顛覆企業傳統ROI

資訊革新論壇

Return on Information

The New ROI

資訊創造報酬率，迎接ROI大革新

海量資料分析術

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關鍵字

- ✓ Data grow, insight is mission critical
- ✓ 20% performance increase
  49% revenue increase
  30% better ROI
- ✓ Faster gain insight
- ✓ Time to value
- ✓ Improve IT economics
- ✓ PureData System for Analytics
  - Appliance design
  - Easy set up and use
  - Run minutes, not hours

- ➢ 資料成長趨勢
- ➢ 企業面臨挑戰
- ➢ 快速獲得洞察
- ➢ 立即得到價值
- ➢ IT 更上一層樓
- ➢ 您的Appliance

如何提高資訊創造報酬率的成功第一步

分享議題

- 資料成長趨勢
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海量資料成長趨勢

- Where is big data coming from?

12+ TBs of tweet data every day

30 billion RFID tags today (1.3B in 2005)

4.6 billion camera phones world wide

? TBs of data every day

25+ TBs of log data every day

100s of millions of GPS enabled devices sold annually

76 million smart meters in 2009… 200M by 2014

2+ billion people on the Web by end 2011

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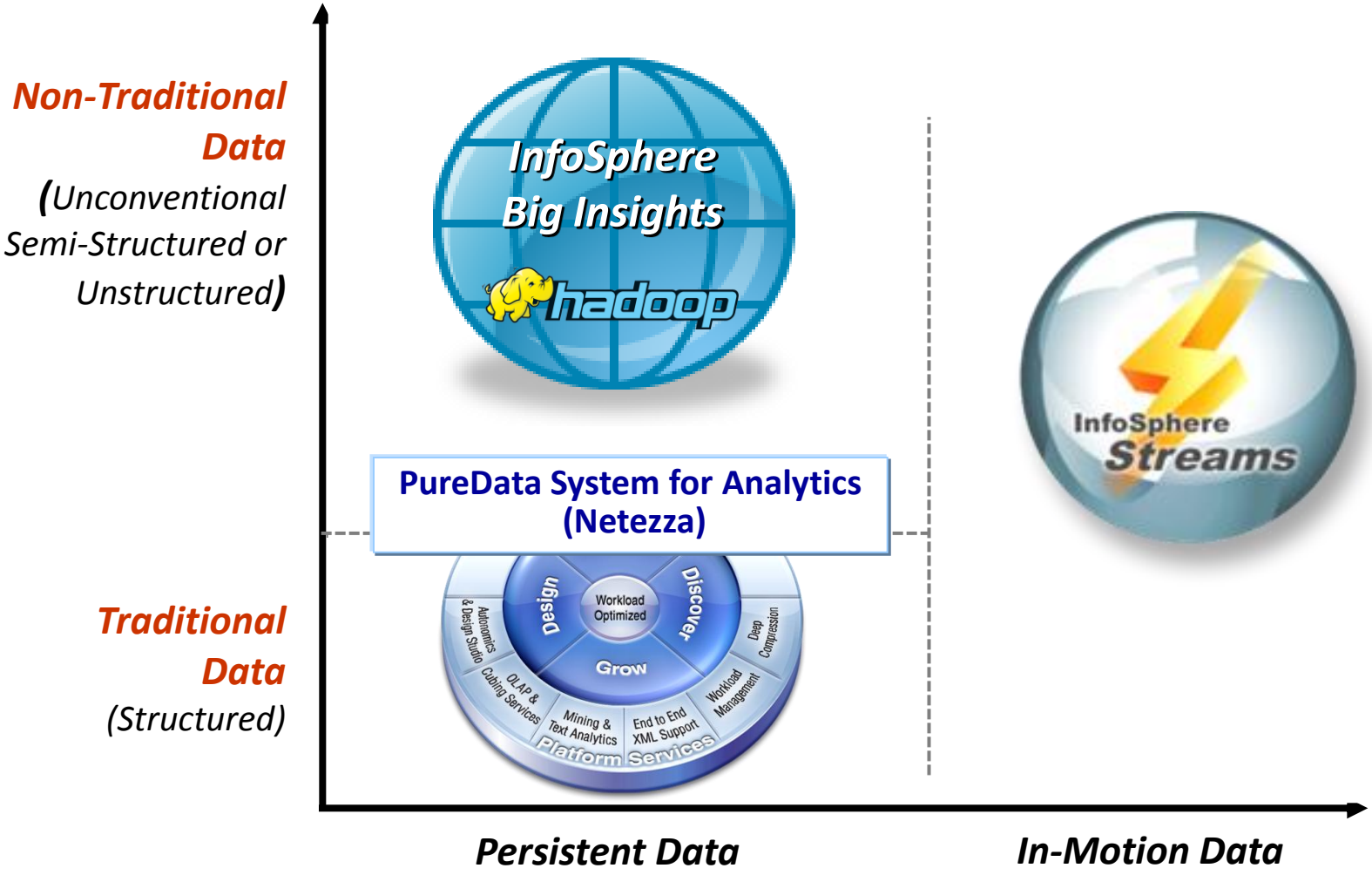
企業會面臨哪些種類的訊息？



