



# EXPLORING THE ECOLOGY OF LAW AND INFORMATICS

Chase is bringing the emerging field of law and informatics to NKU. Fortunately, some Chase alumni are already leading the way.



One of the biggest challenges Professor Jon Garon faces when describing NKU Chase College of Law's new Law and Informatics Institute is defining exactly what "informatics" means.

As director of the institute, he explains it like this: "At its heart, informatics is like an ecology of information, just like the study of organisms in their environment is an ecology. It is the interrelationship of information and data systems. Wherever data flows and information can be used, it has effects, and like any ecosystem, there are consequences triggered by the interactions of those systems."

"The field of law and informatics looks beyond the science of information systems to embrace the information ecosystem regarding data within its environmental context," Garon says, "particularly the potential use and abuse of the information."

This applies to the legal environment in a number of ways, both in the practice of law itself and the legal needs of clients in nearly every industry. As Garon explains, "the role of lawyers in informatics is to understand how these systems will be used so that they can develop appropriate regulations to protect the public while encouraging innovation and growth."

Law and informatics, then, involves anywhere that the law, data, and technology intersect – from data security in digital financial records or medical records to copyright and privacy issues on social media sites like Facebook and YouTube, from cloud storage of email to property rights in virtual worlds, and from data encryption to First Amendment protection for video games. It is the study of legal information systems as well as the study of the law governing information, information technology, and the effects of technology on legal doctrine.







# Hot topic in legal informatics: VIDEO GAMES

There has been debate recently in the courts and state legislatures regarding the nature of video games – whether they should be treated like film and theatre, as a protected form of speech or toys that can be regulated as commercial products.

In June, the Supreme Court struck down a California law banning the sale of video games to children if the video games were deemed too violent. Writing for the majority, Justice Antonin Scalia wrote that the law "abridges the First Amendment rights of young people whose parents (and aunts and uncles) think violent video games are a harmless pastime."

"Most government regulations pertaining to video games fail due to First Amendment issues, as courts have been more willing to recognize video games as a type of expression that is to be afforded the full protection of the First Amendment, and must survive a strict scrutiny constitutional analysis to be upheld," says Garon.

First Amendment protections affect not only the regulation of video games, but the practices. In 2008, a Los Angeles business owner sued the makers of the Grand Theft Auto video games for trademark infringement after a business with a similar name appeared in the virtual city of Los Santos, a city designed for Grand Theft Auto to be based on Los Angeles. The Ninth Circuit found in 2008 that the video game's use of the similar business name was protected by the First Amendment.

California state and federal courts have struggled to reconcile the First Amendment rights of video game producers with the publicity rights of individuals depicted in the games. Lawsuits by former college football players against EA Sports for the unauthorized depiction in video games are still pending.



# INFORMATICS AND THE PRACTICE OF LAW

Information such as medical records, financial records, copyrighted music, personal and professional correspondence, metadata in emails and tweets, scientific research findings, and more will be at the core of many legal issues that new attorneys will face when they enter the legal profession. Because these issues transcend specific types of law and encompass torts, property, contracts, and many other areas of law, today's law students – and practicing attorneys – need to be prepared with knowledge of how



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laws regarding the digital technology apply and often conflict.

Within the field of informatics, one discipline is legal informatics, which focuses on the study of legal systems, including public access to legislation, the tracking of court activities, implications of sentencing guidelines, and the use of technology in the practice of law. Law itself has been revolutionized by digital information.

In addition, when it comes to the practice of law itself, the business side of running a

law firm is becoming digitized: websites like LexisNexis or the Casemaker online legal library provide many services that at one time were only available through law libraries, and the way attorneys bill for time can be done automatically on phones, with hours being automatically generated. Technology is also changing law office management, litigation support, document management, imaging and animations, case management, and electronic court filings.

Joseph W. Shea III '74, creator of Casemaker, recognized the way technology was changing the industry when he first developed the service back in 1981.

"My first ambition was to level the playing field between the large firms who had access to expensive databases and materials and the small firms and solo practitioners who did not," says Shea, who is principal with the Cincinnati firm Shea and Associates.

Having established a relationship with the Ohio State Bar Association, Shea first allowed the online version of the service to be made available as a benefit to bar association members. Casemaker now partners with 28 state bar associations through the "Casemaker Consortium" to provide a cost-effective legal research option for more than 450,000 lawyers and judges nationwide.

"When I graduated from Chase in 1974, no lawyer had keyboard skills beyond a high school typing class," Shea says. "But let's flash forward to today. Lawyers now create their own documents using multiple monitors on their desk to block and copy research materials into their briefs from one screen to the other. The more productive a lawyer can be, the more productive he or she must be in this new order of skills and productivity."

Shea hopes that the increase in productivity and availability of services like Casemaker will lower the cost of the administration of justice in America.

"In the end, we go to law school to make our

society served by the equal administration of justice," he says. "Casemaker may be a significant factor in meeting that goal."

In the courtroom, using the latest technology is also important. Presenting complicated data to a jury, for example, may require the data to be presented in a way that is equally as sophisticated but still understandable, without being oversimplified. The informatics field of data visualization becomes a vital tool, as it involves analyzing information and rendering and presenting it in a way that is comprehensible.

"An individual cannot fathom artificial intelligence or bioinformatics to understand what they're looking at, so many law firms work with firms that specialize in data visualization," says Douglas Perry, former and founding dean of NKU's College of Informatics, which is partnering with Chase in the development of the institute. "It goes way beyond a PowerPoint slide." "The notion of digital technology disrupts everything in human life," Perry says.

### INFORMATICS IN INTELLECTUAL PROPERTY LAW

Perry uses patent law as an example of how clients' needs are also becoming more digital.

In the United States, where patents had been awarded based on "first to invent," a pharmaceutical company may spend 10 years and \$2 billion to develop a new drug only to have the license to the drug challenged by a smaller company, resulting in millions of dollars in litigation. In the past, these were defended physically by experiments with lab notebooks, which were signed and countersigned by a supervisor, sealed, and taken to a records area, which became a large warehouse for these notebooks. When a company sued, the notebooks would have to be found and presented.

