# PECB Insights

THE ALTITUDE OF
SAFETY

When Standards Matter

Towards
a safer workplace

Work-related stress is a highly concerning issue. With the companies growing and the technology changing so rapidly, the pressure on the employees to adjust is increasing day by day, as they have to work a lot harder and with longer hours. Whether you are a simple employee, a supervisor, or a CEO, you do not want to risk yourself or others on the job.

To become the best, and remain the best, organizations need to comply with their standards and make sure that by delivering their best products and services, they are not harming their human resources.

Standards play an important role in creating a positive and safe culture in work environments, reducing work related accidents or stress and working towards better solutions for the companies to meet their mutual expectations.
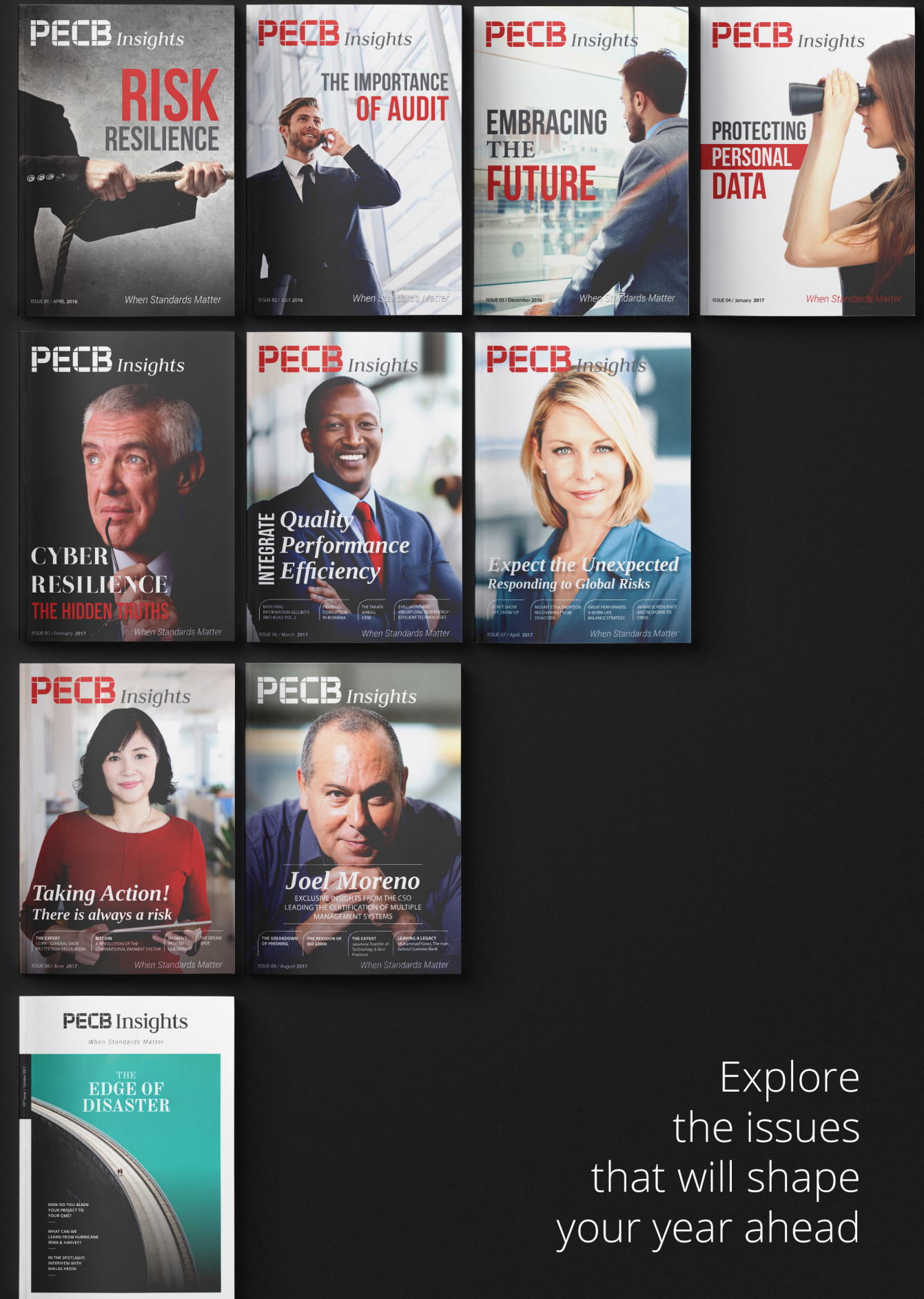
Explore
the issues
that will shape
your year ahead

THE RISKS OF USING CREDIT CARDS DURING HOLIDAYS

HOW CREDIT CARD HACKERS ATTACK

Social Networking Sites

Hackers use social media accounts to entice users into providing sensitive information. The 'About me' section is the attacker's gold mine.

Email

Attackers employ malicious phishing emails to commit fraudulent acts by purporting to be a close friend, bank or organization.

Malicious Websites

Hackers use websites to install malware onto your device and obtain unauthorized access to your personal information

Public Hotspots

The 'Free Wi-Fi' public hotspots in coffee houses and malls are highly suspicious. Hackers sometimes create and use them to access your devices.

HOW TO STAY SAFE FROM CYBER ATTACKS

1 Be aware of how and when you use your card, of course including online transactions

2 Keep your credit card details safe and confidential

3 Install and maintain a proper end-point security solution on all devices you use

4 Always use a VPN solution when using "free-wifi" solutions

5 If your Credit Card is stolen and/or damaged, call your bank immediately to report the case

6 Be aware and avoid suspicious websites that may aim to extract your sensitive personal data

7 Subscribe to monthly Credit reports

Source: Investopedia & BSP

"Have an open mind! Despite what some may think, compliance is not intended to be a "gotcha" role. As with any discipline, there is value in collaboration with colleagues across different functions to achieve the end-goal."

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Technology is changing so rapidly that today's popular devices may become obsolete in only two years.

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A Survey of Management System Standard Certifications conducted in 2012 by ISO states that South Africa saw a significant increase (55%) in the number of ISO 27001 certifications between 2009 and 2012.

ISO 45001, must bring structured control reliable enough to eliminate or reduce injuries to workers and others.

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PREPARING FOR THE FUTURE OF OCCUPATIONAL, HEALTH AND SAFETY MANAGEMENT

With the emergence of globalization and its continual acceleration, the maintenance of physical and mental health of employees has gained momentum in the field of business management. That is why Occupational Health and Safety Management System has received increased attention, and is considered the cornerstone of every organization's long-term strategy. The OHSMS implementation promotes good working conditions, is seen as a prerequisite for survival in the current market, and provides a structured approach that ensures that the organization's workforce is protected and compliant with the changing legislature.

ISO 45001 is the new standard developed by the International Organization of Standardization which will replace OHSAS 18001 and will become the baseline for Occupational Health and Safety Management. The standard provides a framework and guidelines for organizations to better control potential risks, and prevent work-related injuries, ill health and death. While the standard sets forth the specifications for systematic analysis, management of risk, management of regulatory compliance, and evaluation of the occupational health and safety performance, it is applicable to all organizations, regardless of size or industry.

Standing out with ISO 45001 implementation

The ISO 45001 standard was established with the same fundamental purposes as the other ISO standards and that is to ensure effectiveness, efficiency and continual improvement of a management system.

