) in 2006. This organization provides assistance to the Estonian Internet users in the implementation of preventive measures in order to reduce possible damage from security incidents and to help them in responding to security threats. Moreover, a quite unique structure in Estonia is the cyber defense league, where voluntary members can share appropriate and up-to-date information about cybersecurity threats and appropriate defense mechanisms.

Testing and Drills

A famous cybersecurity exercise initiated by and used in the military, but now expanding to non-military uses as well, is the Locked Shields exercise; the largest and most advanced international live-fire cyber defense exercise in the world, organized by the NATO Cooperative Cyber Defense Centre of Excellence (CCD COE) in Tallinn. This exercise consists of a cross-border establishment of SOC (Security Operations Centers) where some of the participants are "red" and others are "blue". Red teams initiate cyber threats and attack scenarios while blue teams act as defenders and incident responders.

Strong Authentication

In Estonia citizens can use ID cards, mobile ID or smart ID solutions for setting up identification and authentication schemes. According to standards of cybersecurity, at least two authentication mechanisms are needed for a strong authentication and in the case of ID cards the two authentication factors are the card itself (physical or electronic) and the PIN number.

Non-repudiation

In Estonia the digital signature is legally equal to the written signature. It is a suitable tool to ensure non-repudiation and it adds to the overall electronic

usage and functionality of the ID-card and mobile ID. Many on-line banking solutions use a layered approach where users have to use strong authentication mechanism to get access to a bank account and digital signing as verification of transactions. A similar approach is used in e-voting solutions.

Use of Cryptography

Alongside the ID card, public key cryptography may be used to ensure the confidentiality and integrity of data. The card's chip stores a key pair, allowing users to encrypt digital documents based on principles of public key cryptography.

Secure Data Exchange

Systems which may be considered part of the state information system, exchange data securely using X-road solution when a similar concept like VPN (virtual private network) is used. To ensure secure transfers, all outgoing data from X-Road is digitally signed and encrypted, and all incoming data is authenticated and logged.

Electronic Services

The aforementioned security solutions have been implemented in services that actually work. Another popular e-service which affects the citizens' life more directly and more often is, for example, the incoming tax refund service – this service consists in collecting the necessary data from different data sources, making the systematic checks and if all is correct, it presents the results to the citizens for confirmation.

Cyber Incidents Response

Estonia gained its first experience in responding to national-level cyber-attacks over ten years ago. During April 2007, several cyber attacks against authorities and companies took place, mostly by means of distributed denial of service – DDOS attacks. This experience has certainly helped stakeholders to prepare a better incident response for similar scenarios in the future.





Continuous Improvement

It goes without saying that existing solutions are updated and continuously improved, while new threats as well as solutions come up all the time. For example, the strength of cryptographic keys is under continuous monitoring in Estonia by competent cryptography experts, the reports of which are sent to the appropriate stakeholders. New developments relate, for example, to blockchain technology, which helps get a higher level of assurance.

Cybersecurity Management System

Coming back to the cybersecurity management system, an ISO/IEC 27032 standard-based approach is considered appropriate for many reasons. First, it gives a comprehensive and complete view regarding the establishment and implementation of solid cybersecurity programs – as cybersecurity seems to be a technical issue (i.e. application level controls, network controls, authentication, encryption, etc.). A standardized approach will not leave aside the organizational (decisions about cybersecurity, cybersecurity program and project management, data classification, etc.) and human aspects out (awareness, training, etc.) of it.

Second, it explains very carefully the integration of different management systems and practices – you can rely on an existing Information Security Management System (ISO/IEC 27001) and seek improvements connected with the cyberspace, but without proper risk analysis and management it is not possible to make meaningful decisions (ISO/IEC 27005). However, cybersecurity controls are not only related to the information security controls (ISO/IEC 27002), and in order to understand better the services offered in the cyberspace you can refer to the requirements of (ISO/IEC 20000-1) – Service Management System. In order to have an effective management of cybersecurity you have to consider proper incident management (ISO/IEC 27035) and you have to have recovery capabilities (ISO 22301).

It is hard to find a better approach than the combination of standardized management systems and word-class cybersecurity solutions to get reasonable assurance. My proposal is to establish, implement and operate a good Information Security Management System (ISMS), and within it create an appropriate cybersecurity program using proven security practices and improve the management system continually according to the new regulations (i.e. General Data Protection Regulation – GDPR, directive on security of network and information systems NIS Directive, etc.), according to the occurrence of security incidents and threats (not only what happens inside the organization) and so on.



About the Author

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Andro Kull during his career has worked in both sectors, public and private. In the previous years he has worked for the financial sector with regards to IT and Information Security, and for the energy sector with regards to IT risks, where security and continuity demands are very high. Kull started his career as IT specialist and IT manager, and has worked extensively as IT auditor and as IT risk manager for one of the largest company in Estonia. At the same time, he founded a small consulting company and managed projects related to IT risk assessment, the implementation of security measures, business continuity planning (BC), planning for recovery (DR), and crisis management mostly in public sector organizations.

The Future of Interactive Projections: Exploring its Limitless Potential

BY DRENI REZARI, PECB



Hologram technology has increasingly become a fascination for the general public because of its capabilities and impact in the technology and business sector globally. And who's to blame them? Consider a hologram as a 3D display, towards the next step in making digital content more human-compatible.

Imagine if a hologram was projected in the middle of your presentation or conference meetings, floating in mid-air, twisting and turning at every graphic detail you call attention to. Or a hologram projected in the middle of your home, showing a 3D concept of a car that you're talking about and want to purchase online. But there is more: have you heard of holographic telepresence? It's a holographic image of you projected in a meeting room thousands of miles away from your actual location communicating with partners through a miniature hologram of your physical self. Researchers are also working on the creation of 3D holograms by using smart phone apps capable of creating holograms above the surface of a phone. The applications of the new technology are limitless but the expectations of our societies being transformed into cyber cities with 3D holographic technology is still far off from science fiction movies we're all familiar with. However, despite the complexity of 3D technology, research is advancing and the commencement of this spectacle is right around the corner.

WHAT IS A HOLOGRAM?