"Laboratory informatics has circumvented that," Perry says. "Electronic lab notebooks are both secure and defensible."



Not only that, but experimental data from machines in laboratories around the world are integrated, automatically analyzed, and stored to be retrieved anywhere on the globe. "Legal firms with these companies as clients have to be just as sophisticated," Perry says.

### TECHNOLOGY AND ELECTRONIC MEDICAL RECORDS

As partner-in-charge of the Cincinnati office of the law firm Dressman, Benzinger and LaVelle and as head of the firm's technology law practice group, Alan J. Hartman '78 says that the bulk of his practice since 1983 has been focused on meeting the legal needs of technology companies.

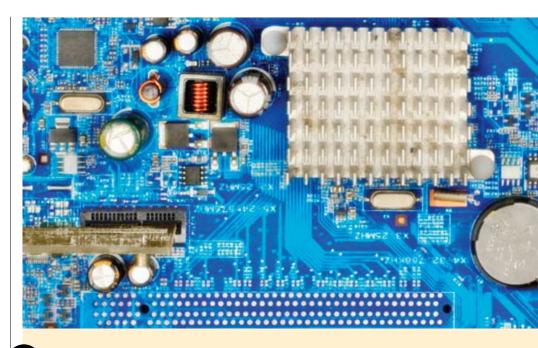
"Technology and the fast pace at which it changes create unique issues that must be appreciated by lawyers to enable them to competently serve the technology client or to competently handle technology-related transactions for the non-technology client," Hartman says.

That technology, he says, has sparked two major evolutions that require technology lawyers to continually develop new approaches to protecting information technology and to constructing the contractual vehicles that deliver the technology to users. One is the miniaturization of computer equipment that, despite its size, has ever-increasing power.

"It is amazing that what could not be done by a room-sized computer years ago can now be done from a phone in the palm of your hand," Hartman says.

The second evolution is the creation and expansion of the Internet.

"The objective of the Internet was to create a communications network that would survive a nuclear attack," Hartman says. "Now we have instantaneous worldwide dissemination of news, social networking, and cloud computing. This fast-paced environment makes for an exciting and challenging legal practice."



# Introducing the NKU Chase Law & Informatics Institute

Bringing the cutting edge of law, information and technology to the next generation of lawyers

The Law & Informatics Institute was formed by Chase Law School to address the fundamental shifts digital transactions and communications are having on society. Dennis Honabach, dean of the law school, envisioned the Institute as a natural progression for NKU following the launch of the College of Informatics in 2005. Through the law school's partnership with the College of Informatics, the Institute will explore key issues facing business and develop original research – a partnership that is the first of its kind in the nation.

The Institute provides education to graduate and law students, as well as lawyers and business leaders, on the best practices involving these evolving digital technologies. In business, for example, mobile apps are changing the ways customers interact with companies; cloud computing is affecting the way businesses engage with their vendors; and evolving federal regulations are revising business practices developed only a few years earlier.

While a number of universities like NKU have developed degree programs in informatics,

Chase is the first law school to begin the systematic analysis of these new digital tools as they apply to existing legal norms.

"The Law & Informatics Institute will provide a critical interdisciplinary approach to the study, research, scholarship, and practical application of informatics, focusing on the regulation and utilization of information – including its creation, acquisition, aggregation, security, manipulation and exploitation – in the fields of intellectual property law, privacy law, evidence (regulating government and the police), business law, and international law," says Garon.

"Through courses, symposia, publications and workshops, the Law & Informatics Institute encourages thoughtful public discourse on the regulation and use of information systems, business innovation, and the development of best business practices regarding the exploitation and effectiveness of the information and data systems in business, health care, media, and entertainment, and the public sector," he says.



These two evolutions have had a powerful effect on how health records are stored. Medical records are becoming more digital. Even the federal government is encouraging hospitals and physicians to adopt electronic health records systems. As part of the American Recovery and Reinvestment Act of 2009, the government offered to provide financial incentives under the Medicare and Medicaid programs for digitizing records.

Because of concerns about the security of the information being stored electronically, regulations have been put in place to help

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abate those concerns, such as through the Health Information Technology for Economic and Clinical Health Act, which became law in 2009.

"The Health Insurance Portability and Accountability Act of 1996 and its implementing regulations include provisions governing the protection of the confidentiality of health information, whether on paper, in electronic format, or some other medium," Hartman says. "The HITECH Act includes additional provisions, which supplement the HIPAA obligations, to beef up the confidentiality obligations in light of the additional concerns raised by electronic records."

One of the ways the HITECH Act addresses the security issue is by increasing civil penalties for willful neglect. It also provides requirements for who should be notified in the event of a breach of data and how quickly the information about the breach needs to be shared.

The creation of the Institute is joined by the creation of two new degree programs: the joint J.D./M.B.I. (Master of Business Informatics) and J.D./M.H.I. (Master of Health Informatics), as well as the development of related specialty programs for law students. Curriculum within the J.D./M.B.A. will also be expanded. The possibility for the creation of advanced degrees, certificate programs and additional partnerships are also on the horizon.

Led by its director, Professor Jon Garon, and through partnerships within Chase and KNU, the Institute will stay on the cutting edge of law and technology through its three components: research, curriculum and externships.

# **Cutting-Edge Research**

With the help of research assistants and student editors, the Institute will conduct cutting-edge research and perform public policy advocacy by serving as a neutral organization that looks at best practices and policies. Working closely with the College of Informatics, the Institute will apply legal analysis and policy analysis to the work that is going on in information systems, new forms of media and everything ranging from privacy issues to cyber security and international regulation of cyber-attacks.

Scholarship will include a broad array of topics, including reviews of existing regulatory regimes; assessment of new technologies that affect business practices and the rights of the public; issues related to data ownership; privacy concerns; and the U.S. response to data integrity policies, including the proposal of laws to foster improved data reliability, integrity and accuracy.

"What I particularly like about the field is that it integrates very practical issues with very theoretical research," Garon says. "Students will partner with industry, with lawyers and with academics from other areas to develop solutions for people and companies."

