



Legal Informatics – What Records Professionals Need to Know

ARMA Indianapolis, Wednesday, September 24, 2014

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Today's Program

- ❑ This presentation will discuss the history of informatics as a discipline.
- ❑ It will describe some of the programs and activities at the School of Informatics and Computing, IUPUI.
- ❑ It will describe the legal informatics certificate program at the School of Informatics and Computing.
- ❑ It will highlight the various ways that legal informatics and records management are intertwined, particularly in the use of technology and also ethical issues.

I Last Presented to ARMA in November 2009 (5 years ago)

- Many things have happened since then:
 - Name change – to School of Informatics and Computing
 - School of Library and Information Science – merged into our school and became a Department
 - **Approval of legal informatics certificate program – as part of degree but also as a free-standing certificate**
 - New departmental structure – so now Informatics program, including legal informatics, is part of the Department of Human-Centered Computing (HCC)
 - Grant to create an Informal Learning Space

History of Informatics

- ❑ Around the world
- ❑ First School of Informatics: University of Edinburgh, Scotland
- ❑ Second School of Informatics: Indiana University, 2000
- ❑ Since that time, other schools and programs
 - Some called School or College of Informatics, Northern Kentucky University College of Informatics
 - Some developed from Library Science or Information Science programs – the iSchools group <http://www.ischools.org/>
 - Some information technology programs have considerable overlap
 - Informatics is found in other schools, such as Nursing Informatics

What is Informatics?

- ❑ Understanding the impact technology has on people.
- ❑ The development of new uses for technology.
- ❑ The application of information technology in the context of another field (legal informatics, health informatics).
- ❑ Informatics is a new field of study that gives students the skills to apply information technology to another field - from health care to journalism to biology to economics.
- ❑ “Informaticists” can then use technology to harness the power of information and make exciting new discoveries that make us more productive at home and at work.

More Definitions

- ❑ A bridge between content areas/disciplines/fields of study and the technology
- ❑ “X” informatics – with the X standing for any content area of subject – music informatics, health informatics, bioinformatics, legal informatics, etc.
- ❑ A unique curriculum that combines IT concepts with other areas of study, opening rewarding career opportunities for graduates.

Our Undergraduate Programs

Bachelor's degrees:

- Informatics: students choose an “area of specialization” - one of these choices is legal informatics. Also includes new 5-year BS/MS program
- Media Arts & Science
- Health Information Administration/Management
- Also undergraduate certificates in:
 - Informatics
 - Medical Coding

Our Master's Programs

□ Master's degrees in:

- Bioinformatics
- Health informatics
- Human-Computer Interaction (HCI)
- Media Arts & Science
- Informatics (under development)
- Collaborations with other schools
 - Masters of Jurisprudence (MJ) at the McKinney School of Law with MS in Informatics or legal informatics certificate

Our Doctoral Programs

- PhD degrees in:
 - Bioinformatics
 - Health Informatics
 - Human-Computer Interaction (HCI)

Our Faculty

- Because Informatics is such a new, emerging and yet undefined discipline, our faculty members often have backgrounds in a number of academic areas :
 - Music
 - Fine and applied arts (painting, sculpture)
 - Computer Science
 - Biology
 - Journalism
 - Nursing
 - Instructional Systems Technology
 - Medicine
 - Graphic Design

Our Resources and Facilities

- ❑ Beautiful new building on the IUPUI campus – corner of West and Michigan Streets
- ❑ Outstanding technology resources: labs, computers, software
- ❑ Terrific support staff
- ❑ Collaboration with non-profit organizations and corporations
- ❑ Practical focus: IUPUI's RISE initiatives
- ❑ IUPUI's Strategic partnerships (international)

Some Interesting Projects

□ Virtual Worlds and Games

- “Serious Games” (suicide prevention as example)
- In the law context: gamification – for CLE or other legal training (*ABA Journal*, March 2014)

