Stanje na tržištu upravljačkih sustava baza podataka

Zoran Jovanović

Glavni arhitekt sustava



O meni

- Oracle ACE 2011
- Radim sa Oracle tehnologijom od1989
- Instalacija, konfiguriranje i podrška za različite Oracle proizvode
 - baza
 - Aplikacijski server
 - Fusion middleware
 - Hyperion EPM
- Arhitekt sustava
 - Planiranje arhitekture
 - Planiranje kapaciteta
 - Optimizacija performansi

- Mnogobrojni uspješno realizirani projekti sa Oracle tehnologijom
- Predavač na tečajevima za
 - Administratore baze
 - Administratore aplikacijskog servera
- Predavač na raznim
 Oracle konferencijama
 - IOUG
 - EOUG
 - HrOUG
 - SiOUG
 - SrOUG

Sadržaj

- Stanje na tržištu RDBMS
- Oracle novosti
- IBM novosti
- Microsoft novosti
- SAP
- Ostali proizvođači
- Zaključci



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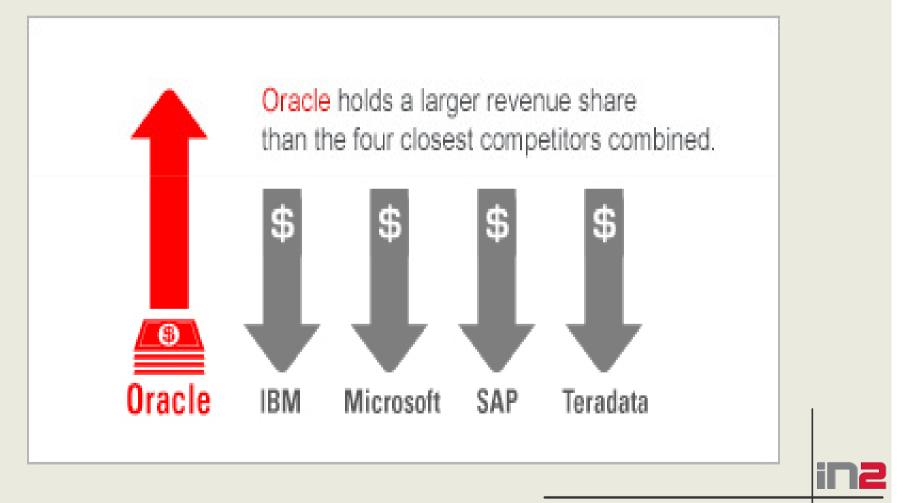


Situation on RDBMS market

- According to Gartner, Oracle:
 - Remains #1 in worldwide DBMS subsegment software revenue share
 - Leads next closest competitor revenue share by 28%

* Source: Gartner, Market Share: All Software Markets, Worldwide, 2013, Colleen Graham, Yanna Dharmasthira, Chad Eschinger, et al., March 28, 2014





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Situation on RDBMS market

- Oracle shoves IBM out of world's No 2 software seller spot – Gartner
- Salesforce breaks into top 10
- Oracle sold more software than IBM last year for the first time ever,
- Oracle made \$29.6bn during 2013, growing 3.4 per cent over the previous year
- This is the first time a cloud or SaaS providers has made it into Gartner's top 10.
- Microsoft remained the world's biggest software maker, earning more than twice as much as IBM or Oracle: \$65.7bn, an increase of six per cent.

Situation on RDBMS market

Table 1. Top 10 Worldwide Software Vendors, Worldwide, 2012-2013 (Billions of Dollars)

Rank	Rank		Revenue	Revenue	Growth Rate (percent)			
2013	2012	Vendor						
1	1	Microsoft	65.7	62.0	6.0			
2	3	Oracle	29.6	28.7	3.4			
3	2	IBM	29.1	28.7	1.4			
4	4	SAP	18.5	16.9	9.5			
5	5	Symantec	6.4	6.4	-0.8			
6	6	EMC	5.6	5.4	4.9			
7	7	HP	4.9	5.0	-2.7			
8	9	VMware	4.8	4.2	14.1			
9	8	CA Technologies	4.2	4.3	-2.6			
10	12	Salesforce.com	3.8	2.9	33.3			
		Others	234.6	224.0	4.7			
		Total	407.3	388.5	4.8			
Source: Gartner (March 2014)								

Gartner magic quadrant Operational DBMS

The operational DBMS market (formerly OLTP) is evolving dramatically, with new, innovative entrants and incumbents supporting the growing use of unstructured data and NoSQL DBMS engines. Information management leaders must understand the market implications affecting DBMS technology decisions."



