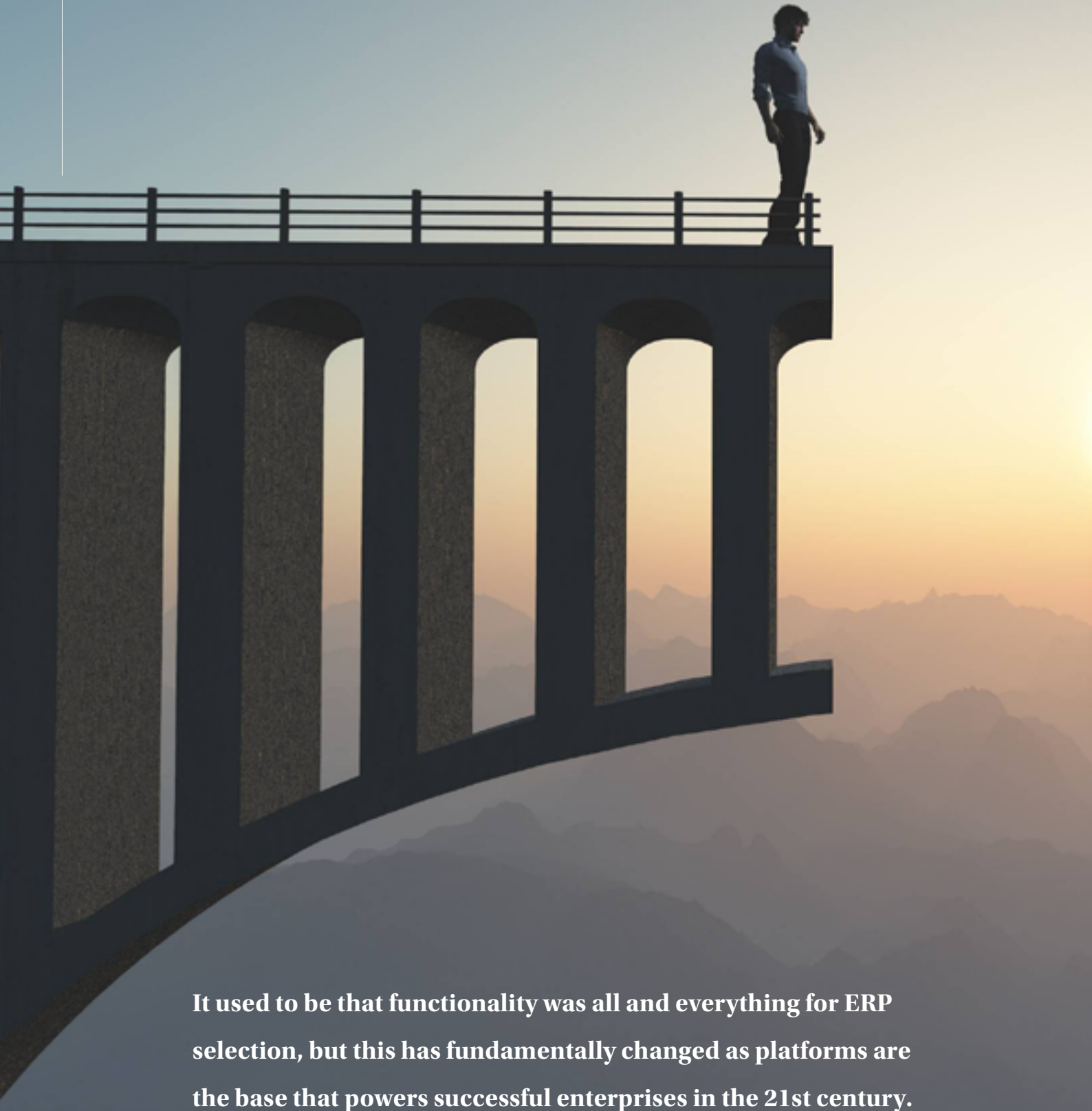


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It's 2019 and ERP platforms matter

BY HOLGER MUELLER

It used to be that functionality was all and everything for ERP selection, but this has fundamentally changed as platforms are the base that powers successful enterprises in the 21st century. Previously, in the era of finite computing - when enterprises had to buy and operate the hardware to run their ERP systems, platforms were largely exchangeable. Often the same machines would run different ERP suites, the hardware cost being the lowest cost of the top five costs of an ERP project.