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企業面臨挑戰

Multi-channel customer sentiment and experience analysis

Detect life-threatening conditions at hospitals in time to intervene

Predict weather patterns to plan optimal wind turbine usage, and optimize capital expenditure on asset placement

Make risk decisions based on real-time transactional data

Identify criminals and threats from disparate video, audio, and data feeds

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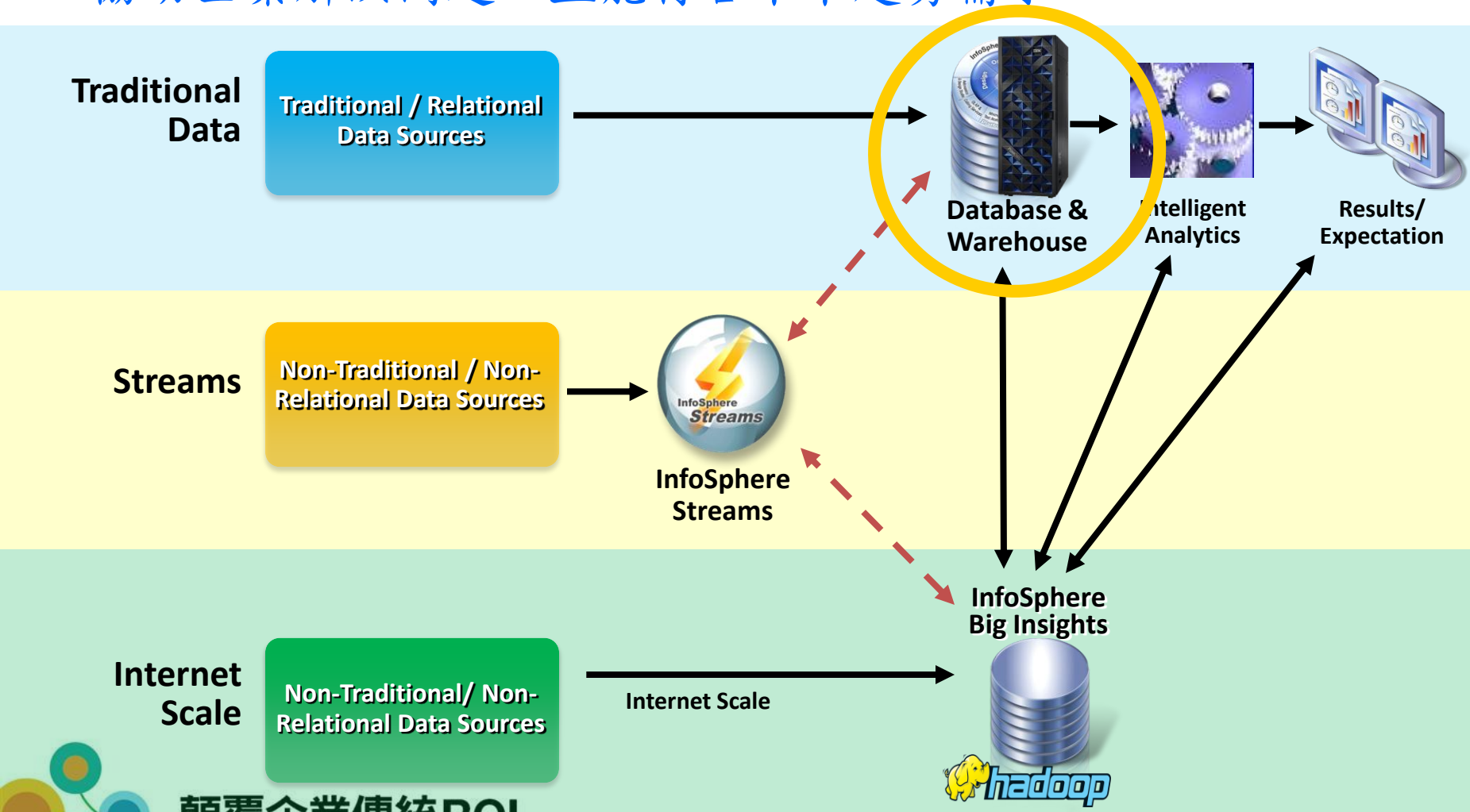
IBM 具備完整海量資料解決方案