The Institute will eventually also publish its research and communicate with the public via a print newsletter and an online legal blog, which is available and linked to the Institute webpage (http://chaselaw.nku.edu/centers/law-informatics/).

One of the services Garon envisions the Institute will provide for the public is helping individuals create do-it-yourself estate plans for digital assets and companies revise their terms-of-use to better reflect the increasing importance of digital estates. As increasingly more important documents and mementos are stored only online, the need for comprehensive digital estate plans has grown substantially. For example, a family wanted to turn the Facebook profile page of a relative who had recently passed away into a memorial page. Through wall postings, status updates and photos, the family had an online record of their relative's thoughts and emotions that they may want to keep in remembrance. In the early years of Facebook and Myspace, this was not possible.

Finally, in 2009 Facebook amended its policies in response to public demand for this memorial function. It also addressed certain privacy concerns for the memorial sites, but left other questions unanswered. For example, could an estate plan trump the terms-of-service contract, and could those digital assets be labeled as property interests? If so, who has the legal right to control the memorial page? In this particular situation. Facebook established its own rules regarding memorial pages, but these accommodations provide only partial solutions. Through publications and practice guides, the Institute plans to help people avoid these kinds of situations ahead of time.

"Through the Institute, we will create a model estate plan for individuals to provide greater protection, control and predictability," Garon says. "Working with students and practitioners, the Institute plans to draft a proposed state law that, where enacted, would ensure that a trustee or executor can properly control digital assets and assure the appropriate



disposition of these important parts of decedents' lives, despite end user agreements."

### Hi-Tech Curriculum

The Institute will supplement the existing curriculum for law students by working with faculty to incorporate informatics education into current classes, bringing in guest lecturers and creating new courses to meet the needs of the changing legal environment. Because informatics touches every area of the law, there are many ways the subject can be incorporated into existing classes: a class on contracts could spend time on electronic signatures, a litigation class could talk about the explosion of e-discovery, and an entirely new "electronic papers" course could be created regarding banking.

"For example," Garon says, "a short portion of the curriculum of Labor and Employment classes could revolve around informatics, discussing subjects like the NLRB's series of decisions involving employment discipline for Twitter use."

In addition to augmenting a variety of classes, the institute would also provide a framework for designing an Intellectual Property curriculum that encompasses privacy, computer security, HIPAA/HITECH Act and other aspects of health law, cyber security, licensing, internet law and electronic media, and cybercrime and digital law enforcement. Because of the inherently interdisciplinary nature of these courses, the Institute will work closely with the College of Informatics to develop them.

To reach out to the legal community, the Institute will be offering symposia, conferences, programs and CLEs. For example, on October 26, 2011, the institute will be partnering with the NKU Small Business Development Center for a day-long program on innovation in small and emerging businesses. Entitled Social, Mobile, Local - Technology Trends, Tools and Strategies for Small Business Success, the program will feature notable speakers from around the region on how best to integrate



technology for managing growth and increasing efficiency. The program is primarily focused for small business owners, but will also be of benefit to the lawyers who serve them.

Another topic Garon sees as an opportunity for educating attorneys is cloud storage of data.

"Some systems now offer secure storage, the idea of storing files in the cloud" Garon says, "so cloud storage is no longer necessarily prohibited under HIPAA, GLBA and the attorney-client privilege. The question is whether the contractual and practical steps taken by the specific service providers meet the obligation to secure the information. And those standards may differ for lawyers, health care providers, and financial service companies."

Garon is already working with the Northern Kentucky Law Review on a legal informatics symposium to be held March 1-2, 2012. The two day program will present an international symposium featuring speakers from around the world who will present on legal topics surrounding technology, such as net neutrality regulation, radio-frequency identification utilization, cyber security in the U.S., E.U. and Russia, social media, the impact on media in criminal justice, global privacy laws and an array of additional topics.

# Global Externships and Local Clinics

The third of the Institute's roles will be its partnership with the Chase externship program, which will provide domestic and global opportunities to rising 3Ls to work in law firms and partner with companies. This is an important piece to the Institute, says

Garon, because "the stronger the externship program is, the stronger the program will be globally." Garon notes that the same is true locally. "Clients for the Chase Small Business & Nonprofit Law Clinic bring a wealth of intellectual property, e-contracting and data security issues to our door. These issues have become central to every business operation and the partnership between the Institute and Clinic enhances student learning, client satisfaction, and the centrality of both programs to the Chase curriculum."

Garon sees a number of areas where Institute students could prove valuable assets to employers beyond traditional intellectual property departments.

"In the banking sector, there are data security and privacy issues," Garon says. "In litigation, there are intellectual property and e-discovery issues. In employment and labor law, there are significant issues involving disgruntled employees and trade secrets."

In addition to its curriculum and research components, by providing clinical and externship opportunities that prepare Chase students for the pervasive and growing digital side of the law, the Law and Informatics Institute positions Chase students well for employment in the modern practice of law. In this, the Institute sits at the heart of the Chase mission to prepare its students and improve the practice of law.





### **About the Director**

Jon M. Garon is a nationally recognized authority on intellectual property, particularly copyright law, entertainment practice, cyberspace, and entrepreneurship in the creative industries. His passion for informatics and how the law intersects with technology makes him an ideal choice for serving as director of the institute.

After NKU Chase dean Dennis Honabach described the development of informatics at NKU a few years ago, Garon became interested in the university and came to NKU to give a series of presentations for Chase and the Haile/U.S. Bank College of Business. Garon describes the new set of challenges in the industry and exploring them through the institute "incredibly exciting."

Garon joins the Chase faculty as professor and director of the new Law and Informatics Institute . He comes to Chase from Hamline University School of Law, where he had served as professor since 2003 and as the law school's ninth dean 2003-08. In addition, he was appointed interim dean of the Graduate School of Management for 2005-06. He traveled extensively on his post-deanship sabbatical, lecturing in Israel and China at schools including Hebrew University, Haifa University, University of Hong Kong, University of International Business and Economics, Beijing, and East China University of Political Science and Law, Shanghai. Garon returned to the classroom in 2009 to teach intellectual property, copyright, entertainment law, unincorporated business entities and a seminar on informatics policy.