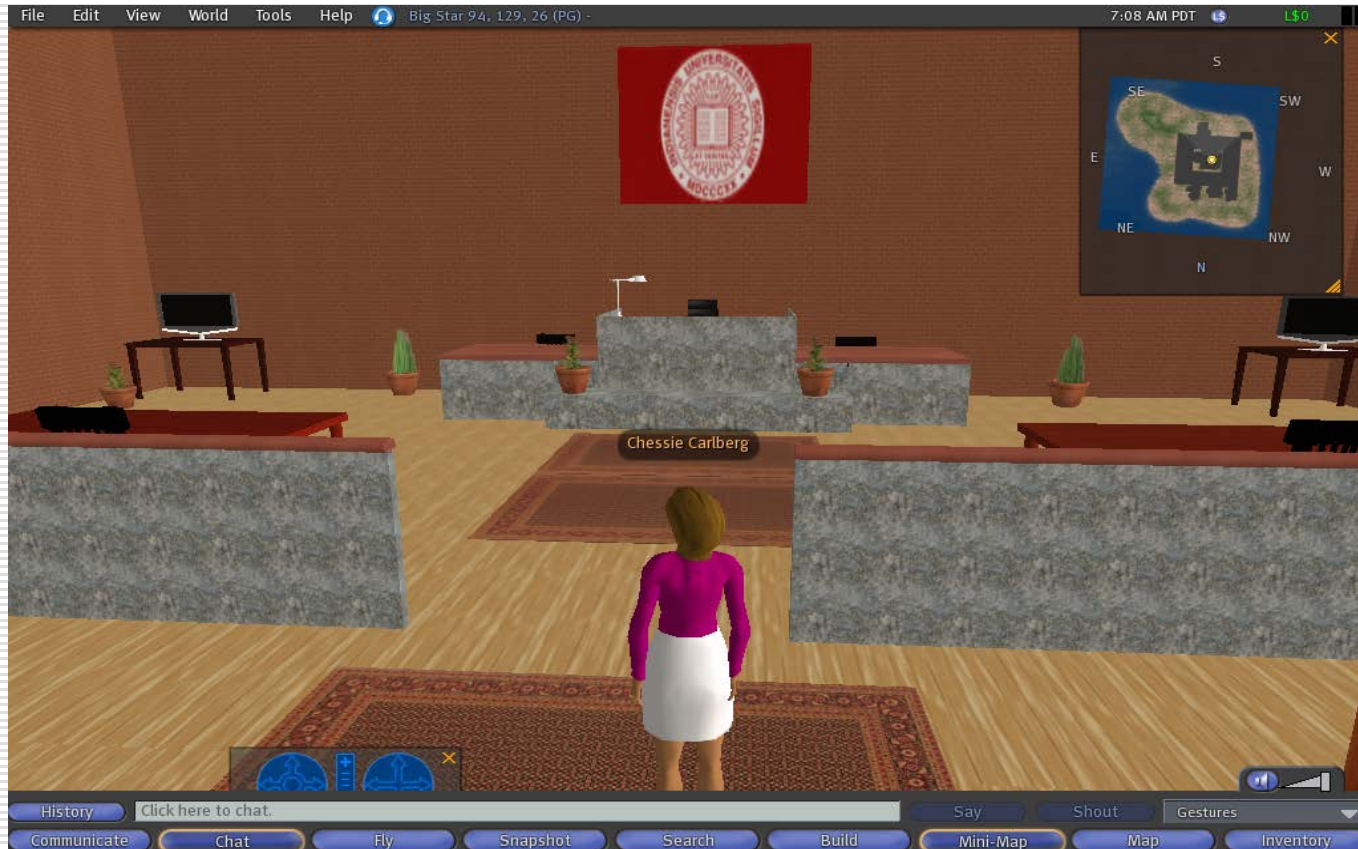
□ 3D Printing

- The Virtual Early Flute – exploit the full power of the web (2D and 3D images, sound, animations, text)
- Attempt to recreate flutes from the Baroque era using 3D printing technologies
- Uses in law
- Legal issues

Suicide Prevention Game



Early Attempt at a Virtual Courthouse



The Virtual Early Flute





The Virtual Early Flute



EARLY FLUTE EXAMPLES

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The Virtual Early Flute



EARLY FLUTE EXAMPLES

Cival War Era Flute With Case



Making a Flute with 3D Printing

- Additive versus subtractive process
- Conical bore
- Four pieces which fit together
- Key
- Modeling software
- Will it play?



What is Legal Informatics?

- ❑ Legal informatics has been described as “the study of the application of information technologies to the field of law and the use of these technologies by legal professionals.”
- ❑ Therefore, the focus of the legal informatics area of specialization/certificate is on the effective use of cutting-edge technology in the study and practice of law.
- ❑ Legal informatics also includes the law related to technology, such as intellectual property law, privacy and security.

History of Legal Informatics

- ❑ Used infrequently – most notably in the countries of the European Union and Japan
- ❑ In the U.S., “legal information technology”
- ❑ IT law/computer law versus IT applied to the practice of law
- ❑ Jurimetrics
- ❑ Results of research paper I wrote in June 2004
- ❑ University of Edinburgh School of Law
- ❑ Legal informatics IS NOT legal bibliography

What About Career Opportunities?

- ❑ As law firms convert from a paper-based practice to a practice using a full range of software, there are a considerable number of exciting career opportunities.
- ❑ Responsibilities could encompass everything from setting up databases of documents for a trial to running all of the software to manage a law firm's operational functions, such as time-keeping and billing.
- ❑ Duties could also include preparing audio, visual and multimedia materials and presentations for accident reconstructions, criminal investigations and to explain the intricacies of machinery and high-tech inventions.

What About Career Opportunities?

