Preview: IT4200: Data Governance and Stewardship

Syllabus

Course Overview

In this course, you will study legal and ethical issues regarding data collection, storage, and use. These include understanding and being able to apply concepts related to information security and privacy. It also requires that learners demonstrate an understanding of organizational core processes and workflows, and how these factors impact core processes related to data.

Course Competencies

(Read Only)

To successfully complete this course, you will be expected to:

- 1 Apply legal and ethical issues to specific examples of core data processes.
- 2 Describe an example of data governance.
- 3 Apply information security and privacy regulations.
- Evaluate the impact of process flows in developing effective core processes related to data.
- 5 Communicate effectively.

Course Prerequisites

Prerequisite(s): BUS1003 or BUS3006 or BUS3007 or IT2230.



The following required readings are provided in the Capella University Library or linked directly in this course. To find specific readings by journal or book title, use <u>Journal and Book Locator</u>. Refer to the <u>Journal and Book Locator</u> to learn how to use this tool.

- Barnett, M. (2013, September 10). NSA files reveal war on data privacy. Marketing Week (Online).
- Biegelman, M. (2009). Identity theft handbook: Detection, prevention and security. Hoboken, NJ: Wiley.
- DeGeorge, R. (2006). <u>Information technology, globalization and ethics</u>. Ethics and Information Technology, 8(1), 29–40.
- Dolean, C., & Petrusel, R. (2012). <u>Data-flow modeling: A survey of issues and approaches</u>. *Informatica Economica*, 16(4), 117–130.
- Dowell, M. (2012). <u>HIPAA privacy and security HITECH Act enforcement actions begin.</u> *Employee Benefit Plan Review,* 66(12), 9–11.
- Drake, J. (2008). Objective ethics for managing information technology. In M. Quigley (Ed.), *Encyclopedia* of information ethics and security (pp. 486–491).
- Fernandes, L., & O'Connor, M. (2009, May). <u>Data governance and data stewardship</u>. *Journal of AHIMA*, 80(5), 36–39.
- Flint, D. (2009). <u>Law shaping technology: Technology shaping the law.</u> International Review of Law, Computers & Technology, 23(1-2), 5–11.
- Gallagher, L. (2010). Revisiting HIPAA. Nursing Management 41(4), 34–39.
- Greene, A. (2012). <u>HIPAA compliance for clinician texting.</u> *Journal of AHIMA 83*(4) 34–36.
- Harmon, P. (2007). <u>Business process change: A guide for business managers and BPM and Six Sigma professionals (2nd ed.)</u>. Burlington, MA: Morgan Kaufmann.
- Krutz, R., Vines, R., & Brunette, G. (2010). <u>Cloud security: A comprehensive guide to secure cloud computing</u>. Hoboken, NJ: Wiley.
- McAllister, D. (2007). <u>Law enforcement turns to face-recognition technology</u>. *Information Today* 24(5), 50–51.
- Minow, M. (2002). <u>The USA PATRIOT Act.</u> Library Journal, 127(16), 52–55.
- Nunn, S. (2009, March). Driving compliance through data governance. Journal of AHIMA; 80(3), 50-51.
- Nuyen, A. (2004). <u>Lyotard's postmodern ethics and information technology</u>. Ethics and Information Technology, 6(3), 185–191.
- Ofner, M., Otto, B., & Österle, H. (2012). <u>Integrating a data quality perspective into business process</u> <u>management.</u> Business Process Management Journal 18(6), 1036–1067.
- Page, J. (2011). How to launch a data governance initiative. Business Intelligence Journal 16(2),17–25.
- Paulet, E. (2011). Banking ethics. Corporate Governance, 11(3), 293-300.
- Pavolotsky, J. (2013). Privacy in the age of big data. The Business Lawyer 69(1), 217–225.
- Pike, G. (2007). The PATRIOT Act illuminated. Information Today, 24(5), 17–18.
- Pike, G. (2010). The PATRIOT Act is back. Information Today, 27(1), 15, 17.
- Purvis, R., & McCray, G. (1999). <u>Integrating core IT processes: A case study.</u> *Information Systems Management*, 16(3), 36–46.
- Reeves, M., Bowen, R. (2013, February). <u>Developing a data governance model in health care</u>. *Healthcare Financial Management* 67(2), 82–86.
- Rode, D. (2010). Keeping HITECH in context. Journal of AHIMA 81(10),18, 20.

