Semantic Reports

Make sense out of your data

Problem

- Increasingly available
  - Open government data (data.gov.uk)
  - Data APIs (graph.facebook.com)
  - Screenscraped data (dataincubator.org)
- Potentially available
  - Any relational database (RDB) via an adapter
- Lack of tools (to make sense of it)
  - Analyze (query, filter, sort, group) data
  - Mashup different datasources
  - Visualize data

Solution

- Provide a report service
  - Creation and storage of interactive reports and visualization widgets
  - Based on Software-as-a-Service model
  - Accepts both public and private datasources
  - Suitable fo public/restricted/internal access
  - Datasource-independent
  - Dataset-independent
  - Socially-enabled
  - API-enabled

Use case #1: Startups & small biz

- Copy-editing service wordy.com needs to visualize API analytics
- Common solution
  - Pay PHP/MySQL/JavaScript developer(s)
  - Implement custom code for each visualization
  - Test and deploy
- With Semantic Reports
  - Provide database connection
  - Define queries
  - Embed visualizations on site

Use case #2: Research

- Research DB Enipedia needs to combine, visualize & publish energy industry data
- Common solution
  - Download, convert & integrate database(s)
  - Implement custom code for each visualization
  - Integrate with existing site or develop new site
- With Semantic Reports
  - Provide database connection
  - Define queries over several (remote) datasources
  - Publish stored report & embed visualizations on site

More use cases

- Public institution is required to publish data online
- Real estate website/agency wants to enrich its ads by combining them with public data
- Medical website is looking into more interactive ways to publish data than HTML or XLS

Revenue Streams

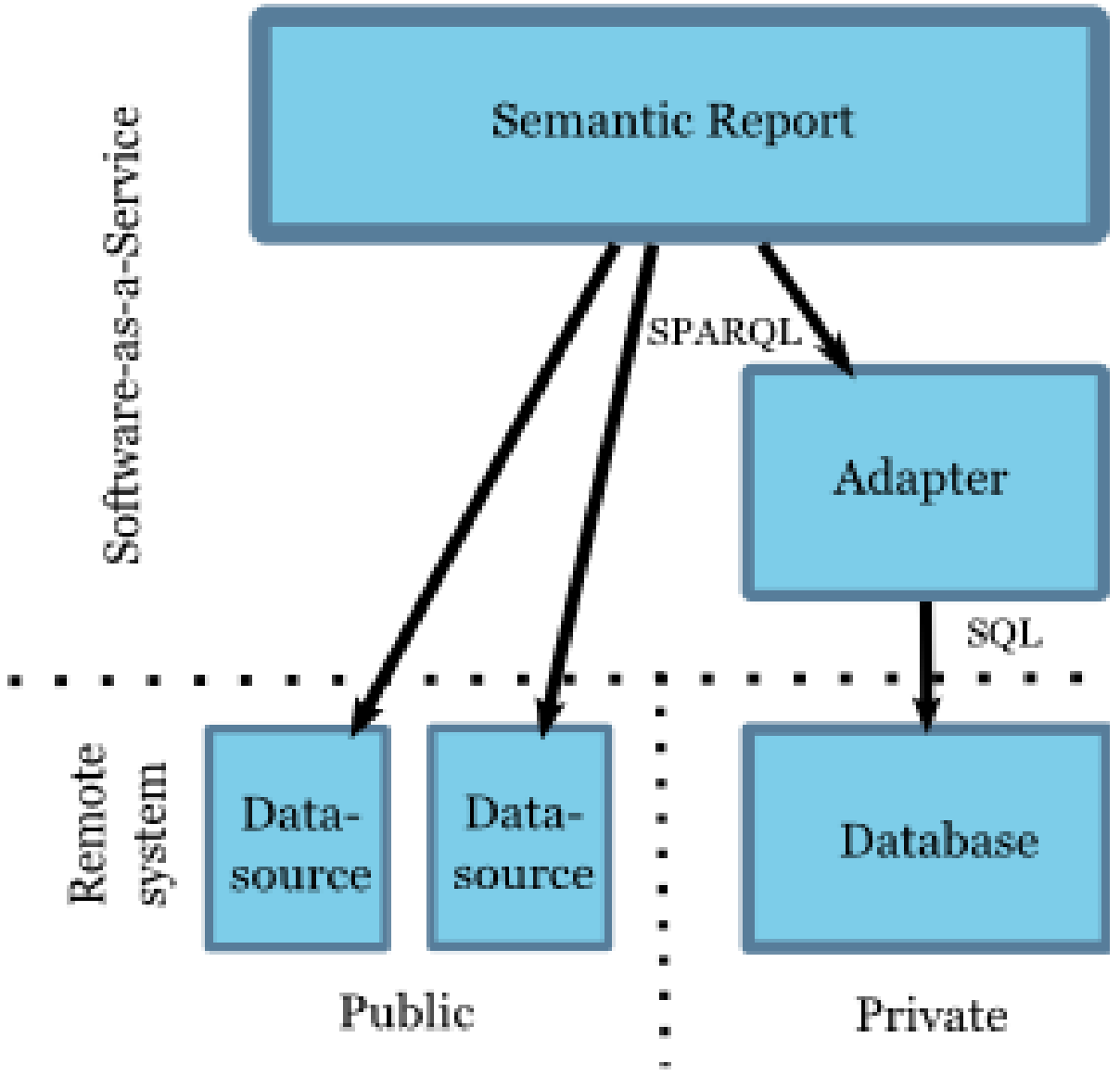
- Free for public use
- Subscription fee
  - For private datasources
  - For internal use (e.g. inside the company)
- Revenue cut
  - For restricted (pay-per-view) reports

Customer Aquisition

Competitive Edge

- Use of semantic technologies enables
  - Genericness (data-independence)
    - Any SPARQL endpoint can be used as datasource
    - Any RDB can serve as SPARQL endpoint (via adapter)
  - Real-time access
    - Adapter provides real-time SPARQL access to RDB
  - Distributedness
    - All datasources are hosted remotely
    - Only very little data needs to be stored in the system
  - Reuse and standard-compliance
    - RDF and SPARQL tools and services can be reused

Architecture



Features

- Simple
  - Public/group/private reports
  - Categories, ratings, comments
  - Embeddable visualizations
  - Export as file (PDF, XLS, XML, etc)
- Advanced
  - Data filters/interactive query editor
  - Combining datasources (federated queries)
  - Choice of visualization toolkits

Prototype testimonials

- *„This looks really cool. How did you specify the kinds of visualizations per query in your data model?“* Dr. Holger Knublauch, VP of Product Development at TopQuadrant
- *„I love how it is entirely agnostic as to what the data is about or how it is structured.“* Joshua Tauberer, open data activist, CTO at POPVOX
- *„One of the things we're looking at is visualisations of data - so your project rang some bells!“* Julian Higman, tech. lead at Talis

Competitors

- Socrata
- Factual
- Swivel
- LogiXML
- Tableau Public