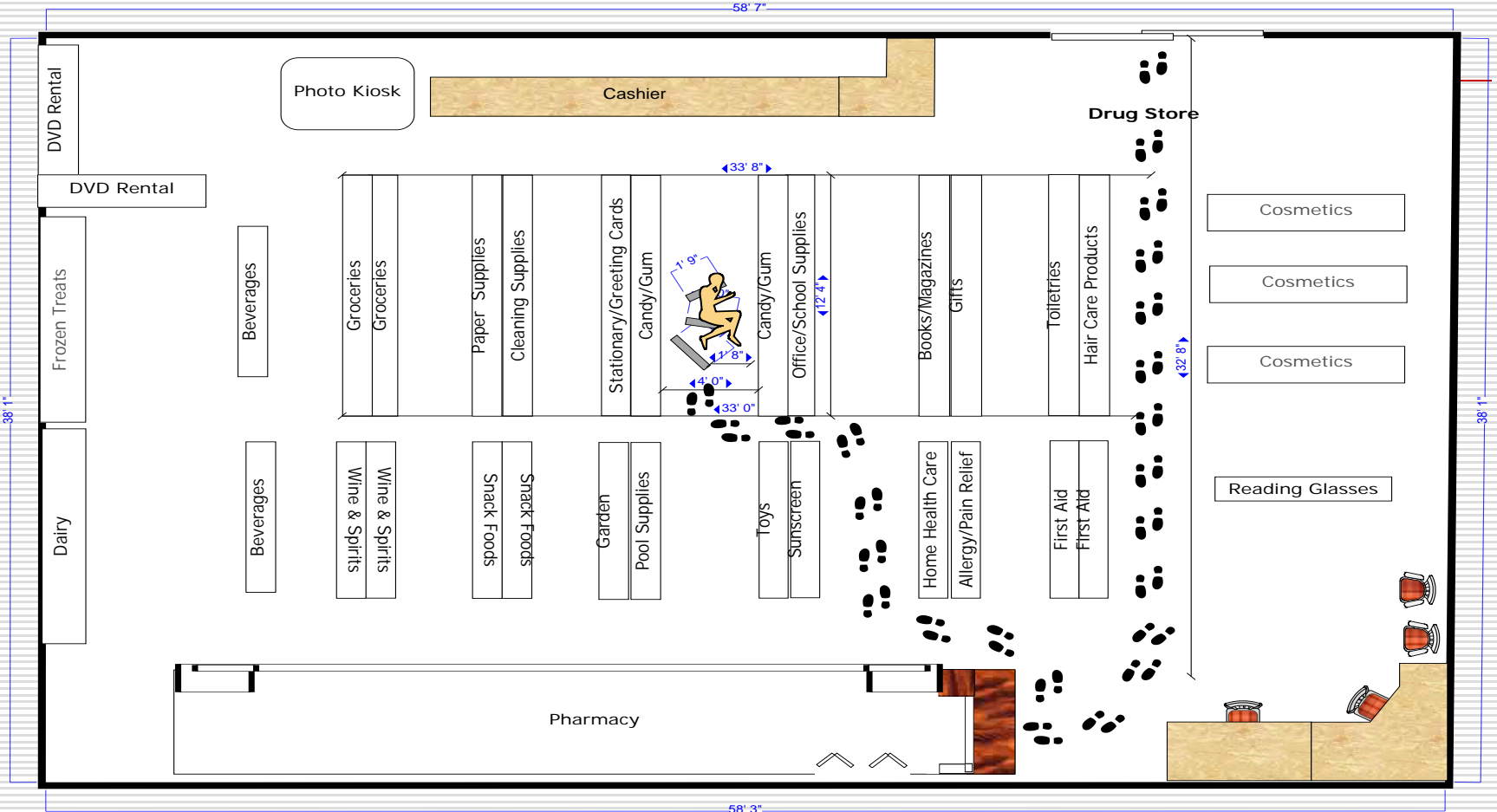
- ❑ Current openings in legal informatics may be found on the websites for ILTA: <http://careers.iltanet.org/jobs> or the Organization of Legal Professionals (OLP): <http://www.theolp.org/>
- ❑ Prediction is that one of the hottest areas for law will be in law + tech – in other words, someone with legal background and strong technology skills.
- ❑ A student who pursues the legal informatics as an area of specialization may choose to continue his/her education by attending law school to become an attorney or by seeking the Masters of Jurisprudence (MJ) degree.

Courses in the Legal Informatics Area of Specialization/Certificate

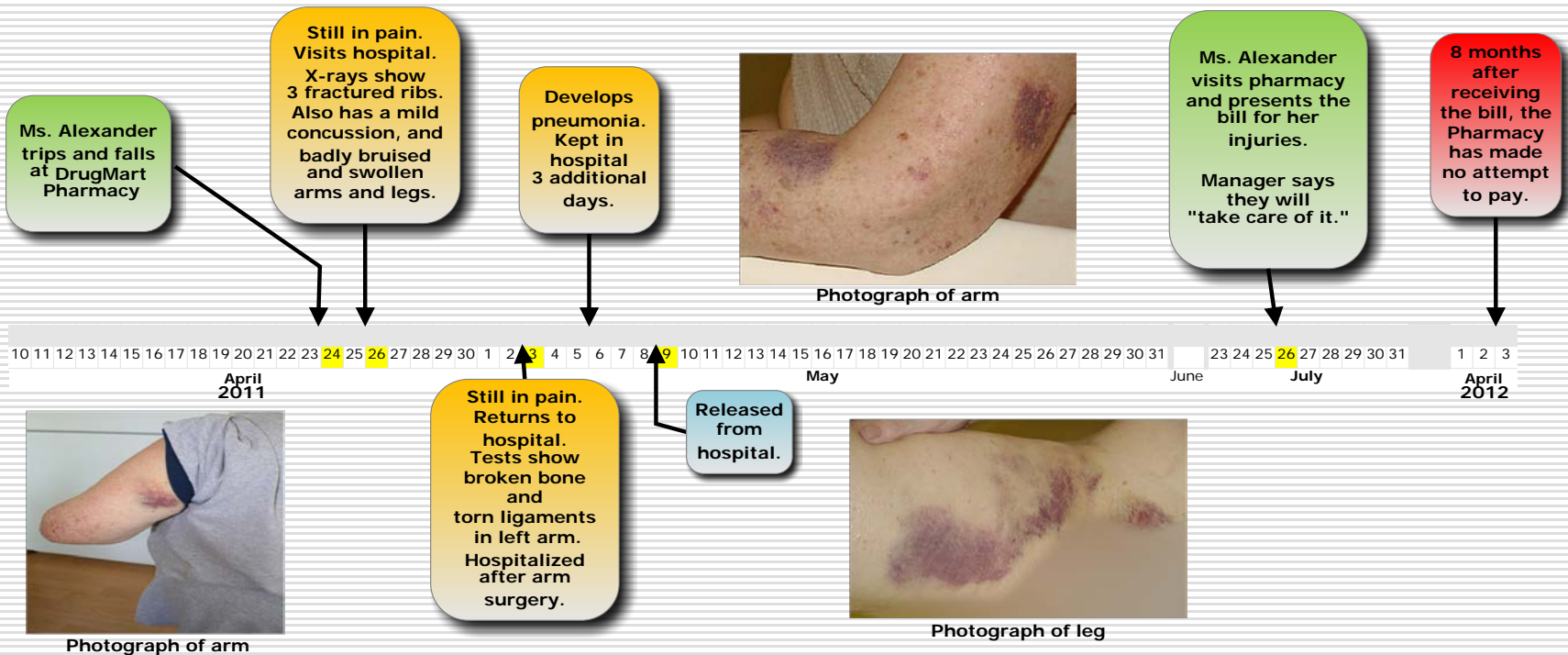
- I350 Foundations in Legal Informatics – Fall (all types of hardware and software used in a law practice and the courtroom)
- N480 Technology and the Law – Spring (covers intellectual property law, contracts, employment agreements, licensing, rights of privacy and publicity issues)
- I330 Legal and Social Informatics of Security – Spring (cybersecurity, including privacy issues)
- I470 Litigation Support Systems and Courtroom Presentations (specialized software tools, especially SmartDraw) - Summer
- I410 Electronic Discovery – Fall
- All courses are online
- 15 credit hours
- Free-standing or as part of a degree
- Undergraduate certificate, but all courses also available at graduate level

