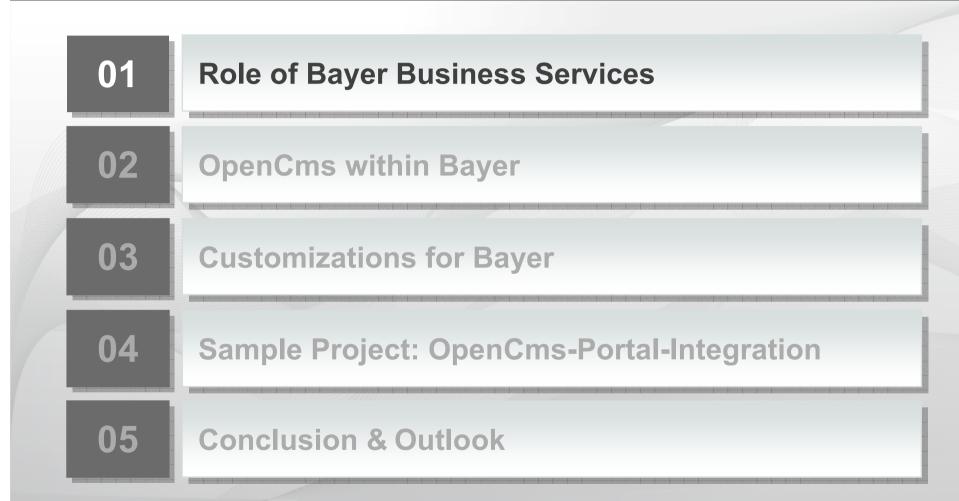


OpenCms @ Bayer

Agenda





Role of Bayer Business Services (I)

Bayer Business Services is the international Bayer-competence-center for

IT-based solutions and services.

~ 1 Billion Euro turnover*

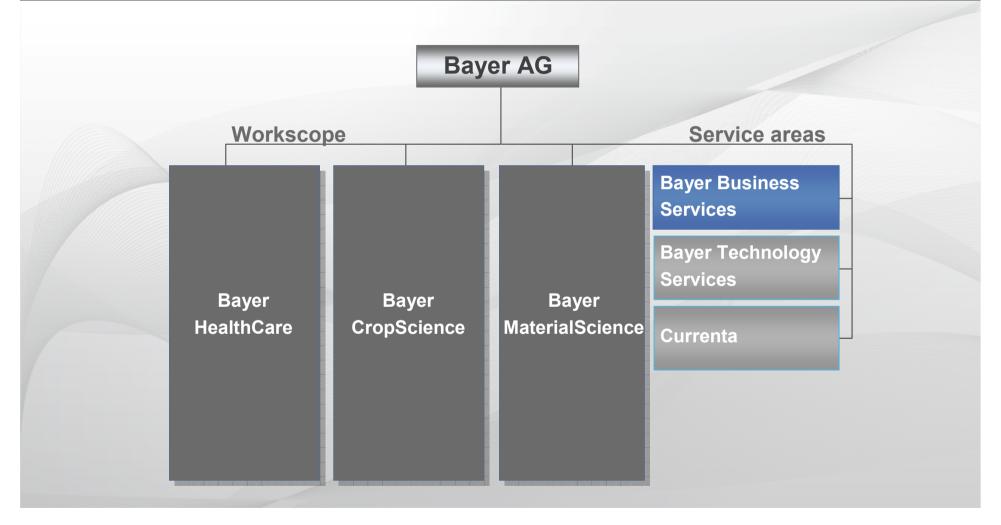
~ 5.000 employees*



* 2007 worldwide



Role of Bayer Business Services (II)





Agenda

01 **Role of Bayer Business Services** 02 **OpenCms within Bayer** 03 **Customizations for Bayer** 04 Sample Project: OpenCms-Portal-Integration 05 **Conclusion & Outlook**



OpenCms within Bayer (I)

■ Why OpenCms?

