

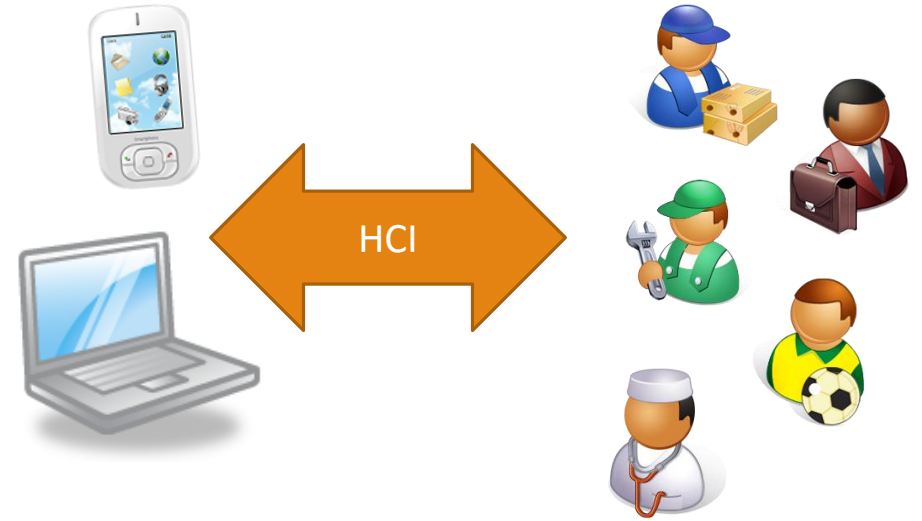
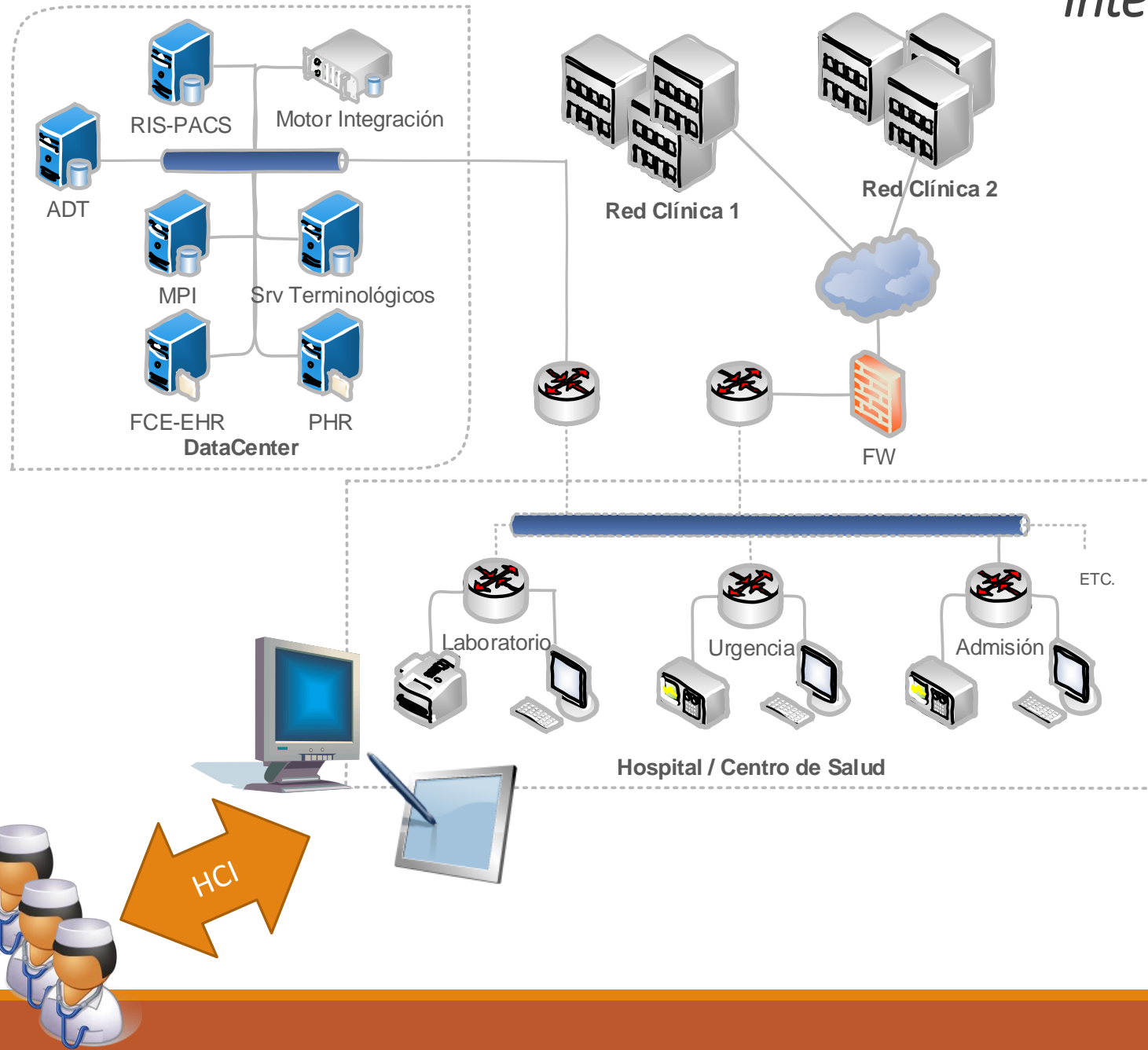
Interacción Humano-Computadora

