USTREAM

The Bl Journey

Agenda

- BI goals and strategy
- Building the Team
- Development processes
- Challenges
- Infrastructure developments
- Future plans



About me

- Computer science and engineering, MBA at BME
- Academic and Corporate background
- Developer, data miner, BI and CRM consultant, business analyst
- 6+ years of BI related experience
- Head of BI at Ustream since November 2012



Ustream

- World's leading live video service provider
- 100+ million monthly users
- SAAS company
- Founded in 2007
- Ustream Cloud Platform
- 250 employees around the World
 - San Francisco, Los Angeles, Budapest, Tokyo, and Seoul





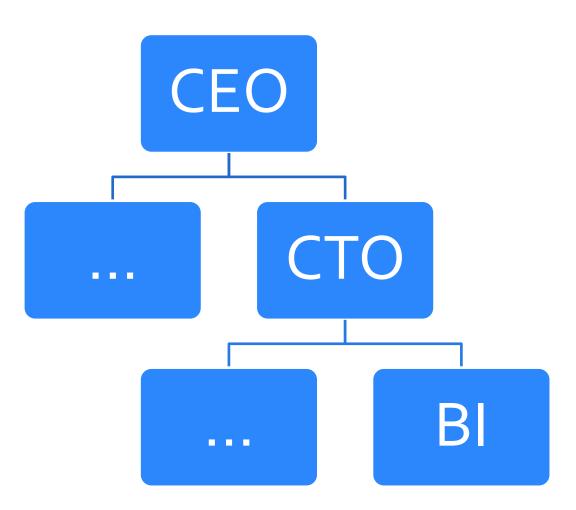
The first steps





Before my first day

- Agree on resources with sponsor
- Position BI in the organization
- Start recruitment





My first day at Ustream





In the first 3 months

- Interview with all data stakeholders
- Define business goals and priorities
- Marketing & education
- Hire new members
- High level data asset review
- Create first reports

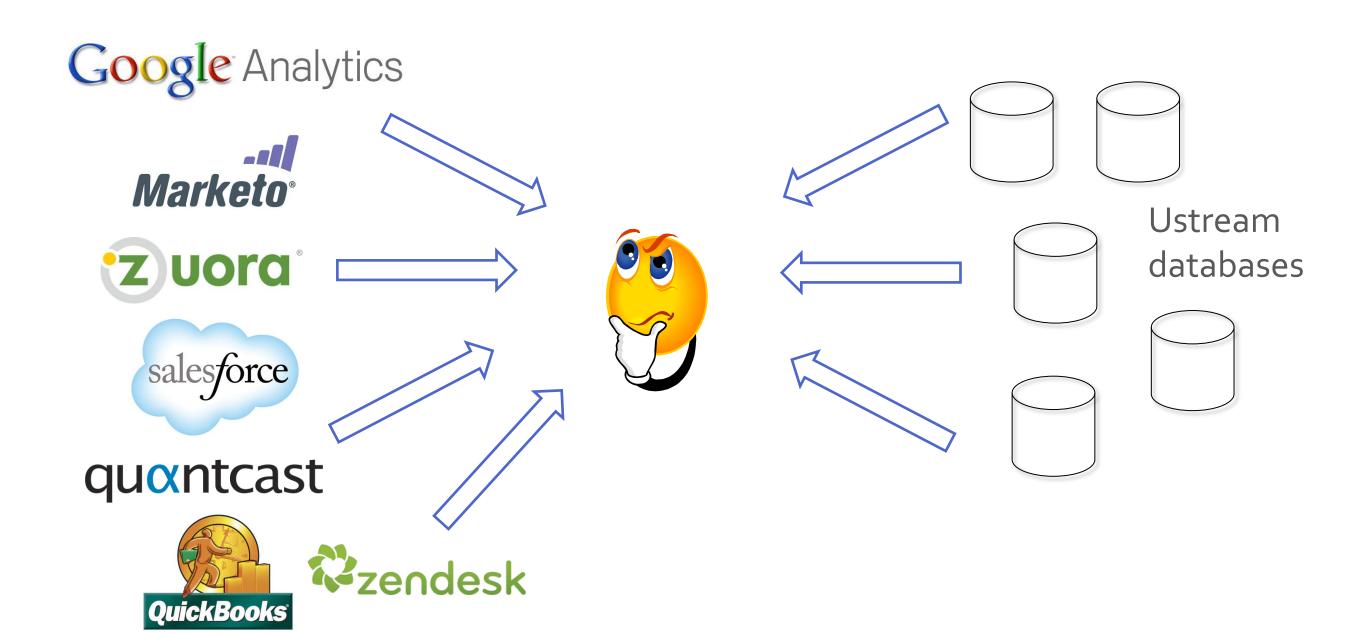


Before BI Team

- No trust in data
- No single source of truth
- Unclear definitions and terms
- No dedicated team, missing ownership
- Data asset is fragmented, missing BI infrastructure
- Lack of regular reports



