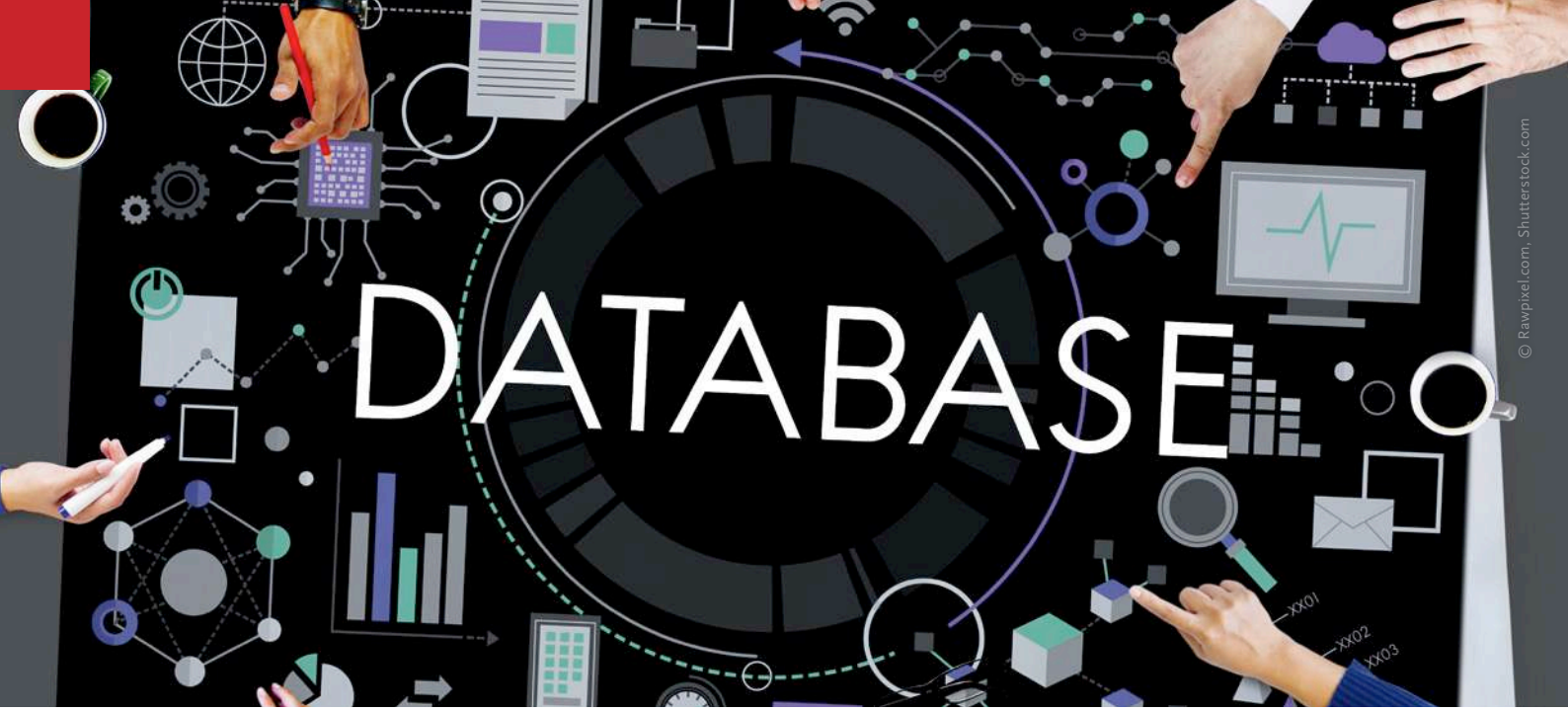
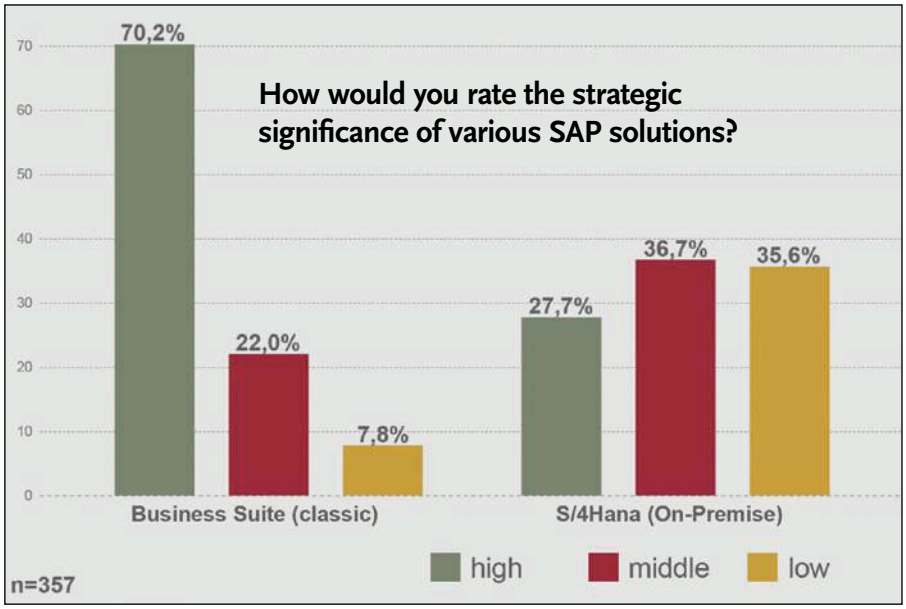


