

Blend in Chicago: MongoDB World 2017

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Blend

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- Tom Schenk, Chief data officer, Chicago. *WindyGrid*.
 - Track colocated data, 911 calls to Tweets to weather.
 - Flexible schema: {what, when, where}
 - Predictive analytics (example, where to send food inspector) using visualization of multiple causal layers.
- Dev Ittycheria, CEO MongoDB
 - 2007 is watershed year, AWS, iPhone, Android, and many others.
 - Argue b/c storage costs dropped below a critical point.
 - MongoDB also in 2007: document model, distributed systems + aggregation.

- Eliot Horowitz, CTO, MongoDB
 - 3.6 ships November, already on Github.
 - MongoDB Charts (3.6)
 - Business Intelligence: BI Connector is SQL interface.
 - Coercing data to table is difficult: polymorphic schemas, arrays.
 - Solution: *MongoDB Charts!* Data visualization tool, handles above.
 - 3.6 document model features:
 - `$lookup` takes sub-pipelines!
 - `$update` can operate on arrays natively! Takes a filter over array entries, can iterate over nested.
 - JSON Schemas.
 - 3.6 distributed systems:
 - Native retryable writes
 - *Change Streams* can get a stream of changes to a db.

- Eliot Horowitz, CTO, MongoDB (continued)
 - Mongo Atlas
 - “Should be irresponsible to run MongoDB in cloud w/o Atlas”
 - Built in security, one-click spin up, built in scaling elasticity.
 - Data browser + performance viewer in UI (utilization stats, examine queries as stream, explore data),
 - Live migration service (not very live in demo, requires downtime for mirror to catch up and change source of truth).
 - Now with MS Azure + Google Cloud support too (+ AWS).
 - Performance Adviser.
 - CRUD support in data browser.
 - Charts!
 - LDAP Auth.
 - Cross-region, cross-cloud!
- MongoDB Stitch (Beta as of today in Atlas, 06/20/17)
 - “Backend as a service”
 - REST API for MongoDB
 - Configuration-based auth/security
 - Service composition to govern how services talk to each other.