



# Postgres in 5 years – Expectations from the Marketplace

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# What this is about...

- NOT about forecasting the future
- IS about understanding current positioning and market forces
- An attempt to triangulate different perspectives
- Reaffirmation of our collective roles in determining the future





# Agenda

Who is EDB and Who am I?

The Postgres journey so far

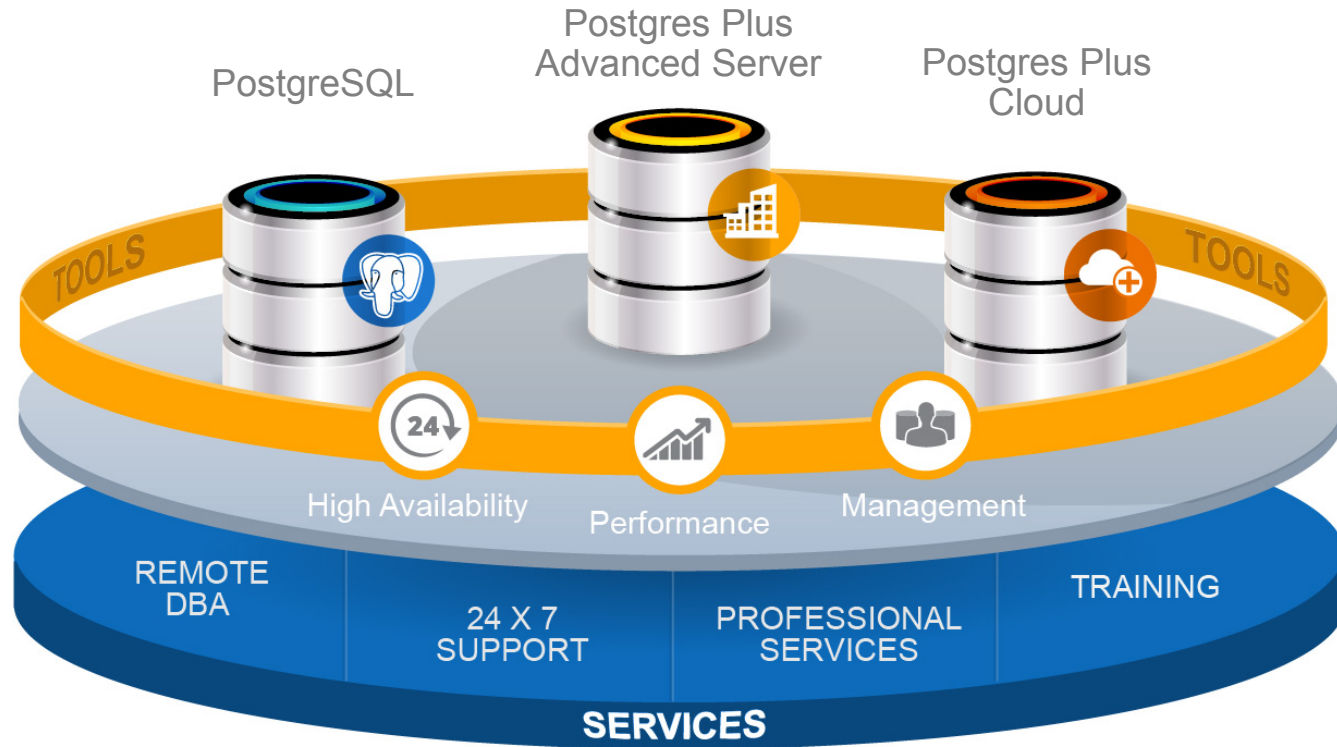
Thoughts from stakeholders

Market forces shaping direction

WE ALL decide the future...