The ISO 45001 standard brings benefits to both, the organization and employees. Some of these benefits include:

- › Reduction of the occupational health and safety risks
- › Improvement of the OHS performance
- › Support in integrating the OHS in the business processes
- › Assurance of sustainable and socially responsible operations
- › Recognition by regulators, public and other interested parties
- › Compliance with worldwide legislation
- › Increased productivity and reduction of downtime
- › Minimization of losses due to accidents and absence
- › Reduction of costs due to insurance premiums

The real difference between ISO 45001 and OHSAS 18001

While both standards are focused in improving the well-being and the work-related conditions of the employees, there are several aspects in which these standards differ. While it tries to incorporate the health and safety aspects into the overall management system, the ISO 45001 standard takes a more proactive approach towards risk control. Thus, it enables the top management to embody the health and safety aspects into their decision-making processes. OHSAS 18001, on the other hand, takes a more reactive approach of risk control by delegating the health and safety responsibility to a health and safety manager rather than integrating it into the organization's management system. Understanding the differences between these two standards is of the paramount importance as it enables the organization to explore the new organizational opportunities while experiencing a smoother transition into the new system.

Some of the main differences between these standards are:

Management Commitment:
ISO 45001 places a significant importance on the management's commitment as it regards it to be of utmost importance for the standard effectiveness and integration. Based on this standard, the safety culture of the organization depends on the involvement of the management and their support towards the employees. Instead of just providing oversight to the processes, the management needs to be a model for true safety leaders.

Worker Involvement:
The new ISO 45001 standard engages employees in the big picture, and places on their shoulders the responsibility of being active participants in the implementation of the health and safety management system. Workers need to be provided with appropriate training and education in order to be able to identify risks and create a rewarding safety program. Moreover, with ISO 45001, the organization will be subject to regular audits, which will ensure that the organization is compliant with the standard's requirements. These audits are openly conducted

with workers as their input is valuable for reaching reliable audit results. Based on ISO 45001, the safety management within the organization is everyone's responsibility.

Hazard vs Risk:
As previously stated, ISO 45001 holds a more proactive approach towards risk, and as such it requires for hazards to be evaluated in advance and remedied before catastrophic outcomes occur. With ISO 45001 the organization will be able to discover hazardous risks before they cause any accidents or injuries. With audits conducted on regular basis, job safety analysis and monitoring of workplace conditions will be the vital bases that guarantee the proactive approach as specified by ISO 45001.

Structure:
Another important difference between ISO 45001 AND OHSAS 18001 is the structure. The new ISO 45001 standard is based on Annex SL which has replaced ISO Guide 83, and has applied a general structure, terminology and definitions. This structure may seem very familiar for those that have had the opportunity to work with other standards such as ISO 9001 and ISO 14001. By using the same structure, the implementation of multiple management systems becomes easier as it streamlines the process.

ISO 45001 can be best outlined as a proactive management system intended to place health and safety at the heart of your organization's processes.
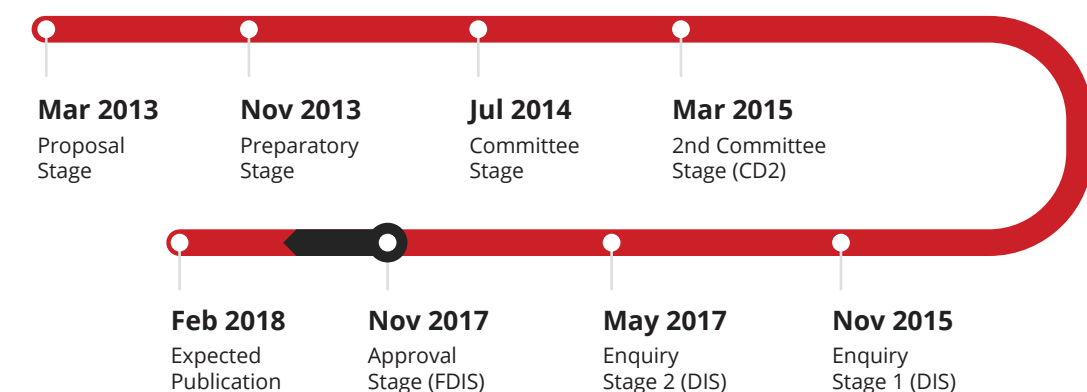
Transition from OHSAS 18001 to ISO 45001

Organizations that are currently certified against OHSAS 18001, have a three year period after the publication of ISO 45001 to adapt the new requirements into their management system before OHSAS 18001 is withdrawn completely. The organization's certification auditors will complete a so-called 'gap analysis' audit to identify the key changes that the organization needs to implement to its existing processes in order to be compliant with the ISO 45001 standard.

While there is a growing acceptance that the costs of compliance are less than the costs of failure, which costs are not just financial but also reputational, social and moral, the organizations should ensure that the Occupational Health and Safety Management System is integrated into their operational processes.

PECB is ready to support its customers on this transition by providing the most updated courses that give fundamental understanding of ISO 45001 and comprehensive knowledge of the implementation process and audit principles

Find out more

ISO 45001 TIMELINE

Mar 2013	Nov 2013	Jul 2014	Mar 2015
Proposal Stage	Preparatory Stage	Committee Stage	2nd Committee Stage (CD2)

Feb 2018	Nov 2017	May 2017	Nov 2015
Expected Publication	Approval Stage (FDIS)	Enquiry Stage 2 (DIS)	Enquiry Stage 1 (DIS)

THE EVOLUTION OF MANAGEMENT SYSTEM STANDARDS LEADING TO ISO 45001

HOW IS ISO 45001 AFFECTING ORGANIZATIONS?

In my HSEQ-MS auditing book, I summarise the evolution and chronology of management systems thinking. This starts with Sun Tzu's Art of War probably written around 488BCE – a masterpiece of strategy advice showing generals how to win their battles - through the Deming Wheel (PDCA) for continual improvement from the 1950s to present. Aside from any company systems then in existence, OH&S management systems emerged from the UK H&S regulator in 1991 as 'Successful Health and Safety Management', commonly known as HSG65 and memorable for its pneumonic POPIMAR.

The Road to ISO 9001 and Annex SL

Modern business management systems standards (MSS) can be traced to 1959 and the publication of US Defence standard MIL-Q-9858. Put simply, this standard was developed to ensure that manufacturing processes were reliable enough to deliver munitions that would explode consistently when they hit their targets – to control variation, and conserve the resources wasted when they did not function as intended. Understanding this purpose is central to understanding the function of an OH&S-MS. It must bring structured control reliable enough to eliminate or reduce injuries to workers and others.

MIL-Q-9858 was revised to become the NATO AQAP series of standards in 1969, revised 1974, and in 1979 to become the UK's series of quality system requirements. These were submitted to ISO to become ISO 9001 in 1987. It has been subsequently revised four times (1994, 2000, 2008 and 2015).

About the Author

Stephen Asbury is a businessman and the author of 5 books and 40 papers on safety and risk management. He founded CRS Ltd in 1999 and was its MD for 15 years prior to selling it to Henderson Insurance Brokers in 2014. Stephen was a member of the IOSH Council from 1998-2013, chairing Professional Committee for 12 years during that time. He was a judge of the London 2012 Olympics HSE Awards in 2009 and 2010.

STEPHEN ASBURY

MBA CFIOSH FIEMA CEnv
Managing Director,
at the AllSafe Group Limited

Clause 1	Scope
Clause 2	Normative references
Clause 3	Terms and definitions
Clause 4	Context of the organization
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Figure 1 – Annex SL High-Level Structure

In 2015, ISO 9001 was revised to reflect the then-new ISO structure in Annex SL as shown in Figure 1. For the first time, Annex SL provided a common high-level structure (HLS) for all MSS owned by ISO. Revision of ISO 14001 followed similarly later that year, and the forthcoming ISO 45001 will also be developed using this same HLS.