Examples of Student Work from INFO I470 Litigation Support Systems and Courtroom Presentations

Based on a real-world event – a slip and fall in a pharmacy.



A Year in the Life of Sally Jo Alexander



Interior of DrugMart Pharmacy – Overhead View

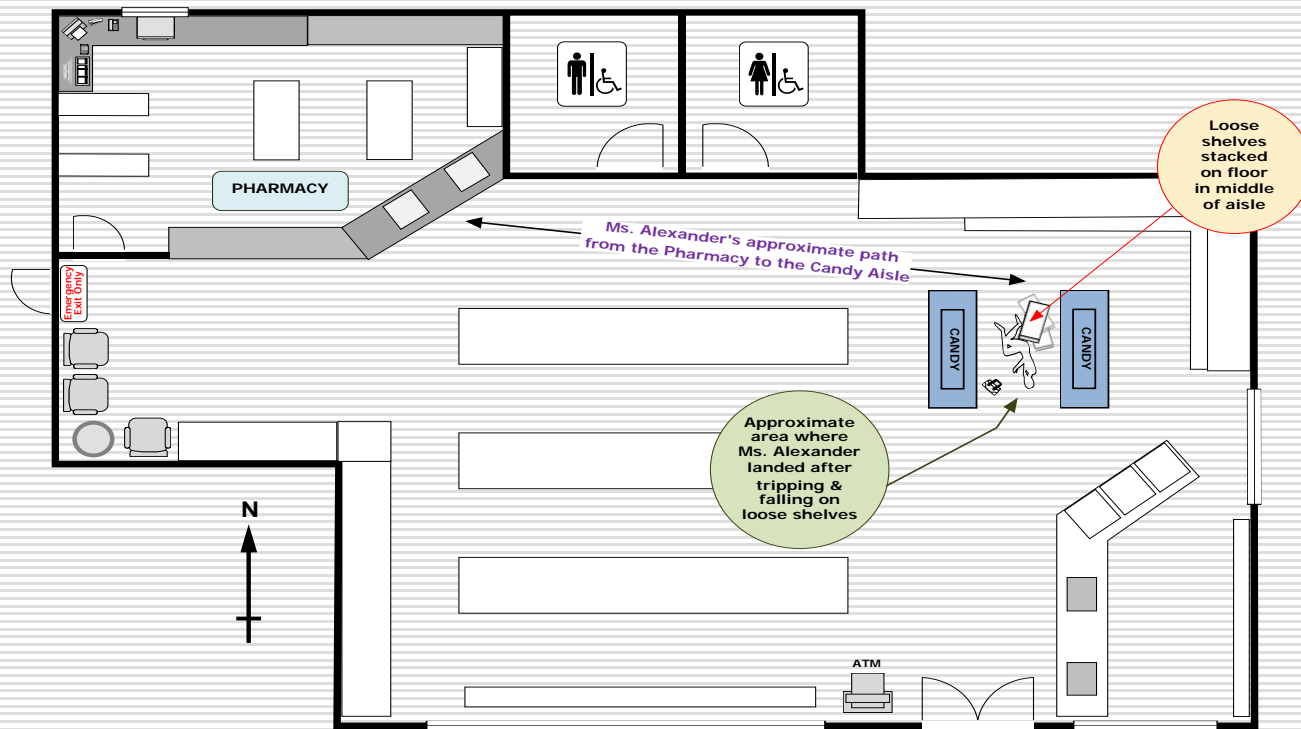


Illustration of DrugMart Pharmacy. All measurements in this and the illustrations to follow are approximate.

