

CREN TechTalk Questions and Brief Answers on Portals

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See URL www.cren.net/know/techtalk/events/portals.html

1. What is a portal?
 - a. A gateway to web access.
 - b. A hub from which users can locate all the web content they commonly need.
 - c. History
 - i. ISPs – AOL, Prodigy, CompuServe, MSN
 - ii. Search engines
 - iii. Intranet portals - VEPs
 - d. Required: (my opinion) Personalization, Search, Channels, Links, Desirable: Customization, Role-based models, workflow

2. What different kinds of portals are there?
 - a. Vertical (VEPs or Vertical Enterprise Portals or Vortals)
 - i. Gartner says: CNET.com (shopping mall), animalhouse.com (college), MP3.com (music), pets.com (pets), webmd.com, women.com – women's issues , Intelihealth.com, Ivillage.com, sportsline.com, tucows.com
 - b. Horizontal (HEPs or Horizontal Enterprise Portals aka MegaPortals)
 - i. (Excite, Yahoo, AltaVista, Netscape's Net Center, AOL.com, Infoseek ...)
 - c. Intranet (also called Enterprise portals)
 - d. Internet (internet gateways or libraries – not focused on internal enterprise functions)
 - e. The Gartner Group says Level 1,2,3, and 4
 - i. 1 Intranet Entry Point – University info, Misc content, Search, Links
 - ii. 2 Content Integration – 1 plus Extensive info, Advanced search, Directories, personalization
 - iii. 3 Workplace Integration – 2 plus Customer support, Transactions, Collaboration, Role-based profiles, ERP (enterprise resource planning) integration
 - iv. 4 Marketplace Integration – 3 plus Procurement, Supply chain mgmt, e-marketplace integration, Advanced personalization, EDI, XML, Java

3. Why have a portal?
 - a. Different roles require different information. Someone from grounds and buildings needs different info than the chair of computer science. (Customization)
 - b. Different people with the same role work differently. (Personalization)
 - c. Efficiency – people get directly to the info they need. (Work Flow) Customization insures they don't miss anything.
 - d. Link Integrity – Software insures that links work or go away.

4. Is a homepage a portal?
 - a. Corporations are replacing their internal homepages with portals. Ford Motor Company (e.g.,) has replaced its supplier extranet (FSN – Ford Supplier Network) with a business portal (Internet Week 5/14/99).
 - b. Web and entertainment companies are building bigger and bigger horizontal portals (HEPs).
 - c. Not every company or university needs a HEP – but maybe they need a VEP.

5. Does a portal replace a homepage?
 - a. **No. Outsiders will still need your home page.**
 - b. **No. You'll still need the info on your home page.**
 - c. **No for a while. You'll need your home page as you transition to a portal.**
 - d. **Yes. Give your outsiders a portal based upon their role. See Error! Bookmark not defined. for an example of a homepage that lets outsiders select their role – though this is NOT a portal.**
 - e. **Yes. Provide the general info on your homepage as part of your portal.**

6. Should you build your own portal) or buy “portalware” from a vendor?
 - a. **Build - expensive, large maintenance burden, training, cross departmental involvement, tech support, may need new skills**
 - b. **Buy - expensive, vendor needs to know details of your university, dependent on specialized vendor – no standard or open systems yet, advertising on portal, privacy, local customization**

7. What are some of the elements that might be on a portal? **Updateable by the user where appropriate.**
 - a. **Calendars and to-do lists – schedules, hours of operation**
 - b. **Discussion groups and chat**
 - c. **Announcements & alerts**
 - d. **Job openings, career opportunities**
 - e. **Reports and documents**
 - f. **Personal HR info – benefits, medical info,**
 - g. **Access to data warehouse**
 - h. **Search**
 - i. **E-mail and address book**
 - j. **Collaboration – intranet and internet**
 - k. **Applications – including access to legacy systems**
 - l. **Work flow**
 - m. **Course schedules, grades, GPAs, transcripts, etc. , degree audit**
 - n. **Residence hall menus**
 - o. **News – campus and world**
 - p. **Weather**
 - q. **Maps and images**
 - r. **Org charts**
 - s. **Finance – stocks and investments, expenses, budget, credit union, bank accounts**
 - t. **Access to online shopping and vendors**
 - u. **Links – reference material, bookmarks**
 - v. **IP telephony**