BI infrastructure - before





Goals for 2013

- Build a team
- Evangelize data driven thinking
- Deliver business value ASAP
 - Gain trust with lowest investment possible
 - No pizza approach
- Fix the basics
 - Build glossary and create regular reports
- Start building data infrastructure
 - Take over ownership of existing systems
 - Clarify data sources

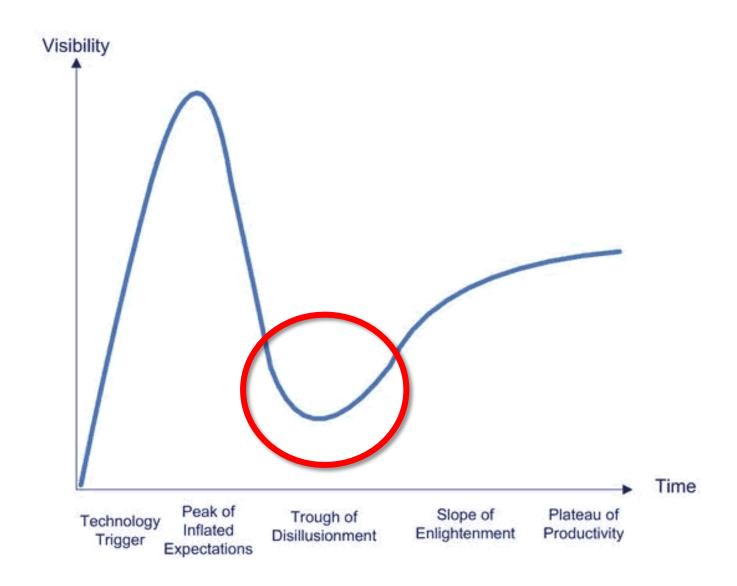


Looking for a team

- Mix cultures
- Mix industry experiences
- Mix seniority
- Start with engineers having business mindset
- Later extend team
 - Mathematician, sociologist, economist
- Initial setup: 1-1 team lead, architect, developer, 2 analysts

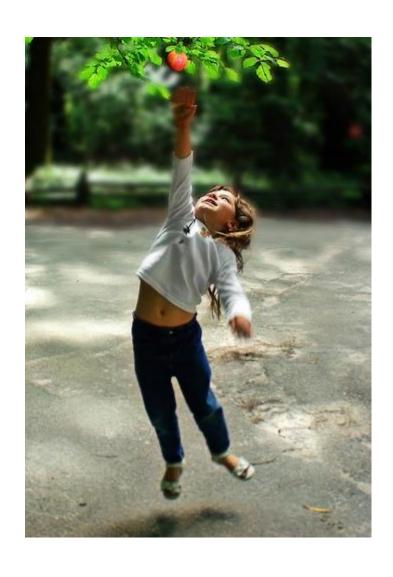


After 3 months





The 2nd 3 months: Fruits and pancakes







The first milestone

02/14 Release of first regular report

- Company KPIs for the management
- Acceptable data quality
- Manual excel Frankenstein from different sources
- Clarified terms and definitions in the background