From over 30 years of practice, I knew that the benefits to businesses of using MSS were potentially very great indeed. Concurring, British Accreditation Bureau reported that 67% of their certified clients had won new business, and others such as Heras and Corbett showed that certified organizations achieved superior return on assets.

OH&S Standards - OHSAS 18001 and ILO OSH-2001

In the early 1980s, the UK regulator HSE resisted the development of an OH&S management standard. At this time, HSE's course was firmly set. Based on the meeting held with Bamber, L. (2016), he reports that the HSE Accident Prevention Advisory Unit (APAU) was supportive of such a standard so long as it was not certifiable, but that the HSE Chief Executive blocked it shortly afterward. Nobody wished to progress without the support of the regulator, despite seeing the possible commercial opportunities. By this resistance, I believe HSE hindered the opportunity for otherwise-proactive organizations to progress the self-regulation agenda.

Around the world, national standards-setting bodies produced a variety of OH&S-MS, but few caused a ripple.

OHSAS 18001 was developed by the Occupational Health and Safety Assessment Series (OHSAS) Project Group in 1999 and revised in 2007. Its owner certification bodies said that the standard would be withdrawn upon the publication of a comparable ISO standard (and this is expected in 2018).

In 2001, the International Safety and Health Information Centre (IOSHIC) reviewed all the available OH&S-MS and made recommendations to the International Labour Organization (ILO) for an international standard. ILO launched its own non-certifiable OH&S management system standard, ILO OSH-2001.

The rise of ISO 45001

The development of ISO 45001 commenced in 2013 and was written by the ISO technical committee. There have been three drafts (committee, DIS1 and DIS/ISO 45001.2), where the second one failed to secure sufficient support.

The DIS/ISO draft achieved a majority of votes (88% of national standards bodies supported it), and a final draft (FDIS) was published in November 2017. Publication of the world's first ISO MSS for OH&S will occur, probably in February 2018, if the ballot on the FDIS due on 25th January 2018 is successful.

For users of ISO 45001, Figure 1 summarises what this will mean. Clauses 1-3 can be ignored for practical purposes, as the scope is self-evident, there are no normative references in the standard, and it is likely that a competent OH&S adviser will be to hand to explain the terms used in the standard; generally speaking, these definitions come from common health and safety language.

Figure 2

FAR: TEN-YEAR TREND

Fatal accident rate - company & contractors

per 100 million hours worked

- - - - Overall
—— Contractor
—— Company

Figure 3

LWDC: TEN-YEAR TREND

Lost time injury frequency - company & contractors

per million hours worked

- - - - Overall
—— Contractor
—— Company

Figure 4

TRIR: TEN-YEAR TREND

Total recordable injury rate - company & contractors

per million hours worked

- - - - Overall
—— Contractor
—— Company

ISO 45001 – A story of success

All Safe Group has employed international standards to focus its leadership, and build its hazard identification and risk control prioritization. The company uses its own evolution of an OH&S MSS which we assisted to develop; it follows the PDCA cycle very closely, and the client will likely adopt ISO 45001 once published. The key to its success has been using risk assessment to prioritize its objectives and targets. It does not allow trivia to interfere with or divert resources from, its major improvement programs. Everyone is involved.

There are many ways to assess the success of such a program. Our client likes to appraise its success on measures of cultural development, worker engagement, and risk reductions. But these are difficult to express succinctly in a short article such as this. Measures of fatality and injury reduction – FAR, LWDC and TRIR – are simpler to share, and easier to understand. Figures 2, 3 and 4 present this data for the last ten years. As it can be seen, the fatal accident rate has reduced from 7 to 3 per 100 million hours (i.e. 50,000 full-time equivalent employees and contractors working for twelve months), lost workday cases have fallen by three-quarters, and total recordable accidents by a third, while we concurrently press for improved incident reporting. While sadly, the business still hurts its employees and contractors, we note the marked performance improvement. Together, we're work ing towards further improvements.
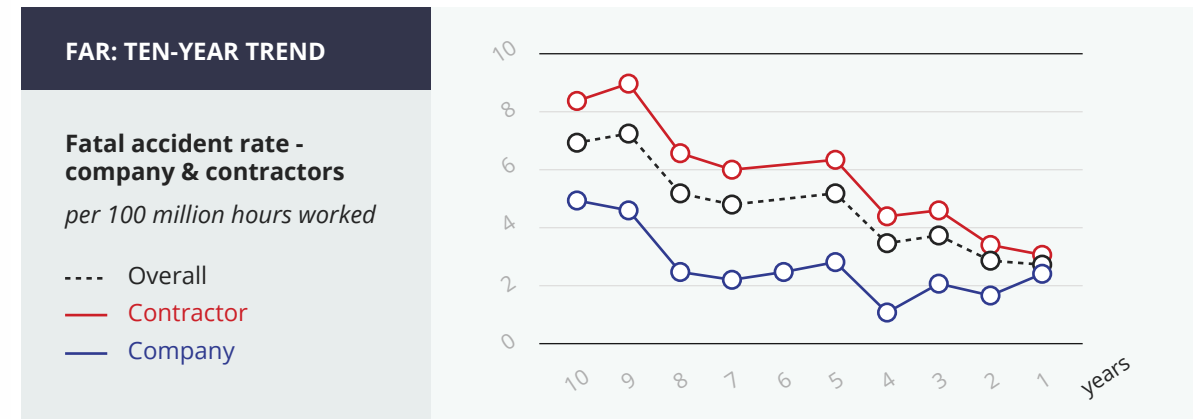
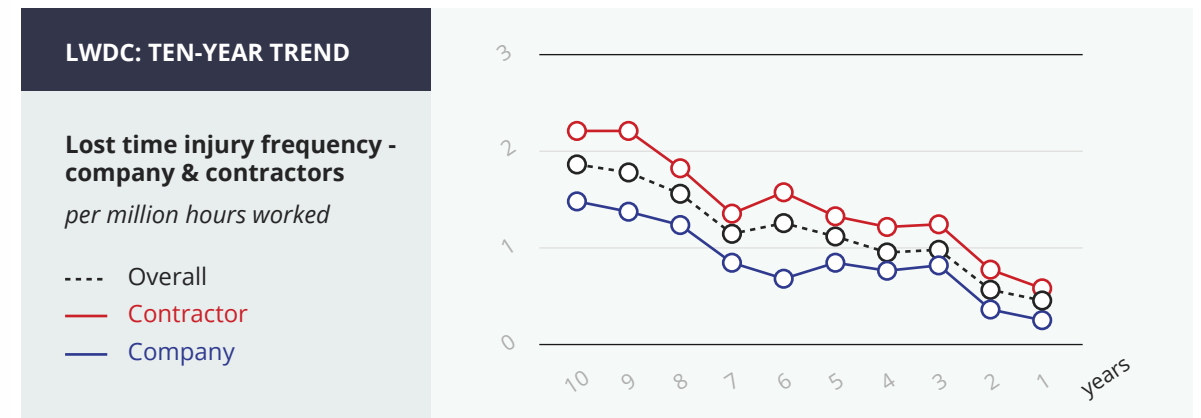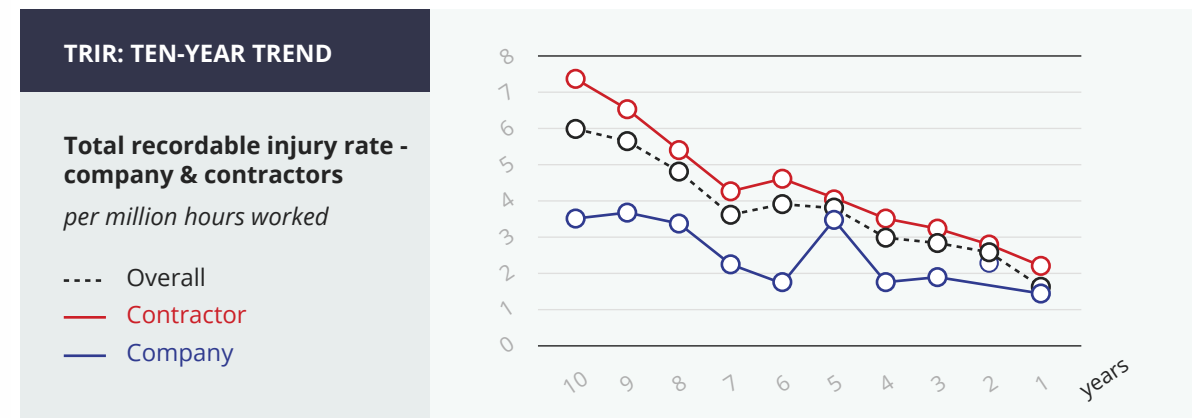## Conclusion

