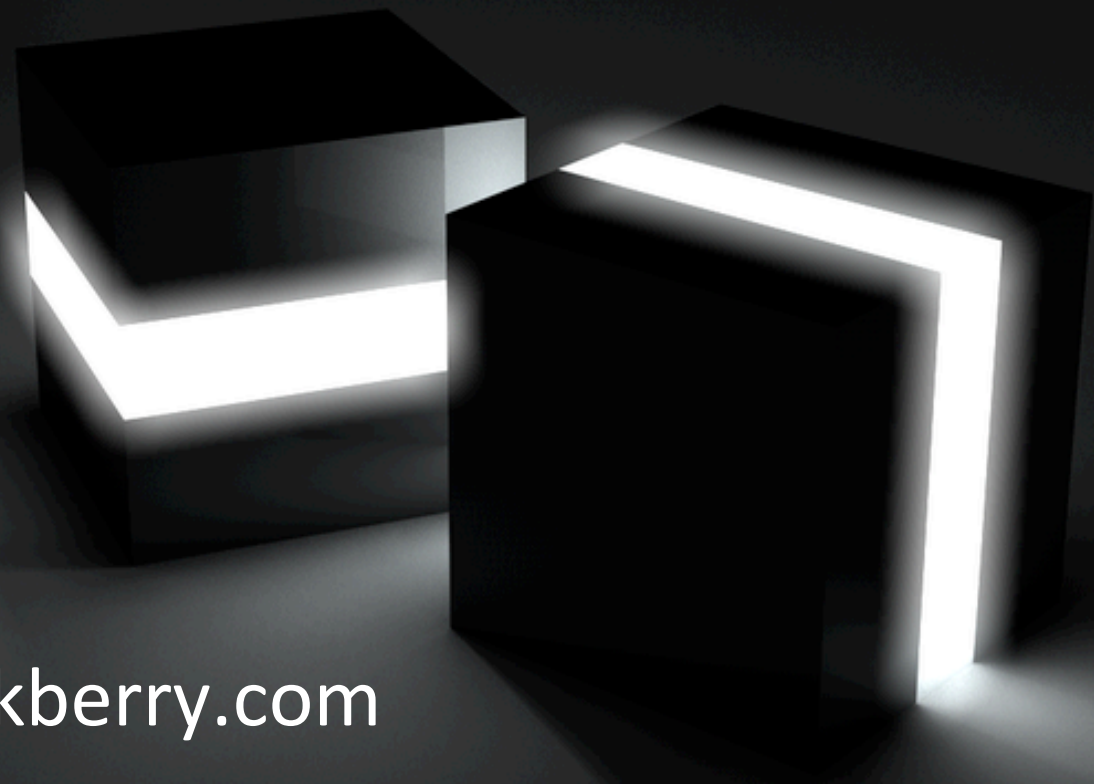


Big Data @ BlackBerry®

From the First Email Delivered to Secure Personalization



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Agenda

- The World At BlackBerry: Our Big Data Journey
- Top 10 Things a Naïve Big Data guy would share with a group of leading health care analytics professionals



The Data Landscape Through the Years

Early days were a router, access logs, and transactions

We had to develop an Identity

We also had to develop an understanding of our customers:

- Consumers
- Enterprise
- Carriers



When did Big Data Become Big?

It was always big. It's just relative.

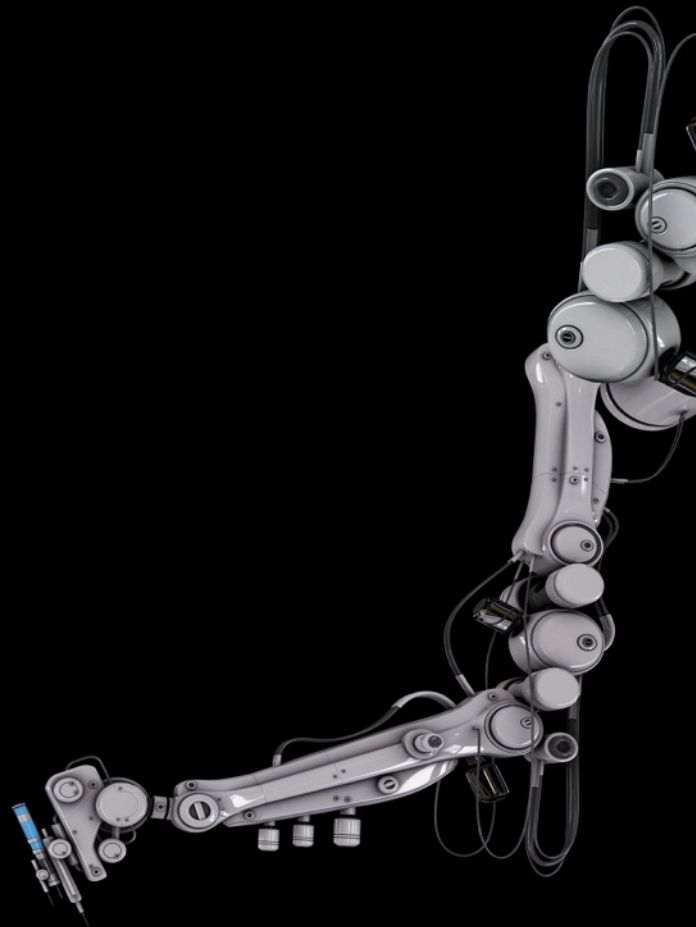
It's Volume, Velocity, Variety, etc. The Gartner Hype Curve.

