MAINFRAME AND CLOUD
A PERFECT MATCH
There's life in the old dog yet. In the IT world, this is especially true for the mainframe. Despite all attempts to remove and replace it, it stands taller than ever. Too many business-critical applications depend on the mainframe. It is, therefore, important for future-oriented companies to bring together legacy and innovation sensibly and effectively. The intelligent combination of mainframe and cloud achieves just that. Forrester has analyzed: Almost half of the companies in Germany still operate more than 50 percent of their business-critical applications on the mainframe computer. Today, it is no longer a question of completely replacing the mainframe. The risk of a system failure and the associated costs are far too high. After all, according to Gartner, the downtime of an IT system can cost around 300,000 euros per hour. These figures, combined with the loss of image, the risk of dwindling customer trust and further consequences, secure the future existence of the mainframe.

A highly critical legacy IT should, therefore, not be torn out of its stable, high-performance and proven secure environment. Because the mainframe is and remains the leading platform regarding reliability and performance.

### ADVANTAGES OF THE MAINFRAME
- Industries that rely heavily on the mainframe – such as retail, banks and insurance companies – use it to process large numbers of transactions in business-critical applications
- No other platform fulfills the ISO standard of the four ACID principles, Atomicity, Consistency, Isolation and Durability, as reliably as the mainframe
- A permanently high transaction rate makes the mainframe particularly lucrative – since it's about constant performance
- Mainframes are and will remain the backbone of IT systems in transaction-intensive business models
- Modernization, application development and the definition of transformation processes pave the way to a combination of mainframe and cloud

### MAINFRAME AND CLOUD – A GREAT TEAM
The combination of mainframe and cloud succeeds in several steps:
- Dismantling monolithic applications helps to gain a deeper understanding of them
- Analysis of the as-is status shows the current condition of the applications
- Evaluation for each application – how and in which form is a transformation to the cloud possible
- Application roadmap to define which applications can be provided via the cloud and which will continue to run conventionally on the mainframe
- Identification of further modernization measures
- Determination of the appropriate cloud form
- Calculation of the transformation and future operating costs
- Detailed planning, including process analysis and evaluation

### IMPLEMENTING INNOVATIONS VIA MAINFRAME
Blockchain, IoT and artificial intelligence – these and many more innovative concepts can be implemented on the basis of modern mainframes. Proof of concepts and pilot projects already exist. Key aspects are the development from Waterfall to Agile, Scrum and DevOps as well as the transfer of COBOL to Java. The enormous computing power and the reliable execution of countless transactions – core competencies of mainframe computers – can also be readily implemented. Mainframe systems, for example, can take the topic of blockchains to a new level:
- Extensive memory for computing operations
- Extremely powerful processors
- Highly scalable input/output system
- Optimized network between virtual systems within the mainframe
- Accelerated peer-to-peer communication
- High level of security thanks to built-in hardware security, end-to-end encryption and container technology

### CONTACT US
T-Systems International GmbH
Stefan Spielbauer
Product Marketing
E-mail: Stefan.Spielbauer@t-systems.com
Dachauer Straße 651
80995 Munich

### PUBLISHER
T-Systems International GmbH
Marketing
Hahnstraße 43d
60528 Frankfurt
Germany