- Rosenblatt, B. (2007). <u>DRM, law and technology: An American perspective.</u> Online Information Review, 31(1), 73–84.
- Rothstein, M. (2013). HIPAA privacy rule 2.0. Journal of Law, Medicine & Ethics, 41(2):, 525–528.
- Sales, N. (2010). <u>Mending walls: Information sharing after the USA PATRIOT Act.</u> Texas LawReview, 88(7), 1795–1854.
- Surma, J. (2011). <u>Business intelligence: Making decisions through data analysis.</u> New York, NY: Business Experts Press.
- Taddeo, M., & Vaccaro, A. (2011). <u>Analyzing peer-to-peer technology using information ethics</u>. <u>Information Society</u>, 27(2), 105–112.
- Taitsman, J., Grimm, C., & Agrawal, S. (2013). <u>Protecting patient privacy and data security.</u> The New England Journal of Medicine 368(11). 977–9.
- Tomes, J. (2012). Keeping it private. Journal of AHIMA, 83(3), 32–35.
- Vogt, N. (2005). <u>HIPAA and the legal electronic health record</u>. *Journal of Health Care Compliance*, 7(6), 43–44, 80–81.
- Wade, R. (2010). Nano-technology, ethics, and risks. Nanoethics, 5(1), 1–13.
- Watson, H., Fuller, C., & Ariyachandra, T. (2004). <u>Data warehouse governance: Best practices at Blue Cross and Blue Shield of North Carolina</u>. *Decision Support Systems*, 38(3), 435–450.
- Weinstock, M. (2010). The new privacy norm. Hospitals and Health Networks, 84(2), 20.
- Witt, C. (2011). <u>HIPAA versus the cloud.</u> Managed Care Outlook, 24(16), 10–11.
- Wright, M. (2008). Technology & terrorism. Forensic Examiner, 17(4),13–20.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- Otto, B. (2012). One size does not fit all: Best practices for data governance [Slide presentation].
 Retrieved from http://www.slideshare.net/borisotto/data-governance-best-practices-boris-otto
- SAS Institute. (2015). <u>SAS OnDemand for Academics: User's guide.</u> Retrieved from http://support.sas.com/ondemand/manuals/sodaug.pdf
- SAS Institute. (n.d.). <u>SAS analytics u.</u> Retrieved from https://communities.sas.com/community/sas-analytics-u
- SAS Institute. (n.d.). <u>SAS University Edition.</u> Retrieved from http://www.sas.com/en_us/software/university-edition.html
- U.S. Department of Health and Human Services. (n.d.). <u>Health IT legislation and regulations</u>. Retrieved from http://www.healthit.gov/policy-researchers-implementers/health-it-legislation-and-regulations
- U.S. Department of Health and Human Services. (n.d.). <u>Summary of the HIPAA privacy rule.</u> Retrieved from http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html
- U.S. Department of Health and Human Services. (n.d.). <u>Summary of the HIPAA security rule.</u> Retrieved from http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html
- U.S. Department of Justice. (2001). <u>Highlights of the USA PATRIOT Act.</u> Retrieved from http://www.justice.gov/archive/ll/highlights.htm

Suggested

The following materials are recommended to provide you with a better understanding of the topics in this course. These materials are not required to complete the course, but they are aligned to course activities and assessments and are highly recommended for your use.

Optional

The following optional materials are offered to provide you with a better understanding of the topics in this course. These materials are not required to complete the course.

Library

The following optional readings may be available in the Capella University Library. To find specific readings by journal or book title, use <u>Journal and Book Locator</u>. Refer to the <u>Journal and Book Locator library guide</u> to learn how to use this tool. If the full text is not available, you may be able to request a copy through the <u>Interlibrary Loan</u> service.

• Sarsfield, S. (2009). *The data governance imperative*. Ely, United Kingdom: IT Governance.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- Microsoft Corporation. (2014). <u>Deliver business intelligence across your organization with Office and SQL Server</u>. Retrieved from http://www.microsoft.com/en-us/server-cloud/solutions/business-intelligence/default.aspx#fbid=3smbt-fCJ6J
- Mulcahy, R. (n.d.). <u>Business intelligence definition and solutions</u>. Retrieved from http://www.cio.com/article/40296/Business_Intelligence_Definition_and_Solutions? page=1&taxonomyld=3002
- Salido, J., & Voon, P. (2010). <u>A guide to data governance for privacy, confidentiality, and compliance. Part 1: The case for data governance.</u> *Trustworthy Computing*. Retrieved from http://go.microsoft.com/? linkid=9707154

Unit 1 >> Legal and Ethical Issues in Data Core Processes

Introduction

Data collection, storage, analysis, and use are a major part of the business world of the 21st century. As more and more of citizens' personal and private information, both from a societal and constitutional perspective, becomes electronic and travels great distances in very short times, both benefits and risks inure to that format and to those individuals. In order to address the threats to privacy, security and governmental intrusion into personal information, ethical standards and laws at all levels of government.