Database roundtable with IBM and Oracle

Diversity Is The Way To Go

There cannot be a monoculture in the SAP community. The success of SAP is based on a unique partner ecosystem, including database providers IBM and Oracle. Existing SAP customers have always preferred having a choice.

The diversity and strength of the SAP community is a unique feature on a worldwide basis. The success of SAP solutions is owed to the combination of strong, business-oriented and organizational knowledge paired with a great selection of IT architecture models. SAP users have always had a choice in terms of infrastructure, operating systems, storage, databases and middleware. This degree of freedom stimulated competition and always allowed for perfect-fit solutions. The SAP Business Suite on AnyDB – Oracle, IBM DB2, Microsoft SQL Server, Sybase or Hana – is the reference model for standard business management software. Hardly anyone wants this setup to change – apart from SAP itself. A survey conducted 18 months ago showed that the SAP portfolio customers that are organized in the German-language SAP user group (DSAG) in Germany, Switzerland and Austria are largely based on the classic model.



The classic SAP Business Suite 7 (ECC/ERP 6.0) with AnyDB, i.e. Oracle, IBM, Microsoft or Sybase, is clearly still the preferred favorite among existing customers (70.2 percent).
(Source: DSAG e.V. 2015, n = 357).

According to DSAG Chairman of the Board Marco Lenck: "DSAG members have accumulated a lot of expertise in the Business Suite and are confident that it will map their processes efficiently now and in the future. Despite innovative products, the Business Suite must remain fit for the future." SAP has announced plans to introduce a monoculture based on S/4 and Hana by 2025, which has raised justified concerns within the SAP community. The E-3 Magazine invited IBM and Oracle to meet their editorial team in Munich for a database roundtable. Martin Mezger, SAP Business Development Executive at IBM Analytics, and Gerhard Kuppler, Vice President SAP Alliances, Oracle Corporation, met with Senior Editor Peter M. Faerbinger. Which options and what strategy will existing SAP customers see over the next few years? A Hana symposium organized by the DSAG e.V. shows that SAP's current development version of the Hana in-memory computing database is disastrous. Attempts are being made to correct the situation with monthly updates and error remediation, however existing customers are totally overburdened by faulty Hana software code. There are intensive discussions about alternatives to S/4 and Hana – and the E-3 database roundtable is no exception.

Mr. Kuppler, your database partnership with SAP is approaching its 30th anniversary. What does this mean for Oracle and for existing SAP customers?

