

## ***Listen to Instructions***

*Early one day we were sitting at tables coloring with crayons on foot square pieces of glossy, white paper, which had been taped to the table. Unlike the way we usually colored in kindergarten, we didn't try to make a picture of something. The teacher had instructed us to use bold, dramatic colors to make a design consisting of shapes of bright color on the page—rectangles, squares, and circles. We made some very interesting designs. Next, she instructed us to put on the paint shirts (old, long sleeved shirts our dads had worn out) which we had been told to bring into the class early in the school year. Miss Waters told us we would put black paint on top of our design, right up to the edge of the paper.*

*At first the paint just seemed to bead up on the colors. I thought, "This isn't going to work." She told us to be persistent and use more paint to continue to cover the paper until it was completely covered in black. Now this didn't seem to make sense to me, but I did as I had been told. While we were still painting, Miss Waters went from table to table placing in the center a pile of paper clips which had one end bent back and straightened out.*

*She told us that we wouldn't need these right now. Actually, I think told us not to touch them, but since we were the first table, how could I possibly resist? While she was passing out the paper clips, she explained that after lunch, when the paint was "good-and-dry," we would scratch off some of the paint to expose the crayon beneath.*

*Wow! I wanted to see that right now! I grabbed a paper clip and began to scratch. The paper was still saturated with paint and I easily scratched through and tore the paper. Great patches of black paint began oozing onto the table, onto the floor, and soaking through my paint shirt. Not only was my art project destroyed, I was a mess.*

Defect and rework are killers to eBusiness projects. In our anxiety to get the product out the door or the project to completion, we forget the fundamentals of business. It all starts out with a good design. It needs to be well thought out and viewed from the users' perspective. We need to listen to the users to give us instruction on how they can use the tools we are building. This is an interactive process of getting the design right.

I like to interview design people or document the process flows. I prefer to use highly descriptive, text-based use cases to drive the functional design. These supplement, but do not replace graphic diagrams of the process flows and other tools to detail the data mapping and data field requirements. I likely will also generate "swim-lane" diagrams to talk about the interaction between the users and the application.

The next step is to get a larger community of internal associates to review the use cases. These sessions usually amaze me. It doesn't matter how short or how long we may have been discussing a design, there are always different assumptions and expectations on how a web application will operate. Usually, at this initial session (provided you have allowed adequate time) we can sort much of the conflict and lack of understanding of the design.

Typically it is still only a rough cut of the design. Things will need to ferment a bit and people will need to withdraw to come to terms with the changes. You will need to get this larger, internal team together once again (and maybe multiple times) to get to the 90% of design state.

Think you are done? Not even close. Next you need to generate what my colleague, Vince Bianchi, termed "dirty pictures." These are drawings of how the screen layouts will look. Graphic design people with experience in user interface are invaluable in working through the flow of screens and in making them as "intuitively obvious" as possible. I define a well designed screen as one that "instructs" itself: in other words, a user can look at the screen and figure out how to make it work without additional aids, such as user manuals or on-line help screens. The dirtier these pictures are the better. By that I mean "back of envelope" screen shots are better than an elaborately done, mock-up of the application with full, polished graphics. Why?

There are three reasons. First, you want to give the user the understanding that you are not done and that you want their active participation in this work. Everyone likes to be consulted early. It makes them feel valued and included. It tells them that you recognize that they are essential to your design and that they are the principle reason for doing this work. It is also a good time to ask for their participation in piloting the application.

Second, you want to work quickly. Waiting while the graphic design is presented and debated with marketing, brand management, legal, etc., can be very time consuming. Third, this is probably throwaway work.

**Do it right the first time.** A well-crafted business and eBusiness strategy is the start of your instruction. It needs to articulate the value not only to your company, but also throughout the value chain. Your suppliers and service providers should be in alignment with your strategy. They should see the value of their participation in the improvement of the overall business.

If they cannot see that value, one of two things is wrong. Either your strategy is not sufficiently broad to encompass their business direction and desires or you have the wrong partners-- you are headed in one direction and they are headed in another. Your path forward is clear: change the strategy or change the partners.

One of our value strategies is customer self-service. This means giving our customers features that enable them to perform functions on their timeline. If that means on a Sunday afternoon they want to be able to place orders, that is fine with us. If the customer wants to track their shipments "on-line, anytime, anywhere," that's great with us as well. But if our carriers don't create and maintain web sites that are aligned with that vision, or if they are not willing to provide the data back to us in a useful, timely manner, then their business vision and ours are no longer in alignment. We either get aligned or get a new carrier or get a new strategy.