Several measures and strategies are being developed to prevent, lessen or eliminate occupational hazards and risks. Occupational Health and Safety Management represents the organization's efforts in anticipating, recognizing, evaluating and controlling hazards arising in the workplace that could impair the health of workers.

The accumulating evidence shows that benefits of implementing the Occupational Health and Safety Management go beyond simply recognizing and preventing accidents.

HOW IS LEGG MASON COMPLYING WITH ISO 37001?

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Have an open mind!
Despite what some may think,
compliance is not intended to be a
"gotcha" role. As with any discipline,
there is value in collaboration with
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to achieve the end-goal."

ISO 37001 is the only anti-bribery management system in the business world. Introduced in October 2016, this international standard was designed to advocate a series of measures that, when implemented, help public or private companies of all sizes prevent and tackle bribery. Legg Mason is one of the first companies in the world to be awarded with the accredited certification under this standard. Legg Mason is a global asset management firm with nine independent investment managers and $763 billion in assets under management as of November 30, 2017. The public company serves clients on six continents, both directly through its investment affiliates and indirectly, through financial intermediaries.

Earlier this year, Legg Mason announced plans to adopt ISO 37001 for its operations. Speaking on behalf of the company, Pia Ongteco McLaine, the Compliance Manager of Legg Mason explains the challenges and the benefits of implementing ISO 37001: "One of the biggest challenges we had in implementing the ISO 37001 standard was to find the right certification body. There was no shortage of information regarding the new standard, but not many accredited providers were able to grant certification. Fortunately, after identifying PECB North America, we were able to work with the firm to achieve certification in this new standard."

Implementing ISO 37001 has many benefits, including promotion of trust and confidence but also avoidance of reputational damage and unnecessary costs by implementing the necessary measures to prevent bribery. As Pia has stated, with this standard, Legg Mason's global compliance program has a stronger anti-bribery framework in place. "It reaffirms our reputation as an ethical organization, providing strong evidence of our commitment to anti-bribery. The benchmarking, annual ISO audits follow up and documentation will show governing bodies our pledge to continually improving our program over time. Hence, the ISO 37001 represents a standard that not only addresses UK and U.S. regulations, but also global standards. This standard provides also guidance for Legg Mason and other companies to organize and strengthen their compliance programs. With the required ISO 37001 annual surveillance audits, Legg Mason will be held accountable to continuously improve its program."

As we discussed about the benefits, Pia elaborated details on how Legg Mason considered the new standard as a competitive advantage in the market. Legg Masson is already receiving Requests for Proposals (RFP) for new business inquiries and also questions on whether Legg Mason has implemented ISO standards. This will be a major differentiator to existing clients and potential new books of business. Transparency is a valued and critical aspect of our business. Legg Mason actively works to make sure we are respecting ethical boundaries and doing the right things for clients and each other."

The path of implementing ISO 37001

A Hostile to gift Administration Framework is the foundation of a shut circle control design that sets up, establishes, implements, maintains, reviews and improves management strategies which address the particular requirements of ISO 37001 standard. Even though the nature of an organization differs from one another, this standard addresses management objectives for the prevention of bribery.

Since the UK Bribery Act was enacted in 2010, companies incorporated in the region have been placed under a microscope, explains Pia. "At Legg Mason, we take anti-bribery very seriously and have been continually enhancing our Anti-Corruption program. We formatted our program according to guidance provided by the UK Ministry of Justice; by building out our existing policies, conducting regular risk assessments, providing in-depth training, bolstering due diligence procedures, and surveying internal and external stakeholders. In constantly assessing our program, we determined it was important to obtain certification for the new ISO 37001 standard. After we selected PECB North America as our certification body, we worked closely with their team to agree on the scope and schedule the onsite."

We looked at each requirement for the ISO 37001 international standard and compared it to our existing compliance and anti-bribery program. This helped us to identify specific critical points which needed to be addressed or improved. Separately, we also pay attention to relevant industry commentary and regulatory cases to evaluate and implement leading edge compliance practices for the financial industry. While onsite, PECB North America spoke to several employees, conducted interviews, and reviewed many of the policies, procedures and documentation."

Legg Mason future with standards

"We are currently implementing a series of extraterritorial regulations as a result of our audit with PECB North America. At this time, we are dedicating our focus to ISO 37001, but we are certainly always looking at how we can align our programs with industry best practices." Standards can be a great help to meet the market's needs, and Legg Mason thinks so, as well. "Yes, I think having firm compliance standards in place can help clients feel more comfortable and confident that they are dealing with a company that takes care to ensure they are providing quality services, products or goods."

The Legg Mason Compliance department is currently focused not only on keeping up with the changing regulations all over the world, but also on regulatory technology, and methods how this technology can be used to meet the demands of a growing business. "We have a dedicated analytics team that is focused on using technology for monitoring and reviewing the business."

Compliance perspective

Legg Mason is a global company with 39 locations and nine global investment firms worldwide. As such, training and preparing the compliance management team is crucial to a successful outcome. "It is critical to keep our global structure in mind as a compliance manager. In many cases, rules and regulations can be extra territorial, so each of our compliance managers is trained to consider how standards can be applied around the world."

Legg Mason prioritizes sound corporate governance practices attributing to the firm's success. By also reinforcing employees' responsibility to adhere to regulatory requirements and internal policies, Legg Mason works actively to make sure it is respecting ethical boundaries and doing the right things for clients and each other. "Consistent with a focus on good governance, Legg Mason's executive committee emphasizes to employees the importance of our "No Chalk on our Shoes" standard. The "No Chalk" standard is a continual reminder that employees should demonstrate good judgment and stay well within boundary lines of ethical behavior", explained Pia.

THE MECHANISMS OF LEADERSHIP

Great leadership remains the basic prerequisite for organizations to succeed in nowadays business environment. Taking into consideration that the elementary principle of leadership has remained the same over the years, it is important to analyze the evolution of leadership habits and describe the importance and strategies of productivity.