A 3D hologram is a virtual image of a real object that isn't actually "there," but it looks like it is, either floating in midair or standing on a nearby surface. Over the years holograms of varying forms have been developed, including transmission holograms like the ones used in music concerts where Frank Sinatra, Tupac Shakur, Michael Jackson and Elvis Presley have been virtually resurrected through an optical illusion digitally formed through a projection trick known as "Pepper's ghost". Then, there are rainbow holograms - similar to the ones utilized on credit cards and driver's licenses for increased security. These holograms can even be found throughout your houses, as part of CD, DVD, BLU-RAY, and software packaging, as well as nearly everything sold as "official merchandise."

However, these security holograms which help preventing forgery are simple physical holograms that simply change shape and color when tilted. The real three dimensional holograms are the kind that are illuminated with lasers or created in a dark room with careful placement of lighting to create virtual objects that "float" in mid-air and are visible through augmented reality glasses. This technology is known as "augmented reality" or recently referred to as "mixed reality", a holographic augmented experience where virtual objects are interwoven into our physical reality and become interactive and digitally manipulative through our real time actions.

This augmented experience should not be confused with AR's close cousin "Virtual Reality", as VR is an immersive experience that completely replaces the user's real world environment with a simulated one through headset goggles and motion controllers primarily utilized for gaming and training experiences.

HOW DOES A HOLOGRAM WORK?

The science and practice of making holograms is based on a photographic technique that records the light scattered from an object, and then presents itself as a three dimensional image. The process of making a hologram consists of recording an object (or person) in a clean environment with a laser beam that is applied to a recording medium that will clean up and verify the image.

This causes the laser beam to split in two directions which are redirected towards mirrors. One of the beams is directed at the object. A portion of the light reflects off the object and is recorded by the medium. The second beam (which is called a reference beam) is directed towards the recording medium that coordinates to make a precise image in the hologram location. For that reason the two laser beams interfere and intersect with each other and that produces an interference pattern that is recorded on the medium to recreate the 3D image. This holographic technology primarily consists of projectors, lasers, hologram tables, augmented device glasses and 3D art programming tools to virtually create an image that brings to reality unreal elements in our surrounding environments.

APPLICATIONS OF HOLOGRAM TECHNOLOGY

The technology is becoming ubiquitous, and companies are racing to win market domination. Microsoft has its HoloLens headset, Apple uses ARKit and Google presents holograms in ARCore. This technology area is saturating the tech market and IT mega corporations are racing to dominate the AR market. Even marketing departments are contemplating the idea of impressing customers with experiential marketing campaigns and customer experience interactions through three dimensional images. [Digital holography market](#) reported that by the 2020 the market for genuine display holograms was expected to reach up to \$5.5 billion. The integration of recent existing hologram technologies is benefiting us in incredible ways and is currently being used in many professions around us such as:

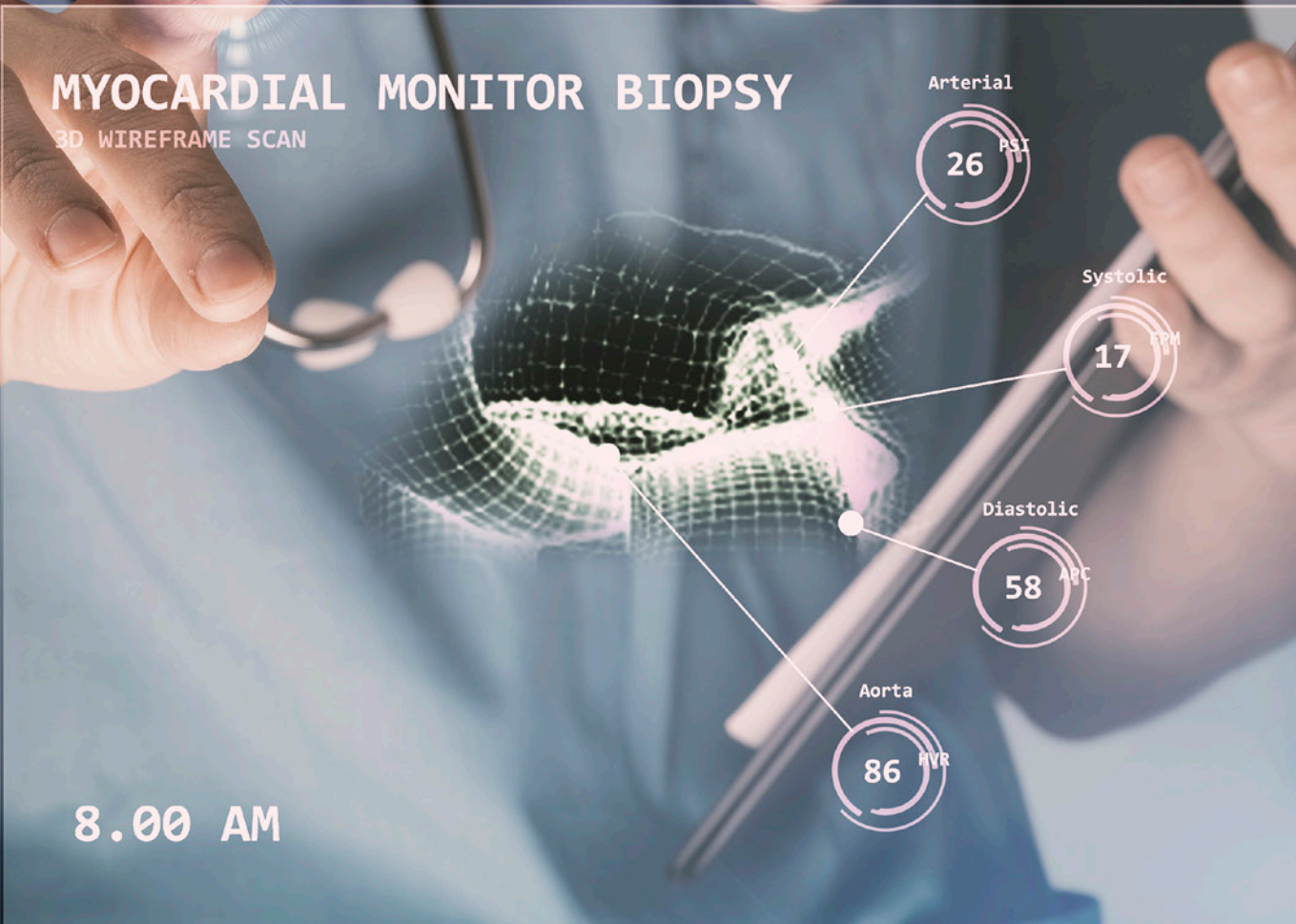
Military Mapping: Through the use of 3D holography, military strategists are utilizing fully dimensional holographic images for high quality 3D images of terrains for improved reconnaissance and effective geographic intelligence. The "battle spaces" of 3D holographic maps will allow soldiers to view three dimensional terrain, look "around" corners, and train in missions involving disaster evacuation and military rescue scenarios.

