A Process for Creating the Business Case for User Experience Projects

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ABSTRACT

The eBay User Experience & Design (UED) group has had significant success sponsoring successful user experience (UE) projects, in large part by creating and communicating the business case for these projects. This paper presents the process the eBay UED group uses to get projects approved and how these projects are evaluated for success. This paper also refers to specific projects as examples that followed this process.

Author Keywords

Business of usability, Return on investment, metrics, business case, user centered activities.

ACM Classification Keywords

H.5.2. User Interfaces: Evaluation / methodology.

INTRODUCTION

UE groups have been striving to play a more strategic role within their organizations [1, 7]. An effective method to achieve this is to create a business case for UE projects, initiate and launch those projects, and then measure the impact on our users and the business [5].

However, UE groups that have reported the business impact of UE projects often report only the end result without explaining the process used within the company to achieve those results [5, 6].

UE groups need a process that helps ensure that the projects they propose are approved and, ultimately, achieve user and business goals. The process should be robust enough that it can be applied to many different types of projects [3, 4].

This paper describes the standard process eBay's UED group uses to propose, initiate, design, and evaluate the user

Copyright is held by the author/owner(s). CHI '04, April 24–29, 2004, Vienna, Austria. ACM 1-58113-703-6/04/0004. and business success of projects. This paper uses the Registration Redesign project as an example project.

Some background information: eBay is an online, worldwide marketplace that enables people to buy and sell goods and services. As of the end of 2003, eBay included listings for over twenty-one million items for sale at any given time. In addition, eBay had over ninety-five million registered users.

Looking back to March 2002, forty-six million people had become registered users at eBay. Although this number was an indication of eBay's success, a preliminary review of the site statistics at the time determined that a significant number of users who started the registration process did not complete it. This business and user experience issue led to a project to redesign eBay's registration process.

PROCESS TO GAIN APPROVAL FOR USER EXPERIENCE INITIATIVES

This section outlines the seven-step process eBay's UED group has used successfully to propose and initiate user experience improvements for the eBay web site (including the Registration Redesign project). The results of projects that have followed this process have enabled the group to have a significant positive impact on eBay's business and the experience of eBay's users.

1. Gain an overview of the project approval process and criteria

To begin proposing a project, a designer needs an understanding of both the approval process as well as the criteria used to determine which projects are approved.

At eBay, a designer who wants to propose a project first needs to have a sponsor who is willing to fund it. Groups that have a budget to fund projects include the UED group, Product Management, Product Development, as well as various business units.

The designer proposing the project presents an overview of the proposal and an ROI analysis to the Product Council, which is made up of Vice Presidents throughout the company (including the VP of the UED group). The Product Council approves projects based on how well the project fits into the short- and long-term goals of the company, and the estimated ROI. (The ROI process will be described in more detail later in this paper.) If the Product Council approves the project, the designer who proposed it (as well as his/her sponsor) has essentially made a commitment to achieve or exceed the estimated ROI for the project.

With this overview of the process, the designer can then continue the steps of proposing a project.

2. Understand the financial levers that drive the business

To gain an understanding of the financial levers that drive the business, the designer needs to identify these levers, know the value of each lever, and know how the user experience he/she creates can affect those levers.

The key financial levers at eBay include increasing the number of registered users, increasing the number of bids users place on items for sale, increasing the number of listings of items for sale on eBay, and decreasing costs (e.g. development costs and customer support costs). The eBay Finance group has determined the incremental monetary value of each lever (e.g. the value of each new registered user, the value of each new bid placed on an item for sale).

eBay's UED group has focused on proposing projects that affect these key financial levers. The next section discusses how we determine which product areas will be the most beneficial to improve.

3. Determine current issues and future opportunities.

It's important to do user and business research upfront in order to learn more about current issues from a user experience point of view, as well as future opportunities that may be available to the business.

At eBay, this upfront research includes the following:

- At a broad level, we regularly discuss business and user experience issues and opportunities with stakeholders throughout the company including the people responsible for eBay's business. These discussions enable us to communicate the issues we are focusing on, and also enable us to learn more about the opportunities and challenges these stakeholders see for the future.
- The Usability Engineering group (part of the UED group) conducts surveys, field studies, and usability studies on major sections of the current site in order to help determine the most significant issues.
- The Customer Support group publishes a list of the top customer issues each month as determined by customer phone calls and email messages.
- The Community group publishes a summary of users' online discussions each week, as well as results from weekly focus groups.
- The Marketing Research group conducts quarterly surveys to measure customer satisfaction with key features of eBay.