Garon also has extensive practice experience in the areas of entertainment law, business planning, copyright, software licensing, data privacy and security, and trademark law. Working in solo practice and for a number of firms in California, he has specialized in film financing, recording agreements, business formation, and copyright and trademark licensing as well as negotiating and drafting software development, multimedia, and music agreements. He remains an of counsel member of the law firm of Gallagher, Callahan, and Gartrell in New Hampshire.

Garon received his B.A. from the University of Minnesota, Twin Cities, and his J.D. from Columbia University School of Law. He began teaching full time in 1993 at Western State University College of Law in Orange County, Calif. He served as chairperson of



the curriculum committee and as founding president of the Western State Law Foundation. From 1996 to 1998, he served as associate dean of academic affairs. He also served on the dean's advisory board and as a member of the Entrepreneurial Law Center advisory board. In 2000, he joined the Franklin Pierce Law Center in Concord, N.H., and while teaching in New Hampshire also served as chairperson of the New Hampshire Film Commission.

Coming to informatics originally with a theatre background, Garon's interests then progressed to film, then to the Internet and then to data security and privacy in the financial and healthcare fields. In addition to leading the institute, Garon will continue to work in the entertainment industry, primarily assisting independent media producers and artists.

Through his firm's blog, Hartman advises healthcare providers that they need to be aware of the new regulations that have been put in place to protect these medical records.

### INFORMATICS IN MEDIA LAW

Another area of the law that has been profoundly impacted by technology is media law.

Jill P. Meyer '96, who is member-in-charge of the Cincinnati office of Frost Brown Todd and oversees the firm's advertising practice, has extensive experience in the areas of advertising law, intellectual property law, media and First Amendment law, and interactive media and Internet law. She describes a time before the Internet when the practice was divided into two distinct areas: media practice, which represented media companies, publishers, television stations, authors, or anyone publishing content, and advertising practice, which focused on issues like truth in advertising, claim substantiation, and copyright and trademark issues. The media publishing side had strong First Amendment rights and advertisers had lesser First Amendment rights as commercial speech.

"Here's where technology came into play," Meyer says. "Everyone is online now."

Because of the Internet, the adoption of usergenerated content has become ubiquitous. On the media side, media clients have "i-reporters," members of the public who report on news going on where they live, collecting news and uploading it to established media websites. In advertising, advertisers are now asking people in the public to create advertisements for them.

"Advertisers will ask people to upload a video telling them why they love their product," Meyer says. "That gets into publishing issues; they're still doing commercial speech, but they've lost control of the content. They have to be aware of defamation, privacy, and publicity rights. Prior to the Internet, advertisers could control these nicely, but now regular people are creating their content for them."

"For example, it's easy for a user to drop music into a video they've made, but if they submit it to an advertiser and the advertiser wants to use it, they may have no rights to the song," Meyer says.

"The existing laws were developed long before the Internet; the Copyright Act never contemplated that people would be able to replicate content the way you can do it online."

Meyer says that advertisers can be legally protected, but because they have lost control of the process, they have to make sure that the proper legal parameters and frameworks are put into place.

Over the past several years, new laws have been developed to address these issues because, Meyer says, "The existing laws were developed long before the Internet; the Copyright Act never contemplated that people would be able to replicate content the way you can do it online."

One of the new laws is the Communications Decency Act. While much of the CDA has since been declared unconstitutional, one section – Section 230 – has become a strong legal right for publishers of online content. It covers a website that provides a forum for unfettered third-party discussion, saying that online service providers are not liable for any defamatory comments that a third party may publish on the provider's forum. A local news website, for example, that provides a section for comments after every article would not need to be called into court every time a reader posted a defamatory comment.

"In traditional publishing, if you're a newspaper and someone sends a letter to the edi-



tor and you publish it, and the subject wants to sue for defamation, the publisher is a rightful defendant to that lawsuit, even though it was written by a third party," Meyer says. "Take the exact same scenario online, or via Twitter feeds, when an article is written and, instead of writing a letter to the editor, I jump online and fire off my thoughts about the person who is the subject. Now the medium is not a defendant."

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The Digital Millennium Copyright Act is another law that was created to address new issues with online content. It provides protection to those hosting an online site that allows people to upload content so that if some of that content violates a copyright, the host will not be held liable, as long as they have taken certain steps outlined in the law. YouTube, which has more than 24 hours of video uploaded by users every minute, is able to thrive because of this law. Copyright owners can file a copyright infringement notification with YouTube regarding specific usergenerated videos, and YouTube will quickly remove those videos.

In advertising, another major development is changes to Federal Trade Commission ad-

vertising laws to address the use of blogs as a source of advertising.

"Advertisers were reaching out to popular bloggers, especially moms, and saying, 'We'll send you our products to let you try it, and then you can blog about it,'" Meyer explains. "The FTC said that's not fair because people reading the blog don't know that the blogger is incented to write about that particular brand. It's human nature that people like to take their friends' opinions higher than a paid endorsement."

The FTC's research found that there were more people than not who failed to recognize that the blogs they were reading were biased. To protect consumers, the FTC created rules saying that if a person is blogging or sending out tweets or reaching out in any electronic capacity, and if an advertiser is sending that person a product or they are materially connected to an advertiser in any way, the blogger has to disclose that connection.

#### TECHNOLOGY IN LABOR AND EMPLOYMENT LAW

When it comes to Labor and Employment Law, there are four main situations where social media have workplace ramifications, says Colleen P. Lewis '89, partner in the Labor and Employment Law Department at the Cincinnati firm Dinsmore & Shohl.

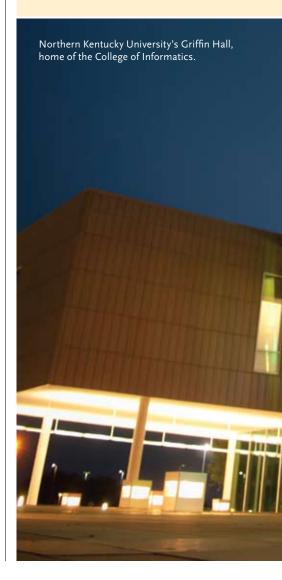
These situations include innocuous time wasting by employees (known as "cyberslacking"); illegal use of the Internet; inappropriate comments made on social networking sites by employees toward their place of employment, supervisors, or coworkers; and the "ill-advised employee" situation.