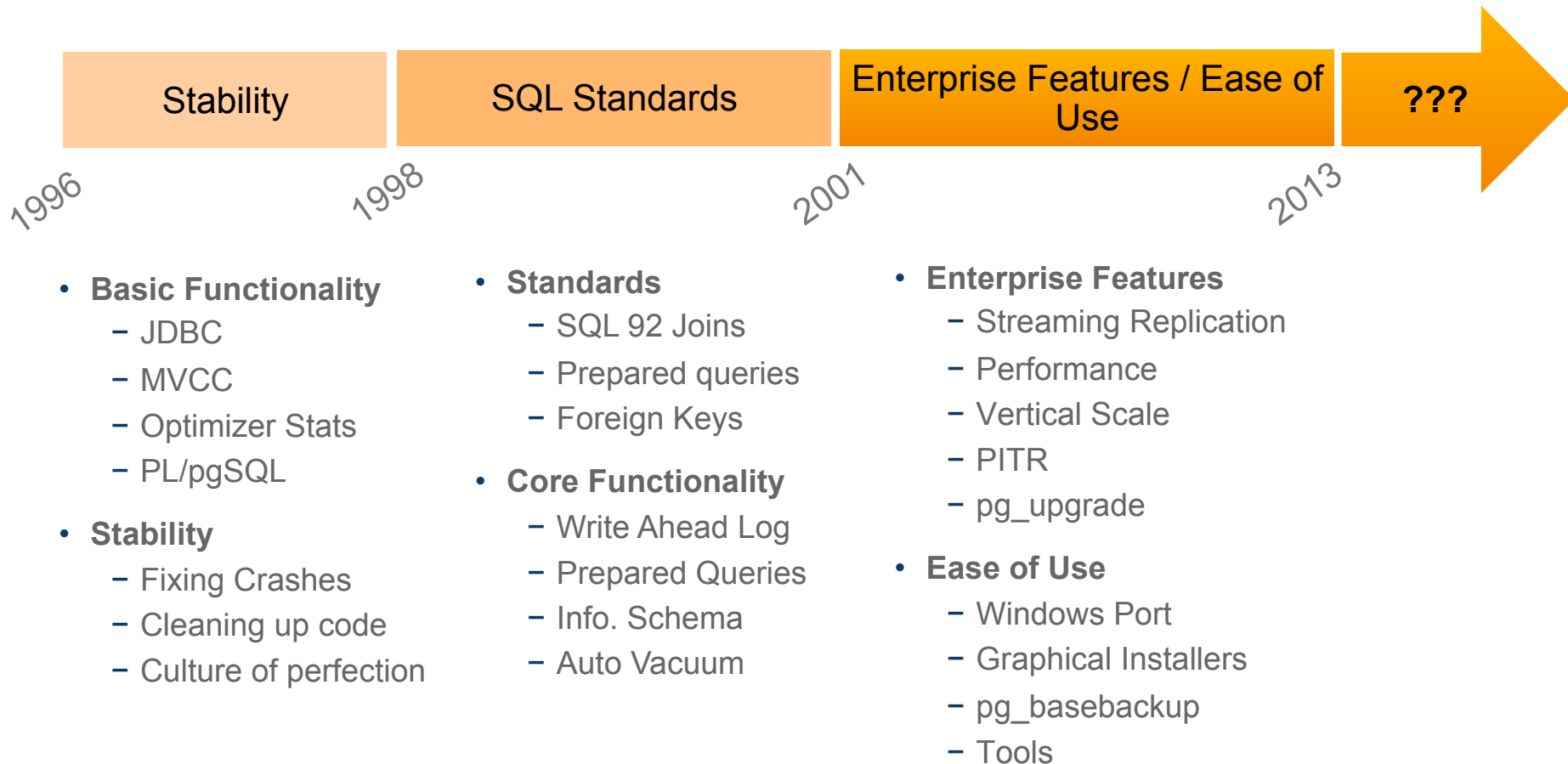
# Who is EDB?



- 150 employees
- Global presence
- Focused on serving needs of enterprise, government and ISV markets
- Platinum Sponsor of PostgreSQL



# The PostgreSQL Journey...



--Courtesy Bruce Momjian

# Postgres today

- Feature rich
- Extremely stable
- Highly pluggable
- Huge user base
- Developer friendly
- Passionate community
- Well respected
- Impressive deployments



# Widely adopted...

To do: Need more customers.



NATIONAL SECURITY AGENCY



SAFeway



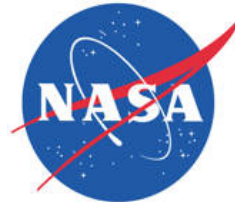
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Genentech



FDA



YAHOO!

