# Lentered MILLINE

The Third Wave of the Information Age

**Powered by Tata Infotech** 



We make usable software

## User-Centered Solutions

The Third Wave of the Information Age

Powered by Tata Infotech

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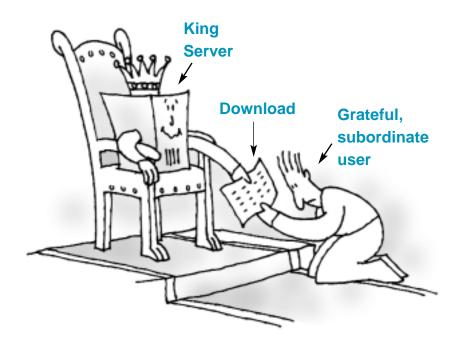
For additional copies, or more information, contact Jay More, HFI, 410 West Lowe, P.O. Box 2020, Fairfield, IA 52556, 1-515-472-4480. Call toll-free from the US and Canada, 1-800-242-4480



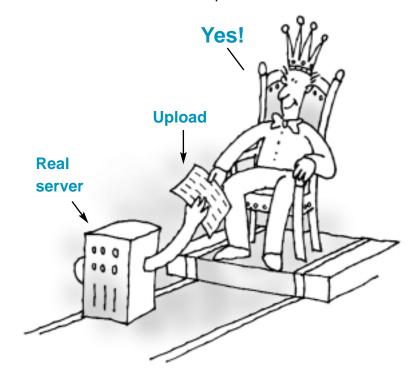
Ecommerce Intranets Applications

#### WHY DO WE CALL IT "DOWNLOADING"?

Today, our industry sees the computer as king



If the **user** was primary, "Download" would be called "Upload"

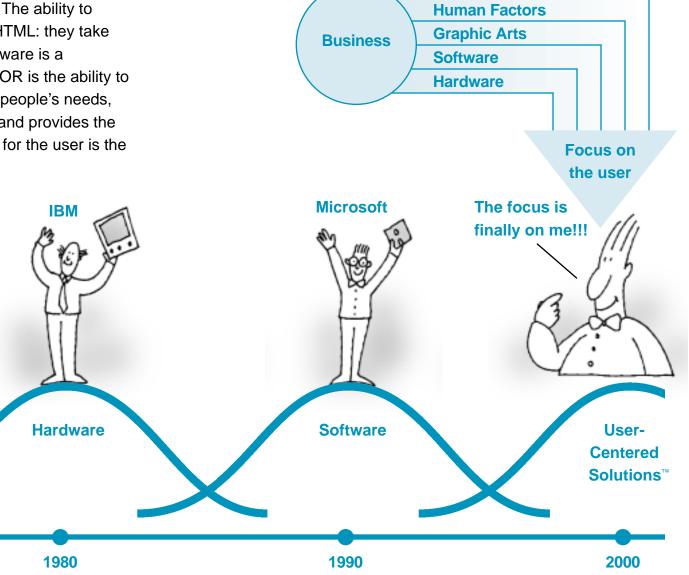


**Another example:** Why are "Inputs" what go into the keyboard, instead of what the user reads? The real "Inputs" are what go into the user's eyes!

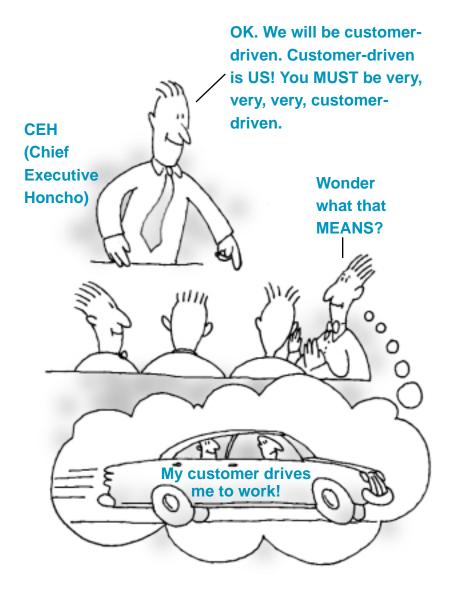
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#### THE THIRD WAVE

Today hardware is a commodity. The ability to create databases, connectivity, HTML: they take skill, but everyone can do it. Software is a commodity. The DIFFERENTIATOR is the ability to create an application that meets people's needs, accommodates their limitations, and provides the right user experience. Designing for the user is the upcoming business advantage.