Meet the Team

03/01 BI Team is now playing at full strength



Szaki



Mozdony



István

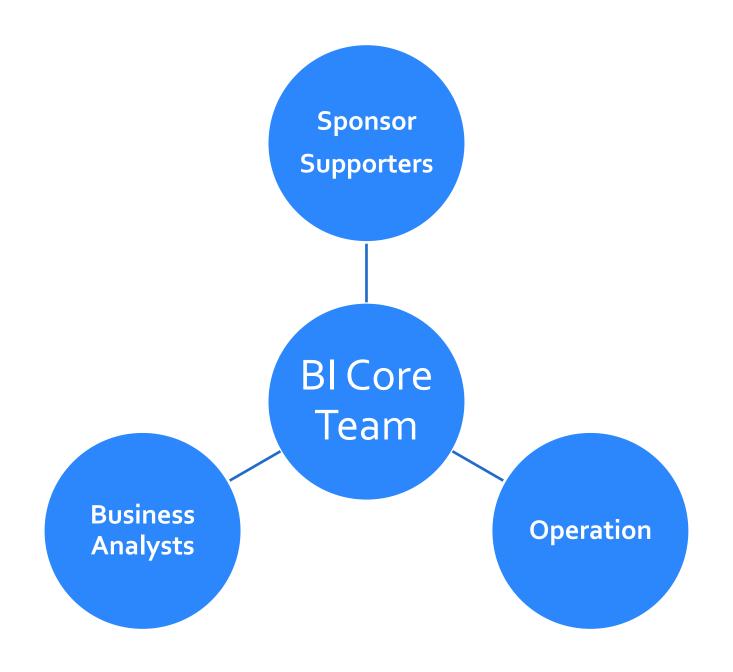


Zsolt



István

The extended BITeam

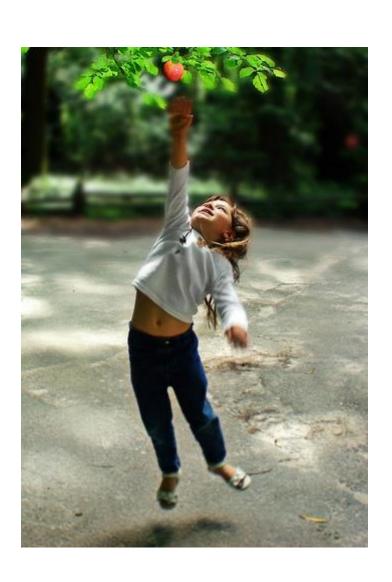




Reporting service for the company

03/22 BI team introduces reporting service

- Practically it's just an e-mail address
 - Processes, ownership, glossary and a Team behind
- 2-3 requests a day
- Average delivery time is 4 days



Building the architecture

o2/25 First table in the predecessor of DWHo4/o9 Launch of separate ETL servero4/11 First automated run of an ETL job



Challanges

- At this stage we were using operative databases for reporting
- DBAs were extremely helpful and flexible





Summer of milestones

05/30 Separate DB for reporting (born of a data warehouse)

06/17 100th delivered report by BI Team

o6/28 Tableau was chosen to be the BI tool of Ustream

07/15 Report request by Felhő

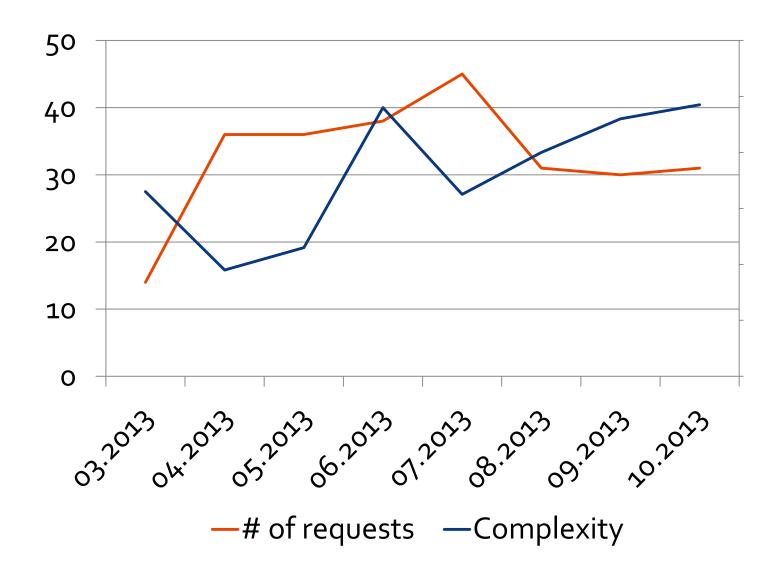
07/18 Launch of Hadoop cluster





Challenges

- Team is swamped in ad-hoc requests
 - Constant # of requests
 - Increasing complexity
- We became popular and soon a bottleneck
- Frequent overtiming 🕾