Laws are created by tradition (common law), statute (criminal, civil, and administrative law), or court review (case law). Ethics, on the other hand are similar to moral standards, but most typically derive from organizational codes of ethics and occupational standards. Penalties for violation of laws may be loss of freedom, loss of money, or equitable court orders, whereas penalties for breaches of ethical codes are less harsh from a general standpoint, but may nonetheless ruin a person's career. In either case, the effect is conformance to norms of behavior.

In the field of information technology, including almost every phase, both ethical principles and legal directives have become increasingly clear. How data may be collected translates into which methods are acceptable. How entities transfer data, and for what purposes data may be used and even shared, have been codified and legislated. The analysis and principles of statistics is subject to a variety of standards, and even controlled by legislation, as in the case of advertising.

In this unit, you will become familiar with the fundamentals of the legal and ethical issues in the core processes related to data. You will have the opportunity to access Web sites dealing with HIPAA (health care data privacy and security) and the USA PATRIOT Act (governmental use of personal and private data to combat terrorism) to interpret core processes applied to personal data. In addition, in sites located in the Capella Library you will have access to up-to-date articles dealing with how these core processes are affected by legal and ethical constraints and various related topics.

Course Resources

Minow, M. (2002). The USA PATRIOT Act. Library Journal, 127(16), 52–55.

Learning Activities

u01s1 - Studies

Readings

Use the Capella Library to read the following:

 DeGeorge, R. (2006). <u>Information technology, globalization and ethics</u>. Ethics and Information Technology, 8(1), 29–40.

- Dowell, M. (2012). <u>HIPAA privacy and security HITECH Act enforcement actions begin</u>. *Employee Benefit Plan Review,* 66(12), 9–11.
- Drake, J. (2008). Objective ethics for managing information technology. In M. Quigley (Ed.), Encyclopedia of information ethics and security (pp. 486–491).
- Flint, D. (2009). <u>Law shaping technology: Technology shaping the law</u>. *International Review of Law Computers & Technology*, 23(1-2), 5–11.
- McAllister, D. (2007). <u>Law enforcement turns to face-recognition technology</u>. *Information Today 24*(5), 50–51.
- Minow, M. (2002). <u>The USA PATRIOT Act</u>. Library Journal, 127(16), 52–55.
- Nuyen, A. (2004). <u>Lyotard's postmodern ethics and information technology</u>. Ethics and Information Technology, 6(3), 185–191.
- Paulet, E. (2011). Banking ethics. Corporate Governance, 11(3), 293–300.
- Pike, G. (2007). The PATRIOT Act illuminated. Information Today, 24(5), 17–18.
- Pike, G. (2010). The PATRIOT Act is back. Information Today, 27(1), 15, 17.
- Rosenblatt, B. (2007). <u>DRM, law and technology: An American perspective</u>. Online Information Review, 31(1), 73–84.
- Rothstein, M. (2013). HIPAA privacy rule 2.0. Journal of Law, Medicine & Ethics, 41(2):, 525–528.
- Sales, N. (2010). <u>Mending walls: Information sharing after the USA PATRIOT Act</u>. Texas LawReview, 88(7), 1795–1854.
- Taddeo, M., & Vaccaro, A. (2011). <u>Analyzing peer-to-peer technology using information ethics</u>. <u>Information Society</u>, 27(2), 105–112.
- Tomes, J. (2012). Keeping it private. Journal of AHIMA, 83(3), 32–35.
- Vogt, N. (2005). <u>HIPAA and the legal electronic health record</u>. *Journal of Health Care Compliance*, 7(6), 43–44, 80–81.
- Wade, R. (2010). Nano-technology, ethics, and risks. Nanoethics, 5(1), 1–13.
- Weinstock, M. (2010). The new privacy norm. Hospitals and Health Networks, 84(2), 20.
- Witt, C. (2011). HIPAA versus the cloud. Managed Care Outlook, 24(16), 10-11.
- Wright, M. (2008). Technology & terrorism. Forensic Examiner, 17(4),13–20.