- 協助企業解決問題，並能符合未來趨勢需求



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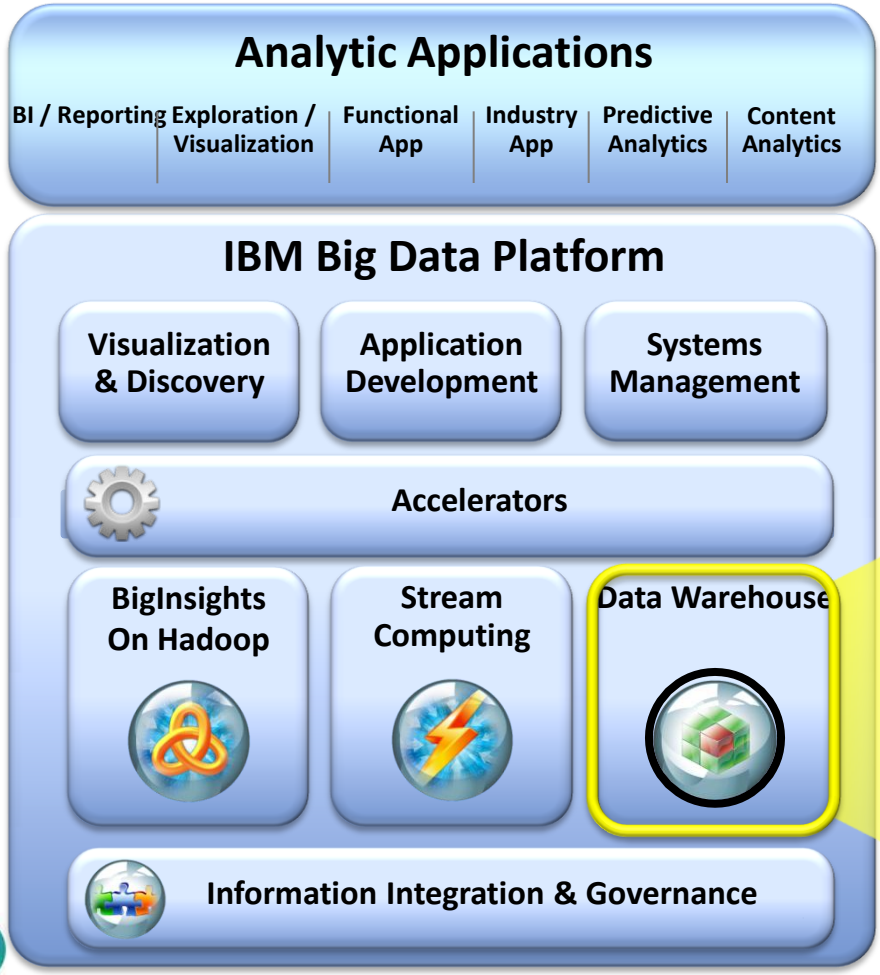
快速獲得洞察

- 在Big Data規劃下，提供極速與大承載平台



PureData System for Analytics (Netezza)