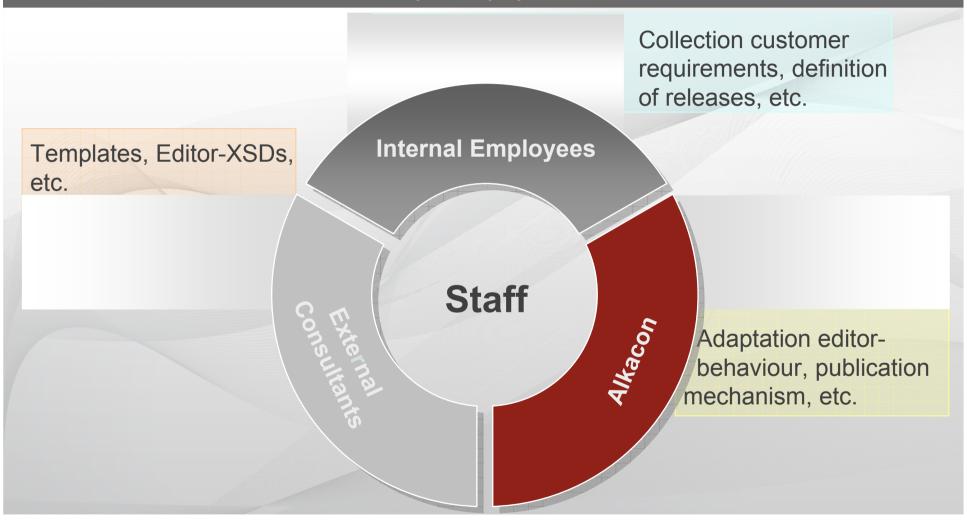
- Finally chosen system after CMS-evaluation in 2005
 - Analysis of 20+ different systems
 - Basis: Catalogue with more than 200 criteria

Open Source

- Contribute to community and use community solutions for free
- Independence from single vendor
- Save licence costs
- Remain flexible in terms of customizations



OpenCms within Bayer (II)





Agenda

01 **Role of Bayer Business Services** 02 **OpenCms within Bayer** 03 **Customizations for Bayer** 04 Sample Project: OpenCms-Portal-Integration 05 **Conclusion & Outlook**

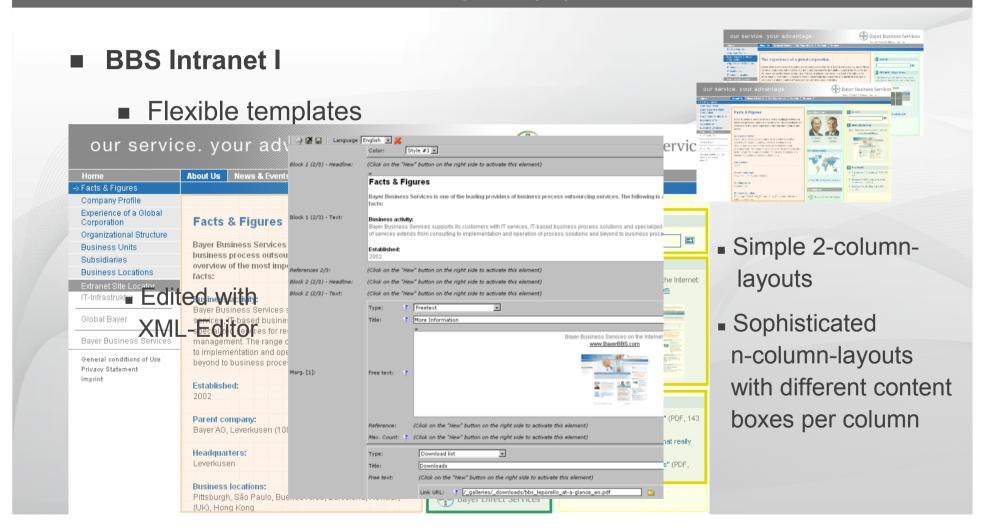


Customizations for Bayer (I)





Customizations for Bayer (II)



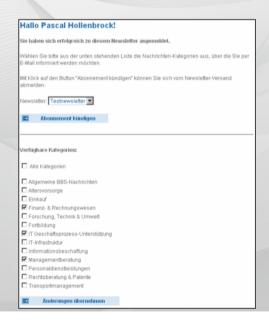


Customizations for Bayer (III)

■ BBS Intranet II

- Categorie tree for news items
 - News-item can belong to 0..n categories





- Newsletter-module
 - Automated news distribution
 - New news items collected in individually defined VFS-folders
 - Subscription via web form, optionally for 0..n categories

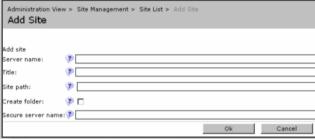


Customizations for Bayer (IV)

■ BBS Intranet III

- Offline-Preview
 - Anonymous (non-OpenCms-) users can preview offline contents (authentication against Bayer LDAP)
 - Links sent via E-Mail and valid for definable time period
- Template to include RSS-feeds
- New sites can be defined "on-the-fly", i.e. without restarting the system

 Administration View > Site Management > Site List > Add Site





Customizations for Bayer (V)

- MyBayerJob: Internet eRecruiting
 - Germany, USA, Northern Europe
 - MyBayerJob.de with approx. 25,000-30,000 visitors per month

RSS-feeds with open API

- → SAP-contents
- → XML-files
- → Binary files (podcasts, ...)