Use the Internet to read the following:

- U.S. Department of Health and Human Services: Summary of the HIPAA Privacy Rule.
- U.S. Department of Health and Human Services: Summary of the HIPAA Security Rule.
- U.S. Department of Justice: Highlights of the USA PATRIOT Act.

Research

Use the Internet to complete the following.

Search for resources commonly used by the informatics industry for data sharing. Perform an Internet search using the following key words, the results of which you will use in this unit's Legal and Ethical Issues in Data Governance assignment:

- Information sharing.
- Interoperability.

- Informational ethics.
- · Network security.
- Pharmacy data laws.

Search for policy resources for protecting information at a workstation. Some key words to use are:

- Workstation.
- Security policy.
- Passwords.
- · Biometrics and security.

Resources

u01s2 - SAS Resources

Did you know that as a business intelligence or data analytics learner at Capella University you have access to a comprehensive list of SAS e-learning materials and SAS certification preparation courses? Well, it's true! You just need to activate your Capella SAS account to gain access to resources that will help you advance in the field of data analytics!

Whether you are interested in becoming SAS-certified or you are just looking for additional resources to help advance your understanding of a particular SAS tool, activate your Capella SAS account now:

- How to activate your Capella SAS account.
- Your e-learning material and certification preparation courses.

Access SAS Analytics U Community and Software Tools

Once you have created your Capella SAS profile account, you become a member of the <u>SAS Analytics U</u> community. This is an online interactive community where you will find valuable resources and free software tools.

SAS University Edition

As a member of the SAS Analytics U, you can download your own free version of <u>SAS University Edition</u>, or gain Web access to more robust and powerful SAS tools by registering for SAS OnDemand. Use this link to learn more about SAS University Edition and to download your own copy.

SAS OnDemand Tools

To obtain cloud access to more powerful and robust SAS tools, you must first <u>register with SAS OnDemand for Academics</u>. Once you have registered for SAS OnDemand and have obtained your user ID, just click the link

below that corresponds with the tool that you would like to access:

- SAS Enterprise Miner.
- SAS Studio.
- SAS Enterprise Guide.
- SAS Forecast Studio. The name of the Environment is C867a0717de594199827634ad02887e5b.
- SAS JMP.

As you work your way through this course and through your program, lean on the <u>SAS Analytics U community</u> to connect with fellow SAS users. Reach out to other community members to obtain peer support, get questions answered, share ideas and best practices, and collaborate on projects!

And refer to the <u>SAS OnDemand for Academics: User's Guide</u> when needed.

Resources

u01a1 - Legal and Ethical Issues in Data Governance

Use the following scenario to complete your assignment.

At your last yearly checkup with your family physician, the doctor tells you that, after some testing, she has discovered that you have diabetes mellitus, for which she prescribes (electronically) a medication called metformin and places you on a strict diet. You receive your medication a local pharmacy and begin following the recommended regimen. Within a week or so, you begin to notice that you are receiving a large amount of mail and email regarding diabetic supplies, medications, and training courses. You consult an attorney, who, after investigation, has found that your family doctor and her employees do not seem to be the source of the leak of your personal information to advertisers. However, he lets you know that your state has no law against pharmacies sharing your prescription information with others "for business purposes."

Assignment Requirements

For this assignment, research and write a short (3–6 page body section) paper that includes the following. See the Legal and Ethical Issues in Data Governance Scoring Guide for more information on how your work will be graded.

- Identify statutory or case law constraints regarding the use of pharmacy data in your state, or any specific state within the United States.
- Describe the statutory and case law history, and current status, regarding the use of pharmacy data in the state chosen.
- Compare the laws of the chosen state with at least one other state and with federal rules and federal case law.

- Identify the individuals' needs and the needs of the pharmaceutical industry in creating a new federal law
 dealing appropriately with these competing needs.
- Illustrate the impact of a new federal law to be entered as a bill in the U.S. House of Representatives
 addressing the issues raised in this paper (congressional rules of formatting not required).
- Follow APA (6th edition) style and formatting guidelines, use references and citations and create a
 document that is clearly written and generally free of grammatical errors.