8. Can't we just have links to all these things? Doesn't that just make a portal a personalized list of bookmarks? What makes a good portal UI (user interface)?
 - a. **DB and application windows – in addition to links**
 - b. **General, site, role specific, and channel specific searches**
 - c. **Personalization and customization – user specific views**
 - d. **Profiles**
 - e. **Single sign-on**

9. Since portals need to access financial information, student and faculty information, and other information from all over the university, can the same folks who built our university homepage(s) build our portal?
- Unlikely.** You'll need both the folks who normally build web pages AND the folks who know how to manage the specialized data (likely financial data, student information, etc.) needed for personalization.
 - The folks who normally build web pages will have to deal with much more dynamic, customized and personalized data. They'll also have to establish relationships with outside databases and information sources)(e.g., the NYT news service).
10. What "roles" might a portal support?
- Student, faculty, staff
 - Manager, worker, temp, Provost, ... for Controller's office, Chemistry dept, IT, Facilities, etc.
 - Scholars, researchers
 - Prospective student, alum, person planning to visit, friend, vendor, ...
11. What's a portal channel?
- A customizable page container (small window) where specific information or an application appears (weather, news, search, reports, stocks, etc.)
12. Does a university need more than one portal?
- Yes** – You can't avoid it. Course Info has its own portal as does many things you'll buy. Many departments will write their own portals. Folks will use commercial portals.
 - No** – You'd lose single sign-on. Folks have several roles (student and employee, worker and softball team member) so one portal is better. Lose single source for web info. Keeping data in synch is messier.
 - No** – You'd lose consistent look and feel and common navigation, etc.,
13. Can outsiders use a university portal?
- They should be able to. See [Error! Bookmark not defined.](#) for a hint at what this might look like.
 - Outsiders could select their role. Portal could remember their role with cookies or some such scheme and offer customization and personalization.
14. How do commercial portals differ from University portals?
- Commercial portals are horizontal and don't include university info.
 - Commercial portals don't know the various roles of a user – just one, a customer.
 - Some commercial portals use cookies to hold state and customization – not good for shared computers.
15. Can we use a commercial portal as our portal? Should our portal point to a commercial portal?
- No.** Commercial portals do not have access to our internal data.
 - Yes.** We could point to or incorporate commercial portal channels.

16. Can we use CourseInfo (or software like that) as our portal? What about just using it as a student portal and using something else for other types of people?
- Version 4.0 of CourseInfo has a portal-like interface as does CampusPipeline and others.
 - All of these vendor solutions limit customization and personalization.
 - You may want to have a single portal. These can't do that.
 - Some of these solutions have advertising on them that you do not control.
17. What's the difference between portal customization and personalization?
- Customization** is done by a portal based on what it knows about you (e.g., your role). Customization will probably be different for your different roles, or a portal might give you a view based on all your roles.
Some roles demand very specific customization. The **registrar**, e.g., subscribes to the student info channel, but has access to all students and has global update privileges. A **student** subscribes to the same channel but can only see her own info and has no update privileges.
 - Customization includes what initial channels you subscribe to, what privileges you have to read, search and update items, what channels you can add, what personalization you can do, etc.,
 - You do **personalization** to a portal to make it work the way you do.
 - Both customization and personalization must be saved for each of your roles. These may be saved with the same or different technologies.
18. What kinds of personalization should you be able to do?
- Subscribe/unsubscribe to a channel
 - Position the channel on a portal page
 - Personalize the channel content (profiles)
 - Personal calculations, reports, and display (e.g., how much money do I have left in my capital account? What's the value of my portfolio? What's the P/E of HD? Display negative numbers in parens in red, etc.)
 - Colors, backgrounds, fonts, when to update, defaults
19. Should portals be aware of the device they run on and have device dependent customization? Should my portal look different, for example, on a palm top than on a desktop than on a wireless laptop?
- Yes.** Oracle and MicroStrategy plan to build portal software for palmtops (InfoWorld Electric 3/19/99). Others will follow.
20. How can portals be implemented? CGI? Applications servers? EJBs? Java servlets?
- Yes – all of them and more, though CGI alone may be very difficult to do.**
21. Are portals less secure than our old homepages?
- Authentication required for most vertical portals**
22. Are **application servers** required? **Context management engines** (an app that collects, analyses and distributes personalization and customization information)? **Integration brokers** (middleware that enables applications to share data)?
- These all are part of a comprehensive portal system. For a portal that includes customization and personalization, all of these components, at least functionally, will be required.**