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Gartner magic quadrant Operational DBMS

- DBMS magic quadrant offered up some changes with Gartner renaming the report from the OLTP DBMS to Operational DBMS.
- Gartner pegged Oracle, Microsoft, IBM and SAP as the Leaders;
- InterSystems and EnterpriseDB are named as Challengers;
- Aerospike is the only provider listed as a Visionary.
- Twelve additional vendors filled out the Niche Players category.



Gartner magic quadrant Operational DBMS

	CHALLENGERS		LEADERS	
			Microsoft IBM	
	InterSystems 🔵			
	Enterprise	DB		
	Altihase 🦱	arkLogic 🔵		
	Altibase VoltDB McObject Basho Technologies DataStax	MongoDB Actian	Aerospike	
NuoDB OClustrix	Basho Technologies DataStax	mongood	Aerospike	
-	McUbject	Actian	Aerospike	

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Situation on RDBMS market

- Worldwide software revenue totaled \$407.3 billion in 2013, a 4.8 percent increase from 2012, according to Gartner, Inc.
- The developed geographies were the primary growth drivers offsetting the relative sluggishness in emerging markets.
- The software industry is in the middle of a multiyear cyclical transition
- organizations are focusing investment on technologies to support existing system structure, in order to maintain competitiveness,
- taking advantage of cloud/subscription-based pricing where it makes sense to grow and advance the business.

Situation on RDBMS market

- An emerging enterprise category of integrated systems that combine servers, storage and network infrastructure is led by the converged infrastructure alliance VCE, according to the latest in a series of "Magic Quadrant" rankings by market researcher Gartner.
- VCE, which was formed by Cisco Systems and EMC along with investments from VMware and Intel, combines network infrastructure with virtualized cloud-based computing in its Vblock series of offerings.
- Oracle, with its Exadata database machine, was also ranked among the leading suppliers of integrated systems, a market that Gartner estimates is growing at an annual rate of more than 50 percent.
- The Oracle product is an example of what Gartner refers to as an "integrated stack system" commonly used to deploy a specific workload.
- IBM was ranked by Gartner among the industry's "visionaries" along with Hewlett-Packard, Dell, Nutanix, and SimpliVity.
- A more generic "integrated infrastructure systems" category includes VCE's Vblock, HP's ConvergedSystem, and IBM's PureFlex system, Gartner said.





Gartner Magic Quadrant for Integrated Systems



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Oracle revenue

	Q1/2014		Q2/2014		Q3/2014		Q4/2014	
	%	mird USD	%	mird USD	%	mird USD	%	mlrd USD
Total revenue	2	8,372	2	9,275	4	9,307	3	11,320
New software license	5	1,653	0	2,380	4	2,415	0	3,769
Software license updates and product support	7	4,431	6	4,516	5	4,564	7	4,695
Cloud SaaS and Paas							25	0,322
Cloud IaaS							13	0,128
Operating income	0	2,873	-2	3,410	7	3,567	-2	4,909
Net income	8	2,191	-1	2,553	2	2,565	-4	3,646
Hardware	-7	1,261	0	1,323	7	1,323	2	1,466
Fiscal year ends 31.05								

14

12



Oracle revenue

Q1 2015 earnings

- total revenues were up 3% to \$8.6 billion.
- Total Software plus Cloud revenue was up 6% to \$6.6 billion.
- Software-as-a-service (SaaS) and Platform-asa-service (PaaS) cloud revenue was up 32% to \$337 million.
- Infrastructure-as-a-service (IaaS) cloud revenue was up 26% to \$138 million.
- Hardware systems revenue was down 8% to \$1.2 billion



- in late October 2013 announced that it has agreed to acquire BigMachines, a leading cloud-based Configure, Price & Quote (CPQ) solution provider.
- BigMachines' CPQ Cloud accelerates the conversion of sales opportunities into revenue by automating the sales order process with guided selling, dynamic pricing, and an easy-touse workflow approval process, accessible anywhere, on any device.
- Late in 2013, Oracle announced that it has entered into an agreement to acquire Responsys, Inc., a provider of enterprise-scale cloud-based B2C marketing software. Oracle will pay \$27.00 per share in cash or approximately \$1.5 billion for the company.
- The addition of Responsys extends Oracle's Customer Experience Cloud, which includes Commerce, Sales, Service, Social and the Oracle Marketing Cloud.