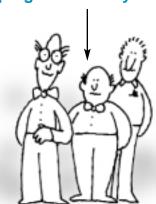
## **HOW COMPANIES TRY — AND FAIL** #1 — Executive edict



#### #2 — Buy an ad agency

Can make it work programmatically

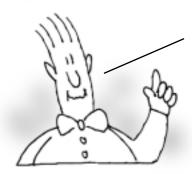
Can make it look cool, catchy, and beautiful





You will be happy to know we have acquired an Ad Agency! Work together and meet the customer's needs.





This works OK for brochures, but NOT for complex sites or applications.

## THERE IS A TECHNOLOGY OF USER CENTERED DESIGN

Human Factors Engineering, aka Software Ergonomics, aka Engineering Psychology

#### **SKILLED PROFESSIONALS**

A few of HFI's directors



Eric M. Schaffer, Ph.D., CPE Board Certified Over 25 years in human factors development



Phil Goddard, Ph.D., CPE
Develops high-level architectures
Teaches ergonomic GUI design



John Sorflaten, Ph.D., CPE 13 years with HFI as project director and usability instructor.



Hal Miller-Jacobs, Ph.D., CPE Instructor and usability consultant Specializes in human computer interaction

#### RESEARCH

You could spend the rest of your life reading the literature applicable to user centered design. Over 70 new publications a day!







#### **PRINCIPLES**

The research is often digested into general principles. Like: Users remember by spatial location – so keep objects in the same place.

#### **METHODOLOGY**

For over 20 years we have been refining The Way to Design a Good User Experience.

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#### **USER-CENTERED TECHNOLOGY**

Optimize the design for your target user groups



You MUST study your user. You must NOT expect the user to tell you what to design

FREE BUTTON! ▶

users
are not
designers

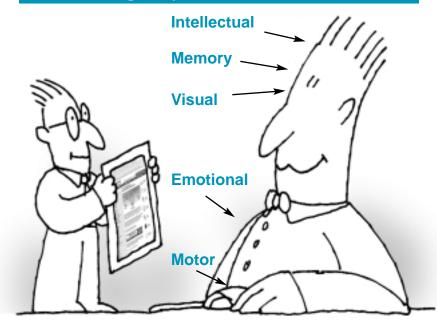
#### **HIGH-LEVEL STRUCTURE AND NAVIGATION**



Based on user's Natural Mental Model ("Cognitive Engineering")