The UED group relies on these inputs in order to inform which product area to improve [2].

4. Select a product area to improve.

In eBay's UED group, we typically propose projects that meet the following criteria:

- The impact of the project will be significant, measurable, and attributed to the project.
- The costs and risks are expected to be relatively low.
- Benefits are expected to be high.
- Chances of success are expected to be high.

Applying these criteria is especially important if the group does not have an established history within the company of initiating projects and doing ROI analysis. In these cases, it may also be necessary to focus on a part of the site that no one else in the company is focusing on or "owns".

The goal is to ensure that each project has the best chance of achieving success from both a business and user experience point of view. Success in both areas increases the credibility of the group and increase the likelihood that the group will have the opportunity to initiate projects in the future.

5. Estimate the ROI for the project

The designer estimates the ROI (Return on Investment) for the project by estimating the costs and benefits created by the project. When estimating the ROI for projects at eBay, we strive to ensure that our estimates are conservative – when millions of dollars are at stake, our goal is to underpromise and over-deliver.

Estimating the cost

The cost of the project includes the time necessary to design, test, development, and launch the product, as well as, from an operations perspective, how the project affects hardware, software, and bandwidth needs.

At eBay, the time and cost estimates are done by all of the groups that will be contributing to the created project (e.g. design, engineering, operations) – these estimates are based on a high-level description of the project written by the designer initiating the project.

Estimating the benefit

To estimate the benefit that will be created by the project, the designer first needs to determine which financial levers the project will affect.

For the Registration Redesign project at eBay, the obvious financial lever was increasing the number of people who completed the registration process. To estimate the specific benefit and to inform the redesign, we did the following:

• We determined through site statistics the percentage of users who completed the registration process, as well as at what point users were exiting the process.

- We conducted baseline usability studies, which helped pinpoint why users were exiting at specific points in the process.
- We consulted with Customer Support to determine what types of issues users were reporting with the registration process.
- We conducted a heuristic analysis and reviewed best practices to determine the extent to which we could improve the existing process and increase the percentage of users who completed the process.

When available, we also review the metrics before and after previous projects in order to help gauge the impact of the current proposal.

6. Present proposal on an equal footing with other proposals

Justify the project according to standard criteria

As mentioned earlier, all proposals at eBay include a project overview and an ROI analysis. Proposals without these elements are not considered for approval.

Justify the expected results, not the process

When designers present their proposals to the Product Council, they focus on the expected results, i.e. the user and business benefits expected from addressing the problems through the proposed project. Although a user-centered design process will be critical to the success of the project, the presentation typically includes little or no mention of it – there is an assumption that, if the project is approved, the product team will apply whatever process is deemed appropriate and necessary to achieve the estimated benefits within the estimated costs.

In the case of the Registration Redesign project, the end result (increasing the percentage of users who complete the registration process) justified the means (a user-centered design process) of achieving it.

Know your audience

When the designer presents the proposal, he/she speaks to the issues and uses terminology the audience is familiar with. (This is much more likely to be the case if the designer conducted stakeholder interviews at the beginning of the process, as mentioned earlier.) In addition, as a result of the stakeholder interviews, some members of the audience may already be strong supporters of the proposal and can help make the case for the project. All of this increases the likelihood that the proposal will be accepted.

7. Follow up after the project launches

After the project launches, it's important to follow up to determine what worked and what didn't from both a user and business point of view. Specifically, site statistics will help determine whether the project achieved user and business goals. Feedback from Customer Support, online discussion boards, customer satisfaction surveys, and follow-on usability studies can help determine whether the project was successful from a user point of view as well.

It's important to communicate these results to key stakeholders within the company. Each project should add to the credibility of the group, making it that much easier to get the next proposal approved as well.

In cases where the project was not as successful as estimated, it's still important to communicate what worked and what didn't. In part, this is to document learnings (which will inform the next proposal and project), but also to make sure stakeholders know that you are taking the lead, following up, and addressing remaining issues.