(Human Computer Interaction - HCI)

SEMINARIO BIBLIOGRÁFICO – MIM2014 – MAURIZIO MATTOLI

A solid orange horizontal bar at the bottom of the slide.

Interfases no solamente entre sistemas..



Un buen diseño de interfaces e interacciones entre el usuario y la máquina debiera:

- Evitar frustración del usuario* (conseguir lo contrario: satisfacción).
- Prevenir errores, mayor seguridad.
- Mayor rapidez y eficiencia (ROI).

*Es fundamental aprender a
diseñar, prototipar y evaluar interfaces
..sobre todo en el rubro de la salud*

* usuario = profesional salud, paciente, etc.

Pensando también en los pacientes (usuarios)... tenemos además desafíos adicionales en Chile

“Nivel I”
BÁRBARA



PORTADA

POLÍTICA

CULTURA

INTERNACIONAL

CIENCIAS

EDUCACIÓN

ECONOMÍA

El 84% de los chilenos no entiende lo que lee

radio.uchile.cl | Miércoles 14 de diciembre 2011 21:15 hrs.



En el marco del seminario “Hacia una sociedad lectora” el Consejo de la Cultura entregó los resultados del Estudio de Comportamiento Lector que reveló que el 84 por ciento de la población chilena de todas las edades no comprende lo que lee. Pero además el informe detectó una relación entre la capacidad de entender textos y la productividad laboral, lo que se traduciría en mejores salarios.

Ejemplo I

Nivel I

usted puede tomar el medicamento.

Puntaje: 188

500

beza, musculares, reumáticos, dentales y de oídos.

FRÍO COMÚN

Los chilenos comprendemos mal lo que leemos, pero lo hacemos aún peor cuando tenemos que interpretar datos numéricos incluidos en los textos. Casi un 60% se encuentra en el nivel I, lo que significa, por ejemplo, que 3 de cada 5 chilenos entienden con dificultad la fórmula para preparar una mamadera impresa en un tarro de leche en polvo (véase Gráfico I).

or un plazo no mayor de

están tomando drogas
consume en grandes dosis
medicamento, habiendo
ería aunque poco común
antes de consumir este
caso de una sobredosis

products, INC

Quebec, HSI PI

No contamos con la traducción oficial de este ejemplo.

Information Age: Final report of the International Adult Literacy Survey. Organization For Economic
Canada. Canada 2000.

De qué “hablaremos” (volando) en menos de 1200’ segundos

1. Usabilidad aplicaciones y dispositivos - Desafíos, principios y técnicas de *validez general* para enfrentar el diseño de interfaces humano-computadora - **Curso HCI de la Universidad de Stanford y ahora UC SanDiego (Scott Klemmer)** / via Coursera – [parcialmente.. una fracción de la punta del iceberg..]
2. Recomendaciones y buenas prácticas para el diseño de interfaces-usuario en salud - **Microsoft Health Common User Interface (MSCUI)**.
3. Un lenguaje “icónico” para la visualización de conceptos en medicina - **VCM** (Visualization of Concept in Medicine) - The “**Laboratoire d’Informatique Médicale et Bioinformatique**” LIM&BIO (EA 3969) is a research laboratory of Paris 13 University..
4. Bibliografías y recursos.