Resources

APA Publication Manual.

u01d1 - Stewardship: Legal and Ethical Practices in Business

Based on the required readings in this unit, discuss the issue of patient consent in insurance companies obtaining personal health information in order to process provider claims for reimbursement. Respond to the following:

- Are personal telephone calls, text messages, voice mails, emails, and social media postings considered data?
- Discuss the issue of governmental agencies accessing such information and whether communications companies should be better data stewards in protecting such information.

Response Guidelines

Respond to at least one other learner, sharing why you agree or disagree with the challenge or challenges he or she identified.

Resources

Course Resources

Undergraduate Discussion Participation Scoring Guide

Unit 2 >> Data Governance in Practice

Introduction

More than ever, organizations require a coherent plan for what data they will use and how they will ensure their data are fit for use. Data governance, data management and data stewardship are frequently-confused terms. Most people, even within the IT/IS industries, hear all three terms as simply alternative ways to acknowledge the importance of data quality and legal requirements. However, a thorough understanding of these concepts and their expressed and distinct meanings is important to understanding the subject of data governance and stewardship in this course.

In this unit, you will become familiar with the fundamentals and applications of data governance. In addition, in sites located in the Capella Library, you will have access to up-to-date articles dealing with how these core concepts are affected by the precision with which they are defined and applied. In the readings, you will come to realize that data governance is the strategic planning, at the highest level of an enterprise, for the collecting of data, ownership of data, and intended use of data. In short, it is the oversight of data management and how those functions relate to the overall organization mission.

The data-governance administrator also oversees the data steward, so that the people, policies, processes, and tools that manage the quality of data fit into the overall operational component that complements the data-governance plan. Data managers, however, carry out the day-to-day tasks to maintain quality data. In Unit 2, you will read about these concepts for structural understanding, but will also review examples of how data governance is set up and used by enterprises in today's IT/IS world.

Learning Activities

u02s1 - Studies

Readings

Use the Internet and the Capella Library to read the following:

- Fernandes, L., & O'Connor, M. (2009, May). <u>Data governance and data stewardship</u>. *Journal of AHIMA*, 80(5), 36–39.
- Nunn, S. (Mar 2009). Driving compliance through data governance. Journal of AHIMA; 80:3 50-51.
- Otto, B. (2012). One size does not fit all: Best practices for data governance [Slide presentation].
 Retrieved from http://www.slideshare.net/borisotto/data-governance-best-practices-boris-otto
- Page, J. (2011). How to launch a data governance initiative. Business Intelligence Journal 16(2), 17–25...
- Reeves, M., Bowen, R. (2013, February). <u>Developing a data governance model in health care</u>. *Healthcare Financial Management* 67(2), 82–86.
- Watson, H., Fuller, C., & Ariyachandra, T. (2004). <u>Data warehouse governance: Best practices at Blue</u>
 Cross and Blue Shield of North Carolina. Decision Support Systems, 38(3), 435–450.

Optional Readings

- Salido, J., & Voon, P. (2010). <u>A guide to data governance for privacy, confidentiality, and compliance. Part 1: The case for data governance</u>. *Trustworthy Computing*. Retrieved from http://go.microsoft.com/? linkid=9707154
- Sarsfield, S. (2009). *The data governance imperative*. Ely, United Kingdom: IT Governance.

Research

Use the Internet to complete the following.

Search for resources commonly used by the informatics industry for data governance. Perform an Internet search using the following key words, the results of which you will use in this unit's Data Governance in Practice assignment:

- Data governance.
- Data management.
- Data stewardship.
- · Data mining.
- Data warehouse.

Search for policy resources related to:

- Data governance policies.
- · Data governance structure.
- Data governance examples.
- Enterprise data governance.

Resources

u02a1 - Data Governance in Practice

Use the following scenario to complete your assignment.

You are the CIO of Toys for Big Boys, an importer of Chinese-manufactured recreational products for the adult market. Examples of their products include radio-controlled helicopters and airplanes with and without integrated video cameras, radio-controlled autos and boats, electronic games aimed at the grown-up market, and various electronic devices that use technology for doing everyday tasks. Originally, you began the company with your friend, the CEO, and sold wholesale only, but you have recently expanded to a number of regional offices and a national order fulfillment center. You have also agreed that direct online retail marketing will be added to the business model.

Management has noticed that the IT and information systems have been having many more difficulties with quality of data. You are concerned about trusting the figures, which take in many more transactions from across

the nation than last year. With the addition of the online retail division, you are desperately afraid of major data problems ahead, let alone the increased threats from expanded online business. Each regional office is well staffed with an IT department and even data managers. In addition there is a data steward at the main office whom you trust, but the workload is getting too great and he does not have time to stay in the loop with upper management.