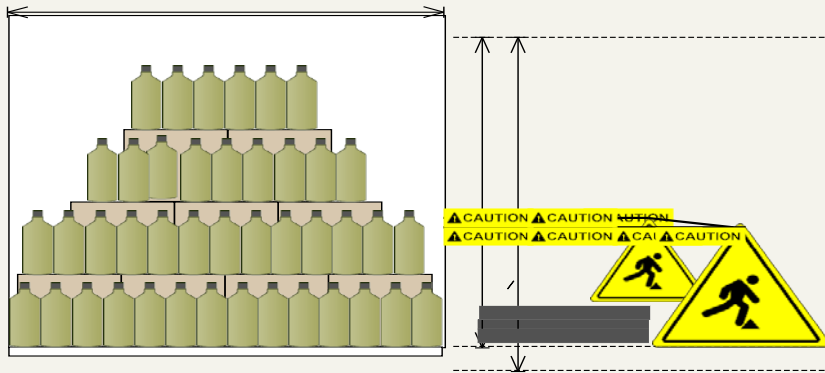
SmartDraw Academic Edition

Aisle 3

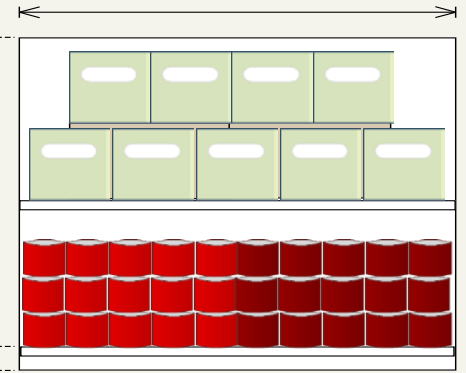


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A: End Rack