Enter the era of infinite computing, and suddenly platforms are everything. The wrong platform may put an enterprise on the backfoot in its markets because it may not be cost effective, it may not be statutory compliant, it may not enable modern user experiences (UX), it may not support needed artificial intelligence (AI) / machine learning (ML) practices, it may not connect with the next generation applications that an enterprise may be building in house, and so on.



So let's take a look at ERP platform criteria:

- **Elasticity.** The elasticity of compute resources (compute, networking and storage) is the defining characteristic of 21st century IT that is powered by the cloud. Compute will gracefully scale up and down as an enterprise uses their ERP systems. Enterprises will only have to pay for what they use transforming the CAPEX of the era of finite computing with the OPEX of the era of infinite computing.

- **Compliance.** Platforms need to be compliant with legislative, statutory and privacy laws, rules and best practices. Operating software opens up enterprises from a liability perspective and these risks need to be addressed by the selected ERP platform. These are not only the traditional security standards, but also the fast-evolving privacy regulation in regards to consumer / customer data (access) and data storage locations.

- **Innovation Speed.** Using cloud-based platforms means that higher innovation speeds are

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possible, and necessary. Enterprises need to evaluate the platform innovation track record and gauge the platform speed of the respective platform vendor going forward. A key area to assess where a platform vendor may be trailing substantially behind their competitors and understand if that gap will be addressed – and if so, when.

- **Total Cost of Ownership (TCO).** At the end of the day, operating ERP is still a cost to enterprises. Understanding TCO and controlling costs of platforms is a necessity, especially given the elastic nature of today's modern platforms. Tying costs together with business success is a wise best practice, as it ensures the necessary revenue has come in to pay for the OPEX of platforms.

So where are the ERP vendors with their platforms? Let's look at the top four – and a European contender:

SAP Is now all on HANA – so what?

It took SAP until spring 2019 to bring the cloud divisions on **SAP HANA**, its in-memory database (only SAP Concur apparently has a rain check and will remain 100% on Amazon AWS). SAP also is moving its SaaS products to its PaaS platform, SAP Cloud Platform (CP). SAP CP allows SAP to operate a multi-cloud strategy for IaaS – supporting (in parts of its large portfolio) the major IaaS vendors (alphabetical order) Ali Cloud, AWS, Google Cloud and Microsoft Azure, that is enabled by the Pivotal Cloud Foundry base of SAP CP. TCO has not been and is not going to be SAP's friend as in-memory instances are amongst the most pricey instances at IaaS, and given SAP HANA's in-memory only database, elasticity is mute as these instances cannot be turned off or reduced in utilisation. It is unlikely though that this will deter SAP customers to move to the new products based on SAP HANA, due to functionality benefits of the new SAP offerings and lock-in from a mindset and resource side into the SAP ecosystem. But custom-

ers should demand that all of the SAP SaaS portfolio can run on the same IaaS vendor, and if not yet available, ask for roadmap dates.

Oracle Will the “chip to click” stack pay off?

Oracle is betting on its integrated “chip to click” strategy that reaches from the chip silicon all the way to a user's click in a SaaS application passing all 7 ISO / OSI layers. Oracle has shown that this can yield positive TCO results in the database area with its Oracle Exadata offerings. Especially the self-driving capabilities are attractive to enterprises that need to ruthlessly automate IT in order to remain successful. Oracle still has to articulate and deliver the same approach, of a self-driving application stack for its SaaS offerings. The recent partnership with Microsoft, allowing to run Oracle SaaS applications on Microsoft Azure is a win for customers, but may also be an indication that the self-driving application stack maybe farther out than expected.

TCO is in the Oracle organisational DNA, starting with its very first database offering. TCO of Oracle SaaS applications is attractive for most enterprises, giving the integrated, single schema architecture of Oracle SaaS. The Oracle Exadata database offerings help here further. However, Oracle has a subpar sales track record to transform these TCO advantages into SaaS market share wins. But Oracle's sales year just started in June and the pressure for cloud revenue is massive. Never say never in enterprise IT.

Workday How long will the platform change take?

Workday has been very successful as an ERP vendor with its in-house developed, object oriented and in-memory platform. Largely based on avoiding dependencies on other technology play-

ers, this approach has served Workday customers well, but even the most successful platform needs upgrading after an almost two decade run. And Workday is addressing this after a short 'love affair' with OpenStack, a partnership with IBM for in-house development and test systems, and seems to have now settled on a partnership with AWS. Workday maintains that this is not a re-platform process but the length of time and the slow move of Workday customers towards AWS (in the few dozens right now) makes one think otherwise.