A valuable purpose of leadership is to provide a vision, direction and motivation for an individual or a group of people to accomplish a goal. However, this purpose has evolved over the years and now, in modern society, that purpose requires different habits which help leaders to adjust to changes in society. Considering that, modern leaders have started to create new habits which maintain and develop the vision, mission and values of a company.

The leaders of millennials have followed a set of skills and qualities, whereas the modern leaders have started to create and invent, making thus Invention the first new habit emerging from the modern environment. Steve Jobs and Elon Musk are perfect examples of modern day leaders which use inventions instead of creating innovations. It takes a combination of a scientist and technology qualities to be able to invent things, and in the modern society, leadership is all about inventions. Another important habit developed by leaders in the modern society is the ability to reframe. Steve Jobs started his company as a computer manufacturer which, later on, became the biggest company in mobile phone and music industry. Not only they had the ability to accomplish the vision, mission and values of a company but today's leaders are reframing the whole company politics and bringing their followers along with them within the circle of reframing.

Leadership

Attraction and arrangement are some other great habits developed by leaders. Due to major changes taking place during these years, companies are struggling to invest while trying to maximize their profits. It is the duty of leaders to attract resources and arrange them in the best possible way in order to increase revenues. By doing so, leaders will be able to influence the company and that is why Influence is considered as another important habit of modern leaders.

Taking into consideration that today's leaders have the ability to manage a huge working ecosystem, it is their duty to lure and influence the members of that ecosystem. The fact that the business environment nowadays is global, hyper-competitive and full of opportunities, it tempts leaders to make huge steps and risks in areas and markets where they lack competencies, and this explains why risking is a habit developed by leaders of modern ages.

Better Leadership Tools

Every individual can make himself/herself a leader by using knowledge to combine different strategies and maintain peak productivity. Today`s hyper-competitive business environment gives an answer to the case of dynamic workplaces, however, the main issue remains on the strategies on being more productive in those dynamic ecosystems.

There are several strategies used by different companies and leaders to raise productivity, including minimizing interruptions. It is great to be able to work in teams, but there are tasks that each one is obliged to finish on its own, whereas, having interruptions by team members significantly decreases productivity. Another great strategy to use is to take regular short breaks as this helps to maintain a persistent level of performance. Also, being able to divide tasks based on their importance and timeframe is a great step towards productivity. Steve Olenski, a writer for Forbes, suggests that the "two-minute" rule can make a significant change on your productivity and time management. Organizing tasks that require less than two minutes to be finished and completing them immediately, takes less time than returning to those tasks later. Following this rule, Steve Olenski is now one of the most powerful online content strategists.

Another way to increase productivity is to quit multitasking. Usually, people tend to think that multitasking increases effectiveness, but in reality, it only decreases productivity and time management. By combining these strategies together, leaders are able to lead and manage their workforce in accomplishing goals.

To conclude, productivity remains the main key to a successful leadership which positively affects the overall performance of the company. It is important to understand the evolution of leadership habits and remember the importance and strategies of productivity that lead to a great leadership. However, successful leadership is not only about being productive and able to adjust to different changes that come along the way, but also to develop habits that correspond to changes in the business environment.

HOW SMARTPHONES ARE 'KILLING' COMPUTERS

TECHNOLOGY IS CHANGING SO RAPIDLY THAT TODAY'S POPULAR DEVICES MAY BECOME OBSOLETE IN ONLY TWO YEARS.

Technology manufacturers introduce new devices every year that threaten to substitute existing technology instantly. It is no surprise that today's smartphones are beating the desktop computer as the leading access medium to the Internet and daily media consumption. Every year, new types of mobile devices are produced that are more yet sophisticated and dominant than the previous generation. Nowadays, almost anyone who possesses a tablet or smartphone is able to manage most of their tasks without the need of computer at all. Cloud computing is one of the main reasons why smartphones are becoming today's go to devices. Synced to their personal clouds - unlike desktop computers- the data on smart phones are sealed and safe from theft and loss.

One of the first companies that tried something new and 'revolutionized' the cell phone production industry is Motorola. Their conceptual idea of the Motorola Atrix linked with a laptop dock was a great effort; however, even though the idea was well thought, the 2011 and 2012 concept did not fulfill the demands in terms of Internet and Media usage. But following up the next few years, the vast increase of the processing power, strong battery life, and large smartphone screens have shifted the attention away from desktops and their use. Large companies such as Apple followed up by Samsung turned the tables and transformed the smartphone industry by reinventing the way smartphones are used.

The latest data on PC vs Smartphone use by numbers

Intel announced in 2012 that by mid-2017 there will be 12,000 layoffs in their computer production industry, as the prediction nears its fulfillment, most of the technology experts are claiming that daily we are faced with increasing evidence that the PC production and usage is in a state of 'life support'. Experts are pointing out continuously that smartphones, as well as tablets, are progressively and rapidly replacing desktop PCs.

In addition, a survey conducted by Ofcom reported that 16% of adults now regularly use only mobile phones to log in online, an increase of more than 10 % from last year. The survey also discovered that 70% of adults use a smartphone. As depicted from the graph below, numbers from StatCounter show a market share for the usage of Mobile phones at 50.87% and Desktop PCs at 44.78%.

According to the statistics portal statista, the number of smartphone users is forecasted to increase from 2.1 billion in 2016 to around 2.5 billion in 2019. Additionally, almost 36 percent of the world's population is predicted to use a smartphone by 2018, which shows an increase of 10% from 2011.

If we take as an example a large country such as China, a leader in the smartphone production industry, reports indicate that the number of smartphone users is projected to increase from around 563 million in 2016 to 675 million in 2019. On the other hand, the US, an important and large market for smartphones, currently has 223 million users and is projected to increase to 247 million by 2019. These numbers depict the vast growth that the smartphone industry has had during the last few years and expected to have by 2019.
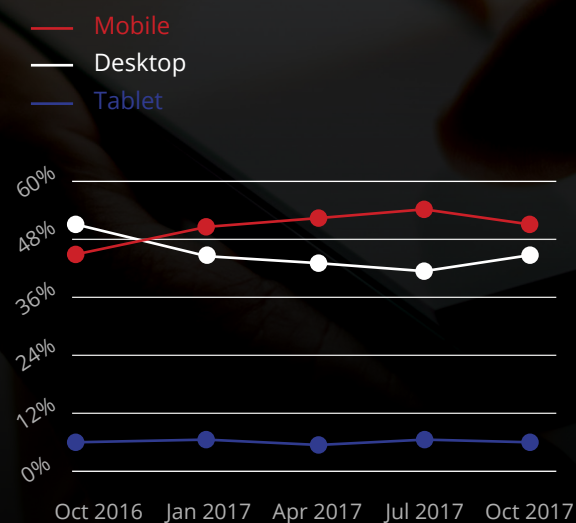

Figure 1.0 – The Mobile vs Desktop market share download (Starcounter Global Stats)

Reasons why Smartphones are overpowering PC's

> Smartphones have moved into tablets and they are beating PCs in one of the last advantages that the PCs prided itself with; screen size

> People are now getting used to glass keyboards and replace regular PC keyboards.