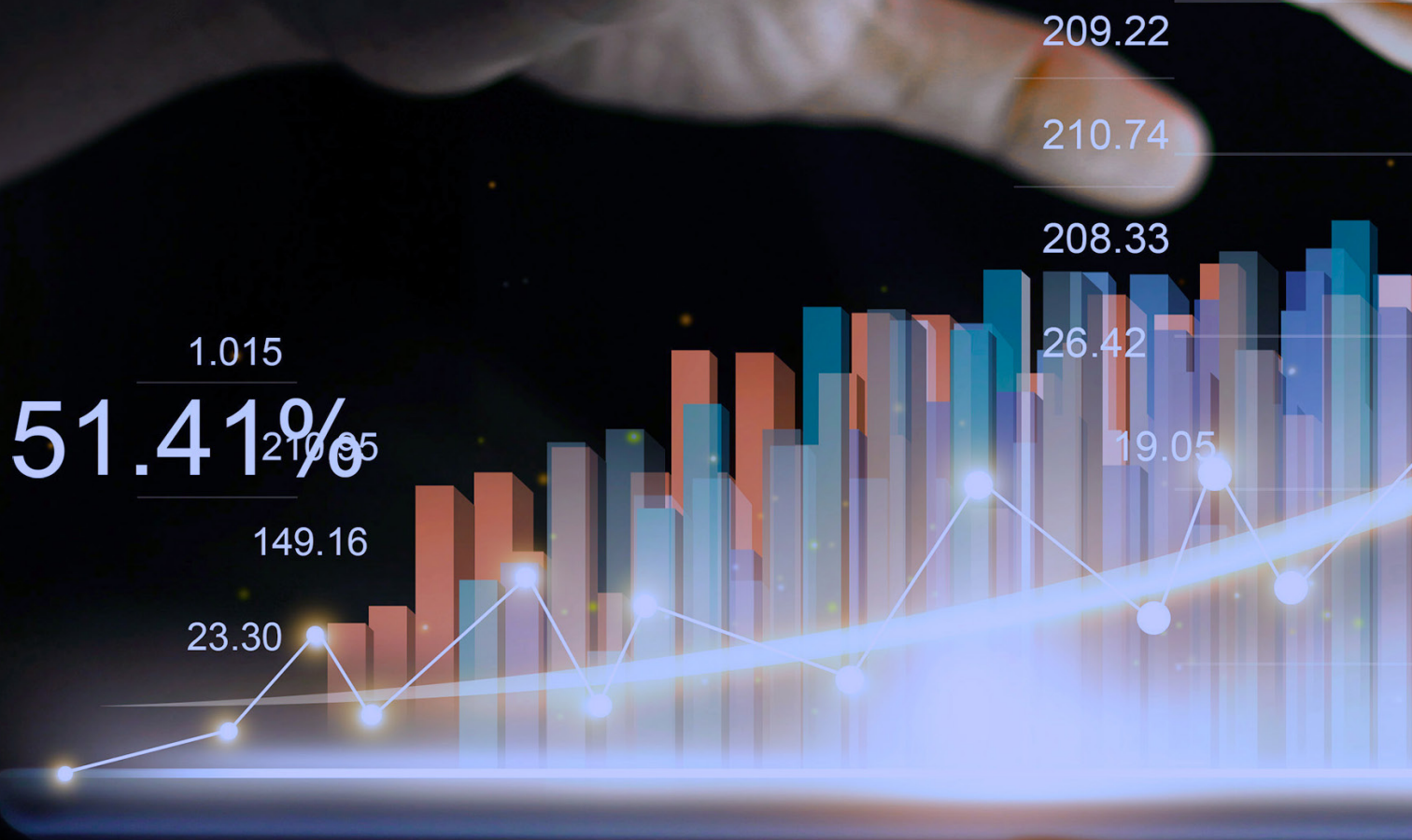
Medical Data: Holographic technology is on its way to revolutionizing medicine. The current use of 3D images is being used for visualizing patient data in training students and surgeons. Current systems like magnetic resonance imaging and ultrasound scans can generate complex data using advanced imaging technology. These images can include the incredibly complex organs and systems of the body, like the brain, heart, lungs, nerves and muscles.

Fraud and Security: Hologram transmissions are also being used as an incredible advantage in commercial security, as they have proven to be incredibly difficult to forge. Banknotes in the UK are using holography to produce a set of changing colors as you tilt the note, just like credit cards utilize the small silver rectangle of a white to verify its authenticity.

High Information Security Storage: Though holograms have proven to create fascinating imagery, they can also be used for storing huge amounts of data with their realistic 3D details system. A hologram is capable of storing an unthinkable amount of data. This means that data is stored in three dimensions so it is overlapped and is more reliable and secure.

Art: Recently, an exhibition in central London at the Tate Modern gallery held by The Digital Maker Collective, presented a show of holographic art works of the future. Through the arts, they explored how holography can move beyond everyday consumption and technology as a spectacle. They challenged the integration and production of technology in our lives, society, work, education and in the creative arts by exploring and re-thinking its impact.





“Fax me the facts,
and I'll telegram a hologram”

- SAUL WILLIAMS

FUTURE HOLOGRAM TECHNOLOGY

The future of holographic technology is said to be a game changer, set to revolutionize industries beyond the conventional standards we live in today. In this article, we've only discussed a few examples of the recent developments in hologram technology, however the potential applications for holography are endless.