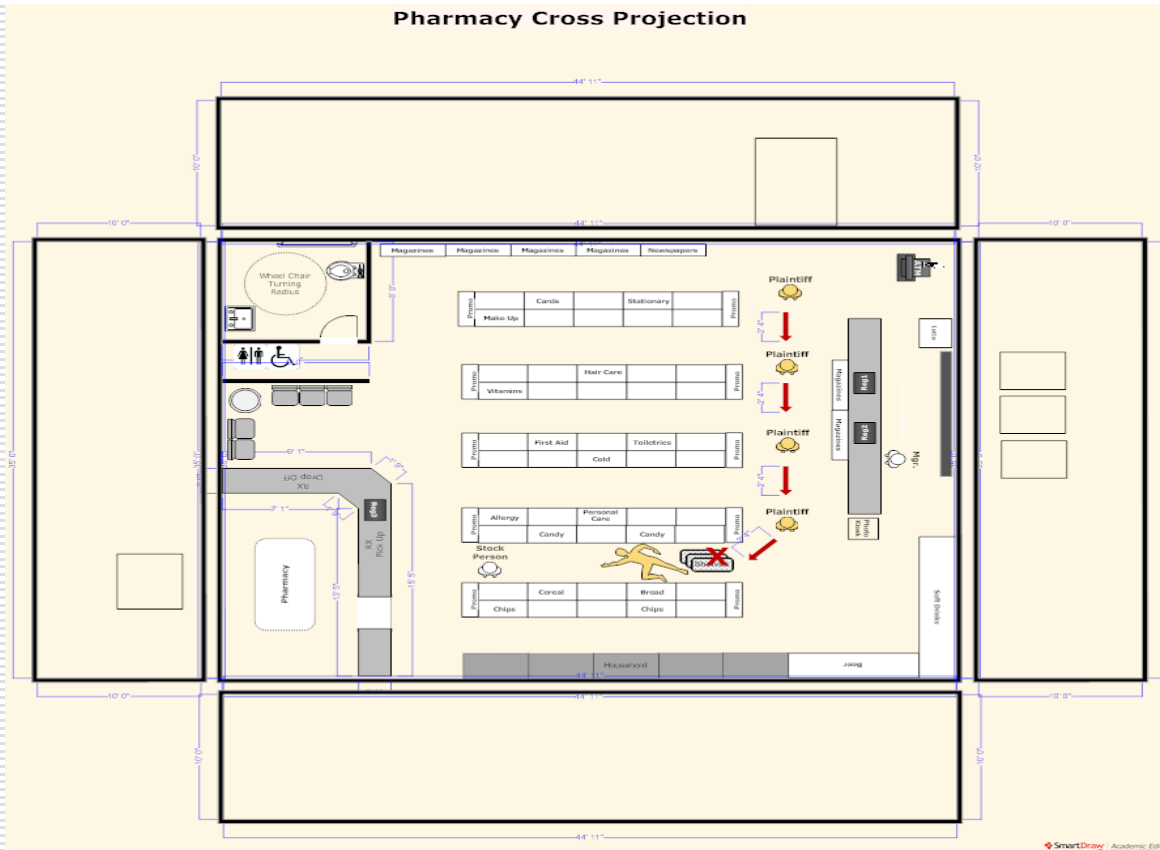


B: End Rack

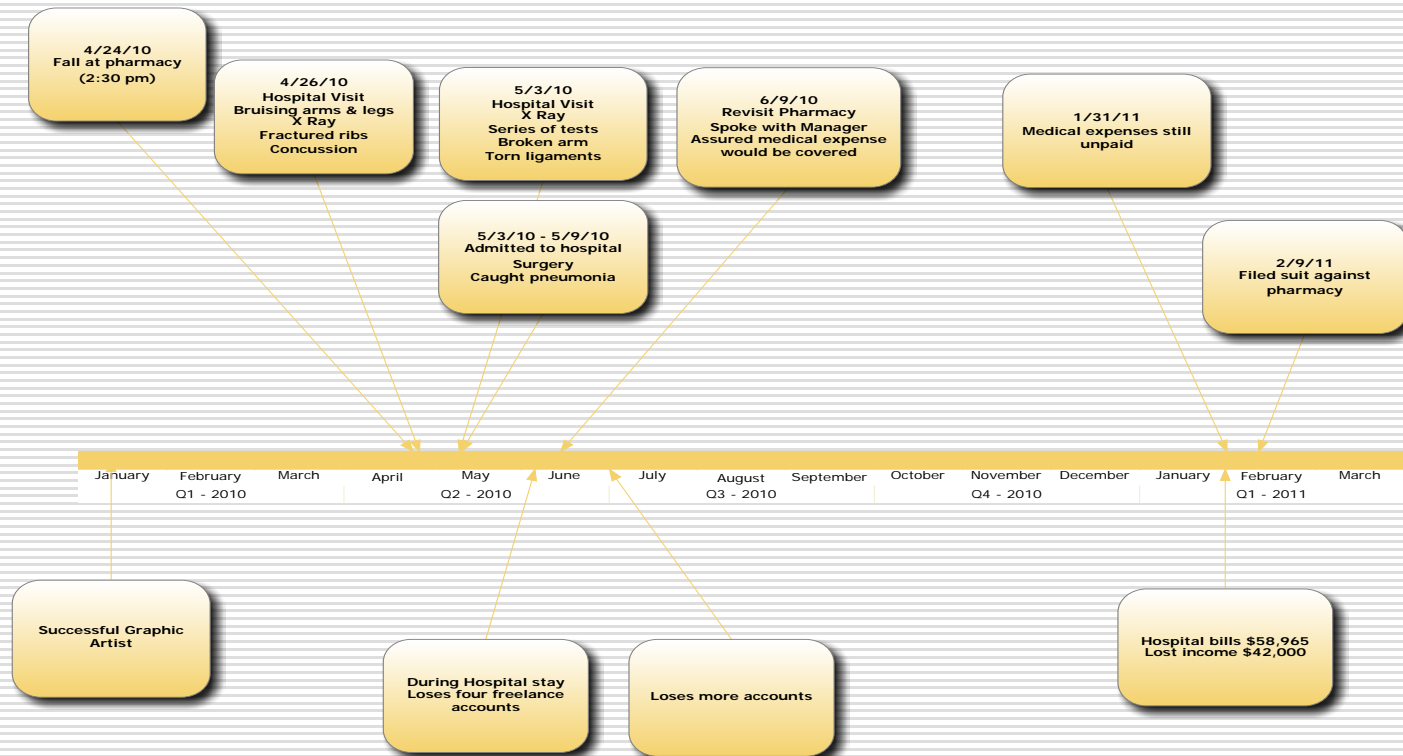


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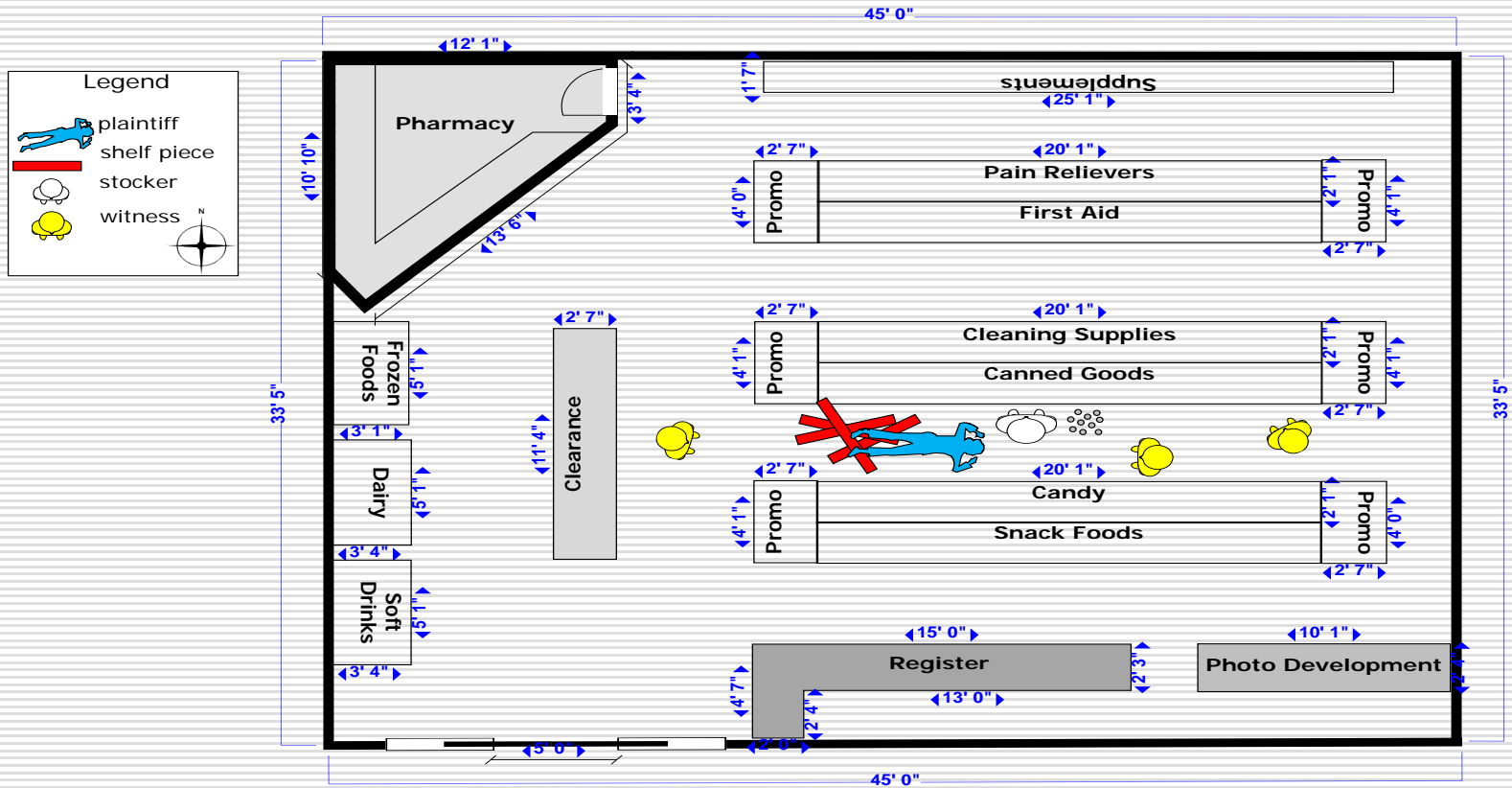
Pharmacy Floor Plan