Evaluación heurística de interfases (10p)

1. Mostrar el estado del sistema
2. Utilizar lenguaje y metáforas familiares
3. Proporcionar control y libertad
4. Asegurar consistencia
5. Prevenir errores
6. Privilegiar el reconocimiento por sobre el tener que recordar
7. Flexibilidad y eficiencia
8. Estética y diseño minimalista
9. Permitir reconocer, diagnosticar y recuperarse de errores
10. Proporcionar ayuda (comprensible)

Human-Computer Interaction

Helping you build human-centered design skills, so that you have the principles and methods to create excellent interfaces with any technology.

[Preview Lectures](#)

About the Course

In this course, you will learn how to design technologies that bring people joy, rather than frustration. You'll learn several techniques for rapidly prototyping and evaluating multiple interface alternatives -- and why rapid prototyping and comparative evaluation are essential to excellent interaction design. You'll learn how to conduct fieldwork with people to help you get design ideas. How to make paper prototypes and low-fidelity mock-ups that are interactive -- and how to use these designs to get feedback from other stakeholders like your teammates, clients, and users. You'll learn principles of visual design so that you can effectively organize and present information with your interfaces. You'll learn principles of perception and cognition that inform effective interaction design. And you'll learn how to perform and analyze controlled experiments online. In many cases, we'll use Web design as the anchoring domain. A lot of the examples will come from the Web, and we'll talk just a bit about Web technologies in particular. When we do so, it will be to support the main goal of this course, which is helping you build human-centered design skills, so that you have the principles and methods to create excellent interfaces with any technology.

Sessions

Jun 30th 2014 - Aug 29th 2014 ▼

[Join for Free](#)

Eligible for

Statement of Accomplishment

Course at a Glance

- 📅 9 weeks of study
- 🕒 10-12 hours of work / week
- 🌐 English
- 📄 English, Turkish, Japanese, Spanish subtitles

Stanford

Human-Computer Interaction

by Scott Klemmer



Home

Video Lectures

Assignments

Quizzes

Discussion Forums

Course Information

Syllabus and Calendar

Design Briefs

Peer Assessment

Useful Software


Publishing/Exporting

Video Lectures













[Help](#)

Having trouble viewing lectures? Try changing players. Your current player format is html5. [Change to flash.](#)










> Week 1 -- Introduction

- | | | |
|---|--|---|
| ✓ | Lecture 1.1: Human Computer Interaction (4:18) |     |
| ✓ | Lecture 1.2: The Power of Prototyping (13:49) |     |
| ✓ | Lecture 1.3: Evaluating Designs (12:15) |     |
| ✓ | Lecture 1.4: The Birth of HCI (8:48) |     |

> Week 2 -- Needfinding

- | | | |
|---|--|---|
| ✓ | Lecture 2.1: Participant Observation (12:55) |     |
| ✓ | Lecture 2.2: Interviewing (11:37) |     |
| ✓ | Lecture 2.3: Additional Needfinding Strategies (11:54) |     |

> Week 3 -- Rapid Prototyping

- | | | |
|---|---|---|
| ✓ | Lecture 3.1: Paper Prototypes and Mockups (12:47) |     |
| ✓ | Lecture 3.2: Faking it -- Wizard of Oz (14:30) |     |
| ✓ | Lecture 3.3: Faking it -- Video Prototyping (11:48) |     |

Hay trabajo muy valioso disponible (gratuitamente)

www.mscai.net

Microsoft Health COMMON USER INTERFACE

HOME | INTRODUCTION | GUIDANCE | CONTROLS | SHOWCASE | ROADMAP


WELCOME

The Microsoft Health Common User Interface (MSCUI) offerings form part of the [Microsoft Health ICT Resource Center](#). MSCUI provides User Interface [Design Guidance](#) and [Toolkit controls](#) that address a wide range of patient safety issues faced by healthcare organizations worldwide. Those design guides and controls enable the quick and easy creation of a new generation of safer, more usable and compelling health applications.