23. What role will XML play?
- Data tagging for shared fields.
 - A common database data format.
 - If we ever expect to share code (EJB, servlets, etc.) we will need some way to share the meaning of the data elements in channels. XML makes that possible.
24. How do portals maintain state, keep customization information, manage authentication and authorization, and manage timeouts? Databases, cookies, global variables, persistent objects? Pros and cons of these?
- Cookies** – Stored on the client computer. Can be shared by other portals. Potential security problems. Limited amount of data. Not appropriate for shared computers.
 - Databases** – most versatile, but may not be shareable across different portals. Performance and security problems.
 - Persistent objects and global variables** – Fine for EJBs, servlets, etc. Update synchronization issues.
25. Brown University hosted a JA-SIG working committee meeting on Wednesday 1/12. The purpose of the meeting was to begin to create specifications document for a free, sharable portal framework. Folks from Brown, Boston College, Delaware, Cornell, Princeton, George Washington and Yale and a few others were there. What is this framework all about?
- Consider the adoption of the IBS (Error! Bookmark not defined.) (Java EJB based) framework as a starting point.
 - Create a JA-SIG clearinghouse for code sharing.
 - Determine which universities have what interests and resources to contribute to building EJBs, defining UI, publish/subscribe, etc. and request volunteers from institutions (not limited to those who attended the meeting)
 - Keep JA-SIG and others informed of progress.
26. Before we get started building our portal, are there some major issues we should consider?
- Plan, plan, and plan, before you code a line of HTML.
 - A portal will change the way the university treats its data. This will require cooperation between many departments related to the use (read, update, fix, etc.) and ownership of data. Include those folks and representatives from all groups who will use your in your portal planning.
 - Specify the division of labor. More than one technical group and many user groups will be involved. Make sure they all know their roles.
 - Leadership and commitment. This is a big undertaking. Get someone that is a good leader to run it. (He or she will need some good managers to make sure things get done.) Get some high-level commitment for the time and resources you'll need to get this done.

27. How do we get started on building our own portal(s)?

- a. Decide who it will serve. You may want to pick just one constituency first – e.g students.**
- b. Get the right people involved early. Decide how you'll divide up the work.**
- c. Decide what services you'll offer now and in the future.**
- d. Watch the JA-SIG framework plan. If they have something you can use, use it.**
- e. Consider commercial services. Consider specialized software for limited constituencies – e.g. CourseInfo for students, but do that only after you've thought thru your grand plan.**
- f. Look at commercial portals and other universities for UI and content advice.**
- g. Consider evolving your homepage into a portal, but do that as part of an overall plan. Evolve your portal a few features at a time.**

28. Is now too soon to get started?

- a. Start planning now.**
- b. Over the next two years all middleware vendors will announce portal packages.**
- c. Move slowly and watch developments.**