How Insurers are Realising the Promise of Big Data

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A Big Data Challenge: Pushing the Limits of What's Possible
The Art of the Possible

Multiple Government Agencies

Data Hub

100’s of Service Providers

Benefits

Citizen Identity

IRS

36 Jurisdictions
The Art of the Possible

Accessed by millions of users
Supporting over 70,000 concurrent users

Multiple Government Agencies

Data Hub

100’s of Service Providers

36 Jurisdictions

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Health Insurance for Millions of Americans

Before MarkLogic
- Unable to handle complexity
- Impossible data model
- Development too slow
- Limited scalability
- Inflexible to change

After MarkLogic
- Built for Today’s Data
  Schema-agnostic data model that could handle various data sources and adapt to later changes with policies and regulations
- Agile Development
  18-month timeframe from procurement to launch for what has been called “the most complex government-IT project of all-time”
- Secure and Trusted
  Did not have to sacrifice any of the enterprise features required, and could rely on a system with government-grade security, ACID transactions, and HA/DR
- Successful Deployment
  Over 8 Million people signed up for health insurance in less than 5 months during the first year of open enrollment
Realising the Promise of Big Data
Promise of Big Data Is Everywhere

✓ Increased revenue
✓ Improved loyalty
✓ Lower costs
✓ Less risk
✓ Better compliance
✓ New product innovation
✓ Operational efficiency
✓ and many more!
The Reality

Data Is In Silos

- Data is spread across disconnected databases
- M&A outpaces the speed of data integration
- Data needs to be delivered in real time
The IT Challenge

Relational Databases with ETL Sacrifice Agility, Timeliness and Cost

- All future data needs must be predictable
- New SQL queries require database re-indexing
- Siloed database changes require ETL re-writes
The Massive Cost of Integrating Data From Silos

80% OF TIME WASTED
By Data scientists just wrangling data

60% OF THE COST
Of data warehouse projects is on ETL

$36 BILLION IN SPENDING
In 2015 in creating relational data silos
THE DESIRED SOLUTION

A Database That Integrates Data Better, Faster, With Less Cost
Focus On The Data

- External Data on Insured Assets
- Social Media
- Fraud detection & investigation
- Policy Systems
- Claims Management
- Customer Data
- Online Access
- Public Data Sets
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Fast & Agile Development – Ready for Business

360 view of Customer, Operation, Risk

New operational systems

Analytical analysis
The MarkLogic Alternative
An *Operational and Transactional* Enterprise NoSQL Database

**EASY TO GET DATA IN**
Flexible Data Model

- Data ingested as is (no ETL)
- Structured and unstructured data
- Data and metadata together
- Adapts to changing data and changing data structures

**EASY TO GET DATA OUT**
Ask Anything Universal Index

- Index once and query endlessly
- Real-time and lightning fast
- Query across JSON, XML, text, geospatial, and semantic triples in one database

**100% TRUSTED**
Enterprise Ready

- Reliable data and transactions (100% ACID compliant)
- Out-of-the-box automatic failover, replication, and backup/recovery
- Enterprise-grade security and Common Criteria certified
THE WORLD’S EXPERTS AT INTEGRATING DATA FROM SILOS