

IF'S RISK  
MANAGEMENT  
MAGAZINE  
03/2022

# Risk Consulting

Insights into risk management and loss prevention

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Integrating  
cybersecurity  
and ESG

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The risks of  
stockpiling fuels

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Fatigue in  
work-related  
accidents



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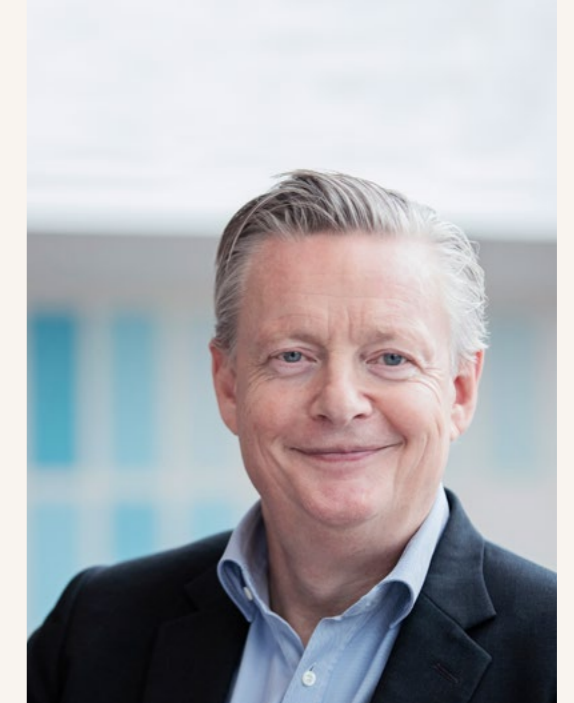
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# Editorial

## What can we do for you?



Let's talk about the future for a moment. There are many things we can dive into and write about, from cyber to claims inflation, climate change and global supply chains. I would like to make some remarks regarding the transition that is driving us all into a more digital future. What we see is that new technologies are changing the game. The speed of digital development, alongside the implementation of these new technologies, will grow substantially over the coming years. Simply, the demand for this progress is coming to us loud and clear from clients and brokers, and we expect that this will continue well into the future.

At If insurance, our understanding is that companies need solutions and services that are not only up to date but will easily be adaptable to future requirements. At the same time, we must provide reliable tools and applications that meet the demands of existing risks and current requirements.

Today, a competitive advantage comes from the usability and adaptability of these solutions. Services and processes must be smooth, quick, and better than they are today. Furthermore, they must be intuitive and easy to use, and not cause additional headaches for users.

We are moving forward on this journey of digitalisation together with our clients. As companies increasingly develop their own processes with new tools and platforms, they will expect insurers to do the same. Our aim is to deliver on these expectations, to support client needs and help bring down their costs of doing business, and this is well underway.

### INSURERS ARE STRATEGIC PARTNERS

Increasingly, risks and losses are issues that need to be addressed in the boardroom. To be blunt, we should be in the room with our clients, helping you to become more competitive in the market. Insuring your business operations is a matter of survival. Having a transparent view on the vulnerabilities and risks is vital in this regard.

Across the insurance industry, technology investments must continue, and IT budgets must increase as we go forward. Furthermore, the number of technical professionals working in the insurance industry will continue to grow. It is clear that the demands on us will continue to increase, and that is why it is critical for us at If to have the right focus and invest in the future.

Clients will continue to expect us to both adapt to their own solutions, as well as deliver new ones that will support Risk Management and, for example, enable direct access to our databases through APIs. We are also prepared to address developing risks and put our investments where they are needed the most.

In this issue we dive into digital ESG, and look at how important it is to be alert to what is happening around us; from decreasing the number of fatigue-related accidents to better understanding human errors and the causes behind them.



Poul Steffensen  
Head of BA Industrial, If

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# Integrating cybersecurity and ESG

As part of ongoing risk management efforts to protect critical infrastructure and data, companies should consider integrating an ESG program into their cybersecurity strategies.

By Dan Rider

Companies globally now increasingly deliver detailed reporting on ESG issues, like their environmental impact, social metrics that include fair wages, diversity and inclusion, and their governance which relates to how their company is led and managed. However, while every business faces global systemic risks, the issue of cybersecurity has largely been left out of the conversation when it comes to ESG. There are increasing reasons to argue that integration makes good business sense.

First coined in 2005, ESG (environmental, social and governance) has become a well-known term in company boardrooms and impact reports globally. In more recent years, the evolving geopolitical and macroeconomic environment has only increased the importance, not least by the regulatory push to increase scrutiny on how companies, as well as investors, address ESG. To that end, ESG may be best characterised as a framework that helps stakeholders understand how a company or organisation is managing risks and opportunities related to environmental, social and governance criteria. A company's stakeholders include not just the investment community, but also employees, third-party suppliers and customers, and all of them are now becoming increasingly interested in how sustainable a company's operations are.



*The risk is that climate, societal or reputational-related damage could cost far more than a data breach or a costly insurance claim.*

During 2022, investment managers have begun increasingly sounding the alarm on hidden cybersecurity risks, with sectors favoured by ESG funds such as energy, healthcare and technology often particularly exposed.

According to a recent report by the Swiss bank Lombard Odier, costs and damages associated with cybercrime were an estimated EUR 5.5 trillion in 2021 and are likely to be in excess of EUR 10 trillion by 2025. In addition, researchers at the German bank Berenberg recently identified cybersecurity as a key ESG theme for 2022, and in their ESG report noted that “many companies appear under-prepared” for cyberattacks. Furthermore, analysts at Goldman Sachs Group Inc. have also recently singled out cyberattacks as an area of particular concern to ESG investors.

#### **CYBERSECURITY THROUGH THE PRISM OF ESG**

Mikko Peltonen, Head of Digital Risks and Cyber at If, agrees that from a risk management perspective, cybersecurity and ESG need to be more closely aligned. “It has become increasingly obvious in the last few years that cybersecurity should be incorporated into the ESG framework. It is good governance to make sure that you manage your cybersecurity or your data security. These days, the C-suite of

executives certainly do need to know how well their company’s security team does their job, given GDPR and many other legislative requirements.”

This is one perceived benefit of integration, particularly as both cybersecurity and ESG are becoming increasingly subject to regulatory compliance frameworks. Standardised frameworks can help stakeholders measure and understand a company’s risk assessments, governance and accountability.

To that end, efforts to both strengthen and standardise legislation in Europe are gathering pace. In September 2022, a proposed law, titled the Cyber Resilience Act, was unveiled by the European Commission. The new legislation mandates that products are designed, developed and produced in ways that mitigate cybersecurity risks.