Visit the MSCUI Web site to:

- Read more about the project in the [Introduction](#)
- See scenario-based technology demonstrators and testimonials from clinical application and healthcare providers in the [Showcase](#)
- Visit our [Team Blog](#) for news and announcements
- Access our [CodePlex forum](#) to read related discussions

Why not also take a look at the [Microsoft Connected Health Platform Resources](#), which offer prescriptive architecture, solution accelerators, design and deployment guidance that help you optimized e-Health platforms and solutions?



CONSISTENT NAVIGATION

- Alerts and Reminders Framework
- Filtering, Sorting and Grouping
- Icons and Symbology

CLINICAL NOTING AND TERMINOLOGY

- Clinical Noting in Forms: Admissions Clerking
- Display of Clinical Statements
- Displaying Adverse Drug Reaction Risks
- Displaying Graphs and Tables
- Noting Using Templates
- Recording Adverse Drug Reaction Risks
- Terminology Display Standards
- Terminology Elaboration
- Terminology Matching
- Truncation of Clinical Terms

MEDICATIONS

- Drug Administration
- Medication Line
- Medications List
- Search and Prescribe
- Timeline View

PATIENT IDENTIFICATION

- Address Input and Display
- Email Input and Display
- Find a Patient
- Micro Patient Banner
- Patient Banner
- Patient ID Number Input and Display
- Patient List View
- Patient Name Input and Display
- Sex and Current Gender Input and Display
- Telephone Number Input and Display

MISCELLANEOUS

- Abbreviations and Acronyms
- Accessibility Principles
- Accessibility Checklist
- Date Input and Display
- Time Input and Display

Estandarización de interfases-usuario de aplicaciones clínicas...

GUIDANCE OVERVIEW

The aim of the Microsoft Health CUI Design Guidance is to support the delivery of safe patient care by providing detailed guidance for the standardization of clinical application user interfaces.

The Design Guidance is targeted at application providers whose healthcare applications are currently in use, as well as at those developing new healthcare applications in the future. With the primary focus on patient safety, the Design Guidance has been produced through a rigorous user-centred design process that incorporates primary and secondary research, usability testing and consultation with software providers. Patient Safety Assessments (PSAs) are continually performed to ensure the Design Guidance meets safety concerns.

The guidance documents are all free to use under the Microsoft Public license (Ms-PL) the terms of which can be found here: <http://mscui.codeplex.com/license>

The following areas of focus are the first areas to be released as part of the Design Guidance.

Note:

The Design Guidance is updated regularly. See the [Change Record – Guidance and Controls](#) for a list of the documents updated in the latest release.

Un ejemplo - cómo mostrar riesgo reacciones adversas a medicamentos

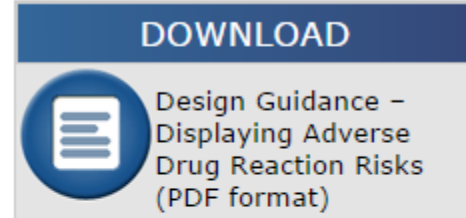
GUIDANCE – DISPLAYING ADVERSE DRUG REACTION RISKS

Introduction

The *Design Guidance – Displaying Adverse Drug Reaction Risks* document provides you with guidance and recommendations for indicating which drugs present a risk to a patient, based upon adverse drug reactions the patient has had in the past. It addresses how to display a summary of these drugs and the nature of the reactions the patient has suffered, so that clinicians can decide whether or not to prescribe these in the future.

This guidance should ensure that clinical applications enhance patient safety and clinical application usability by:

- Clearly displaying the presence, or absence, of any known adverse drug reaction risks for a patient
- Indicating the type of reaction that the patient has experienced in the past
- Presenting links to existing notes which describe the reaction events that justify why the patient is deemed at risk of reacting to the drug



Summary

Guidance is given on displaying adverse drug reaction risks and focuses on:


- Displaying adverse drug reaction risks as a list
- Defining the structure and the content of the list
- Formatting of the elements within the list
- Displaying 'no known' adverse drug reaction risks

Ejemplo de guía..




