

Embrace this change and succeed. Ignore it to your peril.

What about those times when the innovation has grown and people want to pick the fruit.. use the thing, but they need a little help. Think small, think simple, think performance.

Instead of thinking training course, first think about the lowly sticky note.

Remember the code for my phone? I don't need a manual or a course. I just need the number. **You often don't have to design these interventions.** Take a walk where people are doing the work. They will have devised ways to make the work go faster. **Pick the fruit growing in your own yard.**

Years ago my father (a mathematician) was asked by management to try to analyze the most efficient route for garbage collection through a facility using computers (they were new back then). He roared with laughter. "The guys on the truck get paid by the job, not time. There's no way I could do a better job than they can!"

Look for solutions (sticky notes) that people are using. Then print up a bunch of them. Share these easy shortcuts.

Pay for what you want II: The USE Method

When you want to spread innovation, whether by training, performance, or some communication tool, too often **we fall in love with the *thing*...the *object of innovation* instead of the *purpose of the innovation*.**

In a clear example of "you get what you pay for", how often have you worked on projects that focused on building system that was great, cool and innovative, but didn't really **meet the needs of the users**. The result was a really great system that **no one used**.

Here's a slogan you should put on the wall.

The most wonderful system developed is worthless if it is not used. A system that is used, even if it is flawed, can be fixed.

The USE method can be used for the design of performance pieces, systems (both social and technical), and trainings.

USE means User-centric + Sensemaking + Evolutionary.

User-centric:

Remember when we talked about learning? **It is an interaction between information and people in time.** When we design anything that we hope will support learning or performance, **we MUST design it for the people who will use it, in the situation that they will use it.**

The most important way to do this is to **observe.**

Spend time with the users. See what they do, what their situation is like, what problems come up. **Ask them** what problems they face and how they cope with them.

As you develop the system, **do NOT build it once and then show it to the users.** At every step of the way, **make a prototype and run it past the users in their world, not in yours.** Christopher Alexander, in *A Timeless Way of Building*, talks about fireplace designers. He points out that if it you build a fireplace for yourself, you will make sure it has useful parts - a place to sit, a place to put wood, an easy way to clean it. When, however, you start to become a fireplace designer, you immediately start being influenced by fashion. **Your fireplace designs may look good on various designers' cable shows, but they are useless.**

The only way we can hope to design interventions

that help users and are used by users is by spending time with users in their setting throughout the design process.

This kind of design is called socio-technical (interaction of social and technical) and the best book on the subject is *Information Technology and Organisational Change* by Ken Eason. It's not a light read, but it's great.

Sensemaking:

We've talked about sensemaking a lot. **It is crucial to building systems that will help you succeed.**

Most of the time you are being bombarded with an avalanche of information. The only way you can deal with it is to ignore most of the inputs unless something goes wrong. Do you remember all the decisions you made when you were driving today?

But when something out of the ordinary flow happens, you try to make sense of that jolt. Sensemaking, as a field, looks at the process people and organizations go through to make sense of the environment, the inputs, the jolts. If you want to read more, look at Karl Weick's *Sensemaking in Organizations*.

So what? How does this help design better, more useable tools of

communication, innovation, training, and performance? Think about it this way...in the information age, **rarely will someone be coming to your specialized intervention to wile away some time.**

They come with a problem in hand or head.

They also have an idea of what they want.

We need to get into their head, to see what they expect to see and how they expect to find it.

THAT will drive the interventions.

It sounds like this should be filed in the DUH file, but it is very uncommon to approach design this way. Have you ever run into a function in a software program that you don't understand and **try to find some help in the help?**

The problem is that you often **can't find an answer unless you know the answer.**

For years I tried to get Excel to stop formatting my dates when I typed in 10/5/56. However, I only recently stumbled on how to do it - and it was NOT in the help system. I am sure that the folks who wrote the help functions went through and wrote something for everything the program can do. However, what they called it and what I tried to call it were obviously different. **They had a description. I had a problem.**

It is very important we try to get into the head of the user and ask them how they are making

sense of something.

One of the hallmarks of sensemaking is that **we don't see what we don't expect to see.**

The most common phrase at the beginning of an accident is, "I didn't see him." Have you ever almost hit a big truck? It was just too big to be included in the things you expected to see.

We create meaning by what we expect to see. So, if you are designing something and you don't know that every work order in the company has a green border, and you decide to make all the functions that relate to work orders with blue buttons, it is certain to cause confusion.

This is more than interface design... it is creating functions and interventions that meet expectations.

I built an online survey tool that had a button for more information next to an introductory paragraph. The first time through, the information was necessary, but after that, users would probably understand what was going on. We put the button big and right next to the introduction. During user testing not one person clicked that button that said More Information. **They just didn't see it.** It wasn't part of the **sense** they were making of that tool.

So, how do you get to it?

The fastest way is to ask.

Ask them what goes wrong when things go wrong.

Ask them what kind of thing they need during that time.

Ask them what it would look like.

Then make prototypes and ask em again.

Of course, it is MUCH more effective to see the sensemaking as it happens, but rarely do we have the opportunity to watch in the real situation while problems are happening and then be able to stop the person and ask how they are viewing the world.

The next best thing is to observe and interview a lot. Then write lists of “Who am I?”- meaning who are the different roles who come to the system... what is their problem... what kind of sense will they be trying to make?

Evolutionary:

When we build an intervention, we are **making a guess as to what the users need**. If we spend time observing and talking with the users, we can make a better guess.

However, it *must* be wrong.

If not at first, the existence of the intervention will change the practice of the users and so will change what they need.

Alexander says this of houses. Gabriel says it of software systems. I'm saying it for any kind of interventions you use to implement innovations. **If the innovations change things, the needs will be different.**

Success requires continual change.

We cannot think of interventions as things we build and let loose upon a grateful organization as we ride off into the sunset, looking for another dragon to conquer.

That might have worked in the industrial age. It will not work in the information age. The industrial age division of project time is typically about 25% planning, 70% building and 5% doing a little evaluation (usually smiley sheets) after the thing has launched.

Take a longer view.

Think of planning and getting to know the users as 1/3, building as 1/3 and evolutionary changes as 1/3.

Of course, this encourages paying for use and performance, instead of things.

Think of success as a garden. You are the gardener. There is a lot of

work at the beginning and there is very little to show for it. However, once success begins to sprout, your work is far from finished. Your work will change depending on what grows, what bugs get into the system, what weeds come up, the environment.

To succeed in the information age takes a new perspective - that growth and success both require change and continued growth requires continued change.

Listen to your plants. They will tell you what they need.