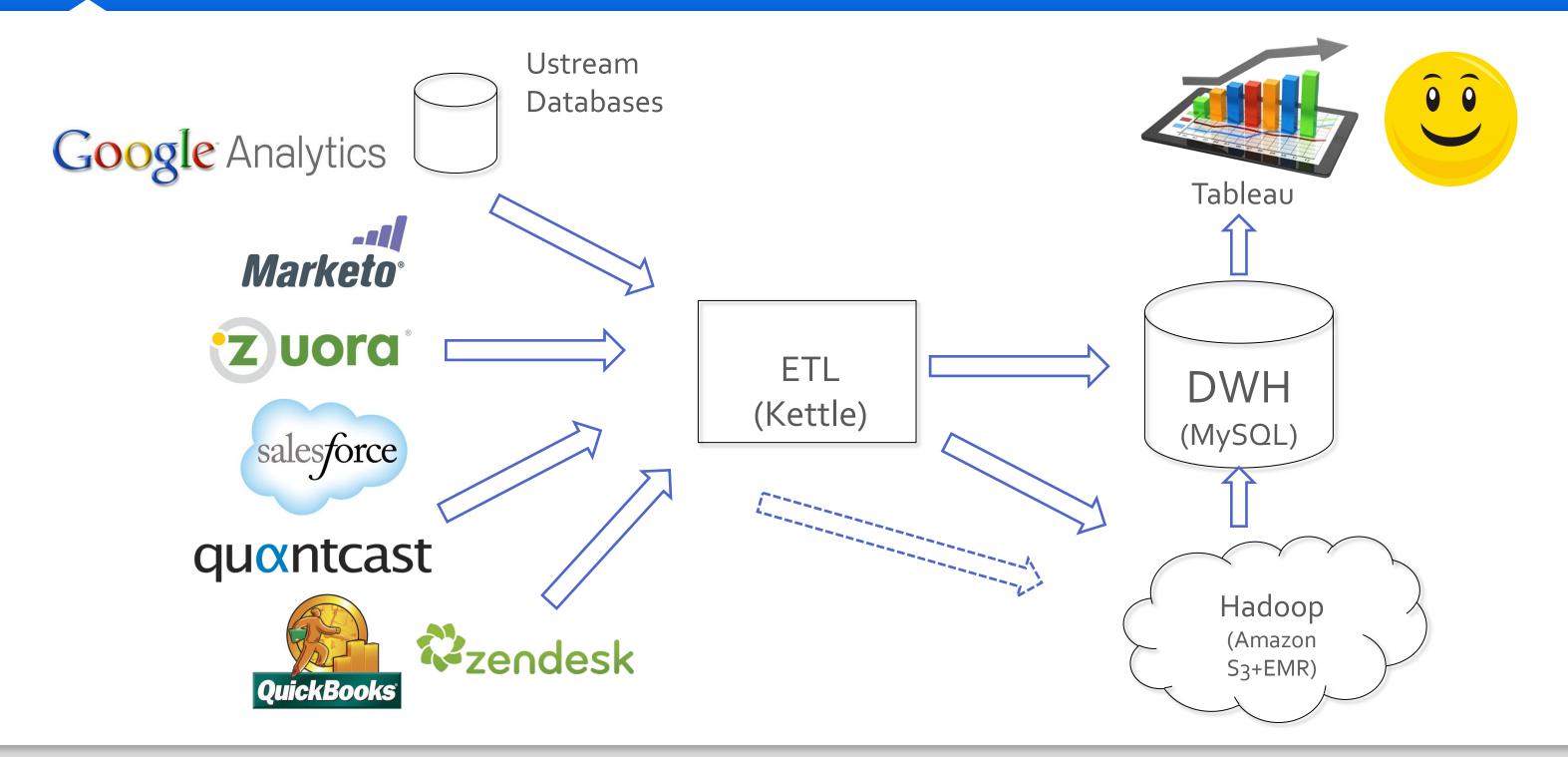


Way of working – Agile BI?

- Kanban style working
- Daily prioritization
- Agility
 - No outsourcing overhead
 - Break down tasks: a task shouldn't be longer than a week
 - Release ASAP sometimes without documentation
 - DevOps
- Every business unit should receive something in every month



BI infrastructure



After the crazy summer

- Things started to work
- Work efficiency increased dramatically
- More complex tasks
 - Segmentation
 - Real-time dashboards
 - Big data tasks
 - System integrations



Milestones of the past months

09/24 Tableau Server was opened for business users

First feedbacks are positive but still a lot to do



10/04 Marketo integration goes live

- Campaign management introduction in 4 weeks
 - Without major error or delay





Future plans

- Speed up building the data warehouse
- Infrastructure developments
- More conscious data asset management
- Enhance self-serve solutions
- Productization: BI for external customers
- Change team role from data providers to analytical consultants
- Hire further experts



So where are we?

- Trust & marketing
- Roles and processes
- Infrastructure
- Data asset management
- Human resources





Final words

- In the first year we managed to build a complete BI stack
 - Now we have to fill it with content
 - Still a lot to do on technical side
- Bl is a considered as a valuable and trustful team
- Keys of the first year
 - Team
 - Sponsorship
 - Company culture
 - Operation



Thank you!

Questions?

szakacs.balazs@ustream.tv