kt



GREENPEACE

AgileView

unicef



BASF



SIRIUS

CDC

Juniper  
NETWORKS

TD AMERITRADE



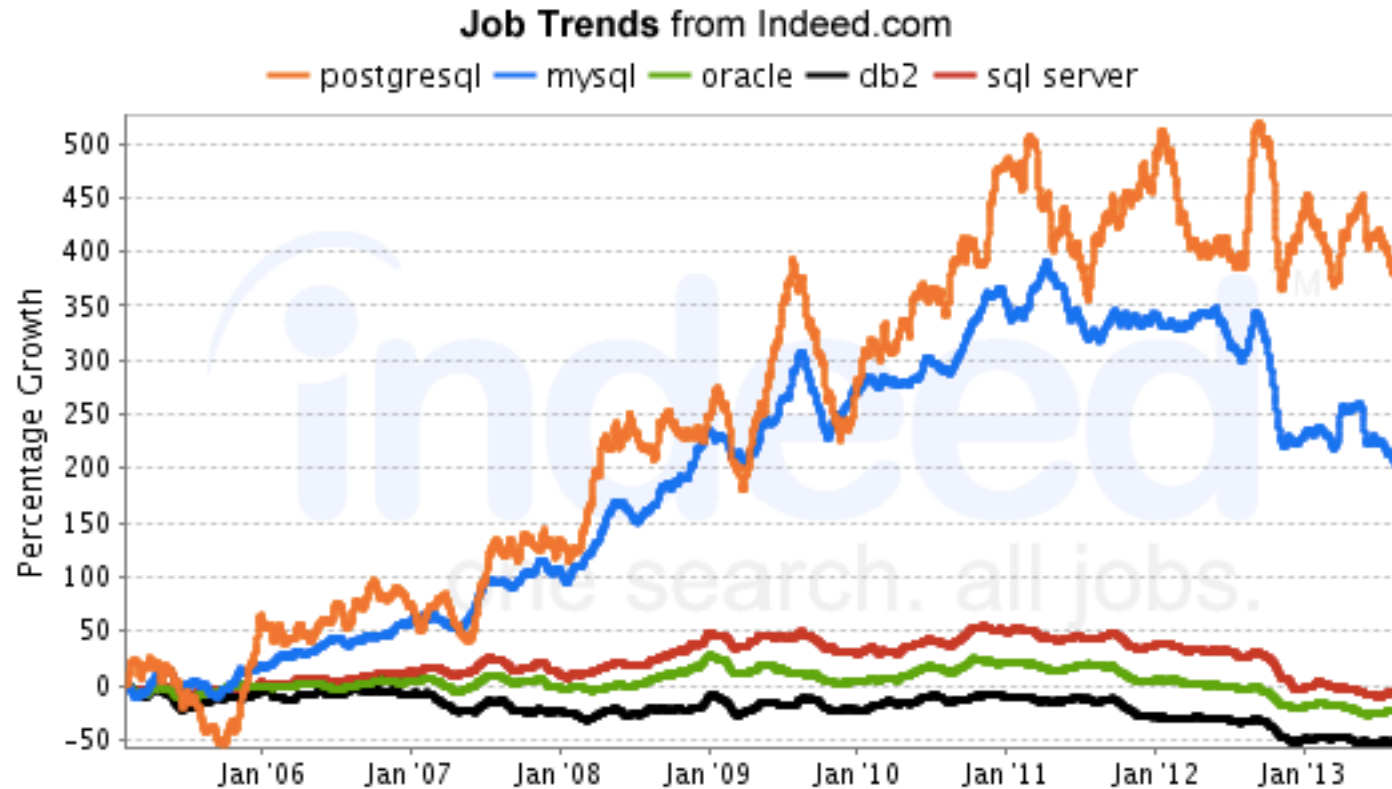
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# In demand...



Indeed.com searches millions of jobs from thousands of job sites.  
This job trends graph shows relative growth for jobs we find matching your search terms.

# Relevant...

## DB-Engines Ranking

204 systems in ranking, November 2013

Rank	Last Month	DBMS	Database Model	Score	Changes
1.	1.	<a href="#">Oracle</a>	Relational DBMS	1617.19	+33.35
2.	2.	<a href="#">MySQL</a>	Relational DBMS	1254.27	-77.07
3.	3.	<a href="#">Microsoft SQL Server</a>	Relational DBMS	1234.46	+27.45
4.	4.	<a href="#">PostgreSQL</a>	Relational DBMS	190.83	+13.82
5.	5.	<a href="#">DB2</a>	Relational DBMS	165.90	-9.93
6.	6.	<a href="#">MongoDB</a>	Document store	161.87	+12.40
7.	7.	<a href="#">Microsoft Access</a>	Relational DBMS	141.60	-0.89
8.	8.	<a href="#">SQLite</a>	Relational DBMS	78.78	+0.90
9.	9.	<a href="#">Sybase</a>	Relational DBMS	77.75	+4.09
10.	10.	<a href="#">Teradata</a>	Relational DBMS	60.12	+5.70
11.	11.	<a href="#">Cassandra</a>	Wide column store	57.58	+4.66
12.	12.	<a href="#">Solr</a>	Search engine	46.53	+3.20
13.	13.	<a href="#">Redis</a>	Key-value store	40.57	+4.56
14.	14.	<a href="#">FileMaker</a>	Relational DBMS	35.10	-0.21
15.	↑	17. <a href="#">Memcached</a>	Key-value store	28.50	+0.38
16.		16. <a href="#">HBase</a>	Wide column store	27.58	-0.74
17.	↓	15. <a href="#">Informix</a>	Relational DBMS	27.28	-2.01
18.	↑	19. <a href="#">CouchDB</a>	Document store	19.34	+0.67
19.	↓	18. <a href="#">Hive</a>	Relational DBMS	17.67	-1.28
20.		20. <a href="#">Netezza</a>	Relational DBMS	14.18	+0.03