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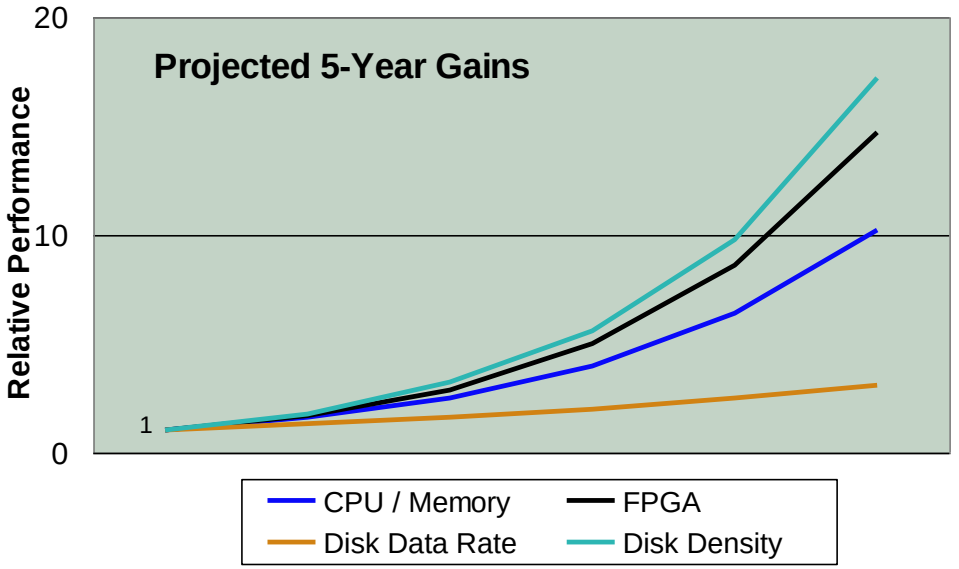
快速獲得洞察

- 結合強大的三大關鍵技術

Leveraging the MPP, FPGA, CPU Technology Advantage is Key



海量平行處理(MPP)

- Low power, high performance, embedded CPUs
- Low power, high integration, flexible FPGAs

系統架構：善用 CPU + FPGA 未來五年性能的快速提升

- CPU performance is outpacing disk (Technology Trends – I/O is losing the war)
- Use FPGA to reduce data needed from disk
- Data has a great deal of redundancy that FPGA algorithms can exploit efficiently

資料壓縮技術

- Allows us to read / write less bits to disk, and process them in real time within FPGA

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立即得到價值
- Time to Value

Other DW platform

Put everything together, and hope it runs right

IBM PureData System for Analytics

Turn the key and go

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立即得到價值

- Time to Value 最佳營運能力

1 PB on PureData System for Analytics

7 years of historical data

100-200% annual data growth

NYSE Euronext

"NYSE … has replaced an Oracle relational database with a data warehousing appliance from PDA, allowing it to conduct rapid searches of 650 terabytes of data."

- ComputerWeekly.com

Source: http://www.computerweekly.com/Articles/2008/04/14/230265/NYSE-improves-data-management-with-datawarehousing.htm

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立即得到價值

- Time to Value 迅速贏得商機

eHarmony

They shipped us a box, we put it into our data center and plugged into our network. Within 24 hours we were up and running. I'm not exaggerating, it was that easy.

- Joseph Essas, Vice President of Technology, eHarmony

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立即得到價值

- Time to Value 最快決策與行銷

nielsen

…when something took 24 hours I could only do so much with it, but when something takes 10 seconds, I may be able to completely rethink the business…

- SVP Application Development, Nielsen

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IT更上一層樓

- Improve IT economics

Other DW platform

Requires constant tuning and maintenance

IBM PureData System for Analytics

Turn the key and go

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IT更上一層樓

- Improve IT economics 提升技術層次

Bloor Research

telling the right story

> This is what **PureData System for Analytics (Netezza)** has done in the data warehousing market**: It has totally changed the way we think about data warehousing.**

- Philip Howard, Bloor Research

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IT更上一層樓

- Improve IT economics 最容易管理與使用

iBasis
a KPN company

Our data warehouse team consists of one to two employees that we need once every three months, to do small changes for release verifications.