To do otherwise and, thereby, put together an application that "makes do" with the limitations we just accept, is foolhardy and will ultimately dissatisfy our customers and ourselves. You need to challenge this thinking. It risks getting black paint all over you.

Once you have determined what your strategy is, once you have solidified it in your heart and mind, it becomes the rough draft of your instruction manual.

We still have a way to go before we are done. We need to validate the model against customers' desires and wishes on two levels: strategy and application.

The strategy level aligns their business goals with our business goals. It is best to send out feelers to determine the level of acceptance and likely issues your strategy will raise. Then formalize the strategy. Only finalize and publish your strategy after you have achieved alignment with your customers. If you get the "cart before the horse," you risk getting black paint all over yourself.

Now you can begin working on your B2B application. Your instruction manual is not quite done. It is neither polished nor perfect. It will still need to be tweaked as you learn more. However, you have arrived at the point where you can validate the model against the customers' desires and wishes on an application basis.

**Listening to feedback interactively.** The feedback that you collect from users will challenge you to do things differently and will result in a different design than you had anticipated. What they will give to you are instructions on how your application should operate. It still needs to work within the context of your "instruction manual," but it will be different in many ways from your original concept of how things should work.

Each of these "design and listen" loops tells us more and more about how the B2B application needs to work. Each is a lesson to us. We need to assimilate this instruction and "bring it to life" on our web pages and other B2B applications.

As we do so, we inch closer and closer to the final design. We inch closer and closer to a full understanding of the functions and limitations the application will have. We inch closer and closer to understanding what our strategy means in the real world.

We need to use these loops primarily to sharpen our focus and limit, not expand, functionality. We use this to pare down the design to a crisp, clean process. This is not about adding "bells and whistles." B2B drives us to the essential portions of the business process. Done right, it rips out "dancing banners" and leaves us with the bare bones of "getting the job done."

**Work to eliminate data entry and to reduce errors.** In moving to electronic processes we want to eliminate manual data entry. You want to push as much of this to

the beginning of the process and pass the data on electronically to subsequent processes and business systems applications. Those systems applications may be at your trading partner's site. It doesn't matter who saves the labor. The elimination or streamlining of the process is the key objective. If the elimination of data entry for one trading partner is merely passed off to another trading partner, no improvement to the information cycle has really occurred. Go back to the drawing board and see if there are ways of eliminating the work process.

You can also move responsibility for errors to the person most likely to create them. Make the person generating the errors also the one most impacted by the incorrect data. As we moved to web order entry, we enabled some customers to do their own drop shipments. Now the bad address they type in or the inadequate telephone number they supply can come back to haunt them.

To automate a broken manual process is foolish. It is asking for a bath of "black paint." Yet, almost every day someone in my company comes forward with something they want to move to the web when they haven't accessed the manual process.

Both trading partners should share the benefits in proportion to their investment. That investment can be either capital or on-going costs. This can be a situation of "you scratch my back, I'll scratch your back." Look for opportunities to trade off benefits: you do something that benefits your trading partner in exchange for something that benefits you.

Typically the buyer loves to have electronic invoices. It helps them with three-way matches of data-- matching the invoice with the purchase order with the delivery documentation. Many companies have their accounts payable and purchase order applications in the same systems or systems that are closely linked. Being able to provide the invoice allows two of the three matches to occur in a less manual manner. Billers love to have electronic payments. It streamlines handling and reduces the delivery-to-payment cycle and improves day's sales outstanding (DSO).

Remarkable as it may seem, sometimes you can give away something that costs you little or nothing. Other times it allows you to give away something you really want the customer to have anyway.

One time we “wanted” to put order acknowledgment information in the customer’s hands. But we gave it to the customer with the stipulation that we would only give it to them if they promised to look at the information before calling us on the status of their shipments. Amazingly, it substantially reduced routine calls to customer service. The overall call centers’ number of calls dropped by eleven percent! The substantial call reduction equated to a similar reduction in customer service support costs.

You need to listen carefully to your trading partners to discern what they value. Like the colors in the art design, following instructions allows the beauty of your design to shine through, without making a mess of things.

*"I like to listen. I have learned a great deal from listening carefully. Most people never listen." -Ernest Hemingway*



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