So where do we  
go from here?



# Some interesting perspectives

- Major contributors
- Customers (mostly DBAs, developers and their management)
- Analysts



# Major contributors said...

*"We need to realize we are now competing with commercial databases"*

*"Plug-ability is our greatest competitive asset"*

*"Creating pg\_basebackup has eliminated some consulting opportunities but has enabled a host of others."*

*"Our greatest strength maybe our greatest curse"*

*"Two years ago, my business was 10% cloud deployments. Now it is 70% cloud deployments."*

*"Oracle knows it's database days are numbered, I now get concerned about the new kinds of databases that are Cloud friendly."*

*"We don't need to turn into something we are not."*

*"We have a great community ... we need to grow it."*



# Customers (DBA's & Developers) said...

"I don't take you seriously because you don't have incremental backup"

"Why is it so hard to partition data"

"We are now doing 1 Billion writes a day. Working with your product is challenging in this environment."

"I can't be off line that long for an upgrade."

"We want Logical Replication"

"What Postgres lacks most is parallel query"

"I can't find good Postgres DBA's"

"I want to optimize for your database."

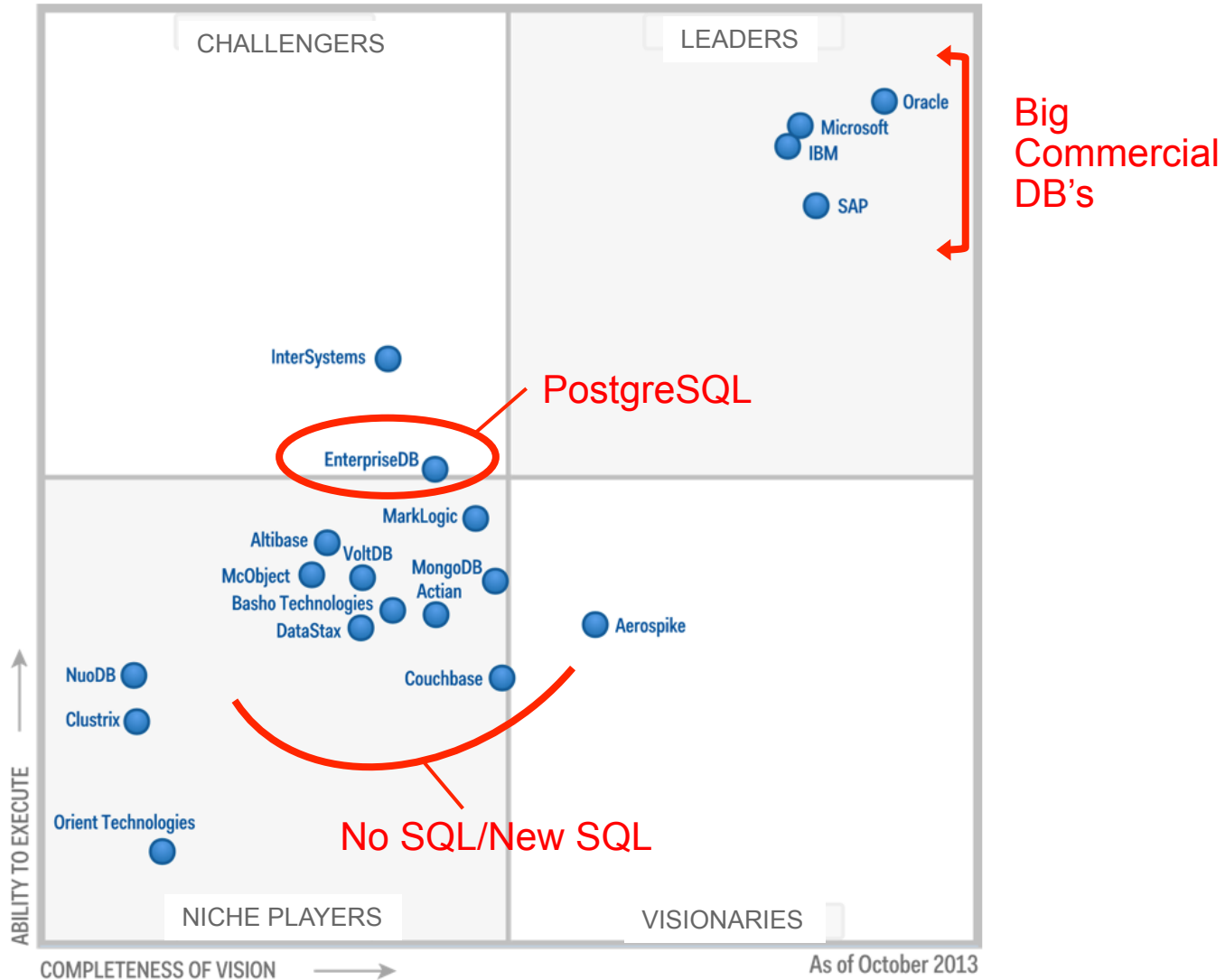




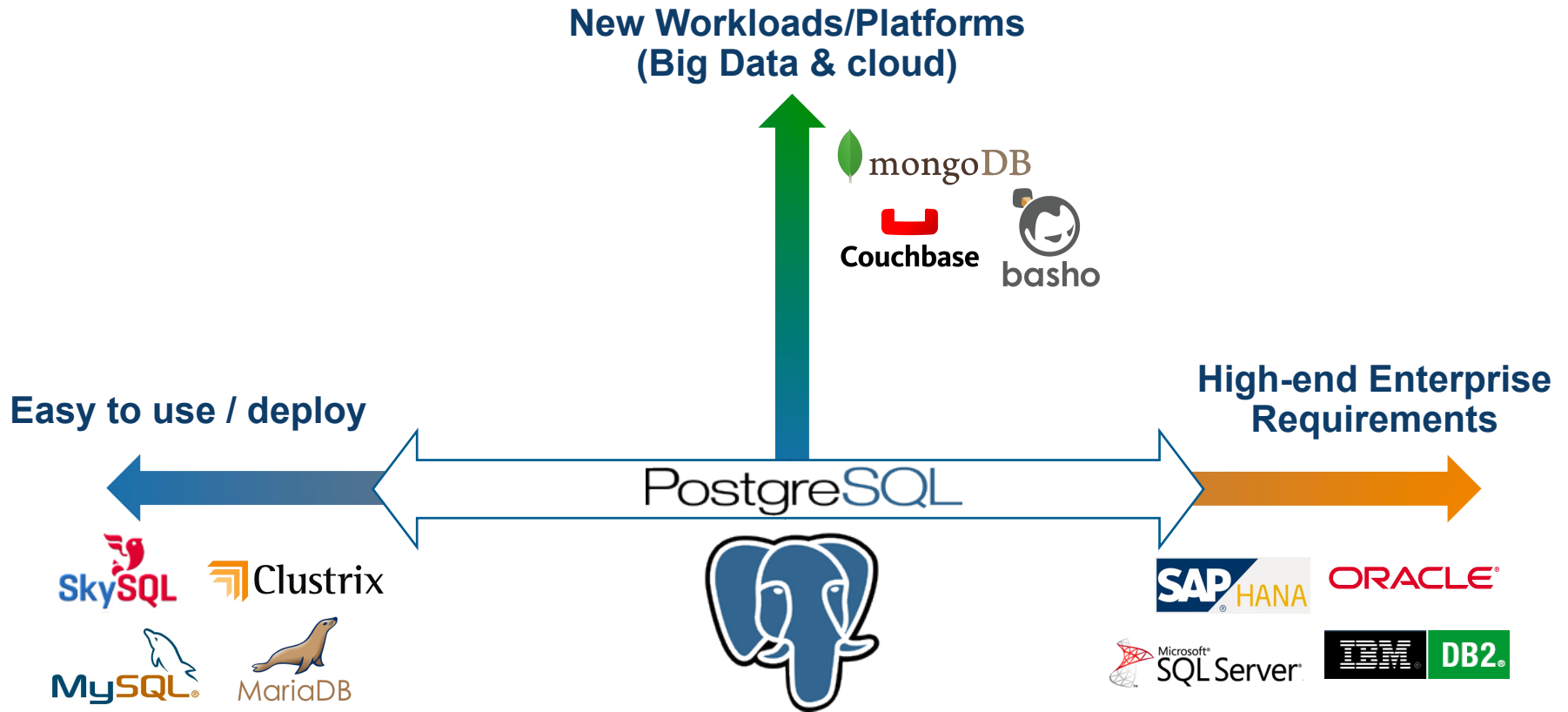
# Analysts said:

- Donald Feinberg, Gartner:
  - Postgres functionality has increased greatly and is now more than sufficient to run both mission-critical and non-mission-critical applications.
  - Constraints include lack of certification by major third-party software vendors, such as Infor, SAP and TOTVS and lack of third-party database administration tools.
  - Dominant vendors will continue to evolve and enhance their DBMS products in support of new classes of applications
- Noel Yuhanna, Forrester:
  - PostgreSQL has the second-largest open source community; has competitive technology and features and continues to expand its growth across various industries.
  - Performance, integration, security, unpredictable workloads, and high availability are companies' top data management challenges.
- Matt Aslett, 451 Group:
  - PostgreSQL is a proven database for enterprise relational application workloads
  - Increased commercial offerings and cloud-based functionality are driving adoption

# New Gartner ODBMS Magic Quadrant



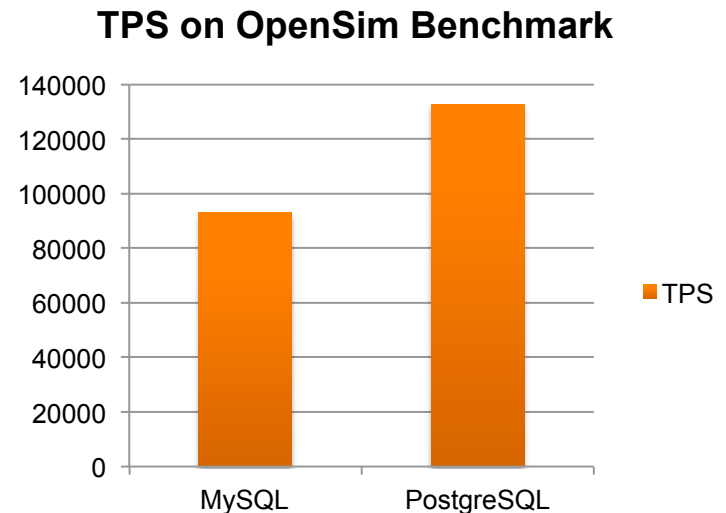
# Market forces influence direction



*PostgreSQL is growing from the "middle-out"*

# Postgres is well positioned now

- Enterprise features without the cost
- Wider range of performance than MySQL & others
- More pluggable than any other database:
  - Backend languages, Index Types and FDWs
  - Opportunity to connect with emerging technologies
- Best Geo-Spatial implementation
- Legendary stability
- Serializable Snapshot Isolation
- Strong, independent, thriving community



# The Next 5 Years??

## New Workloads Platforms (Big Data/Cloud)

- Liasons with other communities
- FDW for common no-SQL DB's
- Continue to evolve new datatypes: JSON, XML, HStore

## Easy to use / deploy

- Diagnosing Problems
- Configuring for success
- Still easier installs
- Tighter integration with frameworks
- Integration with other data stores
- Very simple in the cloud

## High-end Enterprise Requirements

- Vertical Scale (parallel query)
- Horizontal Scale
- Performance Diagnostics
- Incremental Backup
- Integration with other data stores
- Zero down time upgrades

PostgreSQL





# Ideas on How to Help...

- Become a community liaison with a synergistic community such as: Hibernate; Casandra;, Hadoop; Jango; ActiveRecord
- Write, develop and maintain a Foreign Data Wrapper
- Help EDB with the development and testing of parallel operations—contact Dave Page or Tom Kincaid
- Develop a killer query diagnostic tool
- Start a user group
- Shout from the roof top what's makes us different and better!!
- Share YOUR ideas!!



Our ultimate destination is dependent upon each other...



THANK YOU

merci  
grazie  
spasiba  
kam ouen  
tak  
gratizias  
manana  
mahalo  
hvala  
cheers  
toda  
gracias  
kitos  
welalin  
grassie  
thank you  
danki

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merci  
thanks  
na gode  
mesi  
modupe  
talofa  
miigwetch  
thanks  
domo arrigato  
danke  
kitos  
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gratitude  
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