> Smartphones are much easier to carry around and open your favorite apps at your convenience

> Smartphones offer availability through WiFi, which means that you can use internet almost everywhere whilst with PCs you can only use internet if connected to an internet cable

> One of the greatest advantages of PCs is capacity, however, cloud computing is narrowing the gap for smartphones with that aspect too

> The hardware that is used to give you a good smartphone experience uses energy more efficiently than the hardware of a PC
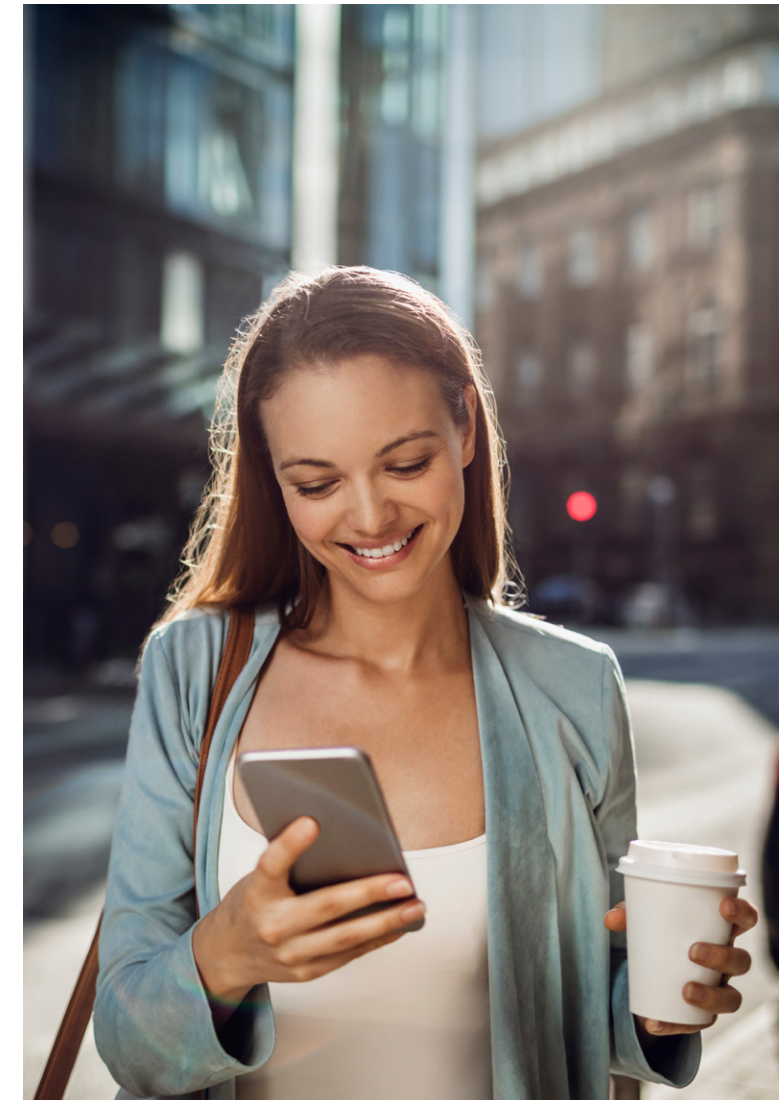
Is it all about the design?

The component of personalization and intimacy takes smartphones past what we have had so far. Our mobile phones used to be a basket of our phone contacts, some pictures, and messages. Right now, it's our emails, our pictures, our Twitter and Facebook accounts and plus each one of those apps and games that we've downloaded to give it our very own personalized device.

Nowadays, if your friends or family have their smartphones stolen, they will try to find the phone and if they don't , they can wipe the phone data remotely from the computer. What you can do now is that you can call your mobile carrier and announce that your phone is stolen. The following day you can grab a new phone and install all your old apps, messages, contacts and photographs on it. Within a couple of hours, you can get back at the same state as with your old phone. Can you do that if your PC is stolen and retrieve back all the hard drives? We hardly doubt so.

But in a certain respect, desktops are also amazingly adjustable, giving customers the ability to assemble and create precisely what they need. This is especially true among PC gamers who ask for frameworks that require a considerable measure of processing and GPU power to play those very detail-oriented games. While there are extraordinary gaming laptops out there, with desktops, gamers can choose precisely what parts they need and consistently update them to the most recent available on the market.

The Story

Will we need a desktop computers in the future?

"No, not all of us will," the Kantar Worldwide's chief researcher, Carolina Milanesi states. "Some of us already don't," she adds.

The PC industry has had a massive market decrease in the last few years while the smartphone industry penetrated the market. Particularly, in the developing countries, a smartphone is the main internet connection device. A report conducted by Pew in 2014, found out that Africans for instance, use their cell phones for mobile payments, health, consumer information and mostly for social networking. That exemplifies the fact that people who have never owned a phone before are now buying an affordable smartphone priced $30 to $50, which serves pretty well as a computing device.

Also, in the United States, we have now smartphones that can provide us with 4k stream, virtual gaming, multi-tasking and writing word documents. However, even though the hardware of the smartphones can provide all the things we mentioned above, it will still take some adjustment or time to switch completely from desktop to smartphone.

Chris Jones, the Canalys principal analyst has told Wired in an interview that we are not (yet) ready to completely ditch PC's so rapidly, and he mostly meant it for our office setups. That is because we still need to use our physical keyboards for productivity tasks. Further, we need to also improve network connectivity and content storage for our smartphones. Nevertheless, viewing the technology developments that we had during the last few years, is there any reason why most of us can not use a smartphone to handle our daily computing needs?

Conclusion

About 8 years ago, Steve Jobs said that a PC resembled a truck. He was contrasting tablets with old PCs the way you would contrast a new car with a truck, contemplating that the PC was for work and to do the "heavy" tasks while a tablet (car) was to do the 'fun' tasks of our choice. Steve Jobs' prophecy constantly stayed with us, for in a way we knew that in the end he would be proven right.

Be that as it may, the vast majority of what we do when we're not doing work, we do it via a modern smartphone. Also, a lot of what we do, both now and in the future, may have the capacity to be done only from our smartphones as the cloud creators are each time focusing less and less on the PC industry.

Nevertheless, in spite of consistent reinvention by smartphone organizations and platforms, in truth remains that a lot of productive work is still done via PC and can't be executed very well on a smartphone's small screen. The doubt that for two or three more years we will achieve a point where a smartphone will turn into an office device will still remain, even though we have been hearing about cloud and bigger screens and faster phones. All in all, change is ever present and currently we are experiencing some of the biggest changes in the way we use technology.

LEARNING STRATEGIES AND CHALLENGES WITH THE TRAINER ROBERTH CHÀVEZ JARA

SENIOR MANAGER OF DELOITTE, ECUADOR

It is universally known that the understanding of the trainees' objectives is crucial to delivering a successful session. Having knowledge of the human behavior, grants the advantage of employing the right technique to encourage effective learning. In terms of the learning strategies used, Roberth claimed "..is important to familiarize yourself with the curriculum, in advance, in order to know how to navigate through each section in a way that guarantees deliverance of the depth that participants look for in each lesson. Knowing the expectations of the participants during the first day of the course helps in adjusting the tone of the lessons and ensuring that each participant perceives that their needs are being met in terms of form and background. Finally, based on the feedback I receive from the participants, I adjust the lessons in such a way that the theory is passed on through real life examples.

Such a method allows conveying the highest possible value through lessons that serve as an input for participants to apply in their daily work." Successful training programs require for the trainer to adapt different approaches when lecturing different courses to different audiences. Consequently, there are myriad challenges that the trainees face during their lecturing, and Roberth highlighted most relevant ones: Ensure that theory is transmitted in an applicable manner, get the participants to share their experiences so that all this generates critical mass that becomes tangible experience, cover each topic with the depth that would allow the participants to be certified successfully.

