

Assignment 2: Potential Solutions

Course ISE 323: Information Systems Engineering 1

Due December 16, 2009

Information systems come in all sizes, shapes, and architectures. For nearly every problem space there are several potential solutions which might suffice for the requirements. One of the first tasks that you must perform when designing and planning a new information system is to consider potential solutions, their advantages and disadvantages. Rarely is there a situation when one solution is completely without disadvantage. From the information gathered, the staff and managers must select one (or two) “best solutions” which will guide the further development of the information system.

1 What to do

Your task in this assignment is to do some searching, reading, and consideration for the advantages and disadvantages in a particular problem space:

An organization needs to introduce a new information system. It has decided to purchase a solution off the shelf and adapt it to their needs, but they still must decide whether to host the system themselves or to hire an outside company to host it.

You may assume that for a self-hosted solution, support will be either in house or provided by the vendor. For a hosted system, support will be either by the hosting company or by the vendor. Support, of course, is only one aspect of the advantage/disadvantage equation.

You may make the following assumptions about the organization:

1. It has 50-100 employees
2. Its budget is sufficient to pay for either self-hosting or third part hosting (but of course it wants to save money and so a cheaper option would be nice)
3. It has a 2-5 person IT department which has experience in hosting a variety of other applications and systems, but **no experience** with any of the potential solutions for the new system
4. The employees who will use the new system have in depth experience with Microsoft Windows and Office, but less experience with Unix or Linux based systems

You may work in groups of up to three (3) students.

Based on your studies, you must put together a 3-5 page document summarizing the advantages and disadvantages of each approach. This assignment is intentionally vague, so while you may offer a preference for which option you think makes more sense, the purpose is to perform research into possibilities and show a reasoned judgement about two potential solution approaches, not to necessarily come to a conclusion.

2 Topic Selection

To guide you, I am offering several potential problem spaces to consider along with the names of different applications or vendors in the space:

1. An application for customer relationship management (Salesforce, Microsoft Dynamics CRM)
2. A large (>500MB) web site with dynamic content and global reach (Akamai, Google, Apache, ASP, IIS)
3. A college course information system (Blackboard, Britanica Knowledge Systems,)
4. A secure online document storage and retrieval system for traveling employees (DocumenTree, Net-Documents, ...)
5. A email spam filtering system (Mailwasher, ClearMyMail, Postini, Barracuda)

Up to two groups may work (separately) on a given problem. Groups may select a topic not listed above at their own discretion.

Groups must send their topic selection to me by November 26, 2009 to ise323@gmail.com. I will respond with an “ok” by the end of November 28. **Groups who have received approval for a topic may not change their minds afterwards.**

Note: You will be doing a lot of reading and searching for this assignment. You will find help by looking at vendor’s white papers, magazines and opinion columns, documentation for products, discussion boards, marketing and sales materials, and many other sources. Some vendors will let you download or use their applications for a trial period for free. If you find one in your area that is, I strongly recommend that you try it out to get a feel for what the vendor is selling.

3 What to turn in

By the end of December 16, 2009, each group must turn in a 3-5 page report which contains the following information:

- The names of each member of the group
- For each member of the group, an approximation of the number of hours the member spent working
- A description of the topic selected
- For both potential solutions (self-hosted or hosted):
 - An explanation of the implications of the choice
 - Names of one or more principal vendors who offer the choice and a short description of their products
 - A thoughtful discussion of the advantages and disadvantages of the choice based on the information gathered from other sources and vendor information
 - Claims made in this section must have citations or references based on information gathered from vendors, online sources, or written sources
- A conclusion summarizing the information gathered
- A list of references to documentation, web pages, or other information sources used to back up your claims.

The report may be given to me in person, uploaded to Telem, or sent to ise323@gmail.com by 11:59:59pm on December 16, 2009. Any reports sent (or received) after that time will be considered late and treated as per the late submission policy in the syllabus.

4 Grading

Since this assignment is in essay form, it will be graded based on the following metrics:

- Scope of research performed (based on amount of and scope of references) - 40%
- Clarity of discussion of options - 60%

Due to the subjective nature of the grading, scores will be assignment coarsely - 100%, 90%, 80%, 70%, etc. based on the judgement of the instructor.