Lewis explains that the problems with an illadvised employee revolve around the fact that employers have unprecedented information about applicants and employees.

"There are Fair Credit Reporting Act implications," she says. "An employer needs to get consent and maintain a record of informa-

# Ready for the Future

NKU's College of Informatics, which will prove a valuable partner in the future of the institute, describes the study of informatics as becoming part of the "innovation age." The college offers bachelor's degrees in business informatics, computer science, electronic media and broadcasting, journalism, library informatics, and public relations. In addition to graduate certificates, five master's degrees are offered, including a master's in health informatics, which provides working professionals in the



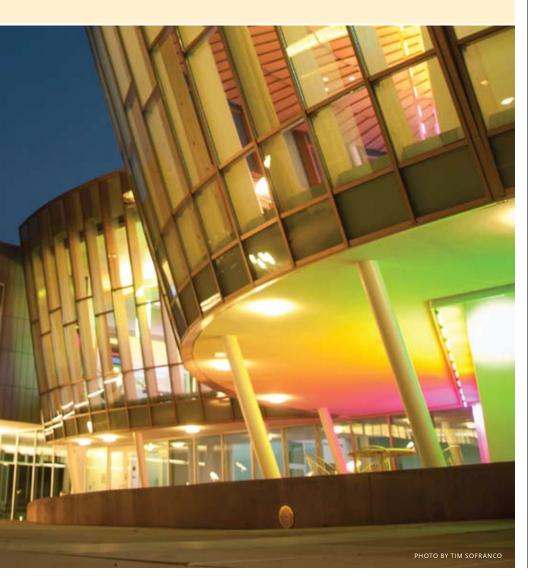


healthcare industry with the knowledge of technological innovations in their field.

NKU is one of only a few universities in the country with a College of Informatics, and the university has recently completed a state-of-the-art facility, Griffin Hall, that is devoted to the study of informatics. Griffin Hall is situated directly across the lawn from the Chase College of Law, and it offers resources such as a "genius bar" technology help desk and a two-story digitorium, which is a technologically equipped, reconfigurable

space designed for interaction with information.

With the resources provided by Griffin Hall and the College of Informatics, the support and expertise of generous alumni, the dedication of Chase faculty and administration, and the passion and leadership of Garon, the Law and Informatics Institute will propel NKU Chase College of Law into the future as a leader and an innovator in preparing its students for the contemporary practice of law.



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# Hot topic in legal informatics: CLOUD STORAGE

A significant trend that has been taking place recently is the movement of data storage to "the cloud." Garon says that the cloud "is actually the storage on giant server farms managed by companies such as Amazon or Google that sell storage and processing on an as-needed basis." Anyone who has ever posted pictures to Facebook, composed a tweet on Twitter or sent an email through their Gmail account has put data out into the cloud. The problem with the cloud is the potential security issue that could arise with that data being accessed or modified by a third party.

"The protection of data in the shared server farms or cloud represents the hardest challenge and opportunity for the growth of informatics," Garon says. "If clouds become ubiquitous, their management will shape everything in the ecology. If they become unstable or insecure, the entirety of the system could be at risk."

Metadata created by activity in the cloud have been used by Google and the U.S. Centers for Disease Control to predict the pattern of the spread of the flu through Google Flu Trends, which exemplifies a positive way this aggregate data can be used for the good of society. However, seemingly less noble uses of cloud data are also becoming more prevalent, as companies track potential customers online and use "behavioral advertising" to serve up an advertisement customized for and targeted to each individual.

"The ability of machines to correlate among the myriad of sources has only just begun," Garon says. "The time for a new regulatory regime, therefore, is now – before the use of such metadata becomes commonplace."





# Hot topic in legal informatics: THE PRESENT STATE OF HUMAN TRACKING

In stories that seem to appear out of science fiction magazines, news stories have reported the use of RFID chips being planted into the arms of Mexican businessmen in response to fears of kidnapping risks. These subdural chips are tiny glass capsules containing an RFID antenna. Without a power source, however, each tag can be read from only a few feet away.

The companies who sell these devices do not disclose the rest of their tracking systems. To work, such a system may require the person's home, vehicle and office each contain networked reading devices which are set to alert security if the person has left the field without preauthorizing the movement. In Mexico, such systems can sell for over \$2,000, plus monthly fees.

For more mundane concerns, a variety of devices are already on the market. To assist seniors who live alone, there are a number of tracking and security devices. Some are little more than pre-programmed phone handsets designed to be worn on pendants in the home. The more sophisticated devices include cellular phone wristbands equipped with GPS and Cell phone services. The equipment knows when it has been removed from the user's wrist, can detect falls, and can be programed to recognize pre-defined safety zones.

Whether the development of these devices is positive or negative depends on the risks being managed. But the field is changing and fear is a powerful motivator.

tion before taking adverse action if the FCRA is implicated."

The Stored Communications Act also forbids obtaining passwords to access private social networking sites without consent.

In some cases, comments employees make on their social networking sites can get them into trouble with their employers, sometimes leading to an employee's termination.

Recently, the National Labor Relations Board has filed unfair labor practice complaints when employees are seemingly fired because of what they say on sites like Facebook.

Under the National Labor Relations Act, what employees say on these sites or in a blog may be a protected activity if, Lewis says, other employees participate and discuss terms and conditions of employment.

In addition to the four main situations where social media affect the workplace, trade secrets have also become an issue. With more than 100 million members on professional social networking site LinkedIn alone, professional contacts are established and maintained online, making it difficult for companies to establish their customer lists as trade secrets. Without policies in place, disgruntled employees can walk off with a list of the company's clients because they are connected to them online. Even without an established list, someone could easily recreate or build their own through information they find on sites like LinkedIn or Facebook.