Design Guidance -- Displaying Adverse Drug Reaction Risks.pdf


Un lenguaje para visualizar conceptos en medicina..



An iconic language for the Visualization of Concepts in Medicine




VCM language



Thousands of easily understandable icons, representing abstract concepts in medicine (signs, symptoms, current diseases, antecedents, physiological states, surgical procedures, drugs, lab tests, medical specialties, medical documents and more)

[Discover VCM](#)

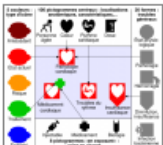
VCM principles



Discover how VCM icons are built for representing various types of concepts, such as diseases, symptoms, physiological states, drugs, lab tests, imaging, medical reports, medical specialties and specialists. Discover Mister VCM, an interactive interface that displays VCM icons organized around an anatomical diagram of the human body with additional mental, etiological and physiological areas

[VCM description](#)

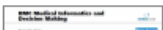
VCM is easy to learn



As a starting point, spend some time learning VCM with a training software. This will provide you with an overview of the language. You will discover how thousands of icons representing various medical concepts can be easily understood by a physician. If you want to become fluent in VCM, the training software will help you master the language quickly.

[Read the VCM tutorial](#)


Publications about VCM



You will find here the main scientific publications relevant to the design of VCM


VCM applications

Medical records




Save time and energy. With VCM icons and Mister VCM, your medical records acquire a graphic dimension. They will be easier to consult. These graphics help you develop efficient management of your patients.

Drug information



Save time, and avoid errors when you are prescribing drugs. Mister VCM allows graphic representation of the properties of drugs such as contraindications and drug interactions. With this interactive interface you can access the content of drug monographs very quickly. You can check in a glance the presence or absence of renal and hepatic impairment.

Clinical guidelines



Lim&Bio

UNIVERSITÉ PARIS 13 NORD

- [About us](#)
- [Our partners](#)
- [Get VCM](#)
- [Contact us](#)
 - [Alain Venot](#)
 - [Catherine Duclos](#)
 - [Jean-Baptiste Lamy](#)

News

- [Using VCM icons in educational documents for nurses](#)
- [Presentation of various uses of VCM at the Paris HIT exhibition \(22-25 May 2012\)](#)

Evolution & research

- [Linking SNOMED CT and VCM](#)
- [VCM for dentistry](#)

VCM language



Thousands of easily understandable icons, representing abstract concepts in medicine (signs, symptoms, current diseases, antecedents, physiological states, surgical procedures, drugs, lab tests, medical specialties, medical documents and more)

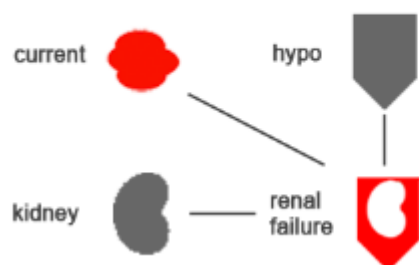
[Discover VCM](#)

Save time and prevent medical error

Halve the time necessary to read and understand medical contents by incorporating VCM icons in your documents

[Read more](#)

VCM is a compositionnal iconic language



Combining simple shapes, pictograms and colors allows numerous medical concepts to be modeled such that physicians can understand at a glance.

[Experiment with VCM lab](#)