- In late February 2014, Oracle pounced again, this time agreeing to acquire BlueKai, a cloud-based big data platform that aggregates consumer data to better target online advertising and marketing efforts.
- Although financial terms of the deal were not officially disclosed, Fortune magazine reported that the cost of the deal was "a little above" \$400 million, mostly in cash.
- Oracle also announced that it acquired Corente, a leading provider of software-defined networking (SDN) technology for wide area networks (WAN). The combination of Oracle and Corente is expected to deliver software-defined networking offerings that create cost-effective, secure networks, spanning global deployments, delivering a complete technology portfolio for cloud deployments with SDN offerings that virtualize both the enterprise data center LAN and the WAN.



- On June 20, 2014 Oracle announced that it signed an agreement to acquire LiveLOOK to strengthen Oracle Service Cloud with leading co-browse functionality to improve customer experiences through connected real-time engagements. The transaction has closed.
- LiveLOOK is a leading provider of cloud-based, real-time visual collaboration with innovative technology for co-browsing and screen sharing that improves the quality of customer interactions.



- On July 31, 2014, Oracle announced that it signed an agreement to acquire TOA Technologies (TOA), adding the leading Field Service SaaS to Oracle Service Cloud and Oracle ERP cloud solutions to deliver effective and timely home- and facility-based customer service. The transaction is expected to close in 2014.
- TOA is the leading provider of cloud-based field service solutions that optimize the last mile of customer service for enterprises by coordinating and managing activities between dispatchers, mobile employees and their customers.





Oracle products, news

- The rollout of Oracle's in-memory database option at Oracle OpenWorld, touted by Larry Ellison as enabling Oracle databases to run "dramatically faster" without any application changes needing to be made at all.
- Oracle also found itself embroiled in a somewhat embarrassing lawsuit this quarter. The New Century Theater in San Francisco claims an Oracle employee used an Oracle-issued American Express card on two separate bills – one for \$16,490 and another later the same week for \$17,050 -- during the 2012 Oracle OpenWorld conference. Oracle refused to pay the bill.
- And Larry Ellison took some flak for skipping his scheduled OracleWorld appearance on Tuesday so he could watch Oracle Team USA race against Emirates Team New Zealand on the San Francisco Bay. So what is more important: watching a boat race or speaking to 60,000 of your best customers?
- A majority of Oracle shareholders voted against the compensation package of Larry Ellison. More than two billion shares were voted against the company's "say on pay" measure at Oracle's annual meeting, with close to 1.6 billion in favor of the proposal. Of course, Mr. Ellison's owns 1.1 billion shares and you can guess how he voted, right? After all, Ellison received \$78.4 million for the 2013 fiscal year, according to Oracle's proxy statement.



Oracle products, news

- First, a federal judge dismissed part of Oracle's suit against Solaris third-party support providers Terix and Maintech. Oracle had claimed that the two companies "either obtained access credentials to Oracle's secure support website under false pretenses or directed others with access credentials to download Oracle's intellectual property unlawfully.
- The judge did not dismiss Oracle's other claims against the companies, including for breach of contract, copyright infringement, unfair competition and false advertising.
- a ruling was handed down in Oracle's case against Rimini Street. The case has been going on for four years, in which Oracle claimed that Rimini Street engaged in "a massive theft," of Oracle's software. According to Oracle, Rimini used automated bots to scour its website and download the materials after obtaining passwords from Oracle customers.
- The ruling found that Rimini Street, had indeed violated some copyrights when the company installed copies of PeopleSoft on its computer systems so it could create software updates for customers. But the U.S. District Court judge also found that Rimini Street did not infringe on Siebel or J.D. Edwards copyrights, as alleged by Oracle.