As part of this context, there is also the purely financial aspect to consider. Cybersecurity breaches threaten the value of business assets, and the value of stored data can, for some companies, be worth more than the physical infrastructure. To highlight the financial risks now facing companies, in early 2022, the World Economic Forum’s Global Cybersecurity Outlook reported that the average cost of a cyber breach for a company was USD 3.6 million, targeted companies saw stock prices fall, and they spent, on average, 280 days both identifying and responding to a cyberattack. Noted Daniel Dobrygowski, Head of Governance and Trust at the Forum’s Centre for Cybersecurity, “Technology leaders, companies and their boards of directors would do well to pay attention to these developments and recognise that cyber strategy is a business strategy and understanding cyber risk is part of good governance in the digital age.”

#### **COMPLEXITIES AND VULNERABILITIES**

Implementing ‘watertight’ cybersecurity is very difficult and there are many aspects to take into consideration, and even if a company has all the possible state-of-the-art controls and solutions in place, it may still have an easy human element there that can be social engineered, or a software vulnerability



*The average cost of a cyber breach for a company was USD 3.6 million.*

exploited that was not patched in time. Companies, then, should understand that cyber-risk has a strong link to the social impacts of ESG and that the impact on the business and the wider community can be severe.

Says Peltonen, “Managing personal data is both complex and important and every company has challenges, but unless we quite rapidly start making it a key factor in how we manage the company, the situation is going to get worse. What we do in cyber insurance is that we underwrite every client separately. We look into the material provided by the client, and we look into the different cyber security controls they have in place today. However, I think that what needs to happen is that in terms of the broader scope of insurance, like the more traditional lines of insurance, they need to also start to consider this as part of their ESG framework. We are investing in the risk, just in the same way as banks are investing in the future success of a company by giving them a loan, for example. Banks, of course, consider ESG factors as part of that process. So, we as an insurer also need to fully understand the implications of ESG, including the digital aspects.”

#### **SUSTAINABLE INVESTMENTS AND CLIMATE RISKS**

One further perceived benefit of integrated ESG and cybersecurity strategies is that cyber-related risks – that can threaten the viability and integrity of sustainability investments on critical infrastructure projects with ambitions to transition to renewable energy – can be mitigated. Likewise, climate-related risks can negatively impact a company’s operations and increase safety risks and human error incidents, as well as reduce system reliability and cyber defence protocols. Integrating ESG and cybersecurity can potentially help companies and other stakeholders further understand that our cyber, physical and social worlds are becoming increasingly interconnected and that a disruption in one area can rapidly disrupt the whole.

The key issue for If is that the client themselves knows their risks and has the controls required in place and implemented to mitigate the risks that they have. Whatever investments are made in cybersecurity must be made on a risk-based approach, so the client must first understand what is the risk that they are facing. If a company deals with huge amounts of personal data, the controls mitigating the loss of that personal data become most important. But if

it is a manufacturing company, then the protection of production lines, renewable energy supplies, the supply chain, continuity planning, and other issues will be more important.

Adds Peltonen, “One important thing that needs to happen is that the risk management organisation of a company needs to start working much closer with the security department. They are on the same side. Cybersecurity has long been viewed as an IT issue and teams often think too much about technology and they don’t see the risk as much as they should. Conversely, risk management experts don’t really understand all the threats that they could be facing. Cybersecurity, then, should become more risk-focused, and risk management should become more cyber-focused.”

However, Peltonen adds a note of caution, “If there is a push for companies to start reporting on their cybersecurity initiatives and incorporating them within the ESG framework on a broader scale, then that could also potentially be a risky proposition in the sense that some companies might report too much. Care is needed.”

ESG is now a critical business framework that describes how businesses across the globe assess the impacts of their activities and investments, as well as their impact on stakeholders, like insurers, for example. For companies, failure to integrate ESG and cybersecurity strategies could mean that they are failing to address the fact that radical change is taking place globally. The risk for a company is that climate, societal or reputational-related damage could cost far more than a data breach or a costly insurance claim.

“Does it serve a purpose to integrate cybersecurity into the framework of ESG? From a risk management perspective, I think the link is becoming increasingly obvious and that there is a significant added value in doing so,” concludes Peltonen. □



#### **Meet our expert**

**Mikko Peltonen**  
Head of Digital Risks and Cyber





Being socially responsible  
requires commitment

As the leading insurance company in the Nordic region, at If Insurance we fulfil an important function in the everyday lives of our 3.6 million customers. Insurance policies are intended to help individuals and companies to reduce their risk and to protect against unexpected financial losses.

By Kristian Orispää

Whether it is a matter of building a house, running a business or protecting one's health, insurance policies provide increased security to the individual, the company and society in general. Our responsibility thereby also includes contributing to a safer community and an environment that is sustainable in the long term.

#### ACTIVELY CONTRIBUTING TO A SAFER COMMUNITY

As part of our general work in social responsibility, we work for a safer society by preventing accidents, illness and by sharing information. Insurers undoubtedly contribute to, and help to enable increased freedom of action, and are therefore an important cornerstone of a well-functioning society.

"We are actively involved in community issues that have a natural link to If's business. We have a comprehensive programme for supporting safety initiatives in the communities within which we operate. The objective is, in the long term, to counteract negative social phenomena such as traffic accidents, physical and mental illness, as well as health problems caused by pollution. We are also working actively to assist our clients personally to prevent accidents, incidences of injury and long-term sick leave due to illness. For example, we're working together with the Heart-lung fund in Sweden for more heart-safe neighbourhoods, and Overvinne, primarily in Norway, supporting our

customers with health insurance in relation to mental health and work environment-related issues," says Kristina Ström Olsson, Nordic Health Strategist at If.

If Insurance is committed to the ten principles of the United Nations Global Compact (UNGC). We work to contribute to individuals as well as businesses and society. "As an insurer, we have a role to play on issues relating to inclusion, diversity, equality, health and wellbeing - as well as a healthy environmental perspective," notes Ström Olsson. If Insurance has also incorporated sustainability into the company's underwriting. Corporate clients who don't respect human rights, labour rights, environment and anti-corruption, will be asked to level up - or find another insurer."

#### WHY IS SOCIAL RESPONSIBILITY IMPORTANT?

Few companies can afford to ignore their environmental and social impact. It is important to understand the true cost of not being socially sustainable. "For example, by disregarding the needs of employees or by ignoring the issues that exist in the local community in which a company operates, companies can meet difficulties."

Ström Olsson continues, "Whether we talk about disregarding employee needs e.g. the impact of employee sick leave, or being involved in environmentally unfriendly activities, it will have an impact

not only on a company's reputation but ultimately also on its license to operate. Furthermore, all these factors affect how the world will see your company, from stakeholders including investors to customers, as well as authorities, competitors and others. In the end, an ineffective organisation will incur costs, miss project possibilities and run greater risks than those who make environmental, social and governance (ESG) factors a priority in their daily operations."

In addition, attracting talent to your company, and keeping talented people in your company, is about authenticity and commitment. "Although factors such as having a good salary, health insurance and wellness benefits are important, we know that other issues make a difference for people when they choose to work for a company. Today, many employees expect their employer to take corporate social responsibility seriously. This includes company values, psychological safety, opportunities for remote work, as well as preventive health & wellbeing services, to name a few examples of what factors will make the difference for your employee or a potential candidate looking to join your company.