Mister VCM



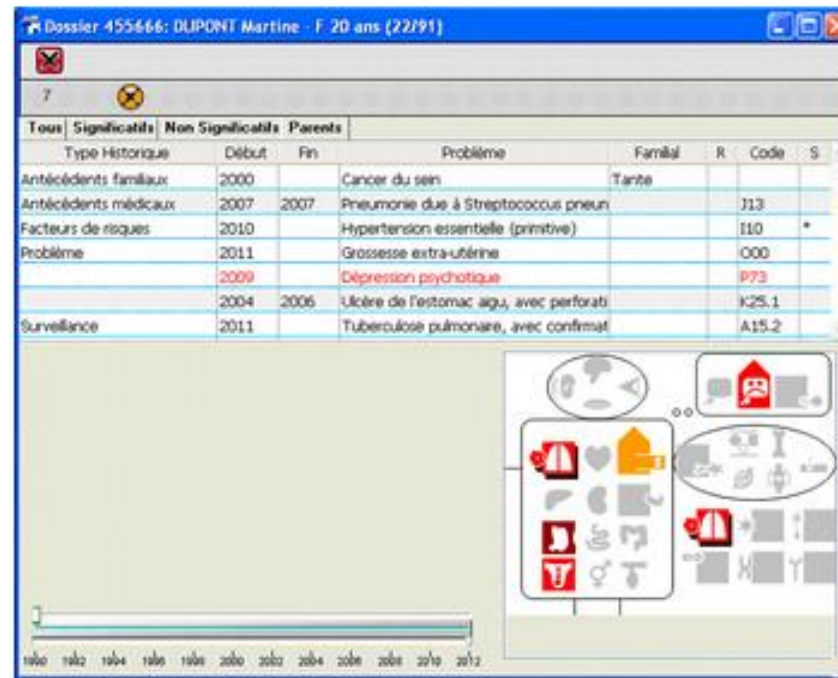
A graphical and interactive interface to facilitate access to drug monographs, clinical guidelines, medical records and other information

[Learn more](#)

For instance :

- You can associate the icons representing health professionals to the medical and surgical reports of patients.
- You can use the disease icons of to enrich the description of hospital stays and consultations
- Mister VCM permits a graphical summary of the patient's entire history, risks, and both past and current treatment. At a glance, the physician can identify the main health problems affecting the patient; he/she can also immediately see which anatomo-functional systems are not affected by pathological processes.

Below is an example for



VCM lab

<http://vcm.univ-paris13.fr/svcm>

Tecnología:

Intellego apunta a establecer un nuevo estándar en usabilidad de SAP

Intellego Chile, compañía de consultoría especializada en soluciones para la gestión de la información, procesos y TI, está impulsando en Chile el Servicio User Experience (UX) que busca cambiar la forma en que las empresas gestionan y rentabilizan su inversión en la plataforma SAP.

Intellego se encuentra trabajando el concepto de Usabilidad por más de un año y luego de la incorporación del software KNOA EPM (Experience and Performance Manager), se dio inicio al nuevo servicio de User Experience (UX).

El objetivo de UX es que la alta dirección de una organización pueda medir y controlar el potencial que está logrando con su sistema tecnológico, gestionar mejoras y maximizar su ROI.

“Ofrecemos al mercado una robusta propuesta metodológica



Luis Toro, director de Operaciones, Grupo Intellego; Eduardo Graniello, presidente y CEO, Grupo Intellego; Martin Hofmann, gerente general de Intellego Chile y Perú, y Felipe Labbé, director ejecutivo Grupo Intellego.

basada en detectar, a través de software especializado, los problemas que un usuario de SAP enfrenta diariamente, comprendiendo en qué nivel de su óptimo se encuentra en términos de eficiencia y eficacia, y determinando las causas de su desviación”, afirma el Country Manager de Intellego Chile,

Martin Hofmann.

El diferenciador de Intellego UX frente a otras soluciones de usabilidad es la capacidad integral del servicio para analizar y gestionar una operación SAP en todo el ciclo de vida del usuario final, asegurando resultados en el corto, mediano y largo plazo.

Resumiendo...

Aspecto mencionado en la presentación	Bibliografía y recursos
Desafíos, principios y técnicas de <i>validez general</i> para enfrentar el diseño de interfaces humano-computadora	Conjunto de recursos y referencias bibliográficas proveídas en el ámbito del curso de Scott Klemmer y otros de M. Mattoli (documento Word “biblio-HCI-Mmattoli.pdf”).
Guías para el diseño de interfaces-usuario en salud - Microsoft Health Common User Interface (MSCUI)	Conjunto de referencias bibliográficas dentro de las guías mismas disponibles online: http://www.mscai.net/
Un lenguaje “icónico” para la visualización de conceptos en medicina - VCM (Visualization of Concept in Medicine) - The “ Laboratoire d’Informatique Médicale et Bioinformatique ” LIM&BIO (EA 3969) is a research laboratory of Paris 13 University..	4 papers relacionados con VCM, referencias disponibles online: http://vcm.univ-paris13.fr/

¡ Muchas gracias !

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