Oracle products, news

- On 18. September 2014 Larry Ellison resigned from the position of CEO in Oracle
- He will retain positions of executive chairman and chief technology officer





Oracle Open World 2014 news

Keynotes: cloud, cloud and cloud

- Opening Keynote Larry Ellison
- The future of the datacenter in a software defined world
- The Business Value of the Cloud
- Cloud Services for the Modern Enterprise
- Leading Digital Transformation Now—No Matter What Business You're In
- Reshaping the World with Software
- The Real Time Enterprise



IBM revenue

Q3/2013 Q4/2013 Q1/2014 Q2/2014 Mird % mlrd % mlrd % Mird % USD USD USD USD Global Technology 9,5 9,9 9,3 9,4 -1 -1 -1 -1 Services **Global Business** 0 4,6 4,7 2 4,5 -2 4,5 4 Services 5,8 8,1 5,7 6,5 Software 2 2 0 4 -16 3,2 -25 4,3 -23 2,4 -12 3,3 Systems & Technology 0,5 **Global Financing** 0,5 0,5 0,5 9 0 6 4 22,5 **Total Revenue** -2 23,7 27,7 24,4 -3 -1 -1



24



IBM acquisitions

- In later September 2013, IBM acquired Daeja Image Systems Ltd., a provider of software that makes it easier for business and IT professionals to view large documents and images. Financial terms of the deal were not disclosed.
- Daeja provides software that helps line of business employees across all industries, especially data intensive ones such as banking, insurance and healthcare, get faster access to critical business information.
- In early October, IBM agreed to acquire The Now Factory, a privately held provider of analytics software that helps communications service providers (CSPs) deliver better customer experiences and drive new revenue opportunities. Financial terms were not disclosed.
- The Now Factory's software enables CSPs to gain real-time insights into their customers by analyzing large quantities of network and business data



25



IBM acquisitions

- In November, IBM announced that it would be acquiring Fiberlink Communications, a mobile management and security company. Financial terms were not disclosed.
- Fiberlink's MaaS360 cloud-based offerings will enable IBM to expand its bring your own device (BYOD) capabilities to deliver a complete mobile management and security solution that includes trusted transactions and security intelligence capabilities for mobile apps, users, content and data



IBM acquisitions

- Moving to the "coming" part of IBM's news, in late February IBM agreed to acquire Boston, Mabased Cloudant, Inc., a privately held database-as-a-service (DBaaS) provider. Financial terms of the deal were not disclosed.
- Cloudant complements IBM's Big Data and Analytics portfolio beyond traditional data management by providing DBaaS capabilities that enables clients to simplify and accelerate the development of engaging and scalable mobile and web apps. Cloudant also is integral to IBM's MobileFirstsolutions





IBM products and news

- IBM partnered with Cloudera to produce integrated Big Data offerings. The offering combines the capabilities and features of Cloudera (Hadoop) with the bare metal cloud servers of IBM SoftLayer. The offering can be deployed on demand and billed on a pay-as-you go basis.
- At IBM's Information on Demand conference the company showed an early-access preview of its BLU Acceleration for Cloud, new capabilities for data discovery in its InfoSphere Data Explorer, and improvements for its IBM PureData System for Hadoop. IBM also introduced an InfoSphere Data Privacy for Hadoop offering that lets users anonymize data in Hadoop and NoSQL database systems.



IBM products and news

- In the "going" part of the news, in late January IBM agreed to sell its low-end server business to Lenovo.
- The server lines being sold to Lenovo include System x, BladeCenter and Flex System blade servers and switches, x86based Flex integrated systems, NeXtScale and iDataPlex servers and associated software, blade networking and maintenance operations.
- The purchase price is about \$2.3 billion, approximately two billion of which will be paid in cash and the balance in Lenovo stock.
- IBM will retain its System z mainframes, Power Systems, Storage Systems, Power-based Flex servers, and PureApplication and PureData appliances.
- Also, IBM will continue to develop and evolve its Windows and Linux software portfolio for the x86 platform



IBM products and news

- In early March details about layoffs occurring at IBM began hitting the IT news. IBM termed the layoffs as workload rebalancing needed because of 2013's financial results. In January, IBM announced that it would take a restructuring charge of \$1 billion in the first quarter of 2014.
- And in March news of job cuts in Poughkeepsie NY, Rochester MN, and Burlington VT (among others) began to trickle out. The cuts were not just in the US, as additional sources reported large cuts in India, Brazil, and Argentina, as well as in some European locations.
- However, even as some employees were let go, IBM continued to hire in high growth areas. At any given time, IBM has thousands of job openings in high growth areas.