"It's also a matter of the employer, and the employees' responsibility in creating a work environment that thrives in a healthy manner, for example by reducing the risk of accidents and health issues, including mental health risks. By supporting initiatives and activities that aid prevention, even in our work to support a positive environmental impact, we can make a difference. In the Nordic countries, this is also a matter of social cohesion and quality of life. Insurers have an important role in this regard through risk management and loss prevention work, but also as an enabler for individuals, companies and society to function and operate," concludes Ström Olsson. □

#### Meet our expert

Kristina Ström Olsson  
Nordic Health Strategist



GETTY IMAGES

## Surveying truck, trailer and rail cargo

Over the past year, If Insurance has worked with clients on over 3000 claims that relate to cargo-related incidents and accidents. Of these claims, around 2000 were related to handling errors. This includes, for example, poorly secured cargo on road, rail, or sea transportation. When transporting goods, it is vital to adhere to the existing national, or international regulations.

By Kristian Orispää

Unsecured cargo carries serious risks, and often there are human factors involved. According to Markus Hytönen, Cargo Risk Engineer at If, some of the more typical accidents and incidents relate to negligence, fatigue, and inexperience. However, criminal acts in warehouses or at sea are also becoming increasingly common.

Transporting goods incorrectly is basically an accident waiting to happen," states Hytönen. "When cargo

is not fastened down for transport, the risks are multiplied. Some common issues include cargo overturning or rolling because of shifting weight. Poorly secured cargo can also damage the vessel or vehicle transporting the goods. It is also important to highlight that these issues will add to the risk of injury to personnel involved with the loading and unloading of goods, as well as potentially put the public in harm's way."

### LOST CARGO, LOST BUSINESS

Every year, cargo losses interrupt business operations, cause adverse environmental incidents in the accident area, as well as damage company reputations, which leads to further business losses. There are many different types of cargo losses, from criminal acts to water damage or contamination, all of which lead to damages incurred during the transportation of goods.

Inadequate stowage, carelessness during lashing or incorrect slinging, as well as poor packing and negligence relating to weight distribution can all play a role in cargo being lost during transit.

Human factors, such as fatigue and stress can also play a role in cargo losses – therefore it is important to consider not only adherence to guidelines and legislation, as well as the recommendations of authorities and other stakeholders, but to take a holistic view to tackle the risks that exist when transporting goods.

### SAFE TRANSPORTATION DEMANDS DUE DILIGENCE

It is of the utmost importance that the cargo being transported is properly secured in accordance with existing regulations. Beyond these regulations, there are several critical factors to consider to safely transport goods and materials. Often, it is better to exceed recommendations to ensure that your cargo will be delivered safely. From careful route planning to knowing when a vehicle escort will be required for your specific combined transport, highlighted below are some essential tips from If's cargo experts:

#### BEFORE LOADING

- Check the drivers route planning. For example, will the vehicle meet height requirements under all bridges?
- Transport on Road, Rail, Combined Rail, or also in Sea Area A, B C?
- Observe and follow all local road regulations and authority

recommendations regarding driving times, as well as breaks and rest periods for drivers.

- Check all tires and the condition of the truck or trailer. These must be in good shape before loading begins.
- Check the integrity of weather protection (tarpaulin, roof, etc.) in case of delicate cargo.
- Check the floor conditions and cleanliness in the loading bay (e.g., ensure that there is no grease or oil present, which can reduce friction).
- All trucks must have valid Compulsory Road traffic insurance.
- Check if the cargo has any damage before loading. If any damage is present, this should be reported in a survey report with photos attached.

#### SECURING THE CARGO

- Check all lashing equipment and lashing eyes on trucks, trailers or rail wagons. They must all be in good condition before loading and lashing.
- Never approve combined web and chain lashings on the same cargo.
- With regards to heavy cargo, use chain lashings only.
- Sliding – friction: use rubber mats or sawn wood under the cargo to prevent sliding.
- Check if the cargo has any damage after loading. If any damage occurred during loading, this should be reported in a survey report with photos attached.
- Cargo must be secured to prevent movement of the cargo vertically, sideways, forward and/or backwards.
- Select the highest cargo securing requirements at combined transport road, rail or at sea.
- Read more about appropriate cargo securing recommendations according to the Swedish CTU-CODE (Quick Lashing Guide) for transports on Road, Rail, Combined Rail and in Sea Area A, B and C.

### WINTER SEASON

- Check and adhere to national regulations regarding proper winter tires. In some countries, winter tires or snow chains must be used during winter. These requirements must be fulfilled before the loading of cargo is undertaken.

### OVERSIZED VEHICLE

- In cases where the width of the transported cargo exceeds the national limits on road width, hazard lights and/or warning signs, as well as the possible use of escort vehicles may be required in many countries.

### DANGEROUS GOODS

- When transporting dangerous goods, national and/or international dangerous goods regulations must be followed depending on what kind of transportation is applicable and which destinations are in question. For combined transport, for example road and sea transport, select the highest requirements, which is usually the IMDG code for sea transport.

### UNLOADING

- When unloading, be sure to check if the cargo has any damage upon arrival as well as after discharging. If any damage is present, this should be reported in a survey report with photos attached.

### Meet our expert



Markus Hytönen  
Cargo Risk Engineer



Rikard Sahl  
Cargo Risk Specialist

# The risks of stockpiling fuels

With rising inflation, the ongoing war in Ukraine, and multiple geopolitical security of energy supply challenges, particularly in natural gas, the looming winter energy crisis in Europe has many companies concerned about guaranteeing business continuity. As a result, some companies have begun stockpiling alternative fuels on their manufacturing sites. In this article, we look at the potential risks of stockpiling fuels for companies and their insurers and suggest actions that can help mitigate adverse events from occurring.

By Dan Rider

The dramatic increase in energy prices and significantly reduced flow of gas from Russia to Europe throughout the second half of 2022 has created an energy crisis that may possibly get worse as the region enters the darker and colder winter months. The suspected sabotage of the Nord Stream gas pipeline in the Baltic Sea on 27 September, only served to highlight the increased risk of potential fuel shortages due to lack of supply or even deliberate attacks on physical energy infrastructure. As a result, many European governments and industry figures have warned of the possibility of energy rationing and have indicated that both their citizens and businesses could experience energy shortfalls and even blackouts during the winter. The impact of the evolving war, the front-page news stories detailing the worsening energy crisis and many other logistical challenges has caused some companies to begin stockpiling fuels on site, due to worries they will have insufficient energy over the winter to support their traditionally gas-intensive processes and operations.

“When change is made to infrastructure at a facility, that’s where we see extra risk, because when something is new the risk can be heightened.”