Should you set up a data-governance position at the vice-presidential level? What would be the job concept and job description? How would you structure a data-governance division and what policies and procedures might be needed? Is there help on a consulting basis you might obtain during the transition?

Assignment Requirements

For this assignment, research and write a short (3–6 page body section) paper that includes the following. See the Data Governance in Practice Scoring Guide for more information on how your work will be graded.

- Research data quality standards for this business, and provide reasonable samples of data that might indicate quality problems requiring data governance.
- Describe the job requirements, duties, limitations, and interrelationships as part of the new vice president of data-governance position.
- Supported by examples in the literature, describe the structure of the data-governance department and the
 polices and procedures needed to enable a smooth transition to the new system.
- Identify the organization relationships of the VP for data governance with the CIO, CEO, data steward, and data managers, as well as with the IT/IS department personnel in general.
- Describe the authority of the VP for data governance and how the salary for this position should be structured and determined.
- Follow APA (6th edition) style and formatting guidelines, use references and citations, and create a
 document that is clearly written and generally free of grammatical errors.

Resources

APA Publication Manual.

u02d1 - Examples of Data Governance

Based on the required readings in this unit and any other research you locate, respond to the following:

- Do you see the need for data governance as a natural progression of increasing data need and use?
- At what point in a corporate life cycle do you see that need arise, if any?
- How does the increasing use of data warehousing and data mining affect the need for accurate and strong data governance in an organization?

Response Guidelines

Respond to at least two other learners, sharing why you agree or disagree with the challenge or challenges they identified.

Resources

Course Resources

Undergraduate Discussion Participation Scoring Guide

Unit 3 >> Information Security and Privacy Regulations

Introduction

Keeping all discussions and other contacts between physician and patient both secure and confidential has been an ethical obligation on the healer since ancient times. Whether verbal or written, the privacy of information has been an obligation on the physician. When medical associations developed it was a clear part of all oaths and codes of ethics on physicians, nurses, and all health care personnel. As modern law developed, such privacy and security was a legal responsibility of the physician and the entire health care team, although physicians had the duty for the entire practice. However, enforceability required a civil lawsuit and compensation for violations were based on actual damages to the patient.

In 1996, in the face of rapidly rising health care costs and increasing electronic communications between health care providers and health care payers (insurance companies and governmental agencies), the Health Insurance Portability and Accessibility Act (HIPAA) was passed into law. This law provided for employees to keep their insurance between jobs and for the person to be eligible for insurance when rehired. It also provided for the beginnings of standardization of health care data. Amended in the early years of the 21st century, the law then provided comprehensive privacy and security rules and regulations, providing for civil and criminal penalties for health care entities that violate this federal law. The rules also provided for the patients' rights to view their own records and provided a mechanism to require incorrect records to be corrected. As health information became increasing electronic, and in preparation for a system in which all patient information would be in the form of electronic data, continuing amendments to HIPAA were passed since that time, and the HITECH Act of 2010 became law. This law provided for standards and governmental monetary incentives for health care providers to implement electronic health record (EHR) systems with meaningful use requirements.

In this unit, you will become familiar with the fundamentals and applications of all regulations mandating health care information security and privacy. In addition to the detailed and comprehensive information found on assigned Web sites provided by the U.S. Department of Health and Human Services, you will obtain information from both required and optional sites located in the Capella Library. You will use both the actual regulations and

scholarly and up-to-date articles dealing with how these regulations affect both the protection and stewardship of health care data, and the careful sharing of only the minimal amount of data required by law, with users other than the patients and their treating physicians. Through the readings, you will come to realize that data stewardship requires carefully designed policies and procedures based on regulations. It also requires constant updating of those policies and procedures and the training and re-training of anyone entrusted with health care information.

