

canoo

Your solution provider
for Rich Internet Applications

RIA for Business

What's next?

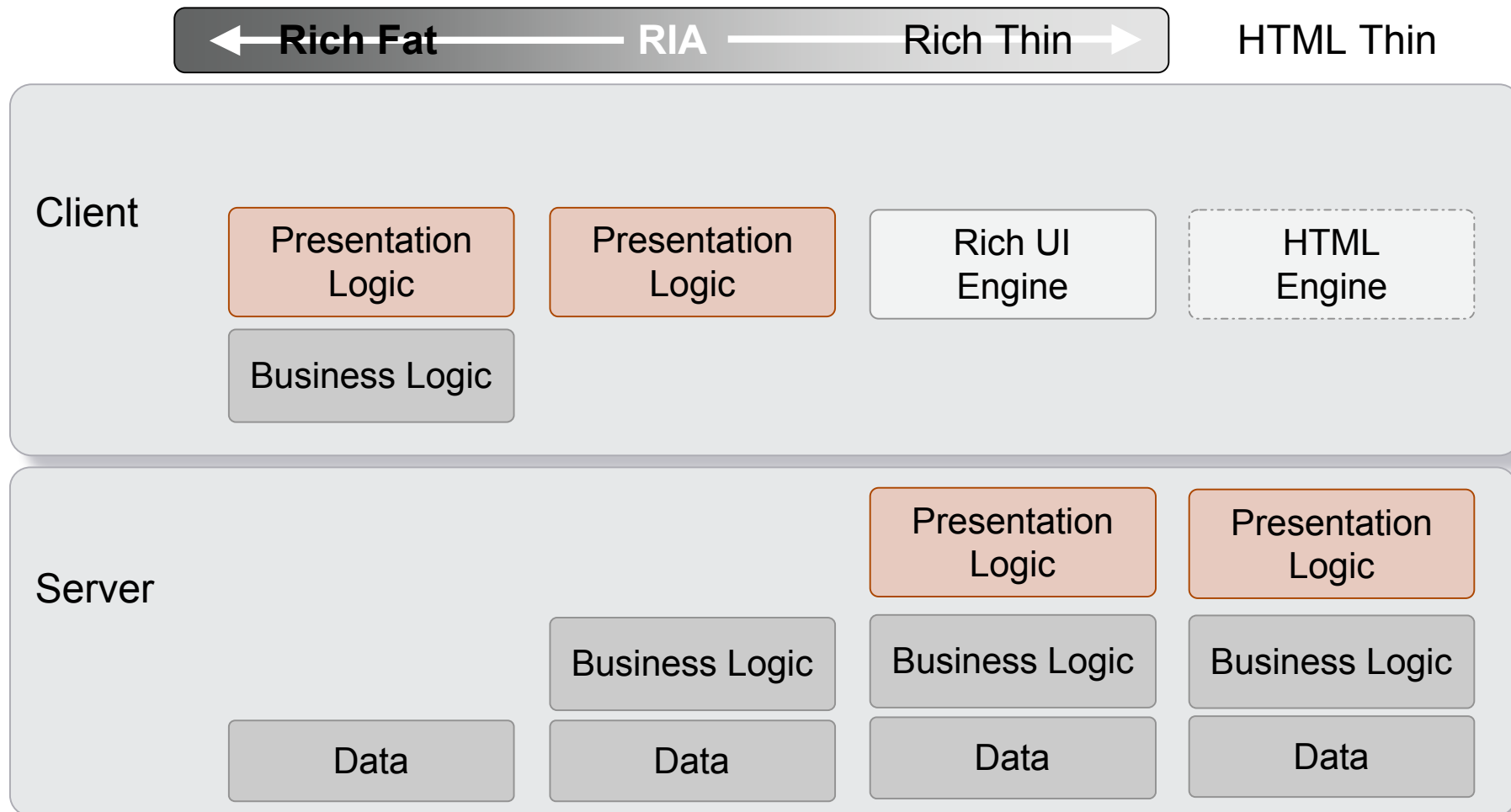
RIA Opportunities for the Business

- Software as a service (SaaS) that works
- Web 2.0 portals that are usable and efficient
- Mobile solutions

Where are we?

- From **Fat** to **Thin** and back again
- Why was the fat client abandoned?
 - Deployment?
 - Only relevant in B2C scenarios
 - Configuration?
 - Windows made it hard to sandbox applications
 - Architecture?
 - Fat client requires distributed programming skills

Architecture



Developer Productivity

- Developer productivity suffered heavily with Web apps
- Separation of design/interaction from programming failed
- How can we pick up speed again?
 - Domain specific language for the presentation layer
 - Abstraction and gradual exposure of low-level details
 - Do not force developers to deal with distributed programming
 - Minimize the toolset (languages & tools & environments)
 - Testing of user interfaces has to get simpler