Fredrik Holmqvist

According to recent articles in Bloomberg and the Financial Times, some companies are already actively making contingency plans. Mercedes Benz Trucks recently revealed it was switching to diesel oil for a significant part of its production in Germany, and Traton SE, owner of the Scania truck brand, has secured large gas tanks as well as indicated it is returning to the use of coal. In addition, the world’s two biggest data centre operators, Equinix and Digital Realty Trust, have intensified their stockpiling of diesel fuel for their generators to help secure the generation of electricity at their European sites.

#### STRICT LEGISLATION IN PLACE

On the legal requirements of stockpiling fuels, begins Fredrik Holmqvist, Head of Property Risk Management Services at If, “In each and every country, there is legislation surrounding inflammable and combustible liquids and gases. And there are different government agencies in each country that direct companies how to store and handle flammable liquids and gases, and this includes what the amount should be and how it should be secured. When installing tanks and handling flammable liquids and gases, local and national rules and legislation should be adhered to. This is from a fire safety point of view, but it is also, critically, from an environmental point of view.”

It is vital that companies are open about their activities when it comes to the stockpiling of alternative fuels on site. In some policies, companies are obliged to inform the insurance companies if there are major changes in the risk, or if there is an increase in risk. This refers to new fuel storage installations. Mobile tanks, or large plastic tanks (IPC) with oil waiting to be used on machines, motors and emergency generators can represent a major risk if something goes wrong. When considering installing new tanks, it is beneficial to inform the insurance company and their risk engineers so they can support the client in the planning phase of the project. In addition, the new circumstances also need to be accounted for in insurance values.

#### ‘BENDING’ THE RULES

As the European region scrambles to deal with the worsening impact of the energy crisis, fears are rising that the crisis is likely to also prove a long-term issue, an increased risk management issue, and that some companies are resorting to ‘bending’ the rules.

“There is some concern at If that some companies, in their current need to secure alternative fuel supplies, may not be abiding by all the guidelines and legislation. We can see that some facilities are really cramped and there is very little space to put in a new fuel tank. If you have a building, for example, with the boiler traditionally running on gas, and then a company decides to make this into a multi-fuel boiler, a tank with fuel oil is then installed. An increasing risk is the fact that the new solution is implemented as a short-term or intermediate solution but can then quickly turn into being a permanent solution. This is not ideal, if the rules are being bent. If they were to do it properly, a company may decide to have a fixed tank outside of the building with piping going inside, but that, of course, takes time and significant cost to implement,” says Holmqvist.

In addition to a short term ‘quick fix’ turning into a long-term solution, it can be the case that the new tank is installed in perhaps not the most suitable location, and it could also be that the handling of the fuel oil itself is not optimally implemented.

#### DIALOGUE WITH RISK ENGINEERS

Notes Holmqvist, “This is also an increasingly important part of the inspection now, when our risk engineers are going round sites. Fuel stockpiling is a discussion we have had at most of our inspections in 2022. We have a detailed dialogue with companies who are concerned. The stockpiling of combustible and flammable liquids and gases is always a focus in our inspections. This new geopolitical situation, alongside the energy crisis, has placed added focus on the stockpiling of fuels. With the storage of fuels in or near a facility, the risks can be heightened.”

It is also the case in late 2022 that some companies are now having to actively stockpile fuel for the first time, when previously they have always had a guaranteed security of supply, and gas has been piped into their facilities. When fuel oil is considered, it should be noted that unlike gas, which is most often delivered to the site via pipes, the oil is stockpiled on site. And while many facilities might have had other combustible and flammable liquids for other purposes, they were not designed to be a fuel for their boilers or heaters. To that end, from time to time, If Insurance is seeing that facilities that have traditionally utilised gas as their main fuel are now making this shift and having to consider or even implement the stockpiling of replacement fuels. For companies making their first steps to stockpile replacement fuels or installing on-site gas tanks for back-up, adds Holmqvist, “Any emergency plans should be updated, and the local fire brigade should be informed about any changes to the new fuel storage arrangements.”

Depending on the size of the facility and the fuel requirements to support operations, the sizes of the fuel tanks themselves can vary enormously. This fact also has an impact on the decisions needed to be taken and can have an impact of risk management. “This is also interesting from the size perspective. Some large facilities that use so much gas and fuel oil are now wondering whether they should have a ship laying in a harbour to supply them. And that represents an additional risk because that also becomes a marine cargo risk.”

#### SECURING ELECTRICITY SUPPLIES

With warnings that Europe will have to deal with possible blackouts during the winter, many companies are now considering securing their overall electricity supply. Many companies have a backup generator, but these are primarily to deliver key safety needs at the facility, like for example, to emergency exits, to power safe shutdown procedures for certain equipment, as well as sprinkler systems and to protect data servers.

Says Holmqvist, “Many companies are now considering if they also need to secure an emergency generator for the overall power supply. And these generators are often powered by diesel, and this takes us back to the stockpiling of fuels and the increased risks involved.”

One additional method to secure a source of energy is in the installation of large batteries on site, but due to their chemical composition, they represent a certain fire risk in themselves. In addition, they have different rules, legislation and setup procedures.

As the ability to stockpile natural gas has been limited, combined with increased fuel prices, many governments in Europe indicate that this will be a very challenging winter. Securing replacement fuels is both a short-term and long-term issue for companies trying to secure their energy supply.

“Do it by the book. Think carefully about the legislative requirements. Think about the environment, as well as the fire safety guidelines. Also, think about informing your insurance company about changes in risk,” concludes Holmqvist. □

Sources: <https://www.bloomberg.com/news/articles/2022-09-19/europe-s-truckmakers-brace-for-worsening-energy-crisis>  
<https://www.ft.com/content/90f94abe-0bfa-48e8-878d-8d5dd7117188>



#### Meet our expert

Fredrik Holmqvist  
Head of Property Risk Management  
Services Denmark and International



# Solid relationships foster efficiency

NCC and If Insurance have had a long-standing relationship across the last two decades. If provides insurance products and risk consulting services and other solutions to support NCC in their daily operations around the world.

By Kristian Orispää



As in many industries, there are significant changes happening in the construction business. Not only changes in materials, processes and the application of digitalisation, but most companies also have solid ambitions to further push environmentally friendly efforts to lower their carbon footprint and increase the sustainability of the industry overall.

NCC is one such company, pioneering new technologies and processes to increase efficiency, as well as deliver on bold targets for more sustainable practices.

Merja Alastalo, Head of Communications Finland at NCC says, "Understanding the business environment and business logic is the key thing for an insurance partner. When both parties, customer and insurance partner, have mutual understanding of the circumstances, it makes cooperation efficient at that moment when something unexpected happens. Also, common understanding regarding key stakeholders and their expectations is developed in a long-term partnership."



Annika Kuusisto, If Insurance (left) planting a tree together with Merja Alastalo, NCC (right) in Paimio, Finland.

Over the years, If and NCC have built a relationship based on trust, which is something that can take decades to build. According to If Account Executive, Erik Hallén, “Working together for a long period of time, If and NCC have established a close and mutually beneficial relationship. Together, we have learned a lot about the risks involved in NCC’s business, how to manage or mitigate some of the risks, how to handle and communicate efficiently around NCC’s claims and how to handle the benefits and challenges. Most importantly though, we have learned how to cooperate to tackle any challenges thrown at us. In the perpetually evolving development of complex regulations, economic ups and downs, risks, and claims – difficult situations will occur and need to be dealt with.”

