

DATABASE BY DESIGN, INC.

Work Smarter, Not Harder

Do you spend too much time typing data into a system?

Is your organization losing tens of thousands of dollars each year through the use of poorly designed software programs?

Where Is Your Money Going?

The manner in which you input data into a software program using a keyboard and mouse ('User Interface') hinders or boosts your efficiency depending on the effectiveness of the software design. The user interface includes the windows, buttons, text areas, and other items in a software program that display and collect your information. As simple as these items seem, they are a critical part of each software program.

"Bad user interfaces may be more expensive than you think, including software your company buys as well as software your company writes.

"[For instance,] Microsoft Word requires at least 30% more keystrokes and 100% more mouse moves to accomplish certain editing tasks than would an optimal word processor. Decreasing physical work not only saves time but also decreases incidents of repetitive stress injury."¹

Stop the Bleeding:

Identify ways that your software is wasting your time and money:

- ✓ Entering the same data more than once
- ✓ Excessive mouse moving & clicking
- ✓ Lengthy training times for software
- ✓ Typing mistakes resulting from typing data rather than choosing options from a pop up list
 - Trouble finding data because of typing mistakes
 - Inaccurate reports caused by typing mistakes

What Makes a Well Designed Program?

An effective user interface is designed with the **user** in mind. When you enter information into your software program, it should be:

- ✓ Completed in a manner that is natural and logical.
- ✓ Accomplished with the fewest number of keystrokes.
- ✓ Entered using pop up lists for frequently typed information (such as cities and states) to minimize errors.

The information on the screen should be:

- ✓ Organized intuitively with related information close to each other.
- ✓ Uncluttered and not over-populated.

Reap the Benefits:

Well designed software can have significant benefits for you and your organization. These benefits will pay for the cost of the software many times over.

"Anytime you make a system faster to use, easier to learn and less frustrating, there are psychological benefits to the individual user and bottom-line productivity benefits to the enterprise. There are also physical benefits: an interface that takes fewer

keystrokes and less 'mousing around' creates less repetitive stress injuries."²

When your software is well designed, expect to see these improvements throughout your organization:

<u>Better Efficiency Results In:</u>	<u>Fewer Mistakes Enable:</u>	<u>Effective Design Increases:</u>
More work done in less time	More accurate output	Physical health (no repetitive stress)
Fewer employees required	Lower costs spent on fixing errors	Level of satisfaction
Higher profit margins	Happier customers	Useful lifetime of computer

Impact of Software Design - The Bottom Line:

Let's look more closely at how software design can impact your business.

- Systems designed with usability engineering have typically reduced the time needed for training by around 25 per cent.
- ...the average cost of supporting a single workstation is [\$7,500 USD], of which at least 50 per cent is the cost of 'hidden' support (that is, productivity lost through users stopping work to help each other with computer problems).
- User-centered design typically cuts errors in user-system interaction from five per cent down to one per cent.³

Using the costs from above, let's calculate some of the measurable savings that your organization could realize from having a well designed software program installed in your office:

	Training (per person)	Computer Support (per computer)
Normal Cost	\$750.00 (example only) (50 hrs @ \$15)	\$7,500.00
Reduction for good software design	25%	50%
Dollars Saved	\$187.50	\$3,500.00

Prepare for Your Next Software:

When you are considering the purchase of new software for your organization, make sure to do a thorough review of your needs and the program's capabilities before you commit to anything. If you are buying a pre-made software program, get a demonstration version of each one that you are considering. Let the people that are going to use it try it out first and compare each program's efficiency. Buying a more expensive program in this case can actually save you more money over time because of the quality of its design.

If you are having a program custom built for you, make sure to get the following from the company that is creating the software:

- ✓ Previous customer comments regarding the ease of use of the created software.
- ✓ Example screens and reports from previous projects.
- ✓ Example documentation for software projects.
- ✓ Mock ups or prototypes prior to software programming to preview its efficiency.

If you need someone to help you evaluate the efficiency of software within your organization, we would be happy to be a resource for you. At Database by Design, Inc., we can help you optimize your computer productivity. Contact us so we can help you build an intuitive and effective software solution!

Database by Design, Inc.
info@mycustomdatabase.com
<http://www.mycustomdatabase.com>
 (503) 579-4638

Next Month's Topic: What kind of database do you really need? Are you beyond a spreadsheet?

References

- ¹ “The Humane Touch: Bad Design Can Be Costly”, <http://www.forbes.com/asap/2001/0528/016a.html>.
- ² “The Interface Revolutionary”,
http://www.computerworld.com/cwi/story/0,1199,NAV47_STO57255,00.html.
- ³ Compilation of research listed at http://www.usability.uk.com/benefits_costjust.htm.