**DQ1: Outsource?**

Compare and contrast the advantages and disadvantages of developing a database-enabled company Web site in-house as opposed to outsourcing this task.

1. Introduction
   1. What is a database-enabled web site?
      1. Mischook, n.d.
         1. One of the most common types of dynamic web pages is the database driven type. This means that you have a web page that grabs information from a database (the web page is connected to the database by programming,) and inserts that information into the web page each time it is loaded.
         2. If the information stored in the database changes, the web page connected to the database will also change accordingly (and automatically,) without human intervention.
         3. This is commonly seen on online banking sites where you can log in (by entering your user name and password) and check out your bank account balance. Your bank account information is stored in a database and has been connected to the web page with programming thus enabling you to see your banking information.
      2. Oracle, n.d.
         1. Data that is shared between web components and is persistent between invocations of a web application is usually maintained in a database. Web applications use the JDBC API to access relational databases. Web applications use the JDBC API to access relational databases.
         2. In the JDBC API, databases are accessed via DataSource objects. A DataSource has a set of properties that identify and describe the real world data source that it represents. These properties include information such as the location of the database server, the name of the database, the network protocol to use to communicate with the server, and so on.
         3. Web applications access a data source using a connection, and a DataSource object can be thought of as a factory for connections to the particular data source that the DataSource instance represents. In a basic DataSource implementation, a call to the getConnection method returns a connection object that is a physical connection to the data source. In the Application Server, a data source is referred to as a JDBC resource.
   2. What is outsourcing?
      1. Traxler, 2012
         1. If you hire an outside consultant, service provider, or agency to manage a portion of your business, that is outsourcing.
2. Advantages of outsourcing development of database-enabled company web site.
   1. Inner Web, 2014
      1. If you plan to sell goods or services from your website, at a minimum, the site will require a robust database and payment processing services which means hiring skilled programmers. Quality images and site design provides visual interest which necessitates graphic design services. Hiring an individual or firm specializing in web design puts your online presence in the hands of people who understand the technology and have the expertise to bring your business ideas to fruition.
      2. Some aspects of a website lend themselves more easily to outsourcing than others. Copywriting for instance, can be readily outsourced once the site is up and running as the business may not need to make extensive changes to the copy very often. Additionally, outsourcing web design services frees up your time to manage other ongoing and important aspects of your business. Usability can be partially outsourced to consultants although it would be prudent to retain a usability team on staff as well to be sure the site functions well with few glitches.
   2. Traxler, 2012
      1. The biggest benefit of short term outsourcing is that you are able to bring in an expert for a defined period of time to perform a task without committing to them long term. Even if the hourly or project rate is higher than hiring an employee, you may save thousands of dollars by not committing to an annual salary and benefits.
   3. GMR Web Team, 2014
      1. Access to proven team of people – you need people with different skill sets to design, maintain and market your website. Outsourcing provides access to these skill sets without needing to hire multiple people.
      2. Cost savings – most of the website maintenance, design, development or marketing work requires people with different skill sets for part-time every month. Outsourcing saves you money by paying only for the hours someone works on your project, rather than pay full-time salary for partial hours worked.
      3. Low cost – the biggest pros of website outsourcing comes when you have access to lower cost people overseas. Several skill sets required for website development, maintenance or marketing are programming; which has been proven to be most effective outsourcing jobs. Large companies outsource programmers on a routine basis.
      4. Scalability – most of the website development, maintenance and marketing projects require spurt of activities for a short period of time Outsourcing with an established company lets you get the people when you need them, and for the time period required.
      5. Protection for employee turnover – outsourcing your website design, maintenance and marketing protects you against employee turnover or your consultant moving on to better and bigger projects. You will need to outsource with an established company in order to accomplish it.
3. Disadvantages of outsourcing development of database-enabled company web site.
   1. Inner Web, 2014
      1. Company employees will have an innate understanding of your corporate culture, mission and vision. Managing your website in-house allows you to retain better control of timelines in the building of the site. Instead of setting up meetings and scheduling time to communicate with external providers, in-house personnel will be more readily available to keep you in the loop. Another disadvantage to outsourcing web design services might be in controlling costs as well as understanding what you are paying for. Costs may be more easily managed, monitored and controlled by an internal web design team.
   2. Traxler, 2012
      1. The disadvantages to this are that you’ll need to find an affordable and high quality service provider. That can be very time consuming. I searched several times for marketing agencies, for example. I found that it was very difficult to find agencies that fit my needs. Most were geared for larger ecommerce companies with a much larger ad budgets than me. The cost of working with those agencies would have been too high. As a result, I would hire them on a short-term basis to create new campaigns, and I could also learn from them.
      2. For longer-term needs — such as fulfillment, marketing activities, or customer service — the benefit is that you gain operational efficiencies and skills that you would have a difficult time replicating in-house
      3. The biggest benefit of hiring or insourcing — i.e., building your own team for an operational function — is that you control the provider’s time, activity, and quality. It is a stretch to say that this is always less expensive, because if you cannot hire the skill levels or expertise required, it may end up costing more.
      4. Most companies try to maintain, in-house, the core operations that they believe will differentiate their business. If you feel that you will be better than your competitors because of your website design, you may want to bring those design skills in-house. Likewise, if world-class customer support is your key differentiator, you should likely build that function from within.
      5. Finally, service providers will generally cost more per hour than someone you hire in-house and their availability will not be in your control.
   3. GMR Web Team, 2014
      1. Control - hiring your own employee instead of outsourcing provides you more control over the job. However, there is an inherent risk that you will become totally dependent on your people and will need major adjustment when the employee decides to leave.
      2. Privacy & Security - website usually requires access to company information. Keeping website design, maintenance and marketing functions in-house lets you have better control over this sensitive company information. Outsourcing to a US based company with access to lower cost employees overseas provides decent protection against this problem.
4. Conclusion
   1. Inner Web, 2014
      1. If the business has urgent needs that must be met, it makes good sense to outsource those tasks that are time-sensitive and beyond the skill of current staff. As the company grows, however, the advantages of retaining an in-house team of web design professionals will be evident the first time the site goes down or a customer complains of problems with navigation or functionality.
   2. Traxler, 2012
      1. Most companies end up with a hybrid model. You’ll likely have marketing experts in-house and retain agencies when necessary. With customer support, you may build a core group internally, and outsource overnight and weekend support. With website design, you can hire outsiders for the latest design, but employ developers in-house to implement recurring CSS and HTML needs.
      2. It’s useful to consider whether a function is better done in-house or by an outside service provider. At my former ecommerce business, we ended up doing most things in-house and hiring outside resources for short-term projects. But, that may not be the right answer for your business. It comes down to skills, and time.

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