"Employers need to protect their trade secrets, which by definition means things not accessible to the public, so they need to build protocols to protect information," Lewis says. "They can't just lock stuff up in the safe anymore, because everyone puts everything in some type of electronic format."

In order to preserve the argument that a piece of information is a "trade secret," Lewis recommends making sure information is security-password protected and limited access is given only to individuals who need to know.

Social networking sites like Facebook come into play in harassment cases, as well.

"In litigation, upon receipt of an employeefiled complaint of discrimination," Lewis says, "as corporate defense lawyers, our team will immediately check MySpace, Facebook, LinkedIn and other social networking sites to see what information is publicly available about the plaintiff that we may be able to use in defending a complaint."

Posts like online profiles, messages, photographs, videos, and online communications that could relate to the employee's emotional or mental state come into focus now, thanks to a 2010 order on discovery issues in a sexual harassment case against a supervisor in the U.S. District Court for the Southern District of Indiana. At issue was whether claimants needed to produce information from their Facebook and MySpace accounts. The court determined the appropriate scope of relevance to include status updates, wall comments, groups or causes joined, blog entries, and more that related to any emotion or mental state.

#### DISRUPTIVE INNOVATION

Major technological change, such as in medicine, media, and employment, is called "disruptive innovation" and is a primary interest of Garon's.

"We're starting to see all these technologies affect the way business operates internally, and that has the potential to undermine old business models, creating opportunity for new businesses to emerge, based on how the start-ups manage the chaos of disruptive change," Garon says.

As an example, Garon describes the case of IBM, which had invented the floppy disk in the 1970s and was poised to create a new layer of technology with the personal computer in 1980. However, when the IBM group charged with the project of creating the PC could not get support anywhere within the company because, Garon says, "the idea of reducing sales of mainframe computers put IBM at risk," IBM staff created the first IBM





# **2**

# The Social Media Side of Legal Informatics

egal informatics is the study of legal information systems as well as the study of the law governing information, information technology, and the effects of technology on legal doctrine. In relation to informatics, social media are all about connection and communication. "Social media" is an umbrella term that includes the activities that integrate technology and social interaction. As more and more businesses and individuals begin to utilize social media, this information technology will continue to affect the legal system and the law of technology.

#### BY EMILY JANOSKI-HAEHLEN

Because of advancements in technology and the Internet, how individuals communicate or wish to communicate has drastically changed in the past few years. The days of picking up a telephone or walking down the office hall to catch up with friends or colleagues are over. Phone calls and in-person communication have been replaced by social media, instant messaging, and text messaging. These types of communication are instant and easy and do not even require the user to leave the comfort of home or office. Discussions on social media sites such as Twitter, Facebook, MySpace,

LinkedIn, and various blogs take place in real time on the Internet.

It is unclear whether social media will have a positive or negative impact on the legal community. The courts argue that social media interfere with the trial process, even though they have created their own social networking sites, while lawyers argue it is pivotal to jury selection and evidence. If communication in this technology-driven world is moving toward being all electronic, then what better way is there

**CONTINUED ON PAGE 30** 

PC with outside technology. Within a short period, a number of competitors were duplicating the PC and eroding IBM's advantage.

"Today, IBM is primarily a service company because it wasn't able to embrace the disruption," Garon says. "This is continuing to happen everywhere, including broadcast companies and film and television companies that don't know how to distribute content on the Internet."

"We're starting to see all these technologies affect the way business operates internally, and that has the potential to undermine old business models, creating opportunity for new businesses to emerge, based on how start-ups manage the chaos of disruptive change."

NKU Chase's newly created institute will be looking at the effects of technology on businesses like this as well as the law, and in doing so, it will prepare Chase students for the realities of the legal profession as it is today and the challenges and opportunities it will face in the future.

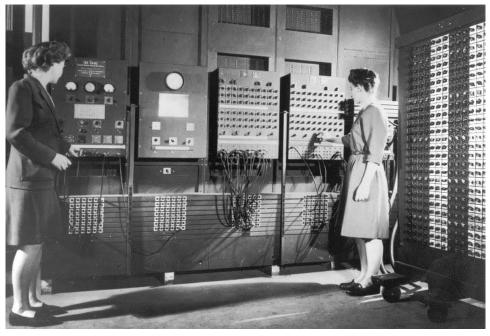
"Studying how informatics applies within the entity setting," Garon says, "is not going on anywhere else."

Lawyers need to prepare for the future by learning about what informatics is doing in the universe, like learning about intellectual property law and the new digital technologies designed to authenticate, substantiate, and corroborate. Even attorneys who don't want to get any more technical than Microsoft Word, Perry says, will need to use digital technology.

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### "EXPLORING THE ECOLOGY OF LAW AND INFORMATICS" CONTINUED FROM PAGE 15



"Sixty years ago, six young women programmed the world's first all-electronic computer, the ENIAC. Their ballistics program used hundreds of wires and 3000 switches. The ENIAC Programmers created the first sort routine, software application and instruction set, and classes in programming. Their work dramatically altered computing in the 1940s and 1950s, and paved the path to the modern software industry." ENIAC Programmers Project. Photo courtesy of University of Pennsylvania Archives.

Perry acknowledges that, in a field like law, the shift to a world where everything is digital will be a slow process. "But," he says, "it will happen."

### INFORMATICS AND TOMORROW'S CHASE GRADUATES

Technology is affecting every facet of the law, and Chase alumni who see its effects every day recognize the need for the next generation of Chase students to prepare for it.

"Technology is not just for technology companies," Hartman says. "Every business that wants to compete in today's market must use technology. As a result, every business lawyer should have some familiarity with the legal issues affecting technology – at least enough to know when to ask for help from someone proficient in the area."

"The Law and Informatics Institute," he says, "will help foster that familiarity among the students and will enable those students who wish to practice in this area an opportunity to begin to develop the proficiency to do so."

Meyer believes the knowledge students will acquire through the institute is critical because, while there are some laws that work just fine with technology, there are other laws that either don't work so well or are not yet in place.

"It's important to know how to find out all the laws that might be implicated by the new technology," Meyer says. "Students need to be familiar with not only technology but also existing legal issues around intellectual property, publication issues, and advertising laws to understand how they might be changed or come into play in a whole different way."



