

SYSTEMS ENGINEERING AT THOMAS-KRENN



**THOMAS
KRENN®**
IT's people business



Foreword

Dear Readers,

Find out what products and services you can expect from Thomas-Krenn.AG's Systems Engineering division. Our goal is to develop customized solutions tailored to your specific needs, no matter how unique they may be. Simply contact us—and we'll be happy to assist you.

We hope you enjoy reading this.

A handwritten signature in black ink, appearing to read 'Bernhard Seibold'.

Bernhard Seibold
Vice President
Product Management

A handwritten signature in black ink, appearing to read 'Aaron Kopp'.

Aaron Kopp
Team Leader
Systems Engineering



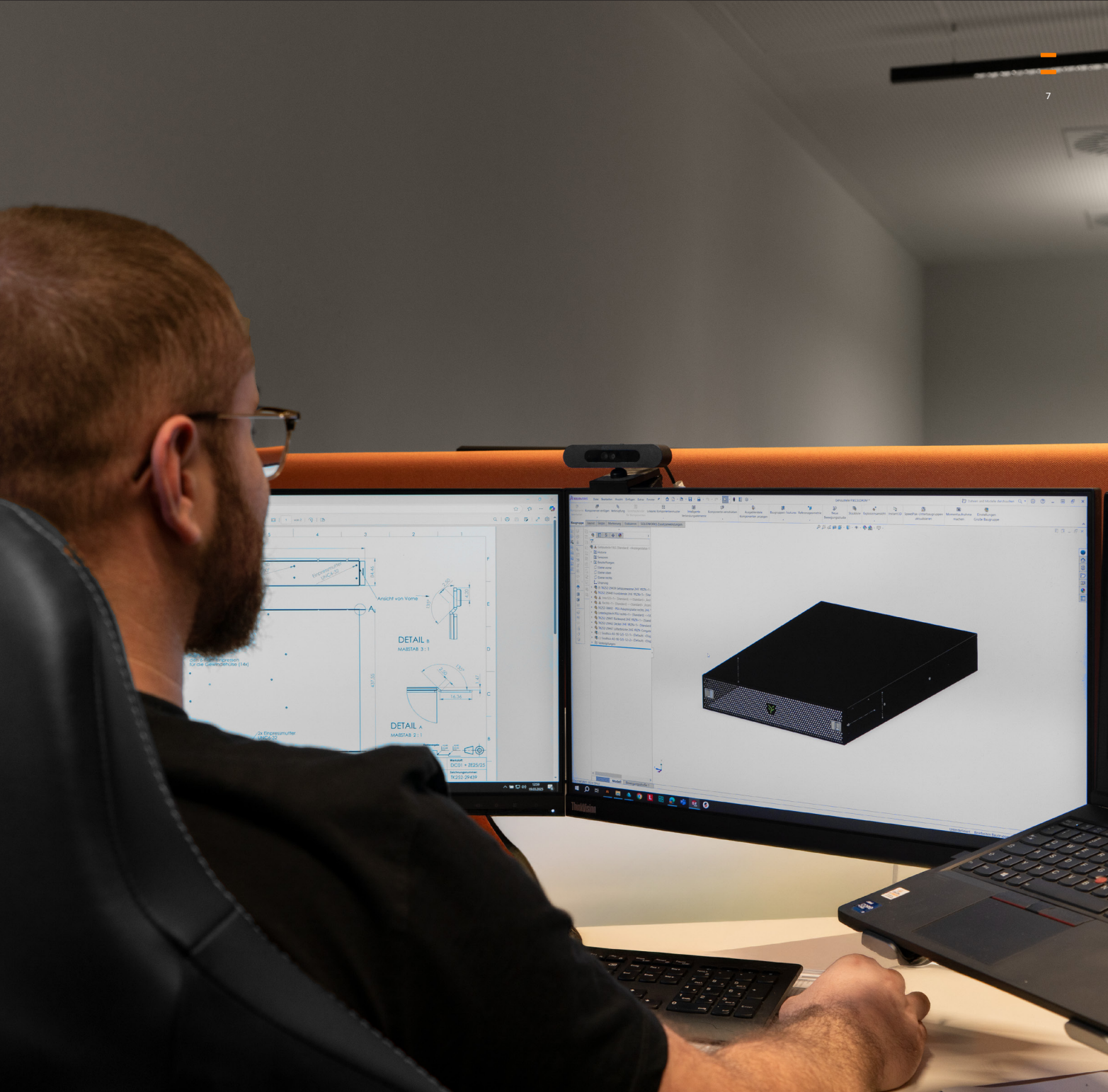
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Systems Engineering

As a reliable technology partner, Thomas-Krenn supports your projects from the initial concept through to series production—and beyond. Our systems engineering team develops customized hardware and appliance solutions tailored precisely to your specific needs. We combine technical excellence, years of experience, and close collaboration on an equal footing.

