



01 Platform /Technology
Platform
 • Do you have a homogenous software environment?
 • Do you think this will remain so in the future?
 • What are the total costs of your platform? For licenses? TCO?
Technology
 • What technologies is your company's strategy based on?
 • Has your current technology also been proven for critical business applications?
 • Security/Performance of your technology?
 • Do you have inhouse development expertise?

02 Java
Pros
 • Platform independent → Win, Linux, Mac
 • Approved, stable and high-performance
 - Fast and native UI with Standard Widget Toolkit (SWT)
 • Open-source transparency
 • Widely used and broad developer basis
 • Great number of freely available components, more than c/c++, php and c#
 • Run time JRE can be included with the application
Cons
 • "Legacy" applications based on Swing, Applets

03 Web Applications
Info
 • Application runs in the internet browser
Pros
 • Minimal end-user system requirements
 • Computing power only on the server side needed (Server side computing)
 • Easily linkable Applications and information
 • Highly flexible UI Design
 • Easy distribution and deployment via central web server
Cons
 • UI response latency caused by the request-response cycle
 • Not applicable for high-interaction requirements
 • No utilization of bandwidth
 • Client-side computing power unused
 • Lack of UI-standards increase development workload

04 AJAX
Questions
 • Does the end-user save time with AJAX?
 • Does AJAX increase user acceptance?
Pros
 • Improved UI response
 • Easier handling of complex data structures
 • Reduction of required bandwidths, only transfer payload
 • Optimum arrangement of page content, dynamic content
Cons
 • Very high development workload, expensive maintenance
 • No 100% standards, browser-dependent development
 • Two worlds: JavaScript Client + Java Backend, only very inconvenient debugging

05 Smart [Rich] Client
Info
 • Stand alone client application
Pros
 • Support for complex data structure, very low delay on user interaction with the application (e.g. graphic modeling)
 • Managed Client – the server always delivers the latest version of the application. Deployment is as easy as for web applications
 • Distribution of the computing power, optimal bandwidth usage
 • Standardized development, fast results
 • Run time – JRE- can be delivered in the required version, no dependency on already installed JREs.
 • No installation, only a copy operation required. Executable even from a USB stick
Cons
 • Initial distribution on the client application required
 • Footprint – minimal size of the basic application – 14MB

06 Mobile Office (offline/online)
Info
 • How important is remote data access for your employees?
Pros
 • Data 2 Go!
 • Use of travel time
 • Easy bridging of central server downtime
 • Saves on bandwidth
Cons
 • Local hard disk space limited
 • Data synchronization for not read-only systems, complex conflict management
 • Data security needs cryptography

07 Power user
Questions
 • How important is the application for the user's day-to-day work?
 • Does the user have to monitor and edit complex interdependencies?
 • Is an installation of the client software acceptable for the user?
Info
 • User is keen to drive the improvement of the application?
 • The efficiency of the processes is important
 • Every crash / downtimes will cause high costs

08 Casual User/ Mass Market
Questions
 • Occasional use of the application; Does the application have a low access barrier and intuitive interface for solving the user's tasks?
Info
 • Installation is not the preferred option
 • High effort to learn how to use the application for a sub process
 • Good usability, fast learning curve → keep the entry barrier low

09 Architecture
Questions
 • Are you deciding about a platform for only one solution or do you want to provide a basis for most of your applications?
 • Do you conduct IT Governance?
 • Are you dependent on a single software vendor?
 • Are you planning for the long term?
Pros
 • Predefined architecture cuts the cost for the setup of an application
 • Reuse cuts costs
 • Service Oriented Architecture allows the use of libraries, also Open Source
 • Fixed architecture reduces the cost of initial training of your developer team
 • Flexibility in the choice of technology – Best of Breed
 • Open Interfaces
Cons
 • Administrative expense

10 Composite Applications
Info
 • SOA not only at server level but also at client level
Pros
 • Integration of existing and proven software solutions (service level) in the application (e.g. via OLE)
 • Step-by-step turning-off of legacy applications
Cons
 • Integration may entail your losing control over the application
 • The result can have an inconsistent look & feel
 • Technical and design dependencies

11 Hybrid Solution/Single Source
Info
 • Web application for the casual user, smart client for the power user. Or all as a smart client
 • No need to develop business logic and GUI twice.
 • With Eclipse Smart Client it is possible to integrate web and rich client applications seamlessly for rich interaction
Pros
 • Through the use of Java for JEE Web Applications and for Eclipse Smart Clients you can use the same functionality and the single source paradigm
Cons
 • Increased deployment workload – could be automated

12 Eclipse RCP
Info
 • Standardized (OSGI based) java application framework for creating Smart Clients
Pros
 • Modular design
 • Very elegant Plug-in/Extension Point architecture, inversion-of-control (IoC)
 • Plug-in architecture enables flexibility and the possibility to deliver functionality afterwards
 • Fast GUI, native Look & feel
 • Large set of additional plugins and frameworks (e.g. GEF, EMF, ECF)
 • Big community
 • Open source, free (e.g. banking)
 • The function richness of the core makes the development much faster. The application is based on concept-proven UI and tested components.
 • Many open source plug-ins which solve the most requirements of a solution
 • Stable developing lifecycle (driven by IBM, Bea, Borland, Intel, Nokia,...)
Cons
 • Getting started, learning curve