Merja Alastalo notes, “At the moment, the energy crisis and rising costs in particular challenge the construction industry. We still do not compromise on the goals of sustainable development - on the contrary, we consider it even more important to develop our own operations more sustainably and offer sustainable solutions to our customers. Another important megatrend is digitalisation and its utilisation. We are currently taking a major leap forward in data-driven construction operations, which enables us to work even more efficiently with complex project requirements.” Alastalo adds that, “Long-term partnering

ensures that a company can focus on essentials, in an ideal case a reliable partner supports the business by taking care of their expertise area like internal supporting functions does with their own areas, and a company don’t have to have all special expertise in-house.”

#### EFFICIENT CLAIMS HANDLING

Over the past year, NCC and If have worked together on a landslide claim which occurred in Paimio, Finland.

Immediately following the incident, NCC contacted the broker who in turn contacted If to inform the company of the situation. If’s claims handlers spoke to the client and an external specialist was contacted to assess what had happened by conducting a geological investigation. Sensors were installed to monitor how the clay soil was moving. With substantial amounts of water in the area, it was concluded that the soil was unstable, and it was decided that the investigation should continue throughout the autumn of 2021 to see how the land settled. The area was also isolated to prevent any possible personal injuries, but once the soil settled, the specialist was able to layout a restoration and preventative plan for the impacted area. The farmer had completed the autumn sowing on the rented field that had been impacted by the incident and was also able to utilise the field surrounding the collapsed area.

The landowner submitted a claim for compensation when the total loss was known, and If Insurance started negotiations with the compensation claimant.

An agreement was reached to rebuild the damaged road and water pipes.

Discussions were held with the landowner on what to do with the remaining impacted area. In order to make the soil useable again, the removal of all soil would be required, and further stabilisation of the clay soil would be needed, alongside the levelling of the land. However, due to the disturbance caused to the clay soil, it was seen as uncertain when, or if ever, the land could be used for cultivation in the future. Furthermore, there would not be any certainty of the quality of the cultivation features either. The cost estimate for these actions was many times higher than the value of the land area. If Insurance offered to redeem the land but the landowner suggested a lump sum payment, and that the land would stay in their possession. Following further discussions, a lump sum was agreed upon, and the landowner agreed not to use the land for cultivation for 30 years. It was also decided that the surface of the land would be levelled, and trees be planted across the impacted area, thus restoring the land to a natural state.

The restoration and forestation work began in the autumn of 2022, which included the planting of trees and native plants in the area before the coming winter. A repair contractor joined the project to help with the completion and restoration of the road and drains.

#### RELATIONSHIPS MAKE THE DIFFERENCE

In a volatile and changing business environment, partnerships are increasingly important. Having worked together for years, If and NCC are better positioned to face challenges, unexpected accidents and incidents head on. Furthermore, planning for the future is easier when you know who is standing in your corner. NCC is used to working with, and negotiating with, an insurance company and this makes day-to-day work with the client smooth and transparent. At NCC, there is an understanding that we are on the same side.

Alastalo highlights, “Good relations with stakeholders is an important part of business. For us at NCC, it’s important that our insurance partner also has a good grip on this topic, and they also understand the expectations towards NCC and can provide new insights to the company.”

As Erik Hallén concludes, “Insurance is a trust business dependent on people, as clients buy insurance expecting insurers and their staff to be by their side when it really matters. I believe that insurers need to earn their client’s trust in order to succeed in a changing business climate. This is done by building close partnerships between the companies, having people putting their hearts into their work, making sure they truly understand our clients’ businesses and related risks involved, to enable an offering of relevant insurance coverages and services. But also, to go the extra mile when things don’t go as planned.” □



#### INCREASING BIODIVERSITY IS ALWAYS A WIN-WIN SOLUTION

Enhancing biodiversity is important at NCC. The changing environment in a quarry or gravel pit can contribute to biodiversity in a very special way, even during operations. NCC has developed a common method to implement solutions to maintain and promote biodiversity in quarries and gravel pits called “NCC Kielo - Our living site”.

Today, several habitats and species are endangered due to a growing human population using an increasing amount of natural resources, unfortunately often in an irresponsible way. NCC’s quarries and gravel pits, with their exposed surfaces of sand, gravel or rock, offer an attractive environment for many species that are displaced when dense vegetation establishes. In those sites, the soil is normally poor in nutrients with certain areas often being exceptionally sunny or shady. For example, many flowering herbs are thriving in these kinds of grasslands.

According to Merja Alastalo, “NCC has designed the NCC Kielo concept to cover expectations of both our customers and the community that remain in the circle of influence – municipalities and local people, landowners as well as society as a whole. We believe that businesses like ours – that utilise the earth’s resources – must lead the way in making responsible choices concerning the natural environment. Therefore, we consider our operations in relation to our neighbourhood and to biodiversity.”

Erik Hallén highlights that, “NCC had great ideas for forestation and the restoration of biodiversity. Their professional touch was a big help for the claims handling process at If. Mutual trust was there, and the parties could trust the expertise of each other.”

Scan the QR code to learn more about Kielo:



<https://www.ncc.com/our-offer/stone/enhancing-biodiversity/>

## FERMA Forum hits participant record in 2022

This year, the FERMA Forum 2022 was held in Denmark at the Bella Centre in Copenhagen. Achieving its highest number of participants ever, a total of 1820 people attended the event, setting a record in the history of FERMA. The theme of the event was Transitioning together, a very relevant topic that was reflected in speeches, presentations, and conversations with colleagues throughout the event.

By Kristian Orispää



**T**oday, there is great pressure from regulators and investors alike on companies to recover from the ongoing economic challenges. From the COVID-19 pandemic, to rising inflation and gas prices following Russia's attack on Ukraine, there are plenty of hurdles to overcome.

Making a meaningful transition in such a turbulent time is complex and demanding. Rising above the existing pressures of individual markets has been compounded with increased cyber risks, recruitment challenges, as well as managing increased levels of stress and fatigue among employees. Simultaneously, sustainability commitments must also be adhered to so that continued efforts for a greener and brighter future can be realised.

### MANAGING RISKS TODAY, AND IN THE FUTURE

Head of Industrial, Poul Steffensen, was invited to present a 5-minute leadership pitch on stage in front of more than 800 attendees. During his speech, the focus was on digital transformation, the importance of strategic partnerships and the future of the insurance business.

Digitalisation is a key enabler for many companies in their transition to a better future. As an example, we see that modern analytical capabilities are opening the potential for AI and big data, providing better insights to user behaviour, and uncovering opportunities for growth. This in turn helps compa-

nies act, mitigate risks, and adapt to new situations quicker. Ultimately, this information will allow for more targeted risk management practices, and help build more robust strategies for loss prevention, all of which will play a role in improving performance and resilience for the modern company.