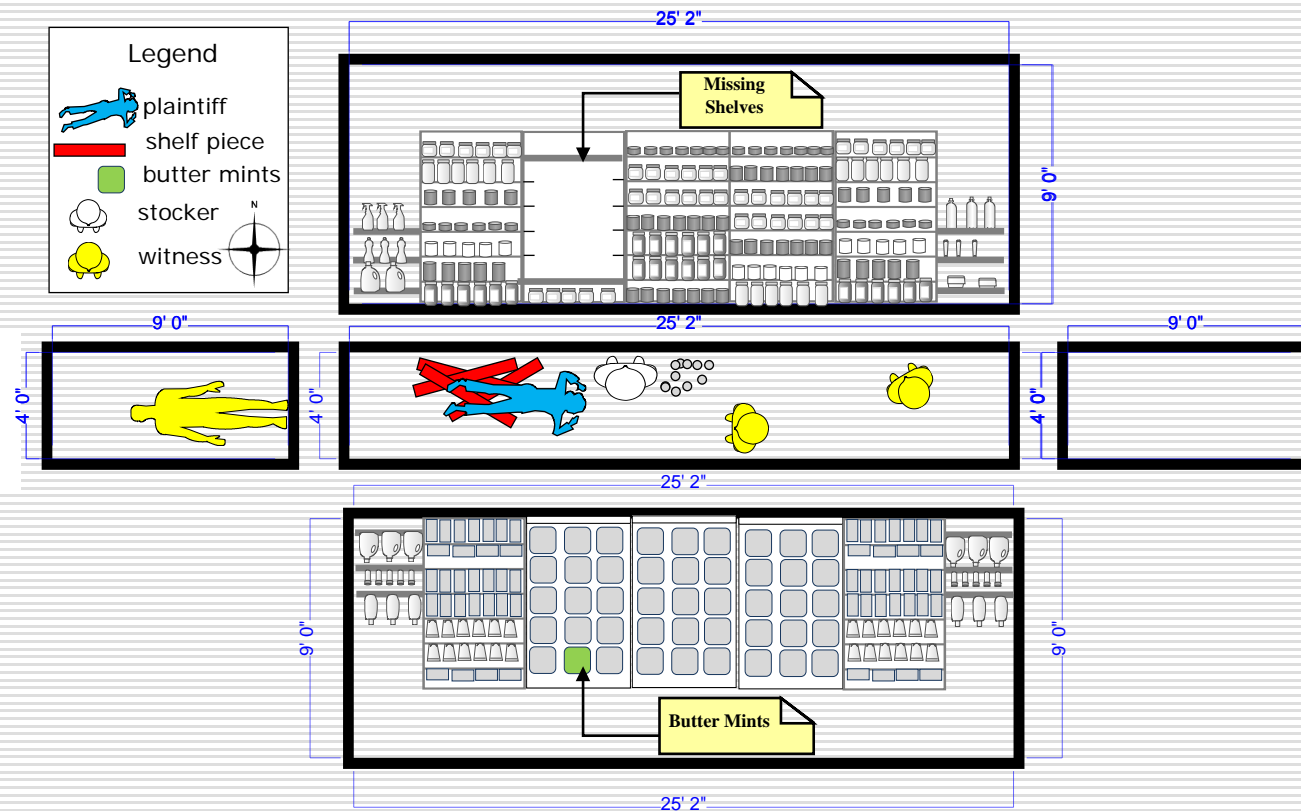
Event Timeline



Accident Scene Overhead



Accident Scene Cross-Projection



Technology in a Modern Courtroom...

- ❑ Means that law firms, courts and other law-related organizations will need people who have appropriate training in legal informatics (law + tech).
- ❑ Electronic discovery as an emerging area in law practice – at the intersection between legal informatics and records management.



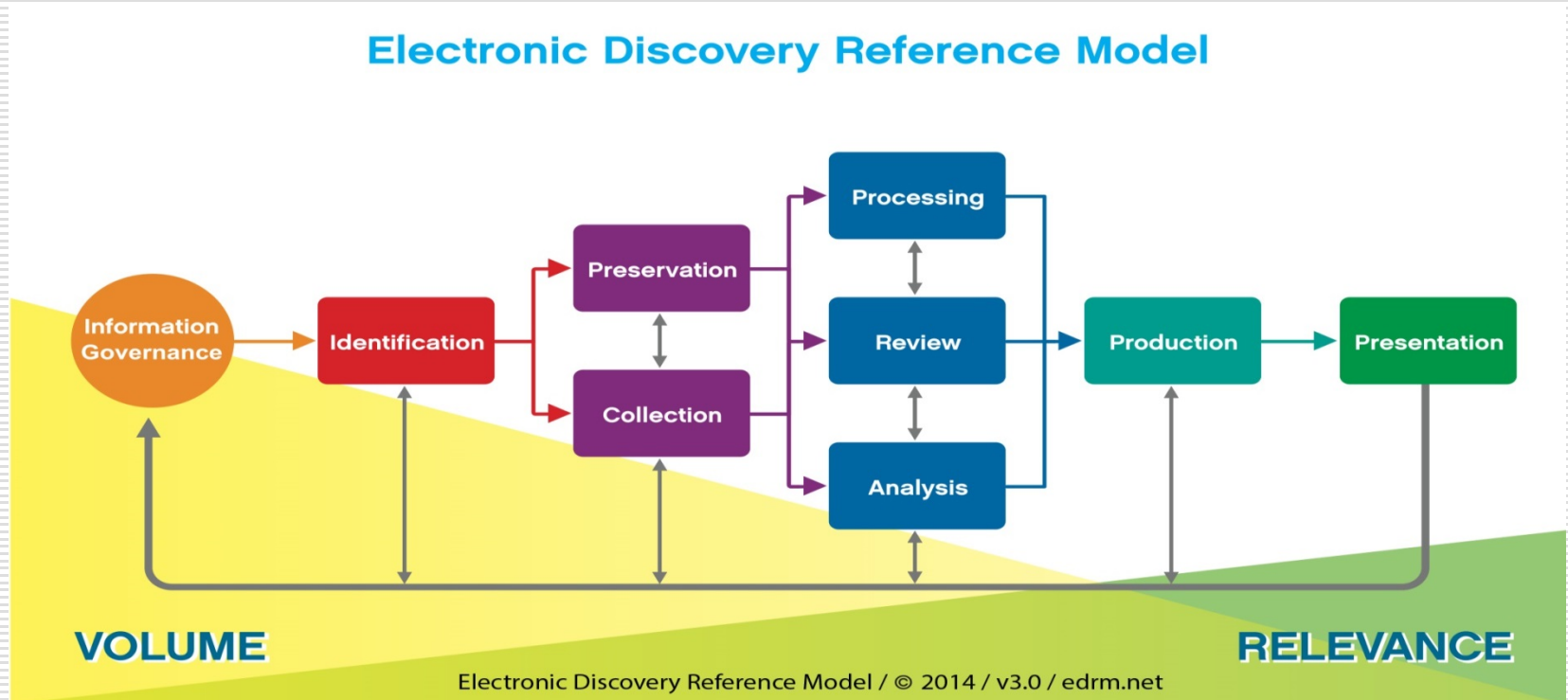
Intersection Between Legal Informatics and Records Management