Overall Workday is an expensive offering, so hardware costs remain relatively small in the overall cost structure. With Workday using customer dedicated instances on the traditional deployments, it is hard for those customers to benefit from elasticity. This could lead to limitations when it comes to exploring the full power of AI / ML and conversational UX, as they need a lot of compute power. But then Workday could accelerate its install base to AWS, only Workday customers have to keep their fingers crossed that AWS catches up to Google Cloud and Microsoft Azure on the AI and ML side.

Infor Can a single cloud platform be the answer?

Infor was the first ERP vendor moving to the public cloud, with its CEO Charles Philips announcing the move to AWS back in 2014. He created the by now famous moniker of “friends don't let friends build data centers.” And while Infor still offers on-premise installation, when customers want cloud, it's on AWS. This was a smart choice, picking the market leader for IaaS, except for AWS recent stumbling and need to catch up on the AI / ML side. With Infor OS, it has built one of the most attractive ERP platforms, giving enterprises access to its Coleman AI, the Infor Data Lake, Birst Business Analytics, integration with Infor Ion and a low code PaaS with Infor Mongoose.

For Infor customers deployed on AWS, TCO is attractive and beats TCO incurred for similar loads by SAP and Workday, and likely for Oracle as well. Infor's challenges in the platform side are that Google Cloud is leading in the AI algorithm on chip race amongst the IaaS vendor with its TPU / Tensorflow combination. It needs to re-virtualise its platform to the latest container platform war winner, Kubernetes. While the former can be a TCO issue, the latter is something that Infor can address soon.

Unit4 Headstart with a modern platform – and now?

Writing for a European publication, it's worth mentioning the European vendor that has done a very good job at offering a cost effective, ERP cloud platform, **Unit4**. The early decision for Microsoft Azure over five years ago has created success for Unit4, not only with the abilities of its conversational AI Wanda, but also with the ability to create smart services for better user productivity. It's probably the only major ERP vendor using a microservices architecture and the ability to use a cloud based extension kit.

TCO for Unit4 is attractive compared to ERP vendors with a similar footprint, thanks to the usage of Microsoft Azure. When for instance nobody talks to the Unit4 assistant Wanda, there is no cost for Wanda. Or when nobody uses the microservices, there is equally no cost. Very good examples for the elasticity that ERP platforms need to have in 2019 and beyond. But there is still work for Unit4 to do, building more smart automations, providing more extensions and most importantly to find a low code strategy. Though the biggest mystery is why has Unit4 been so quiet about its platform?

The CXO Takeaway

What do CXOs need to consider when selecting ERP vendors in 2019?

- **Platforms matter.** A bad platform choice means ERP re-implementation, a nightmare for any enterprise. This makes platform choice critical.

- **No shortcut on compliance.** Everything stops when there are compliance and privacy issues. AWS is the leader in this area, both from a certification and location perspective.

- **ERP is not a standalone app.** It needs to be integrated with an enterprise's productivity applications, this

gives both Microsoft (with Office) and Google (with GSuite) an advantage. Both vendors – from a pure screen time base – are in the best position to power an improved people experience.

- **Big Data capability is a must.** An ERP platform with no Big Data capability almost guarantees irrelevance in a few years – as we know already data is what fuels deep learning networks (DL). Big Data can practically only be operated cost effectively in the public cloud. All IaaS vendors have solid offerings here.

The better AI platform today makes the winners of tomorrow. The speed, cost and capability of AI will shape the winners of tomorrow. Today Google Cloud has a substantial lead here, but the battle for AI leadership between the IaaS vendors has only just started. ■

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VENDOR	ON-PREMISE SUPPORT OF SUITE	CLOUD PARTNERS	COMPLETENESS OF SUITE IN CLOUD	CLOUD ADOPTION OF CUSTOMER BASE	AI READINESS OF IAAS PLATFORM
SAP	Partial (S/4 HANA)	AliCloud, AWS, Azure, Google Cloud	Still some SAP ECC capabilities missing	Small	Good for Google OK for AliCloud, AWS and Azure
ORACLE	Fully supported	Azure (for Apps), Oracle (for all)	100%	Medium	OK for Azure Questionable for OCI
WORKDAY	Not supported	AWS	100%	100%	OK for AWS Questionable for traditional infrastructure
INFOR	Fully supported	AWS	100%	Medium	OK for AWS
UNIT4	Fully supported	Azure	100%	Small	OK for AWS