## Hot topic in legal informatics: UNDERSTANDING STUDENT PRIVACY

In recent years, managing student privacy has become an increasingly difficult balance between the rights of the students and the needs of educational institutions to protect the community and manage the activities on campus. The law begins with the Family Educational Rights and Privacy Act (FERPA). Since 1974, this federal law has protected the privacy of student education records. The law applies to all schools that receive funds under any applicable program of the U.S. Department of Education.

Since the regulations provide schools the ability to disclose information "to protect the health or safety of the student or other individuals" schools have the ability to disclose information when necessary. But often this is not done. FERPA was made infamous when confusion regarding the law slowed much-needed behavioral intervention of a Virginia Tech student who later went on a shooting rampage.

A presidential report studying the incident stated that "it was almost universally observed that these fears and misunderstandings likely limit the transfer of information in more significant ways than is required by law." Unfortunately, it took the Virginia Tech attack to make administrations realize that they need to use the exceptions to the law more fully. Since then, schools have developed emergency responses.



But privacy is equally important among students. Sometimes labeled cyberbullying, students often learn private information about each other, and less often (but still too frequently) they publicize this information to embarrass, harass or tease their classmates. Last year, a secreted computer video camera in a dorm room led to the outing of a gay Rutger's student. The live video streaming of his sexual encounters resulted in his suicide a few days later. Tyler Clementi's death gave witness to the pain such invasions of privacy can cause, but less extreme acts and less extreme reactions occur far too frequently.

An even more bizarre invasion of privacy occurred when a Pennsylvania school spied on students using software delivered to the homes. Allegedly to control misconduct by students, the school secretly installed remote webcam software to monitor student's activity. The practice was discontinued shortly after it came to the public's attention and lawsuits were filed.

Privacy is a human right and essential to human dignity, self-worth, and a functioning society. While it may have no economic value, it has a profound value to society. FERPA and other laws protect these rights, but they can only manage broad uses and misuse.

"THE SOCIAL SIDE OF MEDIA INFORMATICS"
CONTINUED FROM PAGE 15

to communicate with the public than by using social media?

#### What are Social Media?

Social media allow for instant electronic communication to large or small audiences and keep users connected with no regard for location or time. Even though there is no static scientific definition of social media, social media sites usually have three defining characteristics. The first characteristic is that the majority of the content is user generated. Second, there is a high degree of participation or interaction among users. And third, it easily integrates with other sites. By definition, then, social media sites include blogs, social networking (such as Facebook and MySpace), social bookmarking (such as Delicious, Reddit and Digg), news sharing (such as Google+ and Yahoo! Buzz), and photo- and video-sharing sites (such as Flickr, Photobucket, Picasa Web Albums, Vimeo and YouTube).

There are benefits and drawbacks to every new technology, and social media are no exception. The biggest benefits of social media are speed and access. Today's Internet users want information quickly and often do not care how the information is obtained as long as they have access to it. Social media sites allow users to access information fast and communicate about that information instantly. The biggest drawback to social media is personal information overload. Social media users post their daily activities, "check in" at various locations, update their status constantly and post personal photographs of vacations, new homes, new children, weddings, etc. Once this information is available on a social media site, if the user is not careful with site privacy settings, the information could be accessed and redistributed by anyone with a computer and an Internet connection. Social media users also post proprietary information not otherwise available in electronic format with no regard for copyright laws. Businesses and publishers must then closely monitor sites like YouTube, Facebook and blogs for

unlawful use of their proprietary publications, videos, logos, and any other information.

### Social Media in the Courts

How do social media affect the courts? Social media create a big challenge for courts since a simple "tweet" (a post on Twitter consisting of no more than 140 characters) or "comment" can be posted, copied, and republished around the world within seconds. If said tweet, post, or comment relates to an ongoing case or trial, the availability of such information can cause serious complications for the courts. With the creation of smart phones, access to social media applications has become rampant because most jurors, lawyers, judges, and other court personnel have cell phones, personal computers, or tablets with the ability to text, tweet, or post at any time. Moreover, the unregulated access to social media in the courts can cause ethical problems for judges as well as lawyers. This unregulated access is why the judiciary and state bar associations have begun scrutinizing how members of the legal profession use social media tools. A lawyer understands that communication dealing with a case made outside the courtroom is strictly prohibited under the rules of professional conduct, but jurors are not held to the same standards. Whenever a juror tweets, posts, or blogs about case information on the Internet, there is no standard, other than perhaps the court rules or judicial guidelines, for monitoring or punishing this conduct. If this juror misconduct begins to affect the trial process and a person's right to trial by an impartial jury, the possibilities of mistrials, motions to dismiss, and motions for new trials could become endless.

Take, for example, the added time the court in United States v. Fumo, 639 F.Supp.2d 544 (E.D. Pa. 2009) was required to use in deciding whether or not a juror's conduct on Facebook and Twitter constituted grounds for removal of the juror and then whether refusing to remove the juror constituted





grounds for a new trial. The court in Fumo issued a separate order addressing the defendant's request to remove a juror and motion for a new trial after juror Eric Wuest posted comments about the case on Facebook and Twitter. Specifically, juror Wuest posted comments about the trial on his Facebook and Twitter accounts that were picked up by the local media. After reviewing the juror's online comments, the court held that the comments were innocuous and provided no information about the trial, much less his thoughts on the trial, and the iuror's statements about the fact of his service on jury duty were not prohibited. Fortunately, the court in Fumo was able to examine the juror's conduct and decide what to do about it before the trial ended.