We take a holistic approach to systems engineering: from conception through prototyping, verification, and certification to scaling, logistics, and lifecycle support.



Custom Hardware, OEM & ODM

Your needs are our top priority. In addition to a broad portfolio of standardized server and storage systems, we provide:

- ◇ Custom hardware designs for appliances and specialized applications
- ◇ OEM and ODM projects—including high-volume production
- ◇ Mass production with consistently high quality
- ◇ Customizations for industrial, edge computing, networking, and specialized environments

Our systems are designed for durability, availability, and reliability
– developed and manufactured in Germany.

Mechanics, Housing & Design

If standard enclosures aren't sufficient, we'll work with you to develop the right solution:

- ◇ Custom form factors (rack-mounted, embedded, desktop, passively cooled)
- ◇ Design of mounts, covers, slot brackets, and custom components
- ◇ Prototyping (3D printing, metal and plastic prototypes)
- ◇ Thermal, acoustic, and mechanical optimization

This results in systems that are technically impressive and can be seamlessly integrated into your application.

Branding and Packaging

At Thomas-Krenn.AG, you can decide for yourself whether you want to leverage the reputation of our brand when marketing your products or whether you prefer to sell them under your own label. We support you throughout the entire process — from planning and system and packaging design to logistics.

Whether it's high-quality logos applied via digital printing, screen printing, painting, or laser engraving on the system's front panel, powder coating of the housing, or the creation and production of a cohesive packaging design and stickers, we'll work with you to develop a comprehensive concept for a strong brand presence.



Unique design

Our state-of-the-art UV printer allows us to achieve this maximum level of customization. We use it to put your own unique stamp on your product. Best of all, the innovative UV-LED direct printing technology works on nearly any surface. So we can not only give your hardware components a unique look, but also print on everything from cardboard to plastics.

Boost your brand recognition, stand out from the crowd, and create that wow factor—let us customize your products and packaging. We'll make even your most original wishes come true!



Custom Hardware

At Thomas-Krenn.AG, we focus on the individual needs of our customers. In addition to a comprehensive selection of standardized server and storage systems, our Systems Engineering department enables us to provide our customers with specialized custom solutions. Depending on the requirements, we develop and implement server hardware that we tailor together for specific application scenarios.

Whether it's specially shaped enclosures, custom I/O ports, rugged chassis for demanding environments, or extra-reliable systems for unique mobility or usability challenges — we create solutions based on our customers' specific specifications. In doing so, we leverage our deep industry expertise and years of experience to adapt and enhance proven hardware for virtually any conceivable application.

**CUSTOM
HARDWARE**



Learn more at:
[thomas-krenn.com/
 custom](https://thomas-krenn.com/custom)

Software, Images & Turnkey-Delivery

Modern IT solutions don't stop at the hardware. We ensure that your systems are delivered ready for use:

- ◊ Installation of custom software images
- ◊ BIOS, BMC, and firmware customizations
- ◊ DMI strings, IP settings, and system preconfiguration
- ◊ Functional testing and verification in our in-house lab

Our systems are designed for durability, availability, and reliability — developed and manufactured in Germany.