Gerhard Kuppler, Oracle: Firstly, we intend to continue to supply the tens of thousands of SAP-on-Oracle database customers with the best technologies. Our collaboration has always been shaped by an ongoing desire to provide our shared customers with efficient service and support solutions for their application requirements. In other words, to offer customers additional benefits and optimum investment protection. Secondly, our continuous collaboration aims to provide optimized database technologies for business-critical application environments, which make SAP usage more secure, more reliable, even more scalable and prepare it for the cloud. And thirdly, SAP benefits from a very successful service and support partnership with the Oracle Corporation – from which joint customers gain the most. The Oracle teams who work closely with their SAP colleagues in Support, Development and in the Alliance Team in Walldorf and St. Leon-Rot, are well-practiced team players.

So what does that mean for the SAP community?

Kuppler: Oracle is one of the most important infrastructure technology partners, contributing considerably to the development and success of SAP R/3. SAP started out in 1988 with the R/3 development. The database technologies of Oracle and the SAP applications are very closely interlinked and perfectly matched to one another. We have managed to establish our Oracle database technologies as the number one database among SAP customers around the globe. The huge shared customer base expects a cost benefit from our two companies; i.e. technologies that work together perfectly in the long run. The Oracle Corporation deploys a significant amount of support resources at the SAP headquarters in Walldorf and in St. Leon-Rot, Palo Alto and Tokyo to ensure secure, reliable and scalable database use.

Mr. Mezger, IBM has been in a database partnership with SAP for only a slightly shorter period in the R/3 environment and of course for longer in the R/2 environment – how would you rate this time for IBM customers?

Martin Mezger, IBM: Our partnership has grown over a number of decades and has seen us consistently focus on customer benefits. After SAP was founded by former IBM employees, their R/2 product was also designed to run on mainframes with DB2. When it came to the successor products R/3 and SAP Business Suite, a lot of time and money was invested, especially in the database technology area, in joint development work to optimize DB2 for the use of SAP software. I can confirm that this will continue in the future. Our current investments in developing DB2 take the future of SAP customers into account. Of course, every partnership has its ups and downs and our customers should not be deterred by this.

Gerhard Kuppler, Oracle: "We will support SAP customers with DB infrastructure technology."

SAP has virtually declared its own solutions a AnyDB-free zone with the Hana database and especially with S/4. How does a long-standing business associate to SAP, like IBM and Oracle, deal with that?

Mezger: We consider the choice of proprietary strategy to be a mistake in the long term. We at IBM have already understood this. To date, SAP has always had an understanding of competition and all the benefits which can be gained for SAP customers. There has been a partner ecosystem, which created immense value, jointly. Is this still the case? Nowadays SAP talks about partners, but mostly regards them as "routes-to-market".

Isn't SAP still an important partner to IBM and not just in the database market?

Mezger: As far as DB2 is concerned, we are committed to our customers. We are open to cooperate with SAP in many areas and our investments are being directed towards these new areas. This is also due to the fact that cooperations with other ERP providers will equally benefit from our investments into DB2.

Kuppler: Over two thirds of mid-size and high-end SAP customers run their SAP applications on Oracle and trust in Oracle technologies. You could say that Oracle databases are almost a fixed element of the SAP environment. Both companies – Oracle Corporation and SAP – logically have a shared responsibility to the vast SAP customer base, which puts its faith in Oracle database technologies.

Do you not also need to look beyond the boundaries of SAP?

Kuppler: Yes, virtually all SAP customers use very different non-SAP applications. This means that even if SAP customers migrate their Business Warehouse to, say Hana, they will continue to use Oracle database for other applications. What's more, Oracle has a huge share of the market with other applications in precisely this and other markets.

And what about shares of the market?

Kuppler: By launching Hana, paired with taking over Sybase, SAP declared its goal of becoming the number two player on the global database market. This happened several years ago. Surveys of the global database market carried out by Gartner show that SAP is still a long way off conquering the database market outside of SAP with Hana. The fact of the matter is that Oracle evidently remains the undisputed leader in the global database market. Hana is an SAP-proprietary environment and the customers want openness.