- Simple and self-evident
- Physically efficient to navigate

#### Detailed design - optimize what matters

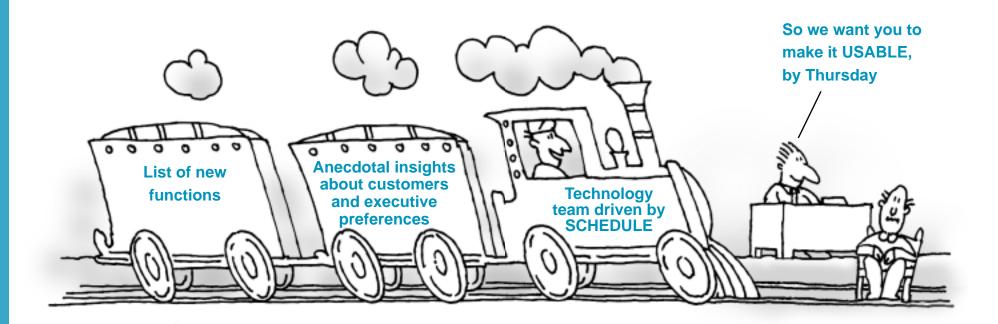


SUCCESS IS

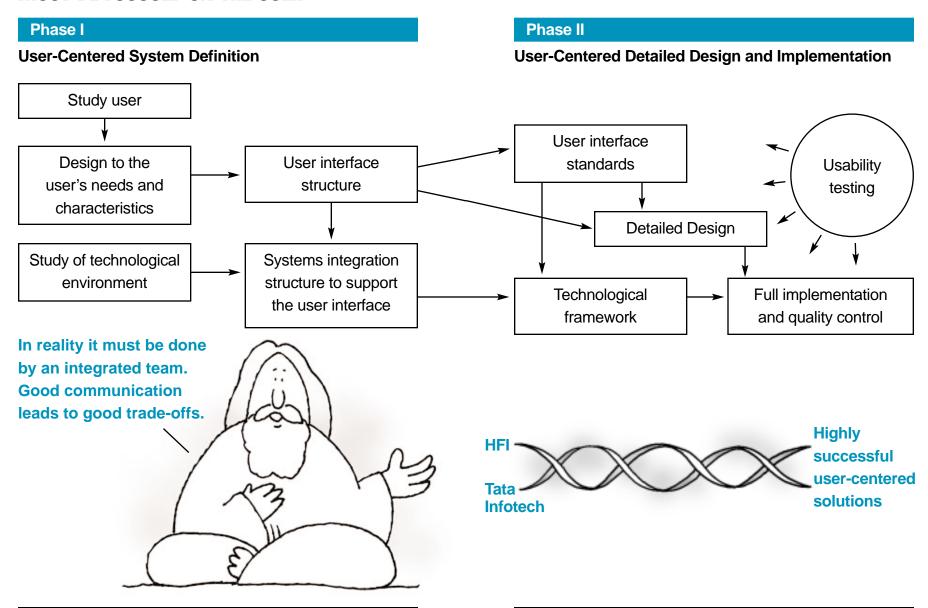
- Speed
- **MEASURABLE** Accuracy
  - Self-Evidency
  - Satisfaction

## DON'T JUST ADD A BIT OF USER-CENTERED DESIGN

In the past, design has tended to be technology-driven. Marketing then adds general direction (which is rarely translated into concrete design). Then add a little human factors work. Better than nothing, but only limited success is possible.



## THE WHOLE DEVELOPMENT PROCESS MUST BE FOCUSED ON THE USER



#### YOU CAN HAVE IT ALL

We spent a full year crafting our ability to deliver User-Centered Solutions™.

These are the criteria we met:

Be user-centered – for real

Be a complete solution

Be fast

Be cost-effective



Offered and controlled by Human Factors International, Inc. Dating back to 1981, it is the world's premier company focused on the practical application of user-centered design to commercial systems.

One point of contact. One point of responsibility. One bill. We provide all, or any part.

Branding ➤ Definition ➤ Design ➤ Implementation ➤ Installation ➤ Support ➤ Maintenance

Our people are experienced. Our methods minimize rework. We use offshore resources so your project follows the sun — moving ahead 20 hours a day. Both HFI and Tata Infotech have staff in the USA and India (12 ½ hours apart).

HFI is known as expensive...and worth every penny. Tata Infotech is trustworthy, effective, and can often reduce costs by extensive use of offshore resources.

#### THE BEST PLAYERS

User-Centered Solutions<sup>™</sup> are offered by Human Factors International, Inc. with the technical effort powered by Tata Infotech.

#### HFI

The world's premier company in practical application of software ergonomics to commercial applications. Operations dating back to 1981. We have worked on many of the biggest and most complex ecommerce sites, Intranets, and other software applications.

#### **Examples**

- ameritrade.com
- art.com
- bamboo.com
- Chevron Intranet
- dell.com
- DLJdirect.com
- epa.gov
- FedEx
- Ford Motor Company
- National Cancer Institute
- painewebber.com
- Sprint and Sprint PCS
- staples.com

#### **Tata Infotech**

Part of Tata Group, India's largest company, with \$9 billion in annual revenue. Tata Infotech has...

- Over 4000 staff
- Over 5000 completed projects
- ISO9000 certification
- Groups specializing in:

Finance and Insurance

**Telecommunications** 

Transportation

**Public Sector** 

Manufacturing

Commercial

#### **AN INTEGRATED TEAM**

We have placed major attention on the working relationship between HFI and Tata Infotech. At every level we have communicated, shared, planned, and worked together. We have bridged the cultural gap between our companies and countries. ALL this to offer the world's first true User Centered Solutions™

#### WE MAKE USABLE SOFTWARE™



Dr. Eric Schaffer, CEO of HFI, and Dr. Nirmal Jain, CEO of Tata Infotech, at the partnership signing in Mumbai, India on December 16th, 1999. Looking on are key managing participants from Tata Infotech and Apala Lahiri Chavan, the HFI Managing Director of our office in Mumbai.



## LET US BUILD ONE FOR YOU.



Vijay More, President, HFI



Eric Schaffer, Ph.D., CPE, CEO and Chief of Technical Staff, HFI

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