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# Cyber security in the

## RUHR AREA

Startups as drivers  
of digital security evolution

— 2020

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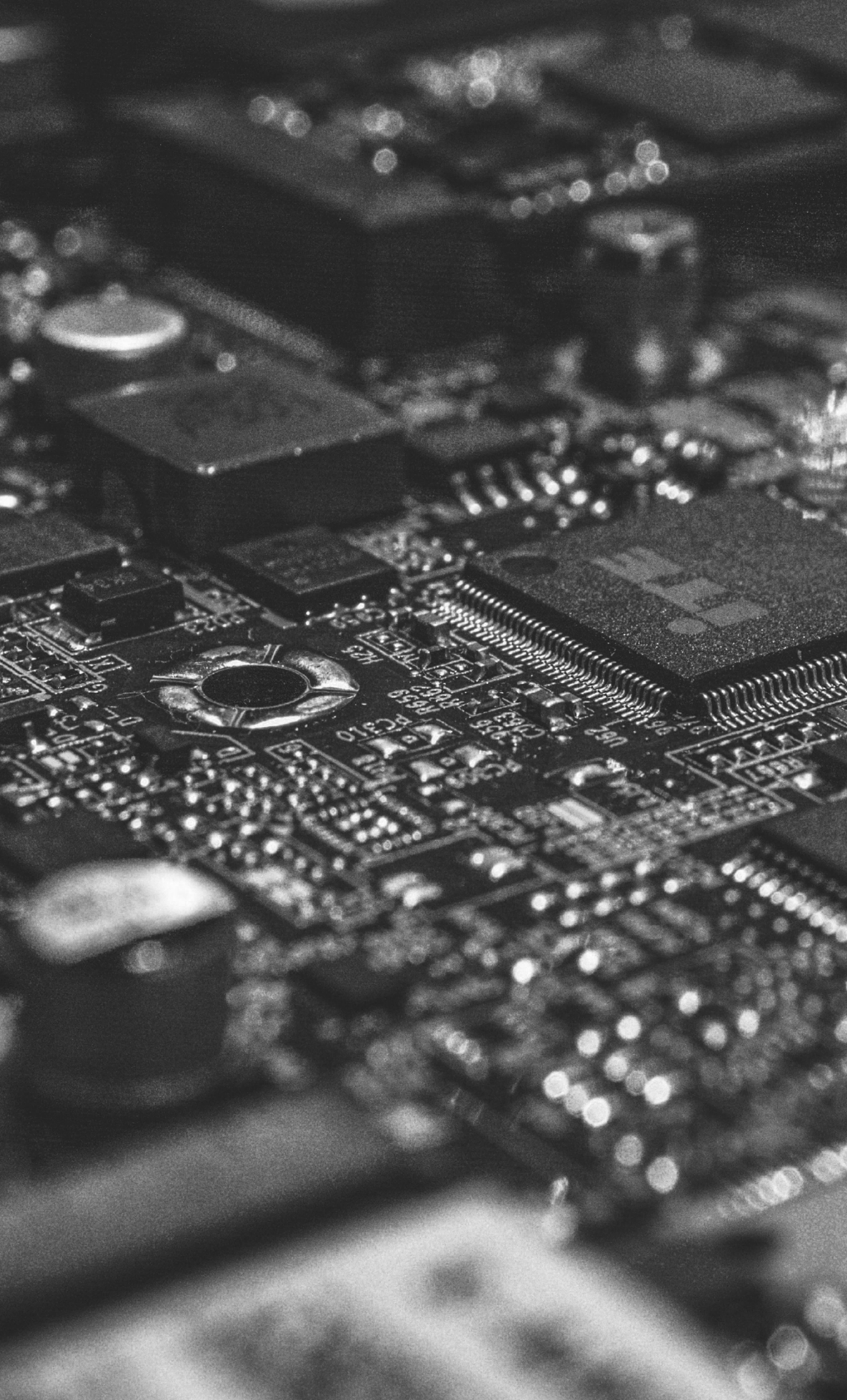
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**RUHR AREA**