### NETWORKING AND KNOWLEDGE SHARING

Many of If's largest clients and prospects were in attendance, which created good opportunities to have a coffee together and host client meetings in If's Hospitality Suite.

If Insurance had a booth of 100 square metres, creating an area that invited colleagues to engage in dialogue and network with others. According to Marianne Wiinblad, Head of Marketing and Business Development, "This year we wanted to highlight risks, including natural hazards and cyber, as well as showcase our digital services and how they can make the lives of clients and brokers easier. We also offered activities ranging from an earthquake simulator to a 'Beat the hacker'-cyberattack challenge at our booth."

Wiinblad concludes, "In general, our clients were happy to visit our booth at FERMA, as well as clearly enjoyed the luncheon and meetings in the hospitality suite. If Industrial's presence was valued, as it is the most important risk management event for insurers and clients, offering an important platform and venue to meet with many of our clients in a big conference event." □

# Fatigue in work-related accidents

Fatigue is a growing concern in working life today and an issue that requires attention in occupational safety and health management. This article discusses the significance of fatigue as a cause of accidents and its identification during the investigation of safety deviations.

By Tuomas Kaleva, University of Oulu

With the increasing role of cognitive work, fatigue is recognised as a major contributor to human errors.<sup>[1][2]</sup> Human factors-related accidents and injuries will not disappear despite advances in technology and automation. As many as 80-90% of Finnish workplace accidents are caused by human factors.<sup>[3]</sup> However, fatigue, as a human factor that is a familiar and daily reality to everyone, can easily be overlooked in the investigation of the root causes of incidents. The link between fatigue and errors in alertness, perceptual motor skills and attentiveness is well known, particularly in the transport sector, but its consideration in corporate occupational safety and risk management is not necessarily a given.

## FATIGUE-INCREASING FACTORS

There is no single clear definition for fatigue because it also involves significant individual variations. Fatigue can be defined as a reduced mental or physical state of alertness<sup>[7]</sup> and as a chronic or acute state of exhaustion.<sup>[8]</sup> More specifically, fatigue is a state in which a person's physical and cognitive performance is substantially decreased.<sup>[9]</sup> From an occupational

safety perspective, the main symptoms of fatigue include:

- slow reaction time
- reduced eye movements
- blurred vision
- reduced coordination and motor skills
- memory problems
- concentration problems
- increased risk-taking
- loss of situational awareness and judgement
- reduced motivation<sup>[10]</sup>

The most common causes of fatigue are insufficient (less than 7-8 hours) or poor-quality sleep.<sup>[11]</sup> Fatigue can be largely attributed to the timing of sleep within the circadian rhythm<sup>[12]</sup> and to lifestyle factors such as substance abuse, obesity, inactivity and also diseases that affect alertness (e.g., diabetes and sleep apnea).<sup>[8][13][14][15]</sup> Acute fatigue is most common between the hours of 02.00 - 06.00 am, when alertness and vigilance levels begin to decline.<sup>[9][16][17]</sup> Work stress factors contributing to fatigue are shift work (3-shift work and especially night shift work), irregular working hours, long working hours (more than 12 hours per day or 48 hours per week), monotony, time

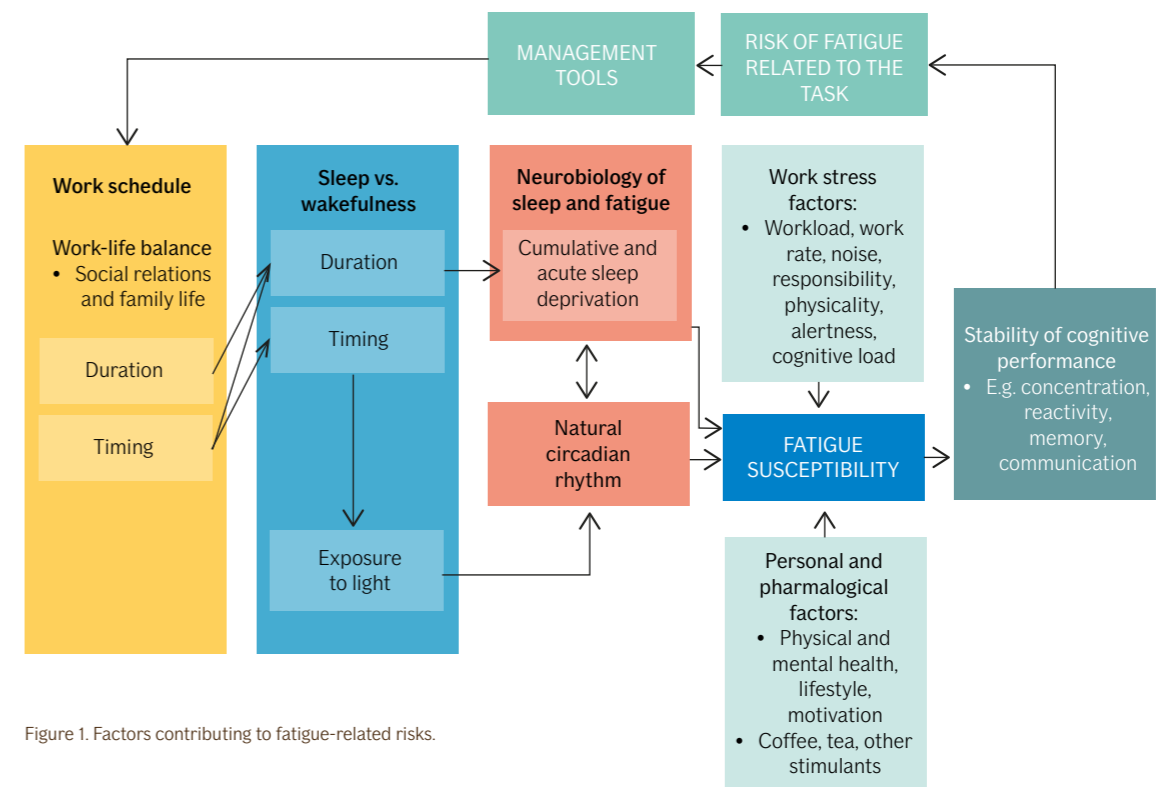


Figure 1. Factors contributing to fatigue-related risks.

pressure and alertness demands.<sup>[8]</sup>  
<sup>[11][13][18]</sup> Psychosocial overload (e.g., constant interruptions and processing large amounts of information) is known to break concentration and impair information processing ability, while underload (e.g., monotony and boredom) impairs alertness and attentiveness.<sup>[19]</sup> Sleep deprivation is a major risk factor for injury in

itself, but when combined with other workload factors, the risk of human errors becomes significant.<sup>[20]</sup>

#### FATIGUE AND ACCIDENTS

A fatigued worker has an approximately 62% higher risk of accidents, which is explained by the increase in human errors as a result of a fatigued individual's performance

decline.<sup>[21][15]</sup> A review of various road accident statistics shows that fatigue is a contributing factor in approximately 5-25% of accidents. Accidents due to fatigue are described as exceptionally severe compared to other causes.<sup>[4][5][6]</sup> A fatigued person is more negligent of perceived risks, which can lead to abnormal safety behaviour. Consequently, in situations where some uncommon disturbance situation needs to be fixed, for example, it is easy to short-cut safe behaviour without intuitive risk assessment.<sup>[12]</sup> In the light of the figures, fatigue can be considered as a significant contributor to the risk of accident and injury.

