If DaaS were the solution...

Donald Kossmann Systems Group, ETH Zurich www.systems.ethz.ch

... then why isn't everybody doing it?

Source: Amadeus, CreditSuisse, Novartis, ...

Why are DBMS such a pain?

- Because they are expensive
 - have functionality that is not needed
 - have gazillions of knobs for performance, etc.
 - require continous hand-holding by admins
- Because they solve only part of the problem
 - SQL alone is not enough
 - yet, dictate the whole application architecture
- Because they can be attacked easily
 - what happens if you do not trust your DB admins?
- Because they are boring
 - who wants to get a PhD in databases?

Why is this pain a feature (not a bug)?

- DBMS are expensive...
 - every customer needs different functionality
 - performance is still critical in many apps
- DBMS solve only part of the problem...
 - solving the whole problem creates bigger monster
 - data centric / client-server is the right architecture!
- DBMS can be attacked...

- if not, what happens if you lose the keys?

- DBMS are boring...
 - we would make less \$ if they were cool and simple

What does DaaS add?

- New business model
 - makes people pay for things that matter today
 - (not for things that mattered 20 years ago)
- Helps to rethink and reassess pain
 - repackaging technology stack probably good idea
 - get rid of a few layers (e.g., merge DB+App tiers)
 - rethink programming languages (e.g., LINQ, XQuery)
- Summary: Great playground for new ideas
 - DBMS will evolve into *"true"* distributed systems.