Jobs extracted out of Bayer HR SAP



Customizations for Bayer (VI)

Global Bayer HR Portal I

- OpenCms integrated into an IBM-Websphere Portal
 - Delivery of navigation structure and content pages
- Portal sized for Bayer-global-use
 - Currently:
 Approx. 50,000 users in Germany, USA, Southern America
 - More to come...: Approx. 100,000 users worldwide



Customizations for Bayer (VII)

■ Global Bayer HR Portal II

- Templates
 - Table-Pages



- Image-Hotspots (Image Maps)
- Application Pages
 (Content page linked with SAP-Self-Service)





Customizations for Bayer (VIII)

Global Bayer HR Portal III

- Transfer language versions in XML-editor
 - Prefilled widgets of language version 1 can be transferred to language version 2 easily
 - Facilitate translation of content items
- Linkmanagement
 - Path names replaced by item IDs
 - Allowing move-/rename-operations without risking inconsistencies
- Content distribution functions
 - Contents / Siblings can easily be moved / created within complex tree structure



Agenda

03

05

01 Role of Bayer Business Services

02 OpenCms within Bayer

Customizations for Bayer

O4 Sample Project: OpenCms-Portal-Integration

Conclusion & Outlook



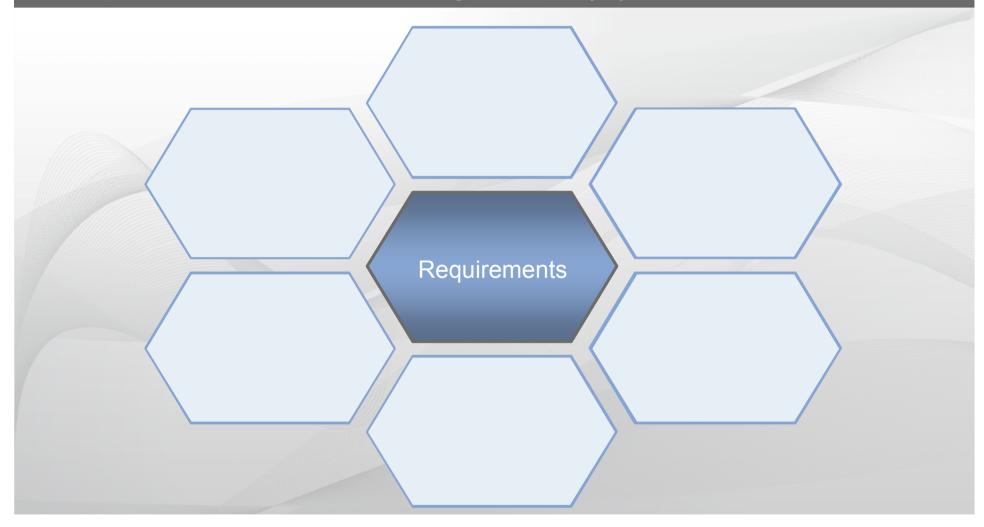
Sample Project: OpenCms-Portal-Integration (I)

- Intention of the project: Implement an HR-Portal
 - With general HR-information (Contents)
 - 2. And HR-specific applications (Self-Services)
 - 3. That can be maintained easily
- Easy maintenance
 - Maintain as many
 Portal-components as possible with OpenCms





Sample Project: OpenCms-Portal-Integration (II)





Sample Project: OpenCms-Portal-Integration (III)

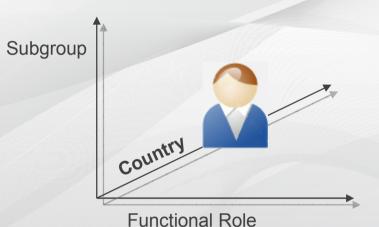
- Risks at project start
 - OpenCms just introduced as new CMS
 - No experiences concerning stability, etc.
 - Missing know-how
 - Developers just in learning-phase
 - Lack of experience in CMS-Portal-integration
 - "Key-project" with tight timeline



Sample Project: OpenCms-Portal-Integration (IV)