Given that every student learns in a different way and at a different pace, it is particularly challenging to cater to every student's learning needs. Roberth stated: "As an instructor, you want to reach all the participants so that you can guarantee that they received the knowledge they came for. However, the reality is that you cannot reach everyone, but if you create a common platform based on knowledge of the professional and educational background of these participants; this allows you to adjust the tone with which the theory is transmitted, guaranteeing that you cover this common platform of participants."

Student engagement, on the other hand, has emerged as one of the cornerstones and objectives of teaching, but simultaneously is a growing challenge for trainers. In the eyes of many, student engagement is seen as one of the antidotes to solve the lower academic achievement and motivation among students. Roberth explained: "I support each group and sometimes address each participant with specific questions about situations that he/she has lived in and is not sure if the way he/she handled it was adequate. If the subject is challenging, I pause the workshop, propose the case to the whole class, and generate a discussion in which everyone shares visions and ideas from a practical perspective. At the end of the training, each participant takes the opportunity to present a case and therefore feel motivated to continue learning about the subject."

When it comes to enhancing student engagement, integrating personalized learning tools can be helpful in overcoming this challenge. For instance, Roberth uses tools like games, such as "Who wants to be a millionaire" to verify that the basic concepts were properly delivered and understood.

Get Motivated and Motivate Others

Due to the strong association with enhanced levels of learning, the trainer's ability to create a learning context that supports student motivation has gained huge importance. As such, Roberth guided us through the essential attributes of a good coach:

1. Humility: admits that he/she does not know everything and is always willing to learn
2. Openness: admits situations that are out of awareness and that you should still experience
3. Patience: there are participants with different levels and abilities and one must change his/her approach so that everyone understands the topic

When it comes to encouraging persistence and commitment, Roberth claimed that "The best motivation tool is the knowledge that the lessons are directly applicable in their work, especially the fact that these lessons will generate tangible value for the companies and clients they work with. Additionally, the experience as professionals will lead way to new certifications as a way to stand out professionally, which will make them experts in the field in the long term."

Teaching is a two-way path: one delivers and receives knowledge, and as such, Roberth explained: "One of the lessons learned is that I learn in every course I teach and it is important to maintain an attitude of humility towards this fact. I do not consider myself an expert who has an answer for everything, but I do know how to listen and relate my knowledge and experience to put myself in the shoes of someone who lived a new experience for me and try to approach that situation from my perspective. Sometimes I have coincided with the participants and sometimes not, but the divergences have generated very interesting discussions that are greatly appreciated by the participants."

When required to provide any advice to new trainers to enhance their training dynamics, he gave us plenty:

1. Manage the time of each course and control the time devoted to each section
2. Keep in mind that they will not be able to meet all the needs of their participants Not doing so does not mean they failed
3. Never forget to associate theory with practice through real life examples
4. Have all your students participate at some time in the course, this ensures that you reached everyone equally
5. Learn from yourself and evolve for your next course

It is already acknowledged that every person you meet is a potential door to a new opportunity, either in the professional or personal aspect. You never know how people may affect or be affected by you. In this context, Roberth elaborated one of his many experiences "I am fascinated by the security of information, as I trained in courses of this subject, I try to transmit all my experience to the participants of the different courses; these same participants have been potential clients of consulting at some point of time but the business could not be completed. After the courses, some of these participants / potential clients have recognized the experience and knowledge that I have with respect to certain topics; and thus have extended our cooperation beyond the classroom: in projects that have generated high impact on their companies."

WHEN IN JOHANNESBURG,
SOUTH AFRICA

AN ADVENTURE
TO REMEMBER

I truly enjoyed my time in Johannesburg, South Africa, one of the 50 largest urban areas in the world.

I was there to teach a PECB Certification course, ISO/IEC 27032 Cyber Security Manager Training Course. I was also there for vacation. I love when my work takes me to such interesting places and that I am able to have my nights and weekends free for sightseeing and enjoying the local culture. I have been to Africa many times in the past and visited Kenya, Tanzania, Angola, Nigeria, UAE and Egypt. However, this was my first time to South Africa.

The Dream Spot

I stayed at the Indaba Hotel, Spa and Conference Center, which is a wonderful relaxing resort that also houses 22 conference rooms and an auditorium. It also has world class restaurants which cater to over 120 African-inspired dishes. While it was tempting to just stay at the Lodge, which had so much to offer, I did of course venture out to see the country.

My work/teaching days started with a swim in the pool, wonderful buffet breakfast, great tea breaks served outdoors in the bright sunshine, superb buffet lunches with the students in beautifully decorated restaurants and also at the outdoor terrace restaurant. Yes, I was working, too. Four of my students were from South Africa and one was from Kenya. The ISO/IEC 27032 is for Cyber Security Managers/CISOs. The brilliant students were well versed in Cyber Security and eager to learn how to implement even better Cyber Security Programs.

Two of the evenings after class, I treated myself to the Mowana Spa. The first night was a 5 hour experience, from 6PM to 11PM. It consisted of a grand reception which included being greeted by spa staff singing traditional songs, and a selection of champagne and juices. After changing into luxurious robes, guests were led to an appetizer buffet. I was soon greeted by my masseuse for a 45 minute massage. This was followed by a three course meal, then a 45 minute neck and shoulder massage, another break with choice of drinks, and then a 45 minute foot massage. Five hours of being pampered. It was so enjoyable that I scheduled a facial the following evening. I enjoyed sitting outside in one of the seating areas with a large outdoor patio heater. Absolute bliss!

On days that I did not have to teach, I spent each day sightseeing from early morning until the evening. While it's not necessary, to learn my way around, I took a private day tour with a very knowledgeable guide in a Mercedes Car, much better than a large bus tour. I am very interested in history and seeing local sights. We went to Soweto and Johannesburg City.

Soweto is a sprawling township with over 4 million people. While there, I visited the original homes of Nelson Mandela and Archbishop Desmond Tutu. Both of the Nobel Prize winners lived

on the same street. I enjoyed visiting the famous Shebeen Township and experiencing the friendly atmosphere. I stopped for lunch at one of the many local restaurants. Afterward, I went to see the outside of the final home of Nelson Mandela where he lived after his Presidency while being married to Graca Machel. While in Soweto, I suggest visiting the Hector Pieterson Museum, which recaptures the anti-apartheid rebellion in the 1970s-1980s.

I enjoyed the downtown Johannesburg a lot. The area around Nelson Mandela Square offers plenty of great retail shops and restaurants with culinary tastes ranging from Mediterranean, European, Thai, Indian and other cuisines. Johannesburg has so much history. I do recommend taking tours of the S.A. Constitutional Court, The Old Fort Prison Complex where both Mahatma Gandi and Nelson Mandela were imprisoned. You can pay for the tours at the entrances. Allow yourself time to stay longer after the tours to revisit areas that you are most interested in. The Apartheid Museum is close to downtown Johannesburg, and covers the history of South Africa from 1948 to 1994.

What would a trip to South Africa be without seeing the animals? I did not choose to find out, and took a day at the Rhino and Lion Nature Reserve, which is approximately 60 km from Johannesburg. The Reserve has more than 30 different species of animals excluding a variety of cat species we host; from buffalo, white rhino, zebra, eland, wildebeest, springbuck, ostrich to lion, tiger, leopard, hyena, wild dog and many more. The Wonder Cave, which is nearby the nature reserve, is the third-largest cave chamber in the country, and is believed to be about 2.2 billion years old. It has only been open to the public since 1991. Wear very comfortable shoes. The pathways are well lit, but sure footedness is necessary.

To sum up my impression of Johannesburg, there is so much to do and the people are friendly, helpful and very kind. I recommend Johannesburg as a must see location. Enjoy your trip.

