Components of a successful website design project

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February 2009

In this article I discuss, what I think based on my experiences are three key aspects of website design projects that when used together can help ensure the success of such projects. The three key aspects are;

- The use of a user centered approach to designing a website
- The use of the agile development methodology to develop the coding behind the website
- Some important tasks that the project manager needs to manage to ensure that the project team perform well

While there is a section dedicated to an overview of each methodology in the article to demonstrate the benefits each can bring to a website design project, I would like to emphasis that the greatest overall benefit is derived from the aggregate of the three methodologies being used together as part of a continuous circle.

User centered design – a philosophy focused on the user's needs

With user centered design, the user becomes the focus of the design process and with this approach; designers are seeking to design an appropriate website that supports the user in their daily routine by asking such questions as;

- What is the user attempting to accomplish in terms of specific tasks and goals in their work?
- What information does the user require to progress their work and what's the most appropriate format that they would prefer?
- What set of features does the user require from this website?
- What are the user's expectations about how the website will work?
- Given the user's profile in terms of skills and experience, how can a website better assist the user in problem solving, learning and memory related tasks during their work routine?

As you can see from the above questions, this approach encompasses quantifiable items such as tasks and goals in addition to qualitative aspects such as a user's personality and their problem solving style

In gathering relevant information from these and other related questions, the designer is focusing on improving the usability and the usefulness of the proposed website. Usability and usefulness may appear to be similar terms, but they are related to different aspects, in that;

- Usability is concerned with improving the ease of use of the website
- Usefulness is concerned with improving the relevance of the website to the user as they are completing a task

By improving the usefulness of a website, the user will find the information and functionality provided by the website to be relevant to the task at hand and this helps to increase the user's expectations and satisfaction with using the website. The quality of the website content is a critical factor in determining the usefulness of a website. In simple terms, if the site's content is written in simple and easy to understand terminology with short sentences and the appropriate management process is used to keep the information content current; on the balance of probabilities, the website will register high marks for usefulness.

Usability is focused on designing the website to be easy to use. So, irrespective of whether the website is relevant, the key question here is does the user find using the website to be a chore or a joy? Well known pointers for improving the usability of a website include;

- Does the user know where they are on a website as they are browsing the site and do they know how to get to the page where they want to go?
- Is the user able to find information quickly and easily, given that people scan rather than read content on a website
- Is the content that the user is scanning self-evident or does the user have to spend time thinking about the meaning of the content. This point is elaborated on Steve Krug's book – "Don't make me think …" as a key usability principle.
- When a user clicks any item on a website, there should be immediate feedback from the website showing the result of the action. If the user has made an error, then the website should provide both adequate detail on the error and a means of recovery, so that the user can quickly return to what they were trying to achieve before the error.

With the user centered approach, the user's requirements can be clearly articulated and together with the related user involvement, the project is focused on the appropriate set of features to be delivered. An agile development approach can then be used to ensure that this set of features can be developed and delivered to a high quality.

Agile Development assisting in the rapid delivery of high quality software

I believe that the main principles of Agile Development fit very well with the user centered design approach. In particular I would like to focus on the principle of iterations. In the context of this article, an iteration can be considered as a specific set of website improvements or features that have been designed, developed and tested over a specific short timeframe. Such an iteration developed using Agile principles differs from a prototype in that the website improvements are a working piece of the final desired set of improvements.

Adopting the iteration principle with the resultant focus on a distinct and defined set of website features when developing a website can bring a number of benefits to the project including;

- Better software quality
- Improved team communications between designers, developers and users

If the website project needs to change direction to respond to a changing business environment, short iterations provide the project team with the option to respond quickly to current circumstances. As opposed to being 'anchored' to a sequential design and development process and a pre-determined project plan that may be going of sync with the current business needs.

Another benefit of incorporating the iterations principle as a team progresses a website design project, is the leveraging of the release and sign-off phase of each iteration to provide a checkpoint for users, designers, developers and sponsors to compare and validate the overall project direction and design to ensure that the project is pursuing the appropriate business objectives.

Agile development and user centered design provide methodologies to articulate and deliver new features to a website, now all that is needed is for the project manager to facilitate the project team to perform.

Project management - facilitating the high performance of the project team

One way for the project manager to facilitate the project team to perform well, is to focus on the potential risks that could negatively impact on a project, including the following;

1. Ensuring a clear understanding on the business drivers for the website project

   The project manager should compile and circulate a statement of work. The statement of work contains details on;

   - The business requirements that are driving the project. These drivers can range from legal/regulatory requirements, market/customer requirements and internal business process improvement initiatives

- An overview of the specific requirements that are to be provided by the project. This detail can be expanded in greater detail later in the project, as each iteration is planned and completed.

- An explanation on how this project supports the strategic goals of the organisation which is very important in demonstrating the project's importance to the organisation

The statement of work is the overall scope from which the detail of each iteration is drawn.

2. Ensuring that the website project team has the appropriate sponsorship and support at senior management level, in particular from the different areas of the organisation that will be impacted by the redesign project

This doesn't mean that the website will be designed for senior management! Rather that the project will be delivering practical business benefits to the business and senior management support is available to progress the project as and when required.

3. Ensuring that an appropriate budget is set aside for website maintenance after the initial design is rolled out

As we all know, if a well designed website is not maintained appropriately and consistently after its launch, it can lose its usefulness. Appropriate maintenance includes the recognition that;

- Style guides and templates need to evolve with changing business needs and to ensure that the look & feel doesn't become outdated.

- The importance of content management to provide a means to have content prepared for the web first, rather than assuming that content from other media can be copied or reformatted from other sources to be displayed on the website.

4. Ensuring that a proper user centered design methodology and approach is used for the detailed design and development work.

The project manager needs to ensure that not only is the methodology being used, but that it is being used effectively. Rather than just deciding on a specific set of design iterations in advance, it may be preferable to also incorporate a set of metrics such as the time required to complete a set of sample tasks using the new design, to help decide if an iteration has achieved its desired results and/or whether further iterations are required. Additional metrics such as the number and categories of errors discovered before the iteration is completed assist in reviewing if changes are required to the development process and workflow.

In summary, the probability of a successful website design project is enhanced when such projects;

- Focus on the user(s) and ensure that their requirements are articulated correctly and that the user(s) have the right involvement in the iterative development of a new set of features for a website
- Adopt an agile approach to the development of the website's set of new features with a focus on iterations, frequent review and if necessary, adaption to changing business circumstances
- Ensure that the project manager is focused on facilitating the project team to perform well with the benefits of a combined user centered design and agile development approach

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