

# CYBER RISKS & LIABILITIES

## Learning to Utilise the Internet of Things

There are more digitally connected devices than there are people on the planet. These immense networks are capable of supporting an array of applications—from the mundane to the sophisticated—and can help propel economic opportunities. This vast interconnected system of devices, vehicles and even entire buildings are all part of the Internet of Things (IoT).

Despite the potential benefits of utilising the IoT to bolster your company, there are some associated hazards. But with the proper knowledge and preparation, you can effectively mitigate those risks while securely strengthening your company and reaping the benefits.

### **What is the Internet of Things?**

Within the last decade, the availability of high-speed internet, smartphone use and microprocessor power have all increased. During that same time, both hardware costs and the size of the processors have steadily decreased.

As a result, it has become more practical and affordable to install devices with digital sensors and Wi-Fi capabilities, which has allowed innovative manufacturers and developers to connect ordinary, everyday devices to the internet.

In addition to smartphones, devices like fitness trackers, smartwatches and vehicle telematics devices are just a few examples of other devices that belong to the IoT. The defining characteristic of the IoT is not that your devices can connect to the internet, but the potential that is created when your devices connect to one another.

For example, your smartwatch has realised that you have overslept the morning of an

appointment with your GP—so it instantly sends a new route to your car's sat nav to better account for traffic. It could also email your GP, warning that you may be late.

### **Telematics and Usage-based Insurance**

Currently, the most common commercial use of devices connected through the IoT is for vehicle telematics. Some freight forwarding companies have begun installing the devices in lorries to track their drivers in real time to better analyse driver safety and vehicle performance.

If your company owns vehicles that are driven by employees, a telematics device may not only help improve the health and performance of the vehicle itself, but it could also reduce your operating costs as well. The device is able to achieve this through what is called 'usage-based insurance' (UBI).

UBI typically offers either a pay-as-you-go (PAYG) or pay-how-you-drive (PHYD) model. The PAYG models are the least invasive, using on-board devices hooked into the vehicle's computers to calculate how many kilometres a person drives. The amount that your company may pay to insure your vehicles will then depend on the amount of kilometres that your employees have driven. However, your company may find the PHYD model to be more beneficial.

The PHYD model collects more data from your employees while they are behind the wheel—such as speed, acceleration, braking, time of day as well as other factors. As this is a more robust data set, the amount that your company may pay to insure would be affected by how safe or risky



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your employees drive. An additional benefit of the PHYD model is that you should receive a regular report detailing your employees' driving habits, so that you may address any potential hazardous behaviours.

## **Wearables and Smart Devices**

Wearables that monitor personal health data—such as a Fitbit or an Apple Watch—have become common accessories for any fitness plan or activity level. The value of these devices is in the biometric data that they are able to collect, such as tracking the number of steps taken, the amount of calories burnt and heart rate.

As an employer, the data that these devices collect may be beneficial to your company. If you offer your employees health insurance, you could use wearables as an incentive for them to participate in your health and wellness programmes. An additional benefit is that if your company were to notice an unhealthy trend amongst your employees—such as sluggishness, high blood pressure or excessive weight—you could tailor your health and wellness programme to better address the issue. Healthier workplaces translate to cost savings through reduced sickness absence and happier, more productive employees.

## **System Failure**

While the IoT was developed in order to streamline processes, it is not infallible. The devices that are linked to the IoT are operated by your employees, who may be well trained, but are still capable of making a mistake. A mistake could cost your company time and money, or expose your company's stores of data to cyber criminals. In addition to human error, one or more of your devices could fail, which may create a gap in one of your company's processes. Which, again, could financially impact your company.

For both of these reasons, it is important that you properly train your employees on how to use each device, establish thorough processes in the event that a mistake is made or a breach occurs, have a robust anti-virus and privacy software installed in

all your devices, and have each device regularly inspected by a licensed IT professional.

## **Privacy and Cyber Attacks**

With its vast interconnected network, the IoT promises considerable advances in technology and convenience. However, the immense stores of private data may be vulnerable to cyber-attacks. Therefore, if your company collects and stores customer data—such as home address, billing information, date of birth, etc.—you should safeguard it against the potential threat of a data breach. And the threat is real—90 per cent of large organisations and 74 per cent of SMEs suffered a cyber security breach last year, according to government research.

If your company were to suffer a cyber-attack, stolen customer information and money are not the only ways in which your company could be damaged. Your company's reputation and public image may be diminished or lost as well. Regardless of what shape a cyber-attack may take, it reflects poorly upon your company.

## **The Changing Landscape**

The IoT promises to radically reshape not only how we live and interact with one another, but how we conduct business as well. With the widespread access to high-speed internet, and the vast digital libraries of information and resources that are readily available, the demand for real-time access to bespoke services will continue to increase.

Yet, while the IoT has the potential to successfully meet and exceed both your company's and your customers' evolving needs, there are potential risks that are associated with these benefits. Contact the experts at **Crendon Insurance Brokers Ltd** to receive guidance on ways to mitigate these risks along with strategies to safely and successfully integrate the IoT into your company.



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