In the case of the Registration Redesign project, the business results exceeded ROI estimates, making a significant contribution to eBay's user and business success. User satisfaction increased because more users were able to complete the registration process -- this enabled more new users to bid on an item for sale (which is the most common goal of a user going through the registration process).

The UED group has built on the success of the Registration Redesign project (and the success of subsequent projects) by using it as part of the rationale for the company to invest more money in projects sponsored by the UED group, as well as to invest in other resources for the group. Since the Registration Redesign project, a number of other projects have been successfully proposed and launched by the UED group using this process.

EXAMPLE: ENABLING PASSWORD RECOVERY

The "Forgot Your Password" project was also initiated by the UED group and followed the same process described above. In this case, the goal was to enable users who had forgotten their password to recover it and continue using the web site.

Similar to the Registration Redesign project, as part of our initial research for this project we reviewed site statistics, conducted a heuristic analysis, and reviewed related customer support contacts.

The ROI estimate for this project was based on several factors, including:

- Increasing the number of items for sale and bids on items for sale. By enabling users to recover their password quickly and easily, an increased number of users would be able to list and bid on items.
- Reducing customer support costs. Prior to the launch of this project, one of the most common reasons users contacted eBay's Customer Support group was to regain their password. By improving this flow, we expected to decrease the number of customer support contacts related to this issue.

After this project launched, site stats indicated that users who started this process were much more successful at

completing it. This led to follow-on listings and bids on items. In addition, customer support contacts related to this issue decreased dramatically. As a result, this project increased revenue, decreased costs, and exceeded the ROI estimates.

FACTORS THAT AFFECT THE SUCCESS OF THIS PROCESS

The process described in this paper will work best in situations where the following are true:

- Financial levers and user experience metrics are available, understood, and pervasive throughout the company.
- The project approval process is open and objective decisions made within the company are driven by data.
- User goals and business goals are typically in synch the company gains revenue by enabling users to accomplish their goals. For example, at eBay, the company gains revenue when users achieve their goals: sellers want to list items for sale and buyers want to bid on and buy items.
- Transactions where the company gains revenue occur at such a high volume that even incremental improvements in user experience can have significant financial benefits to the company.
- Switching costs are low. If a user is experiencing trouble with a product, it is relatively easy and inexpensive for them to switch to another product. In these cases, the importance of the user experience increases from a business point of view because it is a critical part of keeping the user using the product.
- The customer (i.e. the person who made the initial purchase decision to use the product) and the user of the product are the same.
- The UE group follows a user-centered design process and creates an effective user experience.

CONCLUSION

An effective way for user experience groups to play a larger role within their company is to propose and initiate projects that address significant user and business issues. Consistent results can empower the UE group, enabling it to address additional user and business goals.

The process described here has proven to be successful on several projects proposed and initiated by eBay's User

Experience & Design group. As a result, the group has received additional resources to sponsor other projects and add staff to take on those initiatives. In addition, it has enabled the UED group to be involved in project proposals earlier in the process, even if a different group proposes the project.

At a more broad level, the necessary intersection of business and user experience influences the skills necessary to be an effective UE practitioner, which should have an effect on design education and training programs. Specifically, designers who have an understanding of financial issues and statistics will be better able to follow a standard ROI process, make the business case for their projects, design and specify an effective user experience, and, ultimately, achieve both user and business goals.

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REFERENCES

- 1. Bias, R. and Mayhew, D.J. *Cost-Justifying Usability*. Academic Press, Boston, 1994.
- Braun, K. "Measuring Usability ROI at eBay." Panel presentation, Measuring Return on Investment for Usability (July 2002).
- 3. Donoghue, K. Built for Use: Driving Profitability Through the User Experience, McGraw-Hill, 2002.
- 4. Graefe T.M., Keenan, S. L., & Bowen, K. C. Meeting the challenge of measuring return on investment for user centered development. *Ext. Abstracts CHI2003*, ACM Press (2003), 860-861.
- 5. Marcus, A. Return on Investment for Usable UI Design in *User Experience* (Winter, 2002), 25-31.
- 6. Nielsen, J., & Gilutz, S. Usability Return on Investment. Jan 2003.
- Rosenbaum, S., Rohn, J., Humburg, J. A Toolkit for Strategic Usability: Results from Workshops, Panels, and Surveys. In *Proc. CHI 2003*, 337-344.