Networking, Edge & IoT

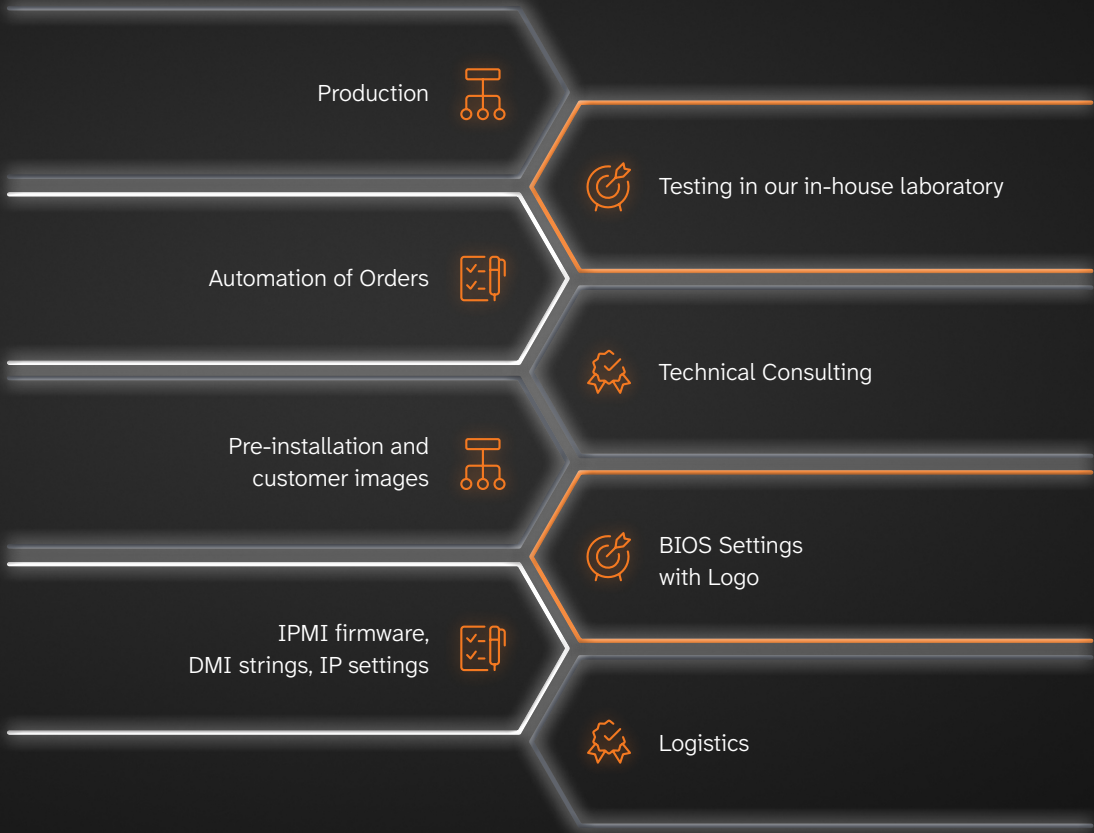
Our systems engineering also covers modern fields of application:

- ◊ Network Appliances and Security Platforms
- ◊ Edge Computing Solutions
- ◊ IoT and Industrial Systems
- ◊ Wireless and Specialized Applications

Thanks to the close integration of hardware, software, and systems expertise, we develop future-proof solutions for demanding scenarios.

Our Services

Our service promise to you: We make sure our systems run smoothly—whether at your location or at your customers’! As soon as we have completed the planning for the ideal system tailored to your requirements, we move on to the fine-tuning: in our in-house test lab, we test even the smallest components—including their interaction with specific applications or other system components, their durability, and their suitability for continuous operation. Only when we are convinced that your system functions flawlessly do we release it for production.



Thomas-Krenn – A reliable partner

Take advantage of our team’s many years of experience in system development. We not only provide you with concrete recommendations for your project, but also offer insights into technical feasibility—whether it involves thermodynamic specifications, fluid dynamics, the availability of individual components, or supply chain considerations. We advise you on how to sustainably minimize manufacturing and operating costs or how to feed generated waste heat back into the energy cycle.

Thanks to our very fast response time and implementation—even for custom solutions—and our direct line of communication with our systems engineering team, our partners are always happy to come to us. After all, our willingness to implement every customer request and think outside the box sets us apart. Through open communication between customers and our expert technical contacts from the very start of the project, we can develop the best system tailored precisely to your requirements.



Learn more at
[thomas-krenn.com/
se-team](https://thomas-krenn.com/se-team)

 BERNHARD SEIBOLD Vice President Product Management Manager Systems Engineering	 AARON KOPP Teamleader Systems Engineering Project Management for Large-Scale Projects	 LENNARD KOPP Systems Engineer Trainer Project Management for Large-Scale Projects	 WILFRIED SEIFERT Systems Engineer Focus: Linux, Windows, IoT & Wireless
 MATTHIAS SCHREINER Systems Engineer Focus Areas: Design & Branding	 CHRISTIAN RANZINGER Systems Engineer Production Engineer Focus: Branding	 SEBASTIAN LANG Systems Engineer Focus Areas: Design & Branding	 SILKE WEISSENBACHER Systems Engineer OEM Customer Support
 ANDREAS TALLOWITZ Systems Engineer Focus Areas: Industry & Certification	 AXEL HANNAK Systems Engineer Focus: Electrical Engineering	 MAXIMILIAN GOTTAL Systems Engineer Project Management	

Customer Feedback

Since 1999, we at X-Net have been committed to making new open-source technologies available to small and medium-sized businesses as a service provider and to supporting our customers with expert and personalized assistance. As an IT service provider and solutions provider, we support clients in the areas of IT security, network management, IT consulting, Voice over IP, and VPN solutions, and we develop complex web applications as well as custom software solutions. In all our actions, we prioritize the principles of open information exchange and networking, as well as the common good—a fact that sets us apart from our competitors in the IT industry and of which we are proud.