Mezger: I believe that it is just as important to consider the needs of the existing SAP customers – which is the overwhelming majority. In other words, the customers who are using Business Suite and want to benefit from advances in technology without destroying man years of consulting investments into their current systems. Here I'm thinking of the massive modifications which SAP customers must undertake on their systems to obtain needed functionality for their individual business model. We have done a lot of work in this area, such as with DB2 BLU in the SAP BW environment, which is our in-memory technology. We are very ambitious with our new HTAP or Hybrid Transactional Analytical Processing strategy. We are envisioning a hybrid database, which is just as much at home with transactional workloads as it is with analytical ones – meaning DB2 with HTAP. This is part of our roadmap and is our approach for customers who want to perform complex analytical queries directly in their Business Suite. We firmly believe that there are benefits for clients through HTAP, if they are able to accelerate their highly optimized and customized Business Suite, as it has been modified for many years to their special business requirements. And, by the way, without radical changes to their system architecture.

In terms of marketing and sales, SAP has been pointing its existing customers towards Hana or Hana-based systems like S/4 for some time. The Walldorf-based software giant stresses the gains to be made from these systems. How does Oracle see existing SAP customers reacting to this?

Kuppler: Which of the many Hana products are you talking about? SAP NetWeaver BW or SAP BW/4 Hana, Business Suite on Hana or S/4 Hana? SAP customers are being made to feel insecure! At the moment, they don't know where things are heading. They have spent decades investing in Oracle, Microsoft or IBM database technologies – and from now on there should only be one database? Customer projects are being delayed and often – not least as a result of the huge amount of pressure being exerted by SAP's sales team – the customer is "successfully" being sold Hana, but it is not being productively used nor is it featuring in customers' plans for the near future. SAP has always been an open technology that is now, you could say, being "closed in" by Hana and especially by S/4 – it's a vendor lock-in scenario.

Mezger: We are seeing the typical market pattern: On the one hand, there are customers wanting to try something different, and there are large numbers of customers concentrating on their own business and expecting their IT partners to align accordingly. Anyway, though ongoing Maintenance Payments, customers are entitled to innovations with their existing

Martin Mezger, IBM: "We are ensuring technological progress and investment protection in the SAP community with DB2."

Gerhard Kuppler, Oracle, and Peter M. Faerbinger, E-3 Magazin: We need to give existing SAP customers a DB roadmap and an alternative.

product. At least, this is what we do with DB2. Based on this mindset, we define our DB2 roadmap and our willingness to provide the DB2 world with relevant innovations on a regular basis. One example of this is the extreme availability provided by DB2 pureScale systems for 24 by 7 uptime, which is even easier to use in the SAP environment with DB2 V11.1. And we make this available without explosive cost increase.

And what about innovations by users themselves?

Mezger: For me, this is just as important. The sales-driven approach used by SAP, as you mention, leads to the effect far too often, that they miss the point. How should I act to make my business fit for the future, as a mid-size customer or a decision-maker for a company listed on a public stock exchange? This is then about an innovation agenda shaped foremost by cognitive systems, the Internet of Things, new "agile" DevOps-driven software projects, mobile end devices and so on. In this respect, IBM is already supplying the industry with Watson based solutions, Watson IoT, IBM Bluemix – in the cloud, but not only there, even on premise. Or very recently, we made available new IBM products and projects supporting Machine Learning. All these themes provide to our customers a new degree of agility. See, perhaps in other markets a vendor may be able to survive by focusing on just one product for the core, but in the German-speaking and similar highly developed markets, this just doesn't work...

SAP user associations, such as DSAG, have time and again called for S/4 to also be made available for other databases so that existing customers are able to protect their investments in Oracle and IBM technologies. What is the current situation?