Learning Activities

u03s1 - Studies

Readings

Use the Capella Library to read the following:

- Biegelman, M. (2009). Identity theft handbook: Detection, prevention and security.
 - ∘ Chapters 1–3.
- Barnett, M. (2013, September 10). NSA files reveal war on data privacy. Marketing Week (Online).
- Gallagher, L. (2010). Revisiting HIPAA. Nursing Management 41(4), 34–39.
- Greene, A. (2012). <u>HIPAA compliance for clinician texting</u>. *Journal of AHIMA 83*(4) 34–36.
- Krutz, R., Vines, R., & Brunette, G. (2010). <u>Cloud security: A comprehensive guide to secure cloud computing</u>.
 - o Chapter 5, pages 153-176.
- Pavolotsky, J. (2013). Privacy in the age of big data. The Business Lawyer 69(1), 217–225.
- Rode, D. (2010). Keeping HITECH in context. Journal of AHIMA 81(10),18, 20.
- Taitsman, J., Grimm, C., & Agrawal, S. (2013). <u>Protecting patient privacy and data security</u>. The New England Journal of Medicine 368(11). 977–9.

Use the Internet to read the following from the U.S. Department of Health and Human Services:

- Health IT Legislation and Regulations.
- Summary of the HIPAA Privacy Rule.
- Summary of the HIPAA Security Rule.

Research

Use the Internet to complete the following.

Search for resources commonly used by the informatics industry for data governance. Perform an Internet search using the following key words, the results of which you will use in this unit's Data Security and Privacy in Business assignment:

- Health information privacy.
- · Health information security.
- Medical confidentiality.

- · Patient rights.
- Fax (or email) health care information.
- HIPAA violations.

Search for policy resources related to:

- HIPAA privacy rule.
- HIPAA security rule.
- HITECH Law of 2010.
- Affordable Care Act of 2010.

Resources

u03a1 - Data Security and Privacy in Business

Use the following scenario to complete your assignment.

You are the CIO of Community General Hospital, a 300-bed acute care hospital serving a medium-sized city of 800,000 area-wide population. The hospital is a tertiary care center for the metropolitan area and the eight outlying rural counties It is the primary teaching hospital for a state-supported medical school and school of nursing, both located close to the facility. Community General has an EHR system initiated in 2007 and provides both onsite and offsite connectivity to all inpatient, outpatient, and office locations. The system also maintains a VPN portal for both professionals and patients to log into the EHR, with appropriate access, via the Internet.

The quality of the medical school, and its faculty and administration, has increased progressively over the years. Recently, you and the director of data sharing have been attending a series of meetings with the top hospital and medical school administration. The group has been discussing the need for medical school professors to have access to existing medical patient data for research purposes. You have also been strategizing where prospective data on an increasing number of research studies approved by the medical school should be stored.

At the last meeting, you were tasked with developing a comprehensive plan for data compiled on human subjects in medical studies, and also on the policies and procedures for access to data on patients in the EHR by physician-faculty members and medical students. The group discussed, and needs guidance on, the development and control of a research review committee (RRC), also known as an institutional review board (IRB).

Assignment Requirements

For this assignment, research and write a short (3–6 page body section) paper that includes the following. See the Data Security and Privacy in Business Scoring Guide for more information on how your work will be graded.

- List and explain the law regarding the use of personal health information for research purposes and the security and privacy of study research data.
- Describe the requirements of RRB members, their duties, limitations, and authority as liaison between the medical school, hospital administration, medical staff, patients, and the director of data sharing.
- Supported by examples in the literature, describe the structure of the RRB and the polices and procedures
 needed to enable a flow of data that is at all times compliant with the HIPAA security and privacy rules.
- Identify the organizational relationships of the RRB with the CIO, CEO, medical school president, health care providers, and patients, as well as with the IT/IS department personnel in general.
- Describe the informational parameters that must be included in a research request form and by whom the request must be approved, other than the RRB.
- Follow APA (6th edition) style and formatting guidelines, use references and citations, and create a document that is clearly written and generally free of grammatical errors.

Resources

APA Publication Manual.

u03d1 - Examples of Security and Privacy Issues

Based on the required readings and any other research you locate, respond to the following:

- How does the need for information security and privacy in other fields compare to the regulations of HIPAA in the health care field?
- What are analogous laws to HIPAA called and how do they operate?

Response Guidelines

Respond to at least two other learners, sharing why you agree or disagree with the challenge or challenges they identified.

Resources

Course Resources

Undergraduate Discussion Participation Scoring Guide

Unit 4 >> Impact of Process Flows in Developing Effective Core Processes Related to Data

Introduction

Modern business analysis requires breaking down the entire business idea into core processes. While such processes vary with respect to the type of business involved, core processes usually include accounting; marketing; IT; sales; and product manufacturing, merchandise retailing, or services of one sort or another. Each core process is studied in detail, and process flows, usually in the form of business modeling, use various methods of graphic and written design in order to clearly communicate the gist of the overall business. It is hard to imagine any part of this analytic study without basing it on facts derived from accurate and pertinent data.