Tackling the Skills Shortage Through Networking and Open Source

Is your company struggling with a shortage of skilled workers and dependence on the Far East? It doesn't have to be that way! With regional networks, you can realize your full potential—even without your own specialized staff. The primary goal of X-Net Services GmbH is to eliminate reliance on knowledge and products from the Far East. That's why the company relies on local partners to strengthen a regional value chain, and on open source to ensure a fair transfer of knowledge for everyone. In this case study, the leaders at Thomas-Krenn and X-Net share the innovative projects the two companies have been implementing together for 20 years. Feel free to follow their lead! Find partners who are a good fit for you, share your knowledge, and get started together.



"It's hard to find good, reliable suppliers these days. With Thomas-Krenn, I have a top-notch partner by my side who doesn't send their last available chip to the highest bidder, but instead prioritizes long-term partnerships—even if they don't generate maximum revenue right away. Not only are SE's products and developments first-rate, but the service is spot-on, too. When I need help, I just pick up the phone. The staff listen to me, understand me, and find solutions. And we speak the same language—'daugt ma,' as we say here in Austria."

Nikolaus Dürk, Managing Director of X-Net, Linz, Upper Austria

Your project – our commitment

Whether it's a custom-built solution, an OEM product, or a mass-production project, we'll help you bring your idea to life efficiently, reliably, and in a way that's market-ready.

Thomas-Krenn Systems Engineering – Your partner for customized IT solutions.

For more information or to request a project quote:



Systems Engineering

[thomas-krenn.com/
se-custom-hardware](https://thomas-krenn.com/se-custom-hardware)



Go directly to the Custom Configurator

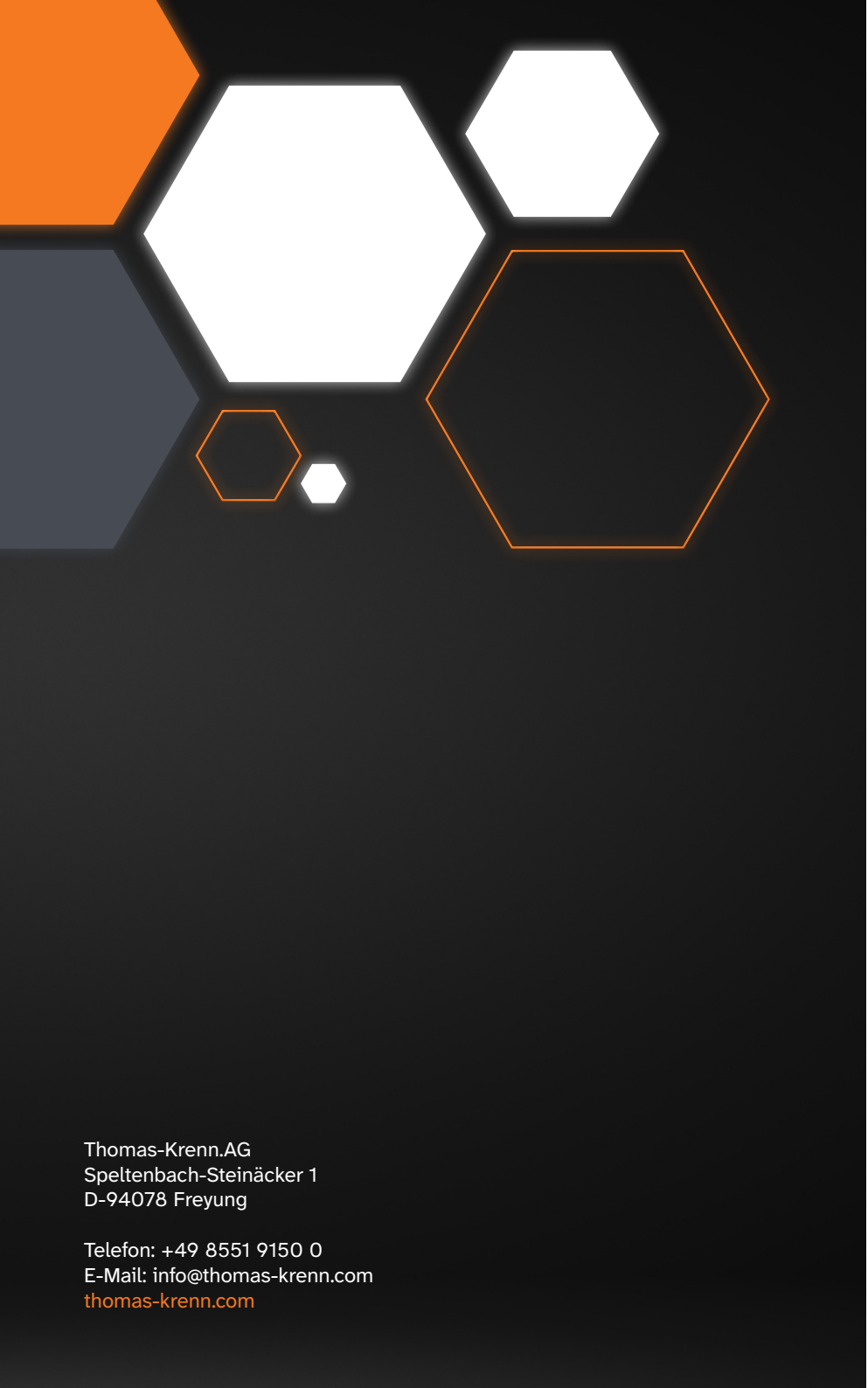
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custom-konfi](https://thomas-krenn.com/custom-konfi)