Mezger: I believe that SAP has over pivoted into this with far too much haste. And so far, they haven't taken the opportunity to bank on their database partners. However, healthy competition is still the best indicator for innovation. As a database provider, IBM actively accepts this challenge and DB2's performance can be verified using DB2 benchmarks. SAP in turn provides a wide selection of database products, as long as it's called Hana. No-one is going to like that. It is ultimately SAP customers and the consumers who suffer from the lack of competition. So I think that customer associations and interest groups have an essential role to play in influencing product strategies. User associations need to actively reflect their needs and use their weight as market constituents, otherwise they are not doing their job. This exertion of influence works quite well with DB2. We have a vital DB2 community, let me just mention the German-language SAP user group (DSAG). We deeply appreciate our customer's commitment and feedback in these groups.

Kuppler: Over time, the SAP user groups around the world have clearly become emancipated. There are more and more critical voices within the community and obviously the SAP board has heard them too. I believe that the DSAG in Germany and in particular the ASUG in the USA will continue to sing the same tune and will call for S/4 AnyDB! When Hana and S/4 were launched, existing customers were pretty much presented with a fait accompli. The market will decide the fate of the "new" SAP technologies. If the speed of switching from AnyDB to Hana or S/4 continues at the same rate as it has so far, I assume that support for the SAP NetWeaver stack will come to an end after 2030.

Oracle's Oracle 12c database provides an in-memory functionality just like Hana. How are existing SAP Oracle customers taking to this option?

Kuppler: Oracle Database In-Memory has proved to be very popular. In a benchmark – not certified by SAP – this option achieved figures better than Hana. And that's

not all, SAP customers using Oracle Database In-Memory spare themselves from expensive new hardware, complex migrations and a second database license. In the non-SAP environment, a lot of customers have long been using Oracle's In-Memory and are very happy with it – the customer presentations made at the DSAG technology meetings in Mannheim this year and in ASUG/ Sapphire Orlando in May 2016 show that SAP customers agree. We know from experience that SAP customers have undertaken thousands of modifications in the SAP NetWeaver stack. They are now enjoying great performance with Oracle Database In-Memory – without having to migrate or change a single piece of code.

Back in 2013, IBM launched DB2 Blu, a column-oriented version of its database. How did the SAP market take to this technology?

Mezger: The DB2 Blu in-memory technology was actually accepted very quickly and extensively by the market because we ensured that it could be used with existing SAP applications right out of the box. Blu is part of the DB2 AESE license, certified by SAP, so many DB2 customers are now using Blu in-memory technology with no additional licensing or maintenance costs. We are getting a lot of positive feedback and actively investing in further development of the technology as part of our DB2 roadmap. And in terms of SAP Core Data Services too.

And what about license costs?

Mezger: I consider license costs as just one element of the overall cost, so we aim to protect customers' investments and make innovations possible with minimized resource consumption. Our goal is to reduce additional spending for SAP Systems with DB2 as most existing hardware in place can continued to be used. The customer has a choice for Blu in-memory technology between Windows, Linux or AIX. We also offer similar options with DB2 zOS on mainframes. Our customers have confirmed to us acceleration by factor 55 for SAP BW queries, for example, and substantial storage space savings thanks to efficient compression like further 63 percent on data that has already been compressed, all coupled with attractive licensing and operating costs. This is the advantage of open competition and I would call on the community to exercise their right to compare products!

SAP has announced the deadline for using the SAP NetWeaver-based Business Suite with AnyDBs. As of 2025, they will no longer be providing support for the Suite on AnyDB. What will happen before this date? What do you think customers may do?

Kuppler: By stating when they will withdraw support, SAP has drawn a line in the sand. As it has already been said, the market will decide whether the goals will be achieved in 2025 or not. If the rate of switching from AnyDBs to Hana or S/4 does not speed up in the long term, we can assume a much later date.

What are your plans?

