



## MULTIVAC

*Ensuring the sky is the limit for business growth with super-scalable technology*

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### Overview

#### The need

Growing at ten percent a year, packaging company MULTIVAC needed to expand the capacity of its supporting IT systems. With cost and complexity rising, the company sought to streamline its IT operations.

#### The solution

MULTIVAC expanded, upgraded and simplified its IT environment with the integrated approach of the IBM® Flex System®, consolidating workloads and accelerating mission-critical SAP ERP application performance.

#### The benefit

The solutions speed database response times by 500 percent, improve SAP ERP performance by 300 percent, save 50 percent in investment costs and support continued business growth.

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Based in Wolfertschwenden, Germany, MULTIVAC employs approximately 4,000 people worldwide to develop, produce and sell packaging machines. The company serves the foodstuffs, medical equipment and related industries, with thermoformers, tray sealers, and vacuum-chamber machines, sold in 140 countries.

#### Challenges of growth

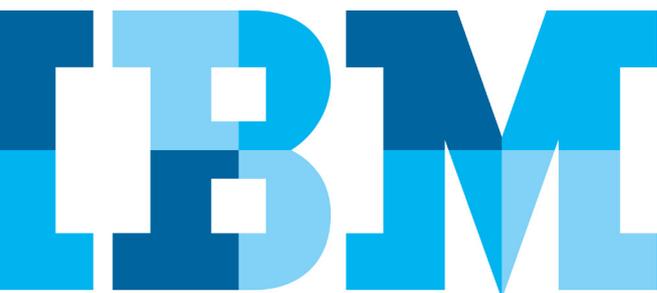
MULTIVAC is continuously growing at a rate of ten percent a year. Fast access to business information is key to success, and underpins the company's expansion into new markets, regions and countries to increase its worldwide presence.

Wilfried Grewe, CIO at MULTIVAC says, "With IT becoming part of almost every business process, more employees rely on business applications for their day-to-day work. To improve productivity, optimize information flow and assist management decisions, we constantly add new features, which tends to add complexity.

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*Enabling faster response times, the IBM Flex System helps MULTIVAC's employees work much more efficiently. "The integrated approach of the Flex System reduces database response times from 400ms to 80ms, an impressive improvement of 500 percent, meaning our workforce always get what they need virtually instantly," says Jürgen Dauner, IT Manager, MULTIVAC.*

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## Solution components

- IBM® Flex System®
- IBM System Storage® SAN Volume Controller
- IBM FlashSystem™ 820
- IBM DB2® for i

## Applications

- SAP ERP
- SAP ERP Human Capital Management
- SAP Customer Relationship Management
- SAP Business Warehouse
- SAP Advanced Planning and Optimization

## IBM Business Partner

- FRITZ & MACZIOL
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“We are always looking for ways to expand the functionality of our SAP software. As we support additional business processes and improve existing workflows with more in-depth data, the data volume and detail stored in our systems increased. We started to find that processes such as producing quarter-end and year-end reports were running into operational hours. This affected the performance of the everyday business applications and we needed to find a way to both run the report batch workload and enable high-performance business-as-usual services.”

## Simplifying and streamlining for success

MULTIVAC engaged IBM Business Partner FRITZ & MACZIOL to consider ways to optimize its IT environment, taking proactive steps to avoid future cost and complexity. Specifically, the company wanted to automate management and administration processes, and introduce standardized and industrialized workflows for increased productivity of IT staff.

FRITZ & MACZIOL recommended the innovative IBM Flex System, combining compute nodes based on both Intel and IBM POWER® processor technologies in a single solution. Within the Flex System, MULTIVAC deployed a fully virtualized environment of two IBM Flex System p460 compute nodes with IBM POWER7® processors. The company also recently introduced two p460 nodes with IBM POWER7+™ processors to support its business-critical SAP ERP environment, migrated from a three-tier landscape based on Microsoft Windows to a highly-efficient two-tier landscape running on the IBM i operating system.

“We added three IBM Flex System x240 compute nodes to our existing virtualized VMware cluster to increase our capacity,” says Grewe. “We now run our Windows workloads seamlessly across IBM and non-IBM servers. The ability to run a hybrid environment within a single Flex System chassis is a true advantage, allowing us to simplify IT management.”