- Mark Saponar, CIO, iBasis, a KPN Affiliate

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您的Appliance

- IBM PureData System for Analytics (Netezza)

Powered by Netezza Technology

最大特色

- 優化設計的一體設備 Appliance
- 三合一的系統 Database, Server and Storage
- 標準介面 ODBC, JDBC, OLE-DB, SQL
- 海量平行處理 MPP (Massively Parallel Processing)
- 極速分析與大承載平台

給您的優勢與好處

(1)最佳效能性 Speed: **10~100x** faster than traditional system

(2)最易使用性 Simplicity: Minimal administration and tuning

(3)最高擴充性 Scalability: Peta-scale user data capacity

您的Appliance

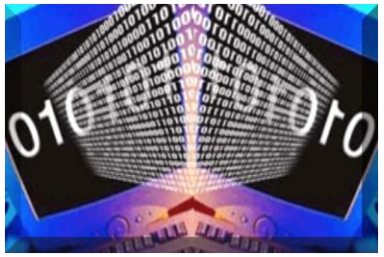
- 全球超過500個客戶 在各個領域

Smarter Healthcare

Multi-channel

Finance

Log Analysis



Homeland Security

Traffic Control

Telecom

Search Quality

Manufacturing

Trading Analytics

Fraud and Risk

Retail: Churn, NBO

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您的Appliance

- 全球超過500個客戶與豐富經驗

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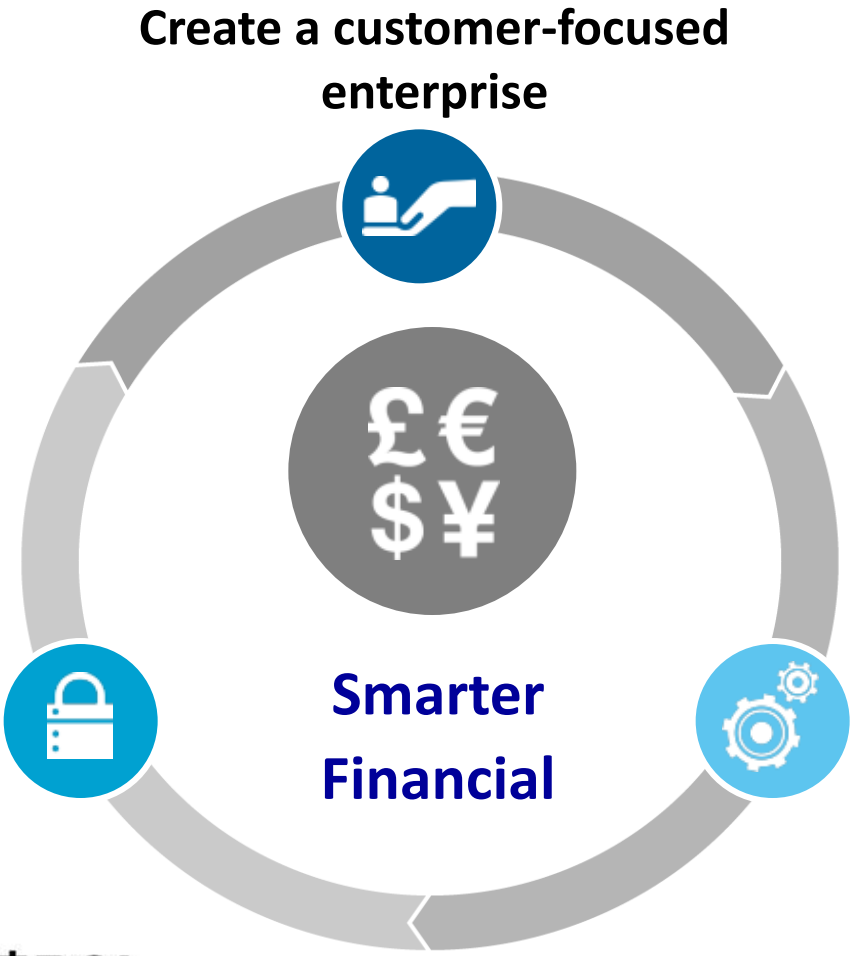
您的Appliance

- 在金融業



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NYSE Euronext improves data management with PureData System for Analytics (Netezza) data warehousing

Need

- Greater flexibility to meet market demands
- Reduce the time taken to access business-critical data on its network, which was taking 26 hours
- The previous Oracle system trawled through large amounts of irrelevant information to complete searches