Architectural Portal-conditions

Advanced Role-concept

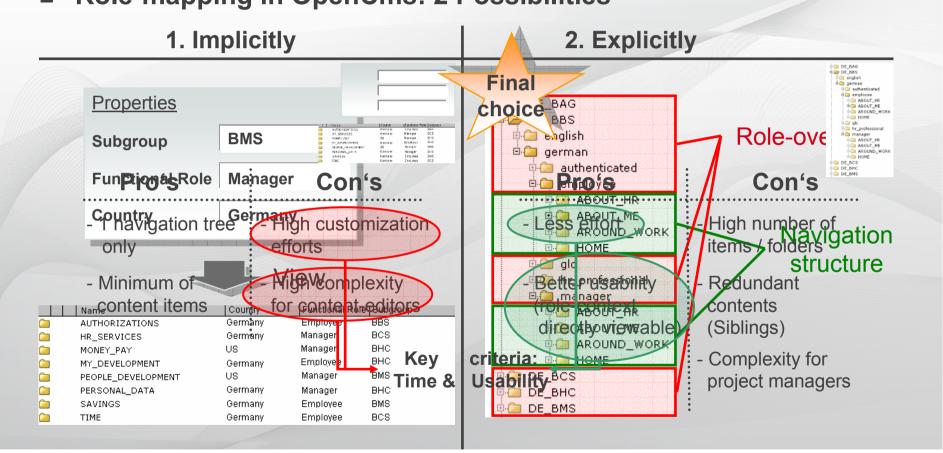


- Import of external contents via
 - Webservice
 - File system
- Portlets can display contents regardless of original format
 - Conversion via XSLT



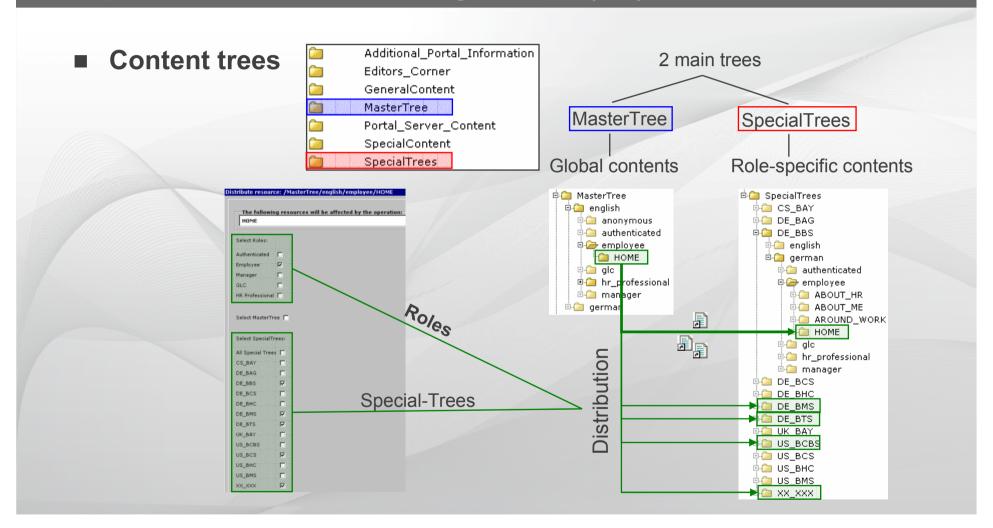
Sample Project: OpenCms-Portal-Integration (V)

■ Role-mapping in OpenCms: 2 Possibilities



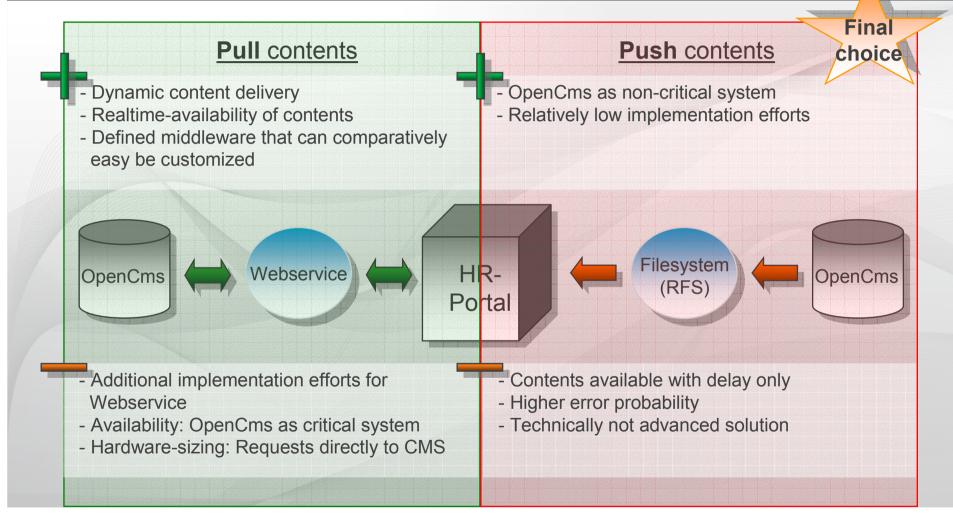


Sample Project: OpenCms-Portal-Integration (VI)