The data most useful for any core process is certainly that which comes from past experience of the business itself. If properly stored, whether in classic databases, in data warehouses, or data marts, the information extracted can support the workflow of existing business core processes. So too can intra-enterprise data support the models for changes in business process, especially when combined with business intelligence. Business intelligence data, whether from competitors' businesses or from data extracted from research in the vast field of business literature, can be related directly to the business flow of any modified core process.

The governance of the company's own data is solely in the hands of administration via the IT department and the chief information officer. Assembling a team to search the business literature for data related to current and changed business flows of core processes is an important step delegated by the CEO, CFO, or CIO, but it involves skill more than ethical considerations. However, the business intelligence that comes from competitive businesses, whether within the same market or others, must be carefully negotiated and may require purchase costs that become part of a cost-benefit analysis for such business re-engineering projects.

Learning Activities

u04s1 - Studies

Readings

Use the Capella Library to read the following:

- Surma, J. (2011). <u>Business intelligence: Making decisions through data analysis</u>.
 - Chapter 3, "The Basics of Business Analysis."
- Harmon, P. (2007). <u>Business process change: A guide for business managers and BPM and Six Sigma</u> <u>professionals</u>.
 - Chapter 1, "Business Process Change, pages 1–26.
- Dolean, C., & Petrusel, R. (2012). <u>Data-flow modeling: A survey of issues and approaches</u>. *Informatica Economica* 16(4), 117–130.
- Ofner, M., Otto, B., & Österle, H. (2012). <u>Integrating a data quality perspective into business process</u> <u>management</u>. *Business Process Management Journal 18*(6), 1036–1067.

Purvis, R., & McCray, G. (1999). <u>Integrating core IT processes: A case study</u>. *Information Systems Management*, 16(3), 36–46.

Optional Readings

- Microsoft Corporation. (2014). <u>Deliver business intelligence across your organization with Office and SQL Server</u>. Retrieved from http://www.microsoft.com/en-us/server-cloud/solutions/business-intelligence/default.aspx#fbid=3smbt-fCJ6J
- Mulcahy, R. (n.d.). <u>Business intelligence definition and solutions</u>. Retrieved from http://www.cio.com/article/40296/Business_Intelligence_Definition_and_Solutions? page=1&taxonomyld=3002

Research

Use the Internet to complete the following.

Search for resources commonly used by the informatics industry for data governance. Perform an Internet search using the following key words, the results of which you will use in this unit's Process Flow Impacts in Developing Data Core Process assignment:

- Core business processes.
- Business modeling.
- Business workflows.
- Business intelligence.

Resources

u04a1 - Process Flow Impacts in Developing Data Core Process

Use the following scenario to complete your assignment.

You have been asked to consult as a business re-engineering consultant for a business located in Salt Lake City, Utah. Morgan Drygoods, LLC has three branches, and its main offices in the Salt Lake City area. It grew from a single drygoods store begun by Lucas Morgan in 1911. The current CEO of the business is Lucas' great-grandson, James Young. While the store still sells all sorts of household merchandise, including kitchen and cooking supplies, and sewing supplies, bulk cloth, and notions, the store opened a computer department in the 1990s, including desktops and peripherals and, more recently, laptops and tablet computers.

After meeting with Mr. Young and his CFO and CIO, it is clear that they want to somehow streamline their business, making it more efficient and more profitable. They hope to expand a re-engineered business model on a national level.

Assignment Requirements

For this assignment, research and write a short (3–6 page body section) paper that includes the following. See the Process Flow Impacts in Developing Data Core Process Scoring Guide for more information on how your work will be graded.

- Research other potential consultants from whom business intelligence may be obtained.
- Identify the strategy for organizing business data from Morgan Drygoods over a pertinent time period.
- Locate some helpful business intelligence from the business literature available in the Capella Library.
- List and explain five core business processes of the current operation of Morgan Drygoods.
- Describe and explain changes to Morgan Drygoods' core processes for future success, and indicate the ideal data related to and supporting the new processes.
- Use a program like Microsoft Visio to model the business flows related to the updated business processes. Include the chart as an appendix to this paper or as a separate file.
- Follow APA (6th edition) style and formatting guidelines, use references and citations, and create a
 document that is clearly written and generally free of grammatical errors.

Resources

APA Publication Manual.

u04