Visit the Thomas-Krenn website

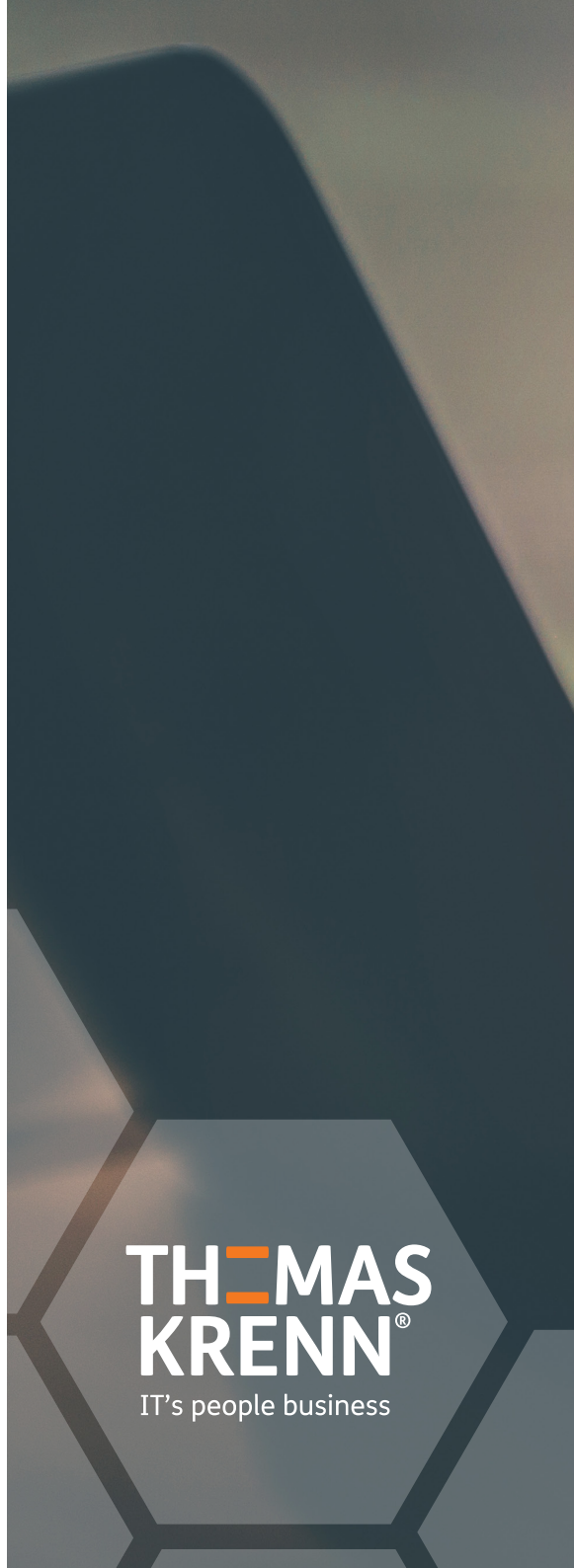
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