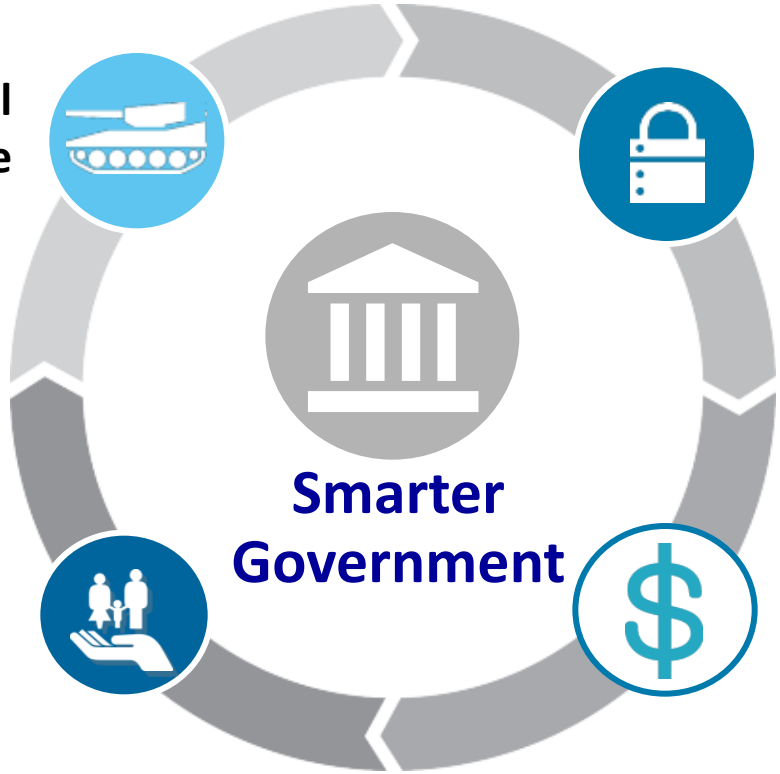
Benefits

- Ability to conduct rapid searches of 650 TB of data; storing over 1 PB on PDA (Netezza)
- Time to access business-critical data reduced from 26 hours to 2 minutes; short time to value – up & running within weeks

NYSE Euronext

您的Appliance

- 在政府機構



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Augmenting the data warehouse environment

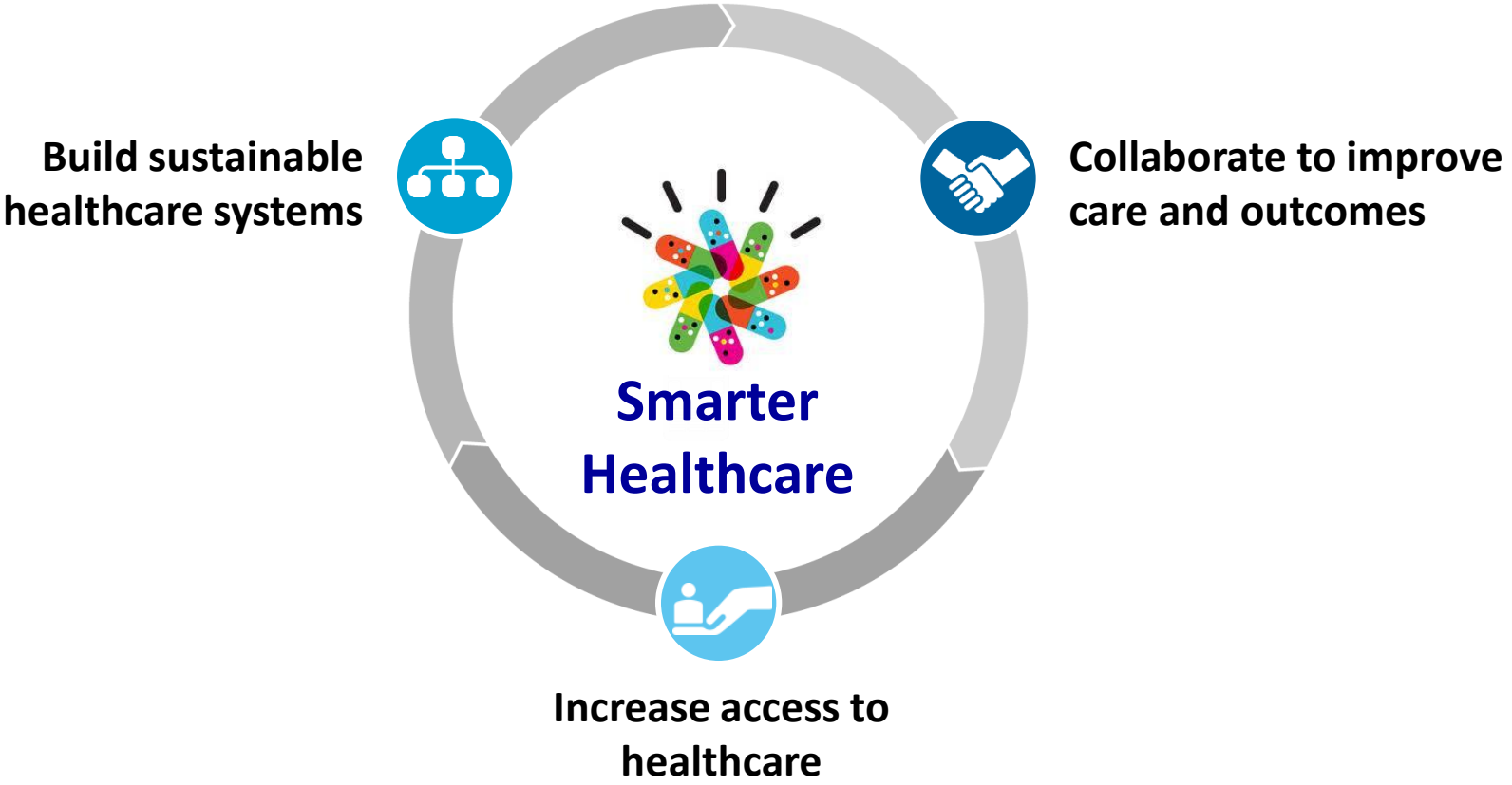
Taxation and Revenue agency Super-charges complex analyses with PureData System for Analytics (Netezza)