About the Author

When not teaching for PECB, Michael is a Director at the EFPR Group, responsible for Consulting and Auditing in the areas of Cyber/Information Security, Business Continuity Management, Disaster Recovery, Emergency and Crisis Management, Risk Management. She has 3 books out: Mastering Your Work Life Balance, Mastering Business Continuity Management and Mastering Your Introduction to Cyber Security. She is also a Retired Lieutenant Colonel, US Army.

MICHAEL C. REDMOND

Director at the EFPR Group

MANAGEMENT SYSTEMS CERTIFICATION IN SOUTH AFRICA

FOCUSING ON INFORMATION SECURITY

Whenever the South African companies were in need of an international standards certification body, they relied on the South African Bureau of Standards, which is a local certification body located on the bottom of Africa. Until recently, companies were limited in choosing a certification body which would bring benefits in terms of costs, quality and reliability. Many certification bodies have now established a local presence and this is having an impact in increasing the number of companies seeking certification across a range of standards.

South Africa has a mature history of implementing management systems for key areas, specifically Quality, Environment and Health & Safety. This focus was driven by the large multinational organizations and the historically strong South African Mining industry which either were compelled to by regulatory or contractual drivers or did so because it added business value.

A Survey of Management System Standard Certifications conducted in 2012 by ISO states that South Africa saw a significant increase (55%) in the number of ISO/IEC 27001 certifications between 2009 and 2012.

Information Security for South Africa

The risks related to Information and Cyber Security over the last 5 years have increased significantly as attacks are now critically endangering the profitability and even survival of organizations across the world. These risks are compounded using cloud, mobility and the reliance on third parties. Improved security is vital for organizations and certification can be considered as an aspect of training and increased security.

2017 has been a massive year for South Africa with major corporate governance scandals and information security related incidents. Two massive data Leaks due to information security control failures have highlighted the risks. In May, an explosive leak of "State Capture" emails revealing the South African government's collusion with external parties to conduct illegal activities was uncovered; these emails had been leaked by an internal employee. In October an unprotected file was discovered on the internet by an independent security consultant which contained more than 30 million personal details records and 2.2 million e-mails of South African citizens. In addition, global Cyber-attacks such as WannaCry and Petya have affected South African companies and further reinforced the need for Information Security management.

In the last 6 months, South Africa has also experienced significant corporate governance related failures which have an adverse effect on the South African Stock exchange and overall economic outlook of the country and even destroyed a major international Public Relations company. This, combined with the government bribery issues has further put pressure on organisations to consider managing cybersecurity vigilance. Another main reason that the demand for the ISO 27001 Information Security Management Systems (ISMS) certification has been growing year by year is the changing of the regulatory requirements and pressure from external parties (i.e. clients and business partners) to implement controls around how organizations protect Information.

South Africa has a corporate governance standard, King IV™ which asks listed organizations to be transparent in the application of their corporate governance practices and this standard has a strong Information Technology component. In addition, the Protection of Personal Information Act (POPIA) mandates privacy and the related information security requirements which align well with ISO 27001.

However, the number of companies certified was still very low (22 in 2012). Many companies however, had been aligning security and IT controls to the standard and since 2012 the amount of certification projects has been steadily increasing. Many tender documents now include ISO/IEC 27001 compliance as a standard requirement for vendors dealing with information.

We have seen how most major local organizations have elevated the importance of cyber related risks and are implementing cyber controls related projects considering certification projects which are aligned to the regulatory environment and their overall risk management strategy. In addition, the large organizations are prescribing assurance requirements onto the smaller companies they deal with and their suppliers which have a waterfall effect on compliance.

Information Security related certification has been steadily increasing and evidence suggests that this norm is likely to continue. We believe that ISMS Certification will become far more prevalent in South Africa as organizations operate globally and look for a consistent approach to all stakeholders involved.

About the Author

Bevan has been involved in Information Security/IT governance for over 16 years where he has gained a multitude of experience across the globe. He is known as a leader in Information Security implementation projects, assessments, policy development and has conducted more than 100 training courses, workshops and presentations at international conferences. He has conducted IT forensic investigations and solved specific IT Security problems for major clients.

BEVAN LANE

Director at Infosec Consulting

A TALK WITH THE MAN BEHIND

"DONNIE BRASCO"

The ISO 37001 & Anti-Bribery PECB Insights Conference introduced us with the former FBI agent, Joe Pistone, who lived six years in the Mafia underworld, winning the trust of the most notorious mobsters, infiltrating the Bonanno and Colombo crime families, and gathering damning evidence that helped put more than a hundred leading Mafia members behind bars.

Donnie Brasco undertook a risky mission; to live in the constant danger of being discovered, where blowing a line might have meant death. It takes a lot of courage and commitment to give up 6 years of your life living behind a mask and never losing sight of who you truly are, and Joe Pistone was capable of doing that.

After his incredibly practical and valuable session on the global organized crime at the PECB Insights Conference, we had the chance to have a conversation with Pistone, where he further described the "art of investigation" and the incredible lengths he went to.

As a FBI agent, Joe Pistone was assigned the duty of investigating crimes by using his unconventional methods and expert investigative skills. As Joe Pistone said: "I just so happen to be good at it and it was a good way to fulfill my duties as a FBI agent." Had he refused the Donnie Brasco job, Joe Pistone probably would have been an FBI agent for 27 years, would have worked in fugitives, bank robberies, just general organized crimes activities, and would have had more time to spent with his family. But as he said "that's the way it worked out, and I don't have any regrets."

> " What motivated me to work undercover was basically to do the right thing"

Life after Donnie Brasco

Pistone is the author of the 1988 book Donnie Brasco: "My Undercover Life in the Mafia" where he uncovered his mysterious life and experience. The book was made into a movie known as Donnie Brasco, starring Johnny Depp and Al Pacino. He is also the author of "The way of the Wiseguy" (2004) and "Donnie Brasco Unfinished Business" (2007).

Today, Pistone, addresses and educates Global Organized Crime in many countries.

Global organized crime and corruption are not isolated criminal activities, but rather one gives rise to the other. Bribery creates a fertile ground for global criminal activities, "because again everything starts with a bribe" explained Pistone.

When discussing the challenges of combating bribery and global organized crime, Pistone blamed the education system for failing to fight the global organized crime, because as he said "most of the public does not realize that the global organized crime is global". As such, individuals must be informed and attention must be drawn to the fact that misconduct has severe, cross-border ramifications.

Moreover, Pistone also elaborated on the role that private companies have in fighting global organized crime. "Organized Crime is global," according to Pistone, private companies can give a substantial contribution by conducting training sessions, organizing conferences, or enhancing awareness on organized crime. "I think it is important that the companies such as yours stay involved in conferences where the topics resolve around global organized crime" claimed Pistone.

When asked about the outcome that he wants to achieve by talking about the global organized crime, Pistone answered: "The impact that I want to make is that there is global organized crime number one and that it's a team effort basically, from all governments and also private companies to help combat global organized crime, because if it keeps growing, I mean it cuts into economics of the country, even into private companies, so the impact: you beat it, I don't know if you will ever eliminate it, but to keep a lid on it, to keep abreast of what are doing so we maybe will be able to head off the criminal activity before they can become involved in it".

The fearless undercover work of Pistone unveiled many truths about the global organized crime, and he remains a living reminder of the sacrifices taken to fight crime and corruption.

Watch the whole interview exclusively on our **YouTube channel** ⊙

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