In some instances, however, juror misconduct on the Internet that occurs during a trial does lead to a mistrial. In a Florida federal drug case, after eight weeks of trial, a juror admitted to the judge that he had been doing research on the case on the Internet. Perhaps what was most shocking about this case was after questioning the rest of the jury, the federal judge presiding, Judge William J. Zloch, found that eight other members of the jury had been doing the same thing. Judge Zloch decided that he had no other choice than to declare a mistrial (which has been popularly coined the

"Google mistrial"). After eight weeks of trial, imagine the public and private resources wasted, not to mention the delays caused to other trials. It is not hard to conceive why judges have started banning the use of smart phones in the courtroom. However, a juror on a break can easily search Google, Facebook, Twitter or Wikipedia for information about the case or laws involved. Interestingly, no court has specifically defined what comments on social media sites would be considered enough to warrant a mistrial or new trial. Courts have handled these issues on a case-by-case basis, but with the increase in social media site usage, a uniform standard for determining what types of comments are prohibited is necessary. By amending court rules and jury instructions, the judiciary can begin to regulate the use of social media in the courtroom.

Social media are also being utilized by members of the judiciary. Judges are using social media sites to connect with "friends" and post comments. Whether they are allowed to do so in their personal or professional capacity is still under scrutiny by many states. Many states are amending judicial canons to include rules on communicating on social media tools while other states have remained silent on the issue until a situation calls for an advisory

opinion or public reprimand. For example, in Florida, the Judicial Ethics Advisory Committee and the Supreme Court have issued advisory opinions stating that a judge's conduct on a social media site does affect the judicial system and is prohibited. Judges in Florida are not allowed to be "friends" with practicing attorneys in Florida. Citing Canon 2B of the Florida Code of Judicial Conduct, the Supreme Court emphasized the need to avoid giving the impression that certain lawyers were in a "special position to influence the judge." This is an understandable outcome as judges often recuse themselves from proceedings due to personal relationships with the parties. Other states have decided to remain silent on the issue or are allowing judges to "friend" whoever as long as it does not interfere with the integrity of the court. In August 2010, the Conference of Court Public Information Officers issued a report addressing social media and their impact on the courts. In this report, the CCPIO stressed the importance of maintaining the public trust and confidence in the courts. The CCPIO also recognized how social media use could adversely impact the courts' ability to maintain the high standard of integrity required by the performance standards implemented by the NCSC and the Bureau of Justice Assistance of the U.S. Department of Justice. The CCPIO examined the ideas that social media use by judges allows for collaboration and communication but also creates the risk that the public will view the judges' conduct on the sites negatively. Ultimately the CCPIO report recommended forming a task force to continue to study the presence of social media in the courts.

The Judicial Conference of the United States has also addressed the issue of judicial employees using social media sites, and some federal courts have already implemented rules to safeguard against improper use of social media sites by employees. In 2010, the Judicial Conference Committee on Codes of Conduct published the Resource Packet for Developing Guidelines on Use of Social Media by Judicial Employees. This guide provides information to help courts develop policies on the use of



social media by judicial employees and includes sample policy provisions and existing policy examples from United States district courts. Some of the examples provide disciplinary actions to be taken, including termination, if an employee of the judiciary violates the rules on social media use.

"Judges in Florida are not allowed to be "friends" with practicing attorneys in Florida. Citing Canon 2B of the Florida Code of Judicial Conduct, the Supreme Court emphasized the need to avoid giving the impression that certain lawyers were in a "special position to influence the judge."

It is obvious that social media are already entrenched in the courts and will continue to affect court proceedings and employees of the courts. The judicial system must continue to explore ways to curtail juror use of social media and develop policies for judges and other court personnel.

### Lawyers Using Social Media

Lawyers are facing new challenges in interpreting the law and professional ethics guidelines because of the influence of social media. According to a 2010 ABA survey, 56 percent of lawyers reported having a presence on social media sites. It is no wonder that state bar associations have started to address the issues of lawyers using social media in their practices. Many states have issued new ethical guidelines addressing whether lawyers can advertise on social media sites such as Facebook. For example, in Kentucky, lawyers

who reach out to potential clients through social media such as Facebook may see their comments regulated by the proposed amendments to professional ethics rules from the Kentucky Bar Association. Similarly, lawyers in New York and Pennsylvania will face an ethical violation if they send a "friend" request to a party opponent or potential witness or if they ask a third party to do so. In these states, a person's social media site must be open to the public in order to view and use the content available. Other states are regulating who a lawyer can associate with on social media sites. For instance, Florida prohibits lawyers and judges from being connected or "friends" on sites like Facebook and MySpace. In some instances lawyers are prohibited from connecting with clients, witnesses, and experts on social media sites as well.

Lawyers have also been sued or fired due to comments made on social media sites. For example, in Florida, two lawyers were sued over their blog posts, which criticized a referral hotline for personal injury cases, and a 19-year assistant public defender lost her job after blogging about "Judge Clueless," thinly disguised case facts, and client identities. And finally, another Florida attorney blogged about a judge, calling her an "evil, unfair witch," which the JUDGE (did the judge or the attorney who blogged call it free speech?) later claimed was free speech. The Florida Supreme Court begged to differ. In order to avoid ethical violations, embarrassing reprimands, and loss of employment, it is important for lawyers to follow the advancements in social media and how they affect the legal profession.

Aside from the ethical and professional issues, there are definite benefits for the legal profession in the advancement of social media sites. Social media present a great opportunity for lawyers to have more access to information about their clients, judges, jurors, and the witnesses and experts who might be testifying at trial. Lawyers can now "Facebook" the jury to decide who is and who isn't suitable to serve on a jury. Spending a little time scouring the Internet

for information on opposing parties, witnesses, potential jurors, and clients might give a lawyer the upper hand in a case because people often speak more openly and uncensored on social media sites. Perhaps the best example of lawyers using social media to monitor jurors is the widely reported case of juror Hadley Jons, who posted "gonna be fun to tell the defendant they're GUILTY" on her Facebook page. The truly shocking part of the story is that the defense attorney's son found the post before the defense had even presented its case. Luckily, the defense presented the post to the judge and the juror was removed, fined, and ordered to write an essay on the Sixth Amendment. This is just one of many examples of lawyers using social media to find information that can be used in court. Lawyers can even use social media for discovery and to prepare for trial. Because social media have become so entrenched in our lives, lawyers must be prepared for its impact on the law and the profession.



Emily Janoski-Haehlen B.A., M.S.L.S., J.D. Associate Director of Law Library Services and Law & Informatics Librarian