Security

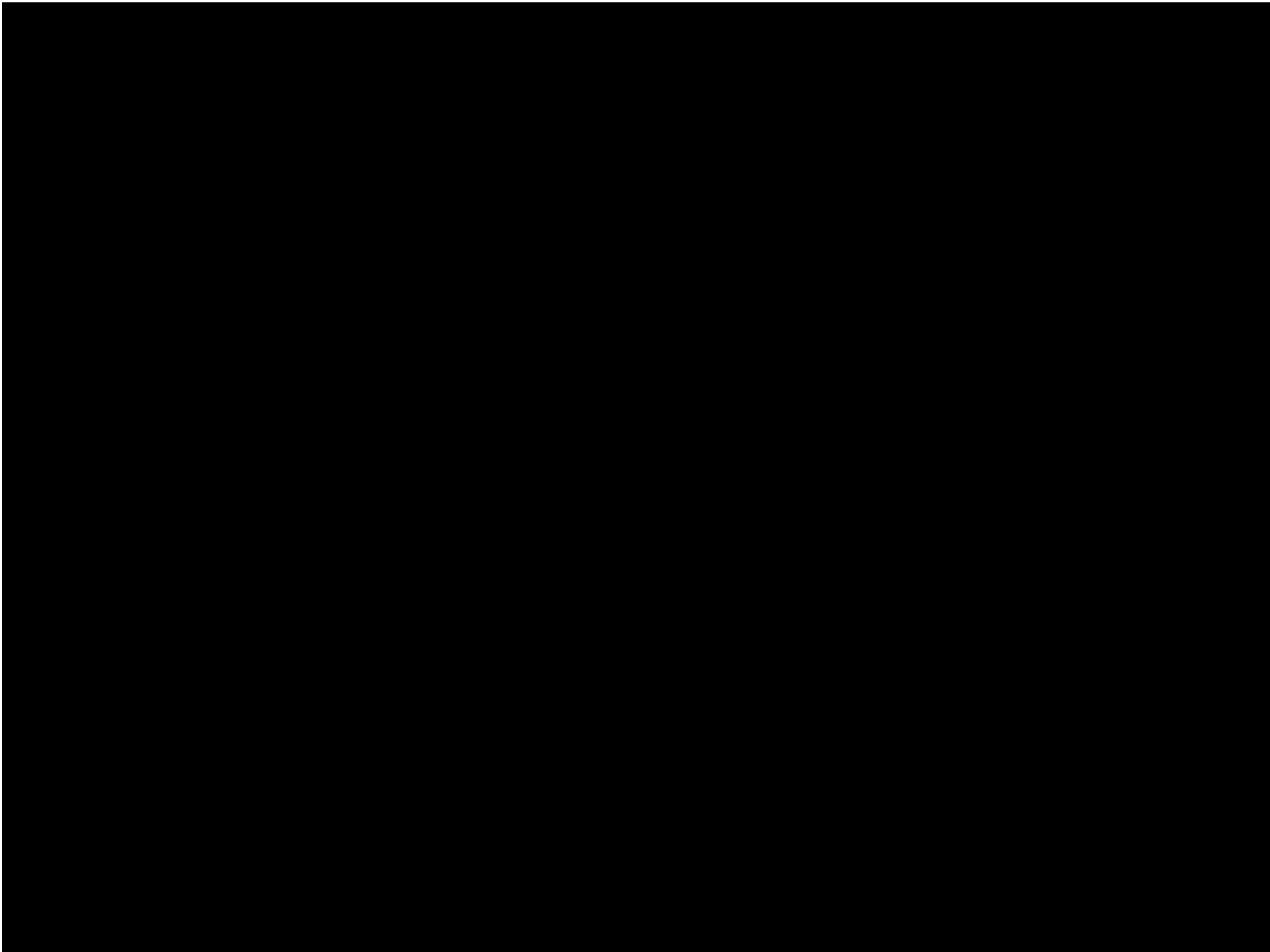
- Browser is still an insecure run-time environment
- RIA needs tightly sandboxed run-time environments
 - Dedicated run-time environments outside of a browser are on the horizon.
 - Java Consumer JRE, AIR, Silverlight, Mozilla
- Generic clients can help to improve security

User Interface

- Interaction design skills got lost with Web applications
- Business applications
 - It's more about productivity/efficiency than flashiness
- We shall overcome the page metaphor
- Merging Web and desktop application styles
- B2C and B2B have different audiences
 - Tailor the user interface to the audience
- Cross platform?

Mobile Devices

- Mobile devices will prevail - the demise of the PC
- Don't try to simply shrink your user interface
- Customized component library
- Tailored interaction design
- Permanent Internet connection cannot be assumed



What else?

- The future of Mash-ups
 - End-user programming on steroids?
 - Relevance in enterprise environments?
 - Dependency management?

What are the challenges ahead of us?

- Architecture
- Developer productivity
- Security
- User interface
- Mobile devices

Contents

- Where are we?
 - History (Fat Client and then HTML), history repeats itself
 - Why was the fat client abandoned?
- Challenges
 - Architecture
 - Server-side and opposing requirements (offline, desktop power)
 - Caching, validation, data consistency, integration into portals
 - Developer productivity
 - Too many technologies with most AJAX toolkits
 - Low level component libraries
 - Frameworks?
 - Cover the entire presentation layer (view creation, presentation logic, validation, data binding)
 - Web designers cannot do interaction design (separation does not work)
 - Domain Specific Languages (not just *XML)
 - Security
 - How to create a secure run-time environment as a prerequisite for secure applications (it takes more than that but it is needed for a start)
 - User interfaces
 - Know-how about building great user interfaces for client-server applications got lost with the advent of the Web applications
 - Educate business analysts and developers
 - Business: it's about productivity and not so much about sexiness
 - Mobile devices
 - One cannot just scale down the user interface by using a different CSS!
 - Different component set and different view and interaction design
 - iPhone as an example
 - Varia
 - Mashups for business applications
 - End user programming
 - Manage your dependencies!