Microsoft revenue

	Q1/2014		Q2/2014		Q3/2014		Q4/2014	
	%	MIrd USD	%	MIrd USD	%	MIrd USD	%	Mird USD
Total revenue	7	18,642	14	24,519	0	20,489	18	23,38
Operating income	-3	6,447	3	7,771	-8	7,612	7	6,073
Devices and Consumer	4	7,46	13	11,91	12	8,30	42	10
Commercial	10	11,2	10	12,67	7	12,23	11	13,48

Fiscal year ends 30.06





Microsoft acquisitions

 In early January Microsoft announced that agreed to acquire Parature, a provider of cloud-based customer engagement solutions. The acquisition enables Microsoft to add customer self-service capabilities to the Microsoft Dynamics family.



Microsoft products and news

- Microsoft released the second Community Technology Preview (CTP) of SQL Server 2014. It is a near feature-complete release slated as the product's last public review before it hits the shelves sometime in the first half of 2014. One of the most eagerly awaited features of SQL Server CTP 2 is In-Memory OLTP, code-named Hekaton. I'm sensing a trend here...
- The company also made its cloud-based distribution of Hadoop (developed in conjunction with Hortonworks) generally available at the end of October 2013. Windows Azure HDInsight is 100 percent Apache Hadoop and builds on top of HDP.
- Microsoft also acknowledged that the company has given up on its earlier plans to deliver a Microsoft-Hortonworks developed implementation of Windows Server and will instead advise customers to use Hortonworks Data Platform (HDP) for Windows.

Microsoft products and news

- on February 4, 2014 Microsoft announced that it had appointed Satya Nadella as Chief Executive Officer and member of the Board of Directors effective immediately. Nadella previously held the position of Executive Vice President of Microsoft's Cloud and Enterprise group
- On the database technology side of all things Microsoft, in mid-March the company announced that SQL Server 2014 had been released to manufacturing and would become generally available on April 1, 2014.
- The new version of SQL Server boasts many improvements such as in-memory and cloud capabilities, improved AlwaysOn Availability, updateable column store indexes, and backup enhancements among others.



SAP revenue

Q3/2013 Q4/2013 Q1/2014 Q2/2014 Mil. % Mil. % Mil. % % Mil. EUR **EUR EUR** EUR Operating profit 5 1,296 1,805 2 919 4 1,236 13 **Total revenue** 2 4,057 2 5,109 2 2,301 2 4,153 1,902 977 623 Software -5 -2 -5 -2 957 2,269 2,280 Support 4 2,189 5 5 2,214 4 Cloud subscription 197 209 242 146 66 32 221 32 and support HANA database 179 149







SAP acquisitions

- SAP in September announced its plans to acquire KXEN, headquartered in San Francisco, California. KXEN provides predictive analytics technology for line-of-business users and analysts.
- By combining KXEN and enterprise business intelligence capabilities from SAP, along the HANA platform, SAP bolsters its ability to help companies harness big data and engage users across the enterprise.
- Financial terms of the deal were not disclosed.



Other vendors

- Embarcadero Technologies acquiring the data modeling software ERwin from CA Technologies.
- ERwin has had a storied life and is a leading data modeling product used by data architects and data analysts for designing logical and physical designs for database implementations
- Announced in mid-March, Embarcadero Technologies, agreed to acquire CA's ERwin Dana Modeling solution. No financial terms were announced. Early indications are that Embarcadero will be retaining the staff and keeping the ERwin product line – at least initially.



Conclusions

- Increased offering of cloud solutions
- All leading vendors are offering memory databases
- Increased demand for Big Data solutions
- High demand for business intelligence solutions (analytic processing)
- Increased demand for processing of unstructured data
- Amount of data to be processed becomes bigger and bigger



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