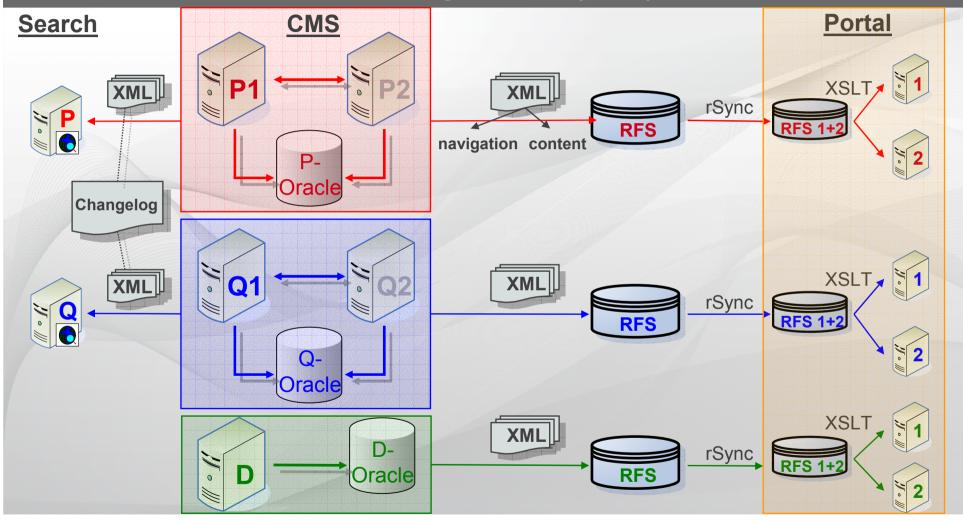


Sample Project: OpenCms-Portal-Integration (VII)





Sample Project: OpenCms-Portal-Integration (VIII)





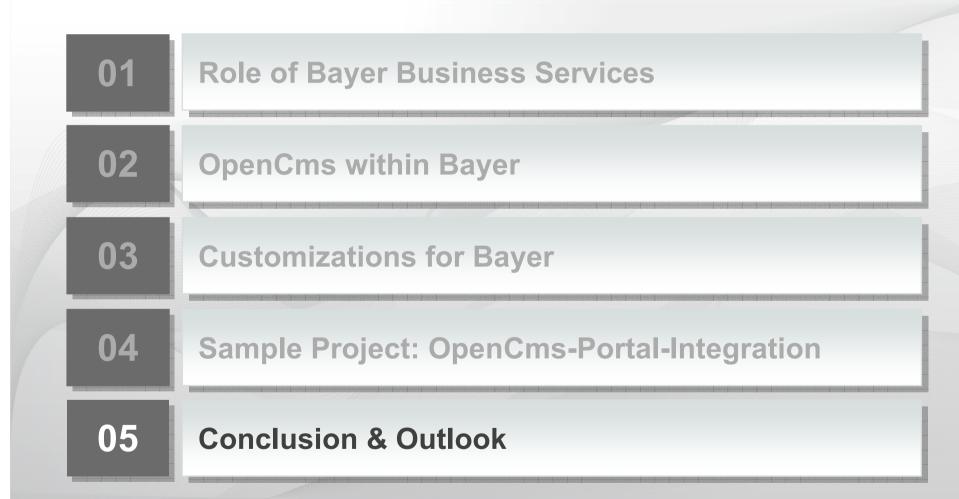
Sample Project: OpenCms-Portal-Integration (IX)

Lessons Learned

- System with acceptable performance up to 50,000 siblings
 - Higher number:
 Performance problems e.g. when calling property dialogues
 - Probable cause:Slow Oracle-DB-server
- rSync to Portal proved to be an adequate solution
 - On OpenCms-failures Portal-contents have not been affected
 - Easy change of sync-directions for maintenance / tests
 - No expensive high-availability environment for OpenCms necessary



Agenda





Conclusion

- OpenCms as suitable system also for larger ECM-projects
- Generally positive feedback of end users
 - Easy to use
- Improvable aspects according to customers
 - Handling of XML-editor
 - Real inline-editing
 - Out-of-the-box workplace-documentation of "standard-OpenCms"



Outlook

- **■** Further expansion of OpenCms within Bayer planned
 - Smaller and medium-sized Intranet- and Internet-sites
 - Plan:
 Establish OpenCms as standardized CMS for Bayer Business
 Services
- Integration of OpenCms and Microsoft Sharepoint



Thank you for your attention!

Which questions do you have?

Should you have any further questions, please do not hesitate to contact me



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