Categories of work that require special consideration for risk management are shift work, on-call work, travelling work and seasonal work.<sup>[15]</sup> Fatigue is a major risk factor, particularly in safety-critical industries (e.g., maritime transport, air traffic control and heavy transport) where complex tasks might be performed around the clock and the potential for serious injury or damage to property exists.<sup>[21]</sup> For safety-critical tasks, fatigue is definitely a risk factor requiring management measures. The risk posed by fatigue in a task can be modelled as shown in Figure 1 on page 23.

#### IDENTIFYING FATIGUE

Around 93% of employers in the construction, industrial and transport sectors identify fatigue as a safety risk, but only 72% of employees feel the same way.<sup>[21]</sup> Raising awareness of the risks of fatigue is the first step to ensuring that fatigue is treated as a risk factor and reported as a factor in safety incidents, rather than being completely ignored in root cause investigations. The background of safety incidents must be analysed to identify both individual and job-related factors that contribute to fatigue and its associated risk. Table 1 shows some of the factors that may reveal a contributing role of fatigue in an incident.

The more of the factors in Table 1 that can be found in the background of the accident, the more likely it is that fatigue played a contributing role in the incident. On this basis, we can consider how to control the fac-



*A fatigued worker has an approximately 62% higher risk of accidents.*

tors that cause fatigue, for example by making changes to shift patterns or workload factors.

#### WHY IS IT IMPORTANT TO TAKE FATIGUE INTO ACCOUNT?

Fatigue is a very individual and complex condition that can rarely be attributed to a single factor. The same can be said of accidents, where there are many different components in play before the accident occurs. Fatigue can be an indirect or direct risk factor leading to or enabling the accident. The question is, why is the importance of fatigue not more strongly emphasised in current safety management? Perhaps fatigue is not seen as a risk worthy of action because it is such a commonplace issue and normal part of everyone's life. This is peculiar given that the effect of severe fatigue on our performance is claimed to be equivalent to 1 per mil of intoxication.<sup>[11][17]</sup> It may also be the case that there is a lack of knowledge about the impact of fatigue on occupational safety, which means that it does not come up in occupational safety discussions. Although fatigue is rarely the only or most significant component of injury, it should be better taken into account in risk management and occupational safety management, given the knowledge of its effects, contributing factors and management responses. By limiting the factors that contribute to fatigue, we can already prevent some of the damage caused by human error, because every incident prevented is important. Managing fatigue not only improves safety but also the quality and efficiency of the work performed, creating a competitive advantage for the company. □

*Tuomas Kaleva's article is based on his Master Thesis for University of Oulu, Finland.*

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# A wake-up call for risk management: why should we bother about employee fatigue?

We all know what sleep deprivation feels like: after a poor night's sleep, motivation and focusing can be more difficult to achieve and maintain.

By Salla Lind-Kohvakka

Several scientific studies have revealed that sleep deprivation can have, to a certain extent, similar effects as the use of alcohol, including a decrease in alertness, as well as an increase in the risk of causing errors and a greater willingness to take risks.

In addition to individual impacts of sleep deprivation, fatigue can - and it will - increase many risks at the workplace. Think of your own work: what can happen in the worst-case scenario if you have difficulties in staying alert, focused or simply awake? Now think of someone working with heavy machinery, complex, rapid decision-making situations, or with dangerous chemicals. What is the worst-case scenario in their case?

And now: how has this risk been tackled in your company?

This simple scenario may reveal how fatigue is often a blind spot in risk management in many companies.

## WE HAVE ALL EXPERIENCED IT, BUT WHAT DO WE REALLY KNOW?

As the master's thesis (featured in the previous article) of Tuomas Kaleva confirmed, fatigue has been

comprehensively studied, especially as a physiological phenomenon. During the past few years, sleep, sleep disorders and health issues relating to poor and/or too little sleep have been studied with increased interest. Following this, it is known that many of us do not sleep enough, or the quality of our sleep is poor, leading to day-time fatigue.

In recent decades, the research of human factors / ergonomics (HFE) has paid a lot of attention to alertness and focus. For example, it is already known that alertness varies throughout the day, and we perform quite seldom at our best. During the last few years, HFE research has changed the perspective from humans acting as planned, to systems and designs that (ideally) tolerate failures and errors that humans are more than probable to make. Over time this can contribute to safety by making our working environments and technical systems more error tolerant.

Yet, the master's thesis of Tuomas Kaleva revealed that fatigue is actually very seldom explored when investigating incidents such as accidents and property losses in workplaces. The same goes with risk assessments: fatigue is rarely, if ever,



“When sleep and fatigue become a part of discussion without the stigma of it being too personal a topic, it can also lead to risk-preventative actions.”

considered in risk assessments and scenarios. The reasons for not including fatigue when assessing probable contributors to incidents is often very prosaic: as fatigue is considered to be a private issue, it is not asked. Following this, we do not know whether fatigue has contributed to an accident or incident. An interesting finding is that fatigue is, by default, explored when investigating traffic accidents. Among professional drivers, e.g. in Finland, fatigue is actually considered to be such an inherent part of human performance that it is managed with compulsory breaks that are monitored technically.

## HOW TO MANAGE THE FATIGUE-RELATED RISKS AT WORKPLACES?

As Kaleva pointed out in the literature review of his thesis, fatigue is a contributing factor in between 5-25% of traffic accidents and (at least) 13% of occupational accidents. Employees experiencing fatigue are at a 62% higher risk of an accident, and human errors increase by 54% when fatigued. It is notable that in the case of traffic accidents, fatigue increases the risk of serious accidents, as the drivers are not capable of reacting both correctly and quickly enough when needed. (Flanagan, 2014; NSC 2014a; Uehli et al., 2014)

Fatigue should be considered as a risk factor: it can increase both the probability and severity of other risks. Instead of looking for something that changes continuously and between individuals, it could make more sense to assess fatigue-related risks with scenarios. For example, making loss scenarios by combining the risk with lowered reaction times or faulty or delayed actions could help to identify those operations that are most vulnerable to fa-

tigue. Also, fatigue could also be approached when investigating losses. Most importantly, company safety culture should allow employees to report if they feel their alertness or capability to perform well enough to be temporarily lower than it should be.

In order to prevent fatigue-related risks, it is always good to advise employees to pursue a healthy lifestyle that includes also sleeping well and enough. The employer can simply acknowledge the value of sleep as a part of employee wellbeing and encourage the employees to rest and recover also during the workday, if needed.