Kuppler: Oracle will continue to support the SAP Business Suite and SAP BW for as long as SAP intends to do so in any case. Oracle can confirm that SAP is also able to support the Oracle database for SAP customers until 2025 and beyond. SAP wanted to use Hana to create various unique application selling points, i.e. functionalities that only benefit Hana users. It's a fact that SAP customers emphatically also want to see these functionalities in a "non-Hana environment". And what has happened? The Core Data Services and Hana SAP BW-optimized InfoCubes – also known as FlatCubes at Oracle – can be used in conjunction with Oracle Database In-Memory, see SAP Note 2335159.

Mezger: I believe that it's the customers and their business needs which will define their end of their Business Suite. We see 2025 merely as a "Statement of Direction" and it is self-evident that we are prepared to support our DB2 customers for as long as they ask for. Even customers who no longer want to use Business Suite systems will still need to access old data if requested by auditors. We also provide flexible licensing modules to even meet such requirements.

A large number of SAP customers use Oracle solutions such as the database, Exadata Database Machine or Oracle SuperCluster, both for SAP and many non-SAP applications. How is the combination of say Oracle Database and Hana regulated?

Kuppler: A lot of customers are using both – both Oracle Database on Exadata in the ECC environment and SAP BW with Hana. One and the same customer may well be a reference speaker at Oracle OpenWorld using Oracle Exadata and 12c for his SAP system and using Hana with SAP BW at Sapphire in Orlando, USA.

Peter M. Faerbinger: "Even the DSAG association is calling for freedom of choice for databases."

Gerhard Kuppler, Oracle, (right) and Martin Mezger, IBM, (left) discuss a D3 strategy for the SAP community with E-3's editor. IBM case

SAP customers who are running both ECC and BW with Hana are very, very rare and are a bit of a "black swan". For more information, please visit: www.oracle.com/sap.

Mr. Kuppler, many thanks for your time. Mr. Mezger, is there still the possibility of IBM Power being combined with DB2? What are the chances of this happening?

Mezger: IBM Power is our home brand among the large Unix providers. Our "Co-Innovation Roadmap" with IBM Power is bursting at the seams. For the roadmap let me just mention Blockchain as an important topic in the future. This will see commercial transactions being redefined at digital level and IBM Blockchain will be adopted by SAP customers. It goes without saying that we maintain a very close working relationship between these IBM groups. Our developers at our IBM Research and Development Center in Böblingen, Germany, were key influencers on the Power8 architecture and command set, and our SAP DB2 customers on AIX have long appreciated this. One example of this is accelerated hardware-assisted NX842 compression of backup and log files by Power8 processors. In internal tests, NX842 compression was the variant for SAP backups that came out fastest and used the fewest resources. It achieved a high rate of compression and as a result space saving of 40 percent on backups. In the future, compression and encryption technologies will gain further importance and this extensive integration already exists here. In turn, our systems will be safer. What's more, thanks to IBM Power's PowerVM virtualization technology, the IBM Analytics Private Cloud strategy can be seamlessly implemented. In the long term, we want to be able to offer our customers the same advantages they know from Public Cloud, right in their own data center.

And lastly, a special but a hot topic right now for the SAP community: The perils of SAP licensing – indirect usage costs? If users aren't aware of what data they are exchanging between SAP and non-SAP-systems, they may be in for a nasty surprise. Indirect use can result in costly additional licensing. Alongside the licensing metrics of SAP, don't users need to come to grips with their own systems?

Mezger: I firmly believe that customers should prioritize their understanding of system licensing. When this involves SAP systems, it's a full-time job forming a vital part of each IT decision-maker's knowledge-base. They need to bear licensing in mind whenever even minor contractual changes occur. In this respect, we want to offer license options whereby data can be unleashed from these systems and not locked into silos by artificial barriers. Because - in the long run data will freely flow in Hadoop architectures and open Apache Spark systems. The future professions dominating these areas, such as Data Scientists and the Chief Data Officers, have absolutely no sympathy for these silos. At least this is the feedback we have from our IBM Data Science Experience Community, DSX.

Mr. Mezger, many thanks for your time too.