

● UPDATE

Rapid Response

WEDNESDAY, AUGUST 26, 2020

CYBERHEDGE

ISS World

ISS WORLD

CURRENT CBH CYBER GOVERNANCE RATING

★★★☆☆ 2

PRE-BREACH CBH RATING

★★★☆☆ 2 | Below Average

The breach: ISS World, a Danish workplace experience and facility management company, was hit by a malware attack on February 17, 2020. ISS World publicly reported the attack on February 19, but disclosed neither the severity and type of attack, nor the extent of the damages it caused.

ISS World was a poor-performing CBH 2-Star rated company on cyber governance at the time of the breach (trending lower in the 6 months leading up to the breach). This served as a **warning for investors about the increased likelihood of a financially damaging cyber** disruption and an under-performing share price stemming from the company's sub-par management of its technology.

At the time of the breach, our models showed ISS World scored worse vs. peers on specific cyber metrics that contributed to the breach and served as evidence of persistently poor management of its technology. This included worst-in-class IT network complexity (complex networks are more difficult and more costly to protect) and below-average employee training and security policies.

February 2020

Cyberhedge Note Warning Investors

ISS management said:

Contrary to management's statement during the February 26 [earnings call](#) that '...there is still no indication that any customer data or systems have been breached'

Cyberhedge said:

The financial impact of this incident has little to do with customer data loss and everything to do with business disruption.

The damage has been considerable even for a business that largely provides a people-based service in the form of facilities management.

Operational disruption breaches are more financially costly—and take longer to recover from—than customer data breaches.

August 2020

Actual Negative Financial Impact to Investors

ISS World's 1H2020 announcement on August 12 affirmed our February assessment in terms of both the protracted time it would take to recover operationally and the degree of financial damage that was likely to be caused. The company announced that it had regained control of the "vast majority" of its IT infrastructure and relaunched business critical systems in the "vast majority" of operations—**six months after the attack**. Repair of damaged assets will continue into early 2021. **The financial cost disclosed thus far is also significant:**

- software write-downs related to the IT malware attack estimated to be DKK 850 million or ~ **\$135mn USD**
- combined net negative impact on free cash flow related to the ransomware disruption in 2020-2021 estimated to be approx. DKK 750 million or ~ **\$120mn USD**
- share price decline -21% to peers in 6 months

Operating income from 2018 and 2019 was \$378mn and \$383mn USD. Therefore, so far the hack has cost ISS 33% of annual operating income.

And these costs are only the beginning as more recovery and repair work is yet to be completed over the next several months.

Management Fallout



On May 18

Group CEO

Jeff Gravenhorst

stepped down



On July 2

CEO of Europe

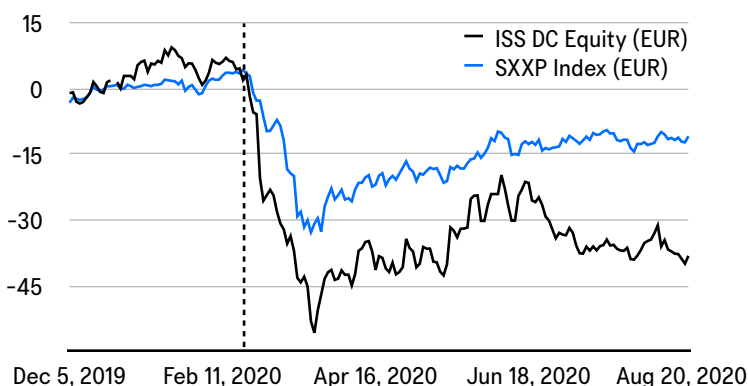
Jacob Götzsche

stepped down

Market Fallout

By February 26, just over one week after the announcement, ISS' share price dropped by approximately 23 percent. It has not recovered, down ~27% relative to the SXXP at the end of August. Though the company cited COVID-19 disruptions as one reason for a 25% drop in operating profit (1H2020), it also cited the ransomware hit to operating margins and FCF.

A struggling share price post-breach



Though net debt has been reduced y/y and does not present a near term constraint to directing additional resources towards cyber, the company is also counting on a recovery in operating performance in 2021 to mitigate the risk of a rising debt load next year.

Accelerated Digital Transformation complicates near term outlook for underperformers like ISS World

COVID-19 has accelerated the separation between outperformers and underperformers across all sectors and all markets on the basis of good or bad cyber governance. ISS World is unfortunately an underperformer that could fall further behind peers that are doing a better job executing on digital transformation.

We would expect to see an improvement of ISS World's Cyber Governance rating from 2 to 3 Star if management allocates additional resources to addressing the underlying weaknesses in the corporate network and processes over the next 6-12 months.

Bottom Line:

The reduction in free cash flow, depressed share price and continued need over the coming months to repair damage done by the breach will strain ISS World management's ability to properly address these underlying weaknesses that would put the company on stronger footing. As a percentage of operating income, the costs to repair its systems are significant. And the company has to be careful to ensure the work done does not create new operational vulnerabilities post-implementation. This means that ISS World investors will likely continue to see an underperforming share price relative to peers and the broader benchmark until its financials improve, enabling management to invest in improving ISS' cyber governance beyond the currently planned repair work. An improved Cyber Governance rating would also lower the probability of another damaging ransomware disruption in the future.

A Rapid Response provides investors analysis of a recent breach event, the likely shareholder value losses and impact on the balance sheet, the possible underlying causes stemming from poor cyber governance and what to look for moving forward.

Why does Cyber Governance matter?

Our Cyber Governance ratings, summarized by a star rating ranging from 1-Star (Worst) to 5-Star (Best), have accurately predicted market outperformers and underperformers in every sector, and across each of the major markets for the past three years. Our results clearly demonstrate that how a company executes its digital transformation strategy and manages related risks impacts shareholder value and financial statements.

For more information, including company coverage, visit cyberhedge.com or contact us at info@cyberhedge.com

USA MARKET

	Since Dec 2016	Outperformance to benchmark
CBH 5-Star Rank Group	53.1%	23.1%
Russell 3000	30%	Benchmark
CBH 1-Star Rank Group	9%	-21%

EUROPE MARKET

	Since Dec 2016	Outperformance to benchmark
CBH 5-Star Rank Group	44.8%	41.8%
Eurostoxx 600	3%	Benchmark
CBH 1-Star Rank Group	-6.95%	-9.95%

Research

Ryan Dodd, Founder and CEO

Chris Nolan, Research

Kevin Dougherty, Research

Denis Bolshakov, Creative Director

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