In the case of shift work, it is often already an established practice to organise shifts to support the natural circadian rhythm. A blind spot may be employees engaging in business trips: although travelling may be an inherent part of work, there may not be enough time to recover after a number of early morning departures and/or late-night arrivals.

When sleep and fatigue become a part of discussion without the stigma of it being too personal a topic, it can also lead to risk-preventative actions that employees can make spontaneously to prevent fatigue-related incidents from happening.

If Insurance continues the work with the topic of understating fatigue-related risks and finding ways to manage them. As our client, read more about human factors in our Learning Hub (Introduction to Human Factors). □

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## Mind your focus

We now truly live in an era of information overload, and working life is moving faster than ever. How does this affect our attention? In this article we look into what organisations can do to improve the performance and health of their employees by applying what we know today about attention, distractions, and recovery.

By Henrik Ulleryd

**O**ur brain consumes a lot of energy. It only makes up a relatively small percentage of our total body weight, but it consumes a significant amount of our energy intake.

The ability to focus on a task that requires effort is known as directed attention, and when we devote ourselves to this, our mental energy drains quickly. In this sense, we must pay for that attention and the name of the currency is energy. Due to this fact, it is impossible for us to stay focused for many consecutive hours because our mental batteries drain quickly. Our ability to focus works like a muscle. As we use the muscle, it gets tired, and then we find it much more difficult to inhibit impulses and resist distractions. This is known as attention fatigue. Typical reactions when this happens is that our mind starts to wander, and that we find it increasingly difficult to direct and maintain our focus. Research suggests that our ability to focus gets impaired a lot quicker than most of us think, and that this starts already within the hour.

At work, we tend to act as if we had the capacity to stay focused for one long work session throughout the day. We might skip breaks and natural pauses. Usually, our perceived experience is that we are being productive and efficient, which is part of the reason why we act in this way. Objectively, as we tire, our brain starts shutting down mental abilities, such as complex problem solving, decision-making, focus



GETTY IMAGES

and other executive functions. It's a natural reaction aiming to save energy. These are abilities often crucial to perform at work. Some of the consequences that follow are that the quality of our decisions progressively declines, accidents occur more frequently, and we get less efficient.

What we also tend to do, especially when workload is high, is that we start multitasking. Today, the myth about us being able to multitask when addressing complex tasks is debunked. What we do, when we think we are working with several tasks simultaneously, is that we shift our attention between tasks at a high pace. As we know already, directed attention costs a lot of energy, but attention shifting is even more energy draining. When we try to multitask, research has shown that we make more mistakes, work more slowly, make worse decisions and our capacity to solve complex problems decreases.

#### WORKING IN A WORLD FULL OF DISTRACTIONS

One way information has an impact on us is in the shape of distractions. Today, distractions are more present than ever. So, why are distractions at work a problem? Well, apart from drawing our attention from the actual work task at hand and pushing us to drop out of the current work sequence, there's an increased risk of quite detrimental effects occurring: when frequently distracted, we make more mistakes, workplace accidents increase, the quality of work decreases, and we have a harder time reaching a state of deep focus. On top of this, it can take up to 15 minutes after being distracted to get back to the same level of focus, and this is something often addressed as 'adjustment' time.

So, what are the common, re-occurring distractions during your workdays? Typical distractions at the office are texts, emails, phone calls, colleagues and ambient noise. These are all external distractions poking at our attention. Social interruption seems to have the highest impact on our ability to return to our original task.

We also face plenty of internal distractions. In fact, research has shown that a significant amount of all distractions come from within, in forms of thoughts, emotions, impulses and physiological reactions. Monotonous work activates more inner distractions since the brain is not fully occupied with the task at hand. In that case, the brain prefers to save energy and moves into a natural state of mind wandering.

Another important aspect is to optimise your capacity to inhibit impulses and stay focused. When we are tired and energy drained, these are abilities that get weakened. Therefore, frequent breaks and opportunities for recovery are highly beneficial as a way to reduce the impact of internal distractions.

#### PROVIDING OUR BRAIN WITH THE RIGHT PRECONDITIONS TO EXCEL

So how can organisations apply this knowledge to really provide the right pre-conditions to excel?

There are plenty of aspects that can be considered to align ways of work with what we know about our attention and distractions. A few general aspects are highlighted below:

- Are there ways to minimise monotonous work for tasks that requires deep focus and where quality errors need to be kept at a minimum?
- How do we secure parts of the day to be devoted to work tasks that require deep focus, and what can we do to minimise distractions during this time?
- How do we provide the right preconditions for our employees to recharge their mental batteries and prevent attention fatigue?
- When do we make our most important decisions and what can be done to promote as good preconditions and contexts as possible for making high-quality decisions?

There are also other more concrete ways to address these issues.

A lot can be done to minimise or decrease external distractions at work. One practical way is to make a distraction assessment within a team or unit over a few days. Log the different types of distractions you notice throughout your workday and try to find the re-occurring sources. Analyse which distractions are within your control and experiment with steps you can take to decrease the frequency of them. It is impossible to get rid of all distractions, but there are usually plenty of actions that can be taken to make them less frequent.

When it comes to the internal distractions, we must deal with them in a different way compared to external distractions. One way to do this is through awareness training. Through awareness training you increase your ability to direct your focus and make you more resilient to distractions. One well-known method for this is mindfulness.

In addition, one highly effective way to recharge our mental batteries and improve our focus is to have frequent micro-breaks. There is a quite solid body of research showing that when less time is spent on the task at hand due to the time allocated for breaks, the accumulated performance does not decrease. It is quite the opposite, in fact. Micro-breaks have been shown to prevent the onset or progression of physical symptoms and discomfort. Furthermore, they have proven to be beneficial for employees' wellbeing and job performance. One way to set it up is to engage in a five- to ten-minute break regularly throughout the workday. Another set-up that has proven to be helpful is to work in sprints of 25 minutes, and then have a five-minute break, which is also known as the Pomodoro method. And if you do not have a strategy for how to promote micro-breaks within your organisation, one suggestion is to take it to the next level by looking into how you could deliver the right preconditions to promote it to all employees.

Currently, there is huge development potential regarding these issues, as well as plenty of low-hanging fruit for organisations in terms of promoting both performance and employee wellbeing. □



**Meet our expert**  
Henrik Ulleryd  
HR Health Partner

**!** As our client, read more about human factors in **Learning Hub** (Daily wellbeing and better ergonomics, and Introduction to human factors.)

## Short news

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## Appointments



Jesper Frovst  
Account Executive, DK



Daniel Martin-Vivaldi  
Head of Property Underwriting, SWE



Lina Sundgren  
Risk Engineer, SWE



Matias Kivelä  
Risk Engineer, FI



Mads Leffers Svendsrup  
Risk Engineer, DK



Nitin Vindhara  
Lead Cyber Risk Architect, FI



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