We developed our own massive parallel processing. Way before it was cool.

MPP databases like Oracle Exadata and Teradata then came along.

Enter Hadoop

- Data footprint is 6 data centers, multi-petabyte environment
- One of the largest NoSQL environments in the world
- Hive and Pig are several years behind Oracle and SAS in maturity
- Hadoop is many years ahead in affordable scalability



Security and Democratization

BlackBerry is known for unparalleled security – this has been unquestioned over time.

Internally – many silos, not always with interoperability

The need to let people explore and experiment, not hold them to 3 month old requirements

The approach that everyone can write SQL



Secure and Private Personalization

A clear value exchange.

Recommendations – a trusted, expected, concierge. We all have friends who are experts in things... wine, restaurants, electronics.

The ability to personalize within a group – what do we all like? (Caution: filter bubble)



Trivia: How long did it take for BlackBerry to get it's first 1 million subscribers?

- a) 3 months
- b) 6 months
- c) 5 years

Top 10 things a **Naïve Big Data guy would share with a group of leading health care analytics professionals.**

10: There is nothing like the sight of the gallows to focus the mind.

9: We are now moving from the 3 V's to the applications that use them.

A low-angle, upward-looking photograph of several modern skyscrapers with glass and steel facades. The buildings are set against a sky filled with white and grey clouds. The perspective creates a sense of height and scale.

8: Scientific methods and experimentation (with data) are required to break out of the KPIs that no longer reflect reality



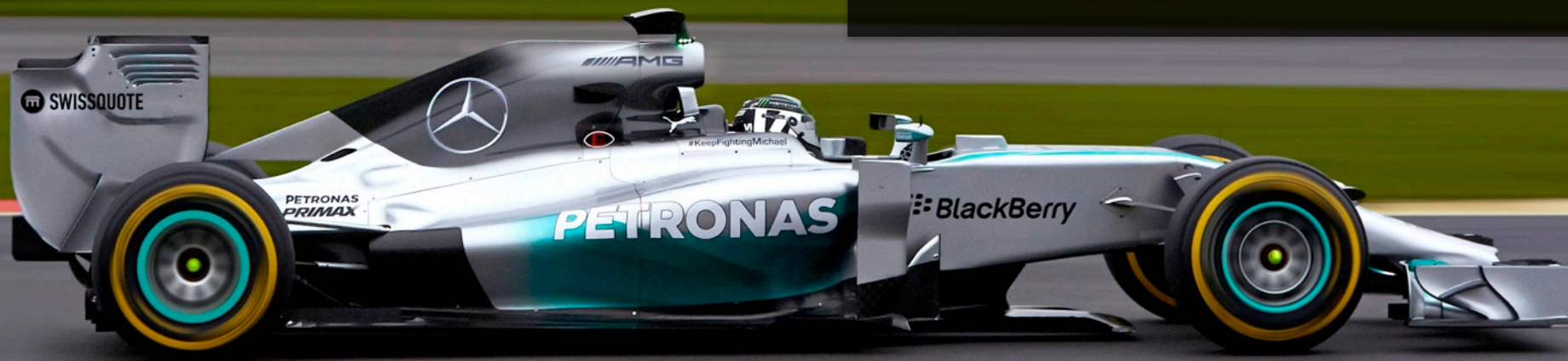
**7: The world in
1400 was flat and
all analytics
supported that**

A low-angle, upward-looking photograph of several modern skyscrapers at night. The buildings are illuminated from within, with many windows glowing with light. The perspective creates a sense of height and scale, with the buildings converging towards the top of the frame. The sky is dark, and the overall atmosphere is urban and technological.

6: Topic Mining and the Web suggest that dogs are people. Interestingly enough, dog owners would agree.

5: When you think about big data, remember that an MRI for a mouse is 1 MB, and a new 3D MRI for a mouse is 1 petabyte. To contrast, Google's Knowledge Graph is 1 terabyte...

4: Organizations need someone who can speak the data. Leadership and Data Sciences are different. Someone needs to distill the narrative.

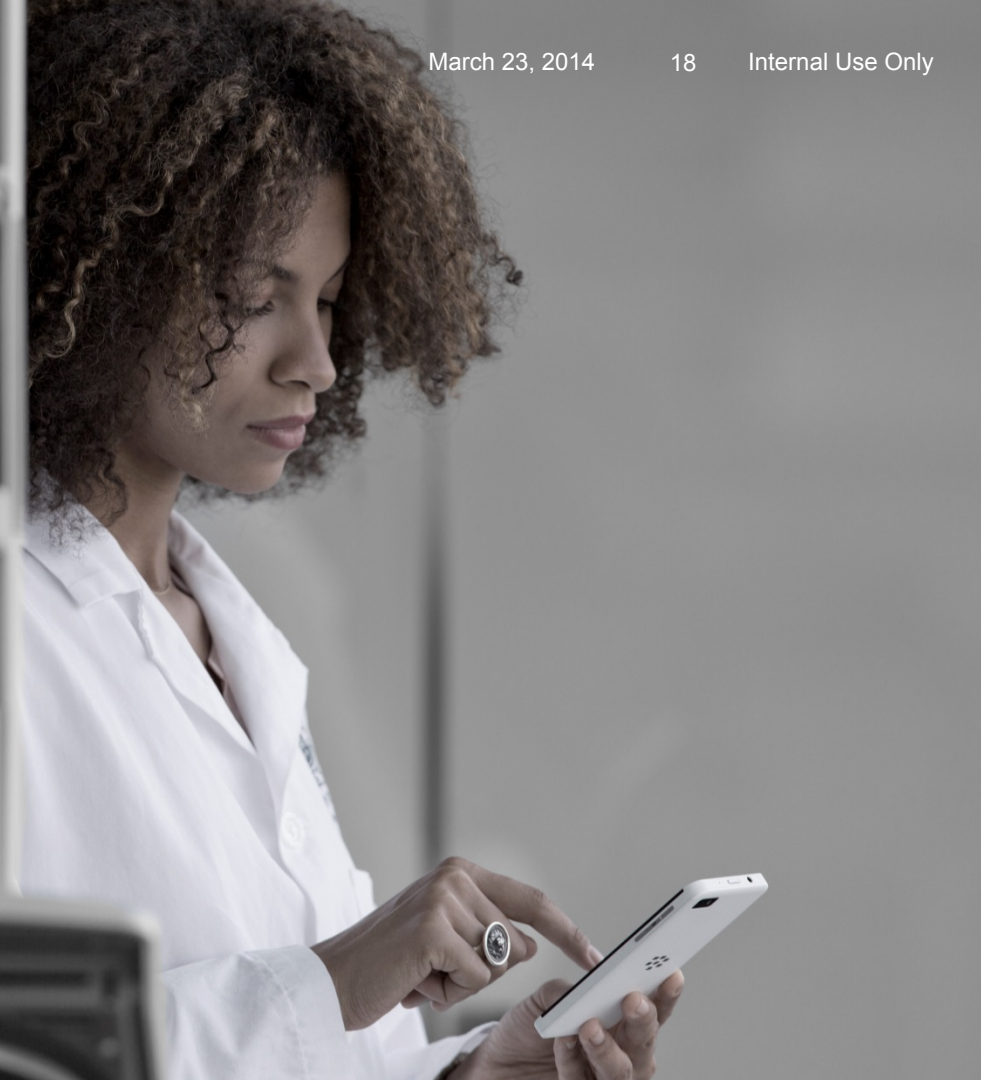


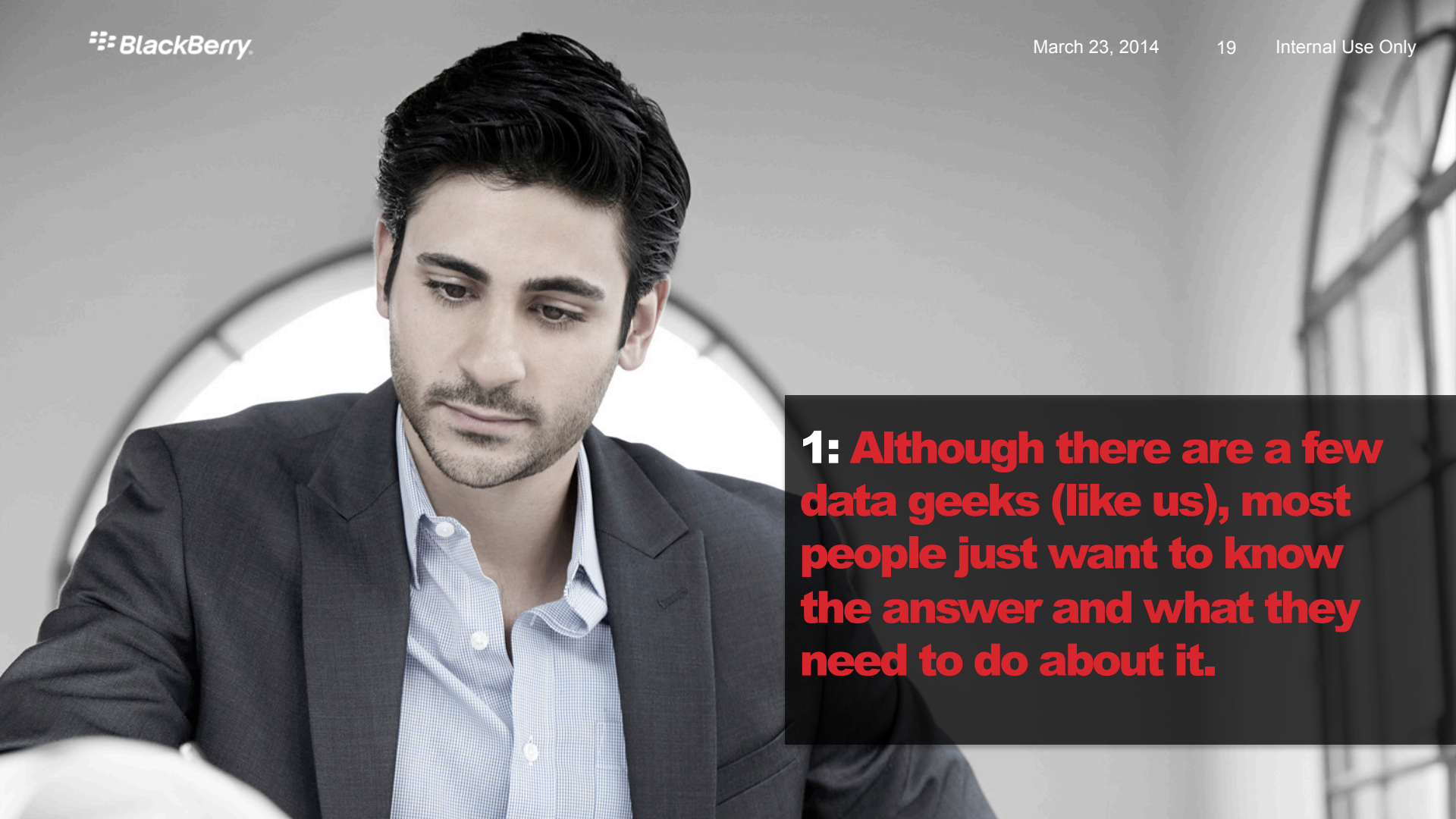
A man with a beard and curly hair, wearing a dark suit jacket over a light blue shirt, is sitting at a desk. He is looking directly at the camera with a serious expression. He is holding a pen over an open notebook. A laptop is open in front of him. The background is a blurred office setting with large windows.

3: The Average Big Data Project is between 10 TB and 30 TB.

2: 80% of the time is spent preparing the data. 20% of the time is spent complaining about preparing the data.

- Big Data Borat



A man with dark hair and a light beard, wearing a dark suit jacket over a light blue button-down shirt, is looking down and to the right. The background is a blurred office setting with a large circular window.

1: Although there are a few data geeks (like us), most people just want to know the answer and what they need to do about it.

In Conclusion

Ask the right questions.

A good Boudreaux is a mathematical formula.

Teenage pregnancies drop dramatically when a woman turns 25.

It's statistically proven that people who have more birthdays live longer.



QUESTIONS?