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*“Our SAP ERP applications run reliably. We have had no downtime since we moved to the IBM Flex System.”*

— Wilfried Grewe, CIO, MULTIVAC

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The company also upgraded its IBM System Storage® SAN Volume Controller environment. Today, MULTIVAC uses four IBM Storwize® V7000 storage systems. With two IBM System Storage FlashSystem™ 820 solutions, MULTIVAC added about 10 percent of high-performance storage.

Jürgen Dauner, IT Manager at MULTIVAC elaborates, “We selected IBM FlashSystem technology so that we could benefit from IBM Easy Tier software. By detecting which data blocks are used most frequently and automatically moving this data to the FlashSystem, Easy Tier helps us improve responsiveness where it matters most.”

The IBM Flex System runs 15 SAP systems for 1,700 users, supporting a range of critical business processes with an application suite including SAP ERP, SAP ERP Human Capital Management, SAP Customer Relationship Management and SAP Business Warehouse.

“The combination of IBM POWER and IBM i with its integrated IBM DB2 database enables us to run our most important systems with low administration overhead and maximum availability,” comments Grewe. “Since migrating our critical SAP ERP applications to the IBM Flex System and moving the application servers from Windows to IBM i, we have had no downtime.”

MULTIVAC pioneered the mixed Intel and IBM POWER processor configuration with FRITZ & MACZIOL and IBM Systems Lab Services. IBM specialists fine-tuned the IBM i and VMware environment to ensure full integration and optimal performance.

“IBM brought in all the necessary resources to support us, and the collaboration with the entire team from IBM and FRITZ & MACZIOL was excellent,” says Dauner. “As part of the IBM Business Partner network, we are confident that they are a strong partner we can rely on.”

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*“By migrating our SAP environment to the IBM Flex System, we estimate that we have saved 50 percent in IT investment costs.”*

— Wilfried Grewe, CIO, MULTIVAC

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### Boosting staff productivity

The combination of IBM Flex System and IBM FlashSystem is delivering significant cost savings to Multivac, as explained by Grewe: “By migrating our SAP environment to the IBM Flex System, we estimate that we have saved 50 percent in IT investment costs compared to alternative server configurations.”

The solution is driving enhanced performance at the company, helping it work more efficiently. Frank Niehaus, Department Head Controlling, comments, “Since deploying the IBM FlashSystem and Flex System, we have seen time savings of up to 75 percent for material cost estimates in SAP ERP.

“In materials management, we noticed approximately 50 percent faster processing for certain reports,” he continues. “Some month-end reports run up to ten times quicker than before. With the ability to run reports more flexibly as required without affecting business operations, we can complete month-end reporting about 30 percent faster than previously.”

In the past, MULTIVAC ran batch processes overnight to avoid performance issues for its users. Today, the company can run batch processes whenever needed without impacting application performance.

Dauner says, “Our users benefit from consistently short response times due to the combination of faster processors, storage and networking within Flex System. SAP ERP runs three times quicker than before, and SAP ERP batch processes can be completed twice as fast, helping us to ensure all data is processed on time, and does not clash with daily operations.”

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— Wilfried Grewe, CIO, MULTIVAC

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### Greater flexibility

Fully virtualizing its IBM i systems using IBM PowerVM® technology enables the company to benefit from the IBM PowerVM Live Partition Mobility feature.

Dauner comments, “Our business users expect even test systems to be available 24/7. IBM Live Partition Mobility gives us the flexibility to deploy new systems quickly and keep them running even if we have to move them from one node to another due to changing capacity requirements.

“Before, it could take us five days to size new systems, limiting our agility. IBM Live Partition Mobility has eliminated the requirement for accurate sizing of systems beforehand, since we can move workload so easily, saving us many days of planning and manual work, making our IT team much more productive.”

Grewe concludes, “IBM Flex System is a solid foundation for business growth. We have automated processes and see big potential in tighter integration of nodes based on the IBM POWER architecture and nodes with Intel Xeon processors. Further standardization across both platforms will enable even more savings. With IBM FlashSystem, we have boosted SAP ERP performance for business users, enabling them to analyze data in new ways to help creative and innovative ways to improve our business processes.”

### For more information

To learn more about expert integrated offerings from IBM, contact your IBM representative or IBM Business Partner, or visit the following website: [ibm.com/flex](http://ibm.com/flex)

For more information on FRITZ & MACZIOL visit: [www.fum.de](http://www.fum.de)

For more information on MULTIVAC visit: [www.multivac.com](http://www.multivac.com)



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