Startups as drivers  
of digital security evolution





## K E Y F I N D I N G S

- 1 Future market and key infrastructure:** This year five billion euros were spent on the cybersecurity industry in Germany; this is an annual growth rate of 10 percent, making it one of our most important growth markets and a cornerstone of our digital infrastructure.
- 2 Huge investment backlog:** Germany invests only 83 cents per capita in cybersecurity startups, a tiny amount compared with Israel where the figure stands at 108 euros. If the sector is to be strengthened, it is vitally important to support existing hubs.
- 3 The Ruhr area as a cybersecurity hub:** The Ruhr area ranks third after Berlin and Munich in the field of cybersecurity startups. With a share of 7.2 percent of German startups, this sector is exceptionally lively here.
- 4 Outstanding research transfer:** One outstanding feature of the cybersecurity hub in the Ruhr area can be seen in the strong ties between research and entrepreneurship where a specialized ecosystem has developed.
- 5 Exploiting synergies:** Cybersecurity hubs benefit particularly from close cooperation between research, politics and business. A good foundation has already been established in the Ruhr area but there is still potential for development when it comes to market focus and collaboration with national security agencies.

# 1 . B A C K G R O U N D S U M M A R Y

The Coronavirus pandemic has put the spotlight on cybersecurity in public discourse as well as in business and politics. Cybersecurity plays a key role in the protection of individual privacy and thus in building customer trust in innovative fields such as E-commerce, the Internet of Things or Cloud Computing. Furthermore, companies now rate the risks

associated with cyber incidents as the number one threat worldwide, greater even than business interruptions caused by supply chain issues or market turbulences, for example.

This has led to a sharp increase in the cybersecurity market with roughly five billion euros spent in Germany this year and an an-

nual growth rate of 10 percent. Current global revenue of around 173 billion US dollars as well as the tremendous costs related to cybercrime point to the vast opportunities and needs within this field. Startups and cybersecurity hubs such as the Ruhr area play a crucial role in leveraging these potentials.



## Cyber Security

# 2 . C L U S T E R R U H R A R E A S U M M A R Y

Startup ecosystems evolve around talent and capital and this tends to concentrate in certain locations. In Germany, startups are currently thriving most in Berlin and Munich, while specialized hubs are also evolving in other regions. With 7.2 percent of Germany's cybersecurity startups, the Ruhr area is an important hub in this sector with a particular strength in research transfer. The Ruhr hub has its origins back

in 1985 when the Bochum-based antivirus software developer G Data CyberDefense was founded, marking a pioneering move in the cybersecurity market. Since then the cybersecurity sector has been continuously developed around the Ruhr-University Bochum, most notably with the creation of the Horst Görtz Institute for IT Security in 2002. Today the institute offers specialized

degree programs to more than a thousand students and runs the cybersecurity incubator Cube 5. Important players alongside these initiatives are the Institute for Internet Security in Gelsenkirchen or the Essen-based cybersecurity company Secunet.



## The Ruhr Area

# 3 . I N T E R N A T I O N A L C O M P A R I S O N S U M M A R Y

International cybersecurity hubs such as Israel showcase important characteristics of successful ecosystems and point to the strengths and opportunities of the Ruhr area. As in the Ruhr area, the Israeli ecosystem has a strong research focus. However, there are also crucial differences: In Israel, private investments in cybersecurity startups amount

to 108 euros per capita, whereas in Germany the figure stands at only 83 cents. Alongside financial resources, strong cooperation with national security agencies also accelerates the growth of the ecosystem.

Access to capital and cooperation with national security agencies are the two vital ingredients

if the Ruhr area is to continue its development as a cybersecurity hub. To achieve this, the ecosystem needs to promote the transfer of scientific innovation into scalable business models and to strengthen the visibility for investors. Cross-links between startups and state players in cybersecurity are another key factor.