European State Revenue Service replaces sluggish data warehouse system and is able to access information in near real-time, generate reports 12 times faster than before and rapidly perform ad-hoc queries to complete complex analytical work

Actionable Insight

您的Appliance

- 在醫療業



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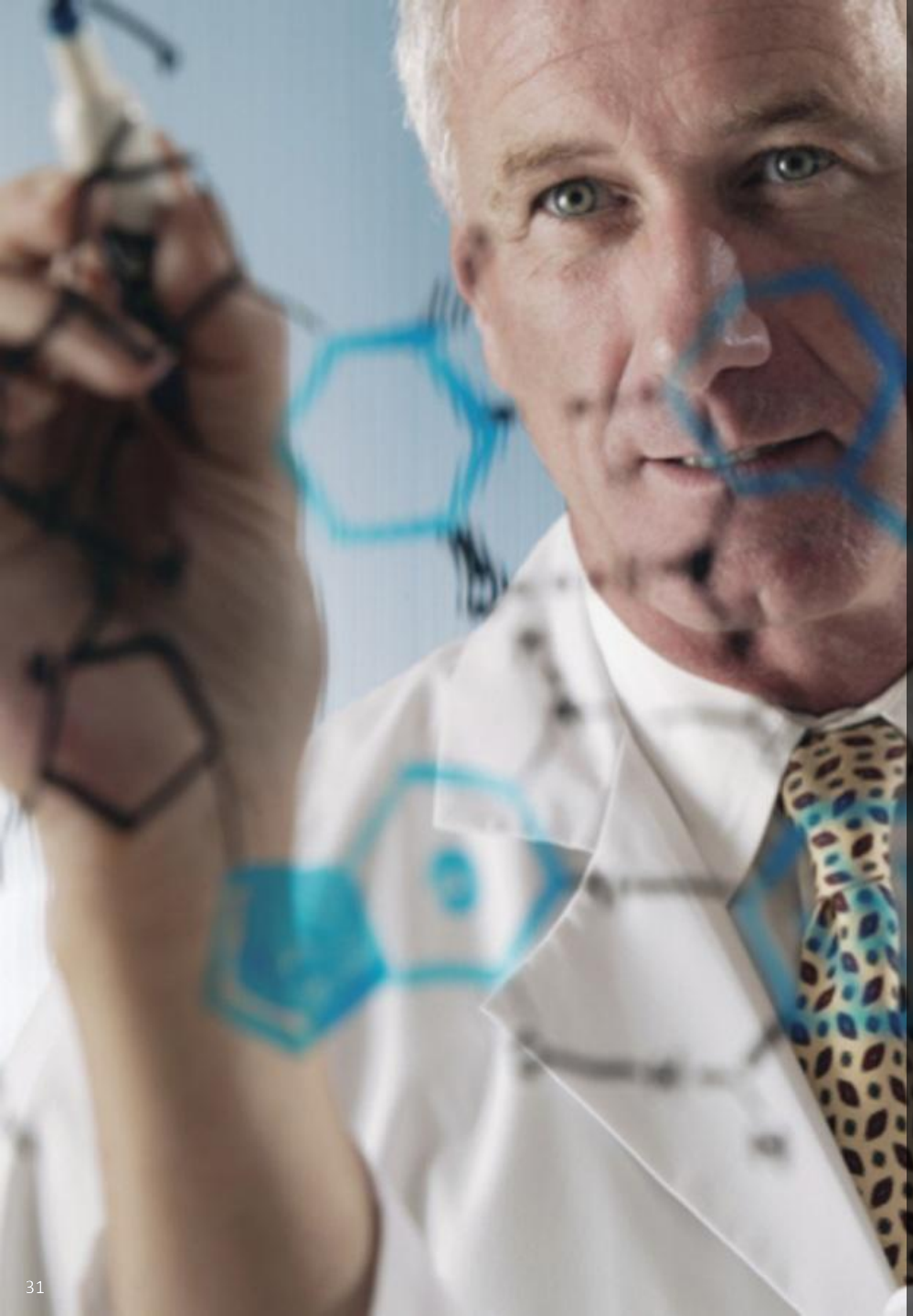