- Legal informatics, especially electronic discovery, but also law firm technology
- Cybersecurity: legal, social, organizational, technological and physical issues as well as privacy rights
- Collection, preservation, accessibility of information/data
- Knowledge management – “big data”, data analytics and visualization, especially using new technologies
- More companies/law firms now recognize information/data as a strategic asset - and need to manage it properly throughout its entire lifecycle (including timely and proper disposal)!
- Competitive intelligence (for the law firm itself and for its clients – emerging trend – see INFO I445)

Challenge for Law Firms

- ❑ The T-Shaped Lawyer – Nelson and Simek
- ❑ Quote from the State Bar of Michigan Solo and Small Firm Institute on a law firm’s intellectual capital:
 - 80% of a law firm’s “knowledge” is stored as non-structured data, such as electronic documents and email. (Note: also referred to as “dark data”.)
 - If you can’t access it, you are giving it up.
 - This is knowledge management.

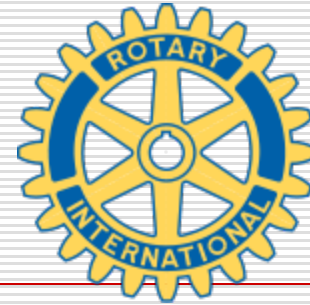
Implications of the Electronic Discovery Reference Model (EDRM)



EDRM: <http://www.edrm.net/>, 2014, accessed 9/24/14.

Potential Ethical Issues with New Technology in Law/Records Management

- ❑ Confidentiality – cloud computing, mobile devices, outsourcing, email –see ABA Formal Ethics Opinions
 - ❑ Technology in the law firm – see ILTSO 2011 Standards
 - ❑ Handling and using metadata – inadvertent production, electronic discovery rules, spoliation, sanctions
 - ❑ Ethical issues with interactive websites – when does the attorney-client relationship begin?
 - ❑ Ethical issues with social media
 - ❑ Social media and electronic discovery
 - ❑ Law firm advertising and marketing (especially with social media)
-



Exciting Service Project

- ❑ Microfinance project in Calnali (State of Hidalgo), Mexico
 - ❑ Funded by Rotary Club of Indianapolis
 - ❑ Supported by other organizations in Central Indiana and in Mexico
 - ❑ \$51,000 distributed so far – also provides training on financial management, business management, empowerment
 - ❑ Just celebrated 4-year anniversary – several hundred women have received loans
 - ❑ Next step is to provide online training materials via iPads and expand into new areas within the State of Hidalgo
-

Beautiful Vistas



The Communal Bank “The Doves” (Las Palomas)



Cecilia Portillo, Communal Bank *Los Rosales* (The Rose Bushes)

“I am in the communal bank Los Rosales (The Rose Bushes.) I am now in my fourth loan cycle, and thanks to the credits I have received, I have been able to grow my business which has enabled me to improve things for my children.”



Similarities – State of Hidalgo/State of Michigan



My favorite bird is also the symbol of the university in Pachuca – UAEH.



Pastes versus pasties. Both areas were settled by miners who came from the Cornwall region of England.



Cultural Differences - Calnali

- ❑ Shaking hands
- ❑ First language – Nahuatl
(pronunciation: [\[ˈnaːwatɬ\]](#)) - Uto-Aztecan language family - Collectively they are spoken by an estimated 1.5 million Nahua people.
- ❑ Spanish as second language
- ❑ Nahuatl words you already know:
 - chocolate
 - avocado
 - chili
 - coyote
 - tomato



For More Information...

- ❑ School of Informatics and Computing, IUPUI, website:
<http://soic.iupui.edu/>
- ❑ Legal Informatics website:
<http://soic.iupui.edu/undergraduate/minors-certificates/legal-informatics/>
- ❑ For my biographical information, see
<http://soic.iupui.edu/people/sara-hook/>



Any Questions?

Thank you for attending today's ARMA meeting! Have a great day!