Scientists have come up with new lasers inventions, modern digital processors and motion sensing technologies, to create several different types of holograms which could change the way we consume and interact with three dimensional objects in the near future. These new holographic technologies known as the no-logram, table hologram, physical hologram and 3D volumetric technology, seem to be the most innovative creations made so far by scientists in the field. You can get more information about these details [here](#). The systems of these latest holograms have made it possible to interact, track the motion of audiences without a camera, use no headset or motion controller devices to see 3D objects and create higher definition and realistic feelings.

The future integration of hologram technology in different sectors is thought to revolutionize certain industries like space research, medical research, information storage, architecture, non-photorealism and even entertainment. Holograms have the potential to dramatically improve training, design, and visualization in many business settings and production facilities, being able to look at, zoom in and manipulate 3D versions of in-progress designs. This technology, of course, is still in its early stages and there's a long way to go. Moreover, in terms of Information Security, holograms will prove vastly useful and powerful for enterprise applications. However, in terms of GDPR regulations and ISO certifications, how will companies that will use holography in the near future safeguard confidentiality of private information? Until then, there are no limits to how this technology could be used.

AN ENCHANTING EXPERIENCE IN "THE CITY OF A HUNDRED SPIRES"

It is said that Prague is the heart of Europe. Geographically it really is in the middle of Europe and it also is the upbeat metropole where modern life meets history creating a city which will make your heart skip a beat.





You can live in Prague for a decade and you'll never stop being amazed by its versatility, comfort, beauty, and safety. The Czech Republic has been selected 7th most peaceful country in the world by Global Peace Index 2018 and Prague can be found between the 50 safest cities in the world. The undisturbed late evening walks are a necessity in Prague for both locals and the visitors. If you come by the river and look at the beautiful scenery of the old town, it will make you wonder whether you are in a fairy tale or in a dream.

"If European cities were a necklace, Prague would be a diamond among the pearls."



Prague – Mother of Cities

The biggest city of the Czech Republic has undergone great developments in the last 30 years. With the fall of the communist regime in 1989, a new era of big changes, opportunities and investments arrived and Prague started to rise from what was a gray, unkempt city into the colorful, friendly and vibrant metropole that we know today. That is the reason why it is becoming an increasingly popular touristic destination and nowadays it belongs to the 5 most visited cities in Europe with almost 9 million tourists visiting every year. Its exquisite beauty was recognized not only by tourists but also by institutions, therefore the historical center of Prague was listed as a UNESCO World Heritage Site in 1992. However, it is not only the historical center and the architectonic treasures which are worth visiting.

The city offers various cultural, gastronomic, intellectual, and sports activities that will satisfy even the most demanding traveler.



Gastronomy

Czech cuisine is not the healthiest but it can be a unique gastronomic experience. Meat is one of the most important ingredients – pork, beef, poultry, rabbit and so on are most commonly used. The Czech cuisine specializes in sauces and dumplings, a big variety! Dumplings can be made with flour or potatoes and can be stuffed with sausage and even fruit. The Czech cuisine is also very rich with soups and, last but not least, sweet pastries. Needless to say, after feasting on Czech specialties, you will be ready to go straight to bed. Even more so if you finish with one (or more) traditional Czech beer, claimed to be the best in the world. We have every right to say so because it was the Czechs who invented the Pilsner. The world's first blond lager, the original Pilsner Urquell, was first produced in 1842 in the Czech town, Pilsen and it is still produced there to this day.

Prague is a paradise for hedonists. Whether you are looking for a gourmet dinner or a beer in a traditional pub, you will find it here with the best possible quality. I recommend you 4 wonderful places which won't disappoint you!

1- La Degustation Bohême Bourgeoise

Unobtrusive, small, corner restaurant between Haštalská Street and Rybí Street in the Old Town, where you will find top-notch, Michelin star-winning gastronomy. It offers a beautiful setting where vaulted historic interiors blend with a superbly equipped open kitchen. The tasting menu is a seasonal selection from local farmers, gatherers and hunters. Do not be surprised by the petite-size portions, you will get so many of them that you will not go home hungry.

2- U Fleků

U Fleků brewery is the only brewery in Central Europe where beer has been brewed for more than 500 years. The first written mention of it dates to 1499 and it is definitely the place of culinary experiences.

If you want to relish the atmosphere of the traditional pub while savoring Old Czech dishes and freshly brewed beer, it is definitely the place to go.

3- Kampa Park

A luxurious restaurant on the riverside terrace overlooking the beautiful scenery of Charles Bridge, Kampa Park offers the best quality gourmet cuisine, which includes top-served fish and meat delicacies along with over 150 types of wine. It is the perfect place for a fine business dinner or a romantic date with your partner.

4- Café Louvre

Café Louvre's doors opened for the first time in 1902 and since then it belongs to the most notable cafés in Prague. You can immerse yourself in the noise of a classic Grand Café and pamper yourself with superb service like Franz Kafka, Albert Einstein, T. G. Masaryk and many others did before. The magnificent Art Nouveau interior of the Café Louvre, its unique atmosphere, rich history and exquisite coffee, food and wine will make you want to revisit it.



Prague Spring

One of the biggest cultural events of the year is the Prague Spring International Music Festival.

The festival was first held in 1946 and it has been a representative show of world music culture and its latest trends since its inception. The festival starts on May 12 (the anniversary of the death of the Czech composer Bedřich Smetana) and lasts until June 4. During this time, you can enjoy Czechia's and world's best musicians; symphony orchestras and chamber music ensembles.

Transport

Prague has an admirable network of public transportation consisting of metro, trams, buses and even ferries and even funicular. It is easy, reliable, and very affordable. All you need to do is buy one of the various time-limited tickets – you can choose between short-term tickets (30 min, 90 min) up to 24-hour or 72-hour ticket. A helpful tool in public transportation is the IDOS app which finds the best connections and is free to download.

Taxis are also a practical mode of transportation in Prague. However, it is not recommended to take a random taxi parked in front of the train station or at a tourist site. The best option is to order a taxi by phone from one of the reliable taxi companies or via various mobile apps. But do not worry, taxis at the airport tend to be trustworthy.

5 must-see things in Prague

Prague Castle

This landmark of Prague rises above the Vltava River and has always been a traditional part of the Prague skyline. Built approximately in 880, the Prague castle represents a great mixture of architectonic styles as it was transformed and enlarged with every king living in it in a thousand-year history. Nowadays, according to the Guinness Book of Records, the Prague Castle is the largest continuous castle complex in the world, covering almost 70,000 m² and is also listed in the UNESCO World Cultural and Natural Heritage List. Small streets, sundry decorated buildings, ubiquitous history and a breathtaking view on the St. Vitus Cathedral makes me fall in love with this place every time I visit, and I believe that you will have the same feeling.

Old Town Square

Prague's Old Town Square is the midpoint of the historical center and its oldest square. Since the 10th century it has witnessed many historical events such as coronations, battles and executions and even today it has an irreplaceable role in Prague's cultural life. It is the place where architectonic styles blend together and you can let yourself be amazed by the gothic Church of Our Lady before Týn, the baroque Church of St. Nicholas, the rococo Kinsky Palace and many other monuments. At every hour, you can join the crowd of tourists and gather in front of the Old Town Hall to watch the apostles march on the legendary The Prague Astronomical Clock.



Throughout the year, you can participate in various events such as Christmas markets, concerts, performances, and even sport broadcasts.

Petřín Hill

If you are up for a fitness walk, you can climb this 327m high hill on foot. However, the most popular way to go there is by funicular, which is the oldest in the country and is 510 meters long. The dominant structure of Petřín Hill is undoubtedly the 63,5 meters high steel tower called the Petřín Tower, which provides an exclusive view of the whole city, but you must climb its 299 stairs first. It is the younger sister of the Eiffel Tower, established just two years after the completion of the elegant Parisian tower in 1891.

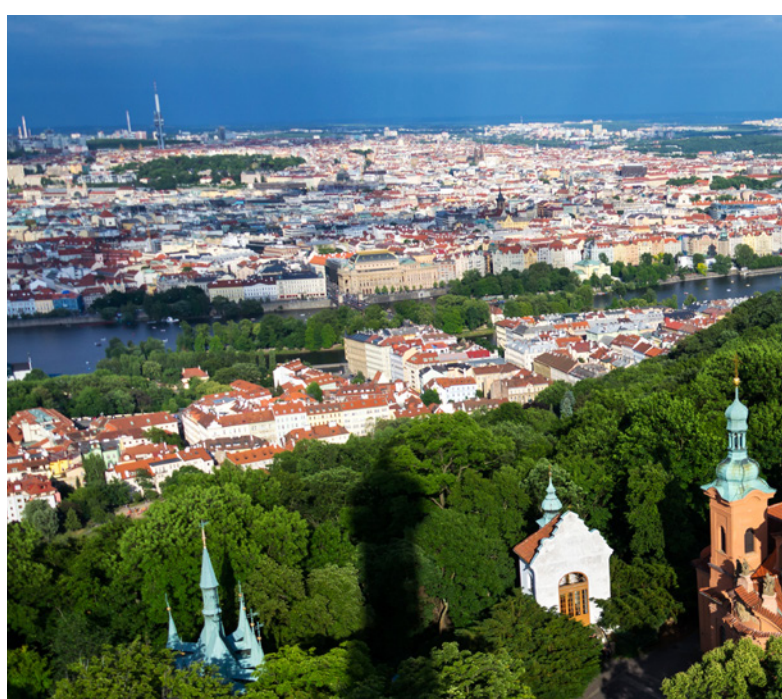
Whole hill offers many attractions, such as a rose garden, a mirror maze, a medieval monastery and a glimpse of natural purity in the middle of a busy metropole.

Charles Bridge

The second oldest bridge in the Czech Republic has been connecting two historical centers since 1357: the Lesser Town and the Old Town. An over 500-meter-long construction stands on 16 pillars and it is decorated with 30 baroque statues and sculptures of saints. Walking on the Charles Bridge, you can delight not only the exceptional view on both sides of the city, but also various artists who exhibit their painting, musical or creative skills and create a playful atmosphere.

Dancing House

The idea of the Dancing House is inspired by the dance art of the famous film couple - Fred Astair, who is symbolized by the stone tower and his partner, Ginger Rogers, symbolized by the glass building. It was created by renowned world architects Vlad Milunić and Frank O. Gehry in 1996 and has been one of the pillars of modern Prague architecture and the origin of controversy ever since. In the Dancing House you can visit a gallery, enjoy a meal in a restaurant or have a drink in the rooftop bar with a panoramic terrace where you can admire Prague in 360 degrees.





A mixture of business and leisure in the "Golden City"

It is always important to find a way to make the trip worthwhile and explore the delights of the city. Prague, the marvel of Europe offers the perfect combination of business with leisure. Especially, since it is a fairly small city with advantages of a world metropole, everything you need is at your fingertips. You can be doing business at a certain moment during the day, and the next thing you know, you are enjoying the architectonic and gastronomical attractions. And the best thing is that it is more than easy to combine business and leisure in the Czech capital. Our team at KRUCEK will be more than happy to introduce you to the heart of Europe and make your business trip relaxing and unforgettable.



About the Author

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Tereza has master's degree in project management and innovation. She is the Business and Project Manager of Czech company KRUCEK, which provides professional Information Security and Cyber-Resilience Management services. Tereza is the lead organizer of the of PECB courses in Prague and as a project manager, she participates on various implementing and auditing projects.

HOW TO SPEND A MONTH IN BALI

A Taste of Paradise

BY MAPPINGMEGAN



BALI, INDONESIA



Bali may not be a big island, but it is the kind of place you could spend a lifetime and still feel like you have barely scratched the surface.

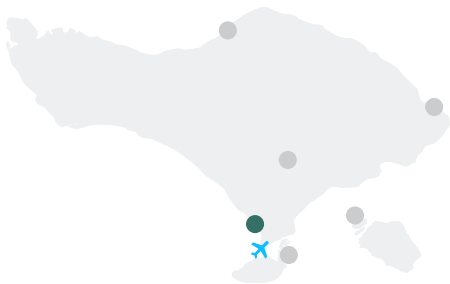
A month may not seem like long enough (is any amount of time long enough when you are on a tropical island?!), but, with some careful planning, you should be able to get a good taste of all the island has to offer. To help you out, I have put together a quick itinerary that, hopefully, has something for everyone, whether you are looking for mountains to climb, beaches to relax on, or towns to party it up!





NIGHTS 1-5

Seminyak / Canggu



To start your adventure, I would recommend staying in the south of Bali. First of all, you'll be close to the airport, meaning you won't have the hassle of a long drive when you get there. Secondly, this is the part of Bali where most visitors choose to stay, there are plenty of things to see and do and it is a great place to get acclimatized before heading off to explore the rest of the island.

Seminyak and neighboring Canggu are two of Bali's trendiest and most stylish neighborhoods, both of which are known for their beach clubs, boutique shops, and vibrant nightlife scenes. There are a couple of differences though that you may want to consider.



FLICKR / ANDREIA



Differences Between Seminyak and Canggu

Seminyak is definitely the livelier of these destinations; it's famous for its restaurants, designer stores, and expensive hotels, and is a bit more at the center of the action being so close to Legian and Kuta (two of Bali's other popular destinations).

Canggu, on the other hand, is a lot quieter, and the town is surrounded by beautiful green paddy fields, meaning you never feel too far from nature. Despite recent developments, the whole place has managed to retain something of a more traditional feel. Deciding between the hustle and bustle of Seminyak or Canggu's more laid back vibe really is a matter of personal taste, but, both will give you plenty of chances to shop, surf, relax on the beach, or in a spa, and find some great bars/clubs to party the night away.

Our Personal Picks

★ Where to Stay

Villa Zenitude

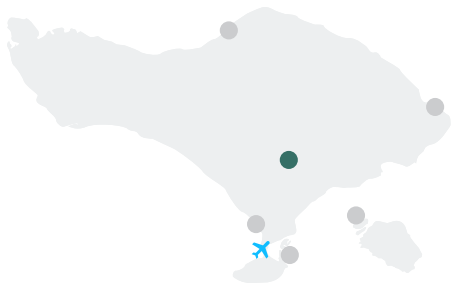
★ Don't Miss

Tanah Lot
(Bali's famous
water temple)



NIGHTS 6-10

Ubud



Now that you've settled in, bought a few sarongs and knocked back a few Bintangs, it's time for a bit of culture! For your second port of call, I'm suggesting you head into the highlands and check out some of the Balinese interiors.

Unfortunately, it does mean giving up the beaches (sob!) for a few days, but you'll exchange them for rainforest, waterfalls and stunning mountains. The most popular town in this part of the island is Ubud. Ubud is considered the cultural heart of Bali – basically, if you are looking to 'find yourself' then this is the place to go. In the early 20th century Ubud became renowned as a retreat for artists, local and foreign alike, and it has maintained a strong connection with the arts ever since.



What You'll Find in Ubud

You will find the streets lined with art galleries, healthy cafes, yoga studios and the odd high-end store that has somehow managed to creep in during the last few years.

Ubud is also a great base from which to explore some of Bali's other cultural gems, it is just a short drive from Tirta Empul, Gunung Kawi and Goa Gajah (the Elephant Cave), three of the most important, and interesting, religious sites on the island.

If you want to get up close to some Indonesian wildlife, the Monkey Forest, Elephant Safari and Bird Park are all close by. Alternatively, if you would prefer a more action-packed day, book a quad biking tour through the jungle, or go whitewater rafting down the beautiful Ayung River.

Our Personal Picks

★ Where to Stay

Ulun Ubud Resort

★ Don't Miss

The Ubud Royal Palace – go for one of the evening performances of Balinese traditional dance to get the full experience



NIGHTS 11-14

Lovina

Although the drive from Ubud to Lovina can be done in to 2 – 3 hours (depending on traffic and road conditions), it's well worth setting aside a whole day for the journey, as it will involve traveling through some of the most beautiful parts of Bali.



Spend a few hours in Bedugul (take a jacket though; this is one of the few parts of Bali that is always chilly!), and the temple on the lake (Pura Ulun Danu). This is one of the most photographed in Bali, and the beautiful botanical gardens have a brilliant treetop adventure course. The pace of life is noticeably slower on Bali's north coast than it is further down south and it's a great place to relax and soak up some of the island's natural beauty.



Things to Do in Lovina

Lovina is made up of 7 traditional villages and is famous for its black sand beaches. The focal point is at Kalibukbuk (look out for the dolphin statue), where you will find art markets, restaurants and a few bars.

Once you are done exploring Lovina itself, go west along the coast towards Gilimanuk to explore the West Bali National Park, or head up into the hills in search of waterfalls (Sekumpul and Gitgit are two of the most well-known).

If you are into diving, go to Pemuteran Beach where you can dive on a submerged Hindu temple (it looks ancient but was actually constructed only a few years ago as part of a unique reef conservation programme).

Our Personal Picks

★ Where to Stay

Puri Mangga Sea
View Resort & Spa

★ Don't Miss

Lovina Dolphin
Tour – get out on
the water to see
the local dolphins
at sunrise.



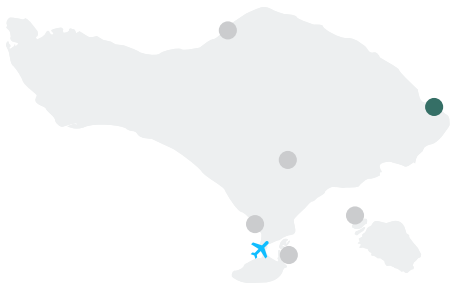
NIGHTS 15-18

Amed

When the time comes to say goodbye to Lovina, jump on the coast road and head East. The journey to Amed will take you a couple of hours but it's a pleasant drive on a good road, with mountains on one side and the sea on the other.

Amed itself is comprised of several sleepy fishing villages strung out along a 14 km stretch of Bali's east coast. The black sand beach is lined with colorful outriggers and the majestic Mount Agung (Bali's biggest volcano) provides a dramatic backdrop.

Tourist development only began here a few years ago, and, although it is gaining in popularity, the area still has much to offer for those looking for a taste of traditional Balinese life.





Mount Agung has been active in recent months. Check to see if there is an exclusion zone in place before you set off.



Things to Do in Amed

Popular activities include learning about traditional salt production and doing spot of early morning fishing with one of the local fishermen, but, the real star of the show here is diving. Amed is known to have some of the best coral reefs in Bali and the waters just offshore are teeming with tropical marine life.

Experienced scuba divers come from far and wide to explore Amed's underwater world, whilst those who prefer to stick to snorkeling can still see some amazing sites (no need to get a boat, you can just walk in off the beach). If you fancy a day trip, the royal water palace of Tirta Gangga, with its beautiful gardens, is just 30 minutes away by car. Alternatively, you could head over to Mount Agung, either to climb the mountain or, to visit Bali's mother temple, Besakih.

Our Personal Picks

★ Where to Stay

Palm Garden
Amed Beach & Spa
Resort

★ Don't Miss

The USS Liberty –
dive on a WWII era
shipwreck.



NIGHTS 19-22

Nusa Lembongan

The Nusa Islands (Lembongan, Ceningan, and Penida) are just a short boat ride from the Balinese mainland. Reaching them from Amed takes about an hour and a half, you will need to go by car to Pandang Bai and from there catch one of the daily public ferries.

The lifestyle on all three islands is often described as similar to how Bali itself was 30 years ago. You won't find much in the way of nightlife (although there are a few bars and restaurants), but you will get the chance to explore an area of incredible natural beauty – dramatic coastline,





mangrove forests, and lagoons with the bluest water imaginable. Popular activities include diving, hiking, and cliff jumping.

I would recommend staying in Lembongan, it is the most popular of the islands and is connected to Ceningan by a bridge, giving you two islands for the price of one (if you want to go over to Penida, it is just a 20-minute boat ride away)!

Accommodation is amazingly cheap, you will find plenty of perfectly nice, but 'no-frills', double rooms for as little as \$15 AUD per night. If you're not afraid of spending the big money, you can get yourself a lovely room in a 4-star resort, overlooking the ocean, for the princely sum of \$45 AUD per night!

Our Personal Picks

★ **Where to Stay**

Harta Lembongan
Villas

★ **Don't Miss**

Sunset at the
Devil's Tears on
Ceningan



NIGHTS 23-28

Nusa Dua / Tanjung Benoa



Finish off the trip by spending the last few days relaxing on the beautiful golden sand beaches of the Benoa peninsula.

Nusa Dua was one of the first parts of Bali to be developed for tourism, it is a small enclave of high-end resorts as well as a shopping center, restaurants, a theatre, and art gallery; some say it is a little sterile, but it is not without its charms.

If you would prefer a bit more local flavor, go to neighboring Tanjung Benoa, you will still get the great resorts (along with a few cheaper accommodation options) but the street life is a little livelier.



The beach is great for water-sports and, at high tide; the water will be thronging with jet skis, banana boats, and parasailers. At low tide, you can walk out to the reef, and there is no better way to spend the afternoon than strolling along the beach path, calling in at the odd beach bar on the way. Other nearby places include Uluwatu (a well-known clifftop temple) and Jimbaran, home to the famous Jimbaran seafood restaurants. As another plus, you will be close enough to all the main shopping centers of the south, perfect if you are still regretting not buying that designer handbag you saw in the first week.

Conveniently Ngurah Rai airport is only a 25-minute drive away, allowing you to absolutely maximize your beach time, before you have to leave for your flight and finally say goodbye to Bali.

Our Personal Picks

★ **Where to Stay**

Nusa Dua Beach
Hotel and Spa

★ **Don't Miss**

All you can eat
buffet brunch
at the 5* Mulia
Resort

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PECB INSIGHTS 2019 CONFERENCE

PECB Insights Conference is a great event for professionals to gather and discuss the latest trends and topics in various industries. There will be two main tracks: Information Security and Risk Management, which will have sessions both in English and French.

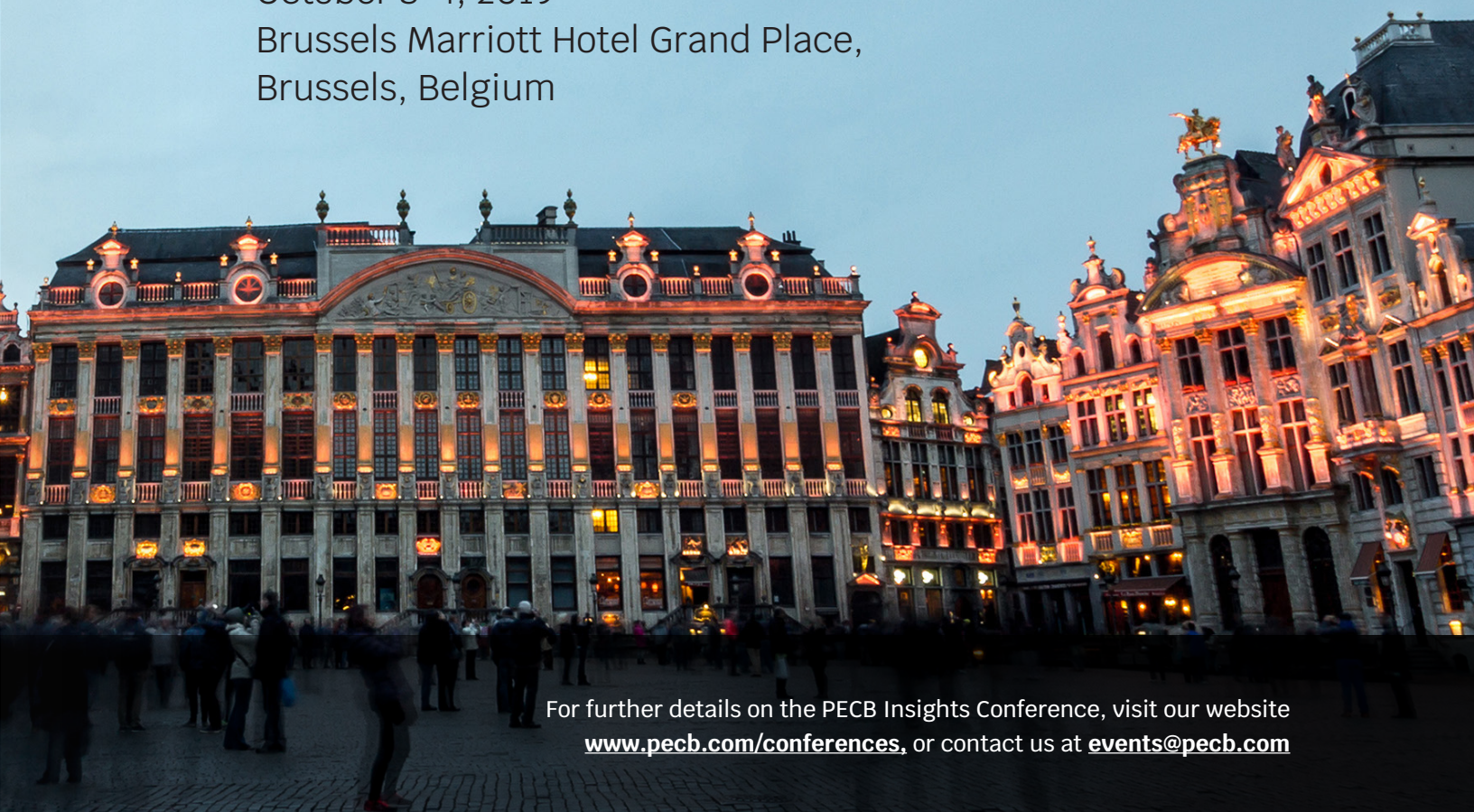
The conference will be organized in a series of round-table discussions, with a bold focus on providing participants with multiple expert opinions and a chance to interact with the panelists. The topics that will be covered will concentrate on recent trends such as Blockchain, Artificial Intelligence, Internet of Things (IoT), and General Data Protection Regulation (GDPR). The PECB Insights Conference is definitely an event that should be on your list of must attend conferences for 2019.

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For further details on the PECB Insights Conference, visit our website www.pecb.com/conferences, or contact us at events@pecb.com



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A low-angle, upward-looking shot of a modern skyscraper at night. The building's glass facade is dark, but many windows are illuminated from within, creating a grid of warm, glowing lights against the dark sky. The perspective makes the building appear to converge towards the top of the frame.

PECB

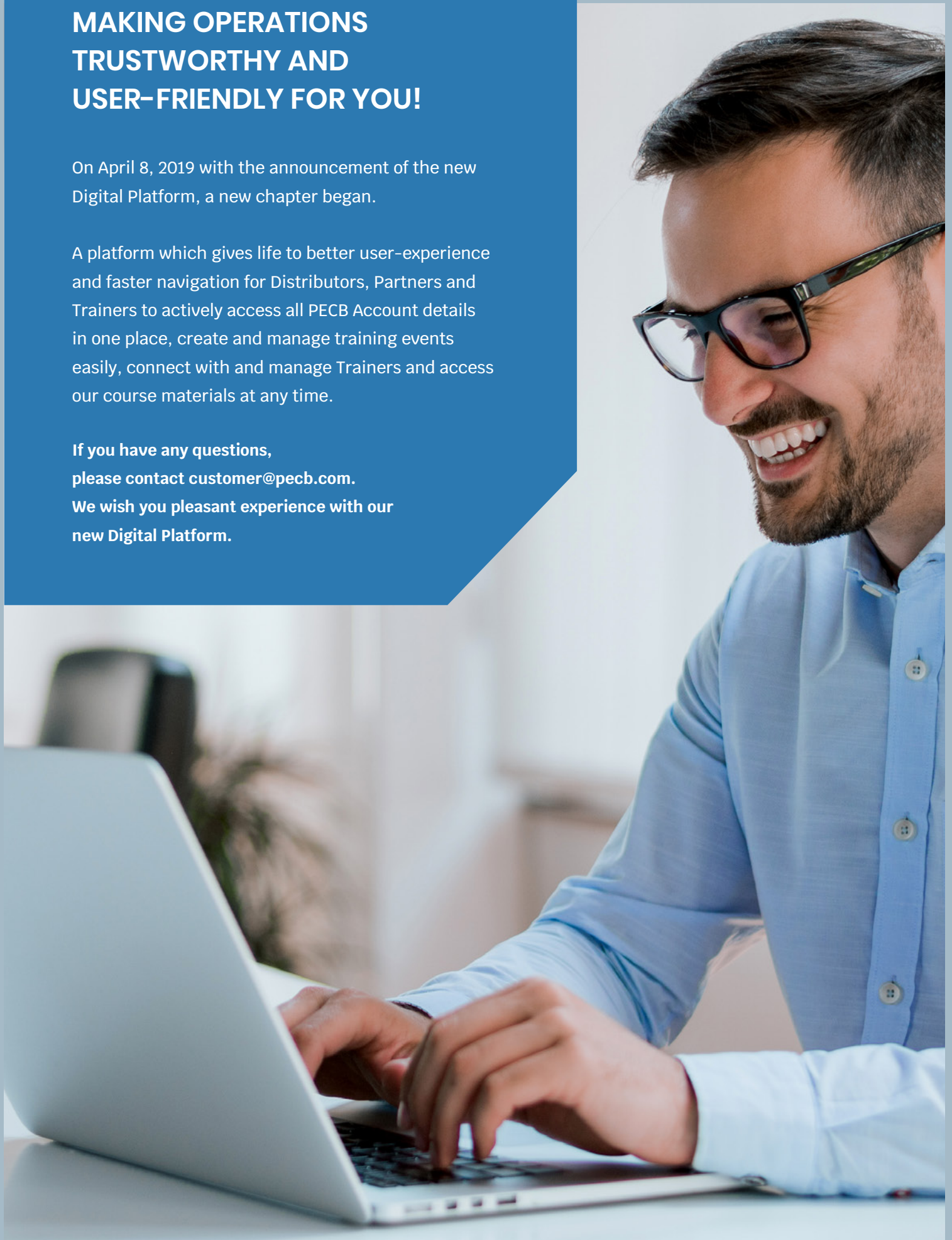
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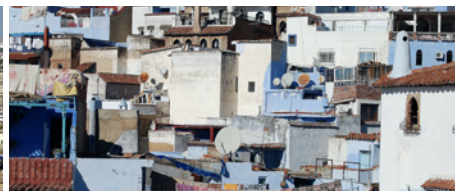
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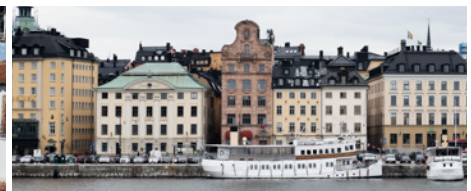
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