The State University of New York (SUNY) at Buffalo gains insights from big data to slow progression of multiple sclerosis

Need

- Researchers needed to quickly build models using a range of variable types and run them on a high-performing environment on huge data sets spanning more than 2,000 genetic and environmental factors that may contribute to multiple sclerosis (MS) symptoms

Benefits

- Able to reduce the time required to conduct analysis from 27.2 hours to 11.7 minutes
- Researchers are empowered to look for potential factors contributing to the risk of developing MS

SUNY The State University of New York

您的Appliance
- 在電信業

Build Smarter Networks that are optimized and can be monetized

Deliver Smarter Services that generate new sources of revenue

Transform Operations to achieve business & service excellence

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T-Mobile scales engineering success with IBM PureData System for Analytics (Netezza)

Need

- Provide longer retention and more meaningful results for click stream data

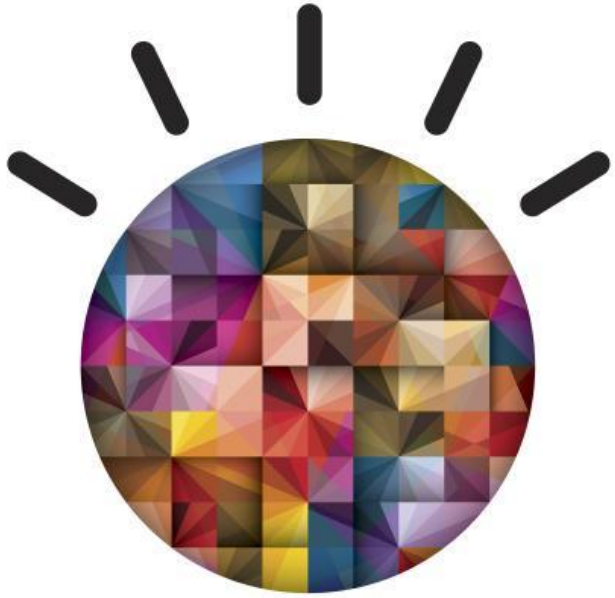
Benefits

- Reduce tax and call-routing fees by using the data stored to defend against false claims
- Acquire dropped-call and churn-reduction analysis capabilities
- Increase network availability by identifying and fixing any network “holes”
- Storage capacity increased from 100 TB to 2 PB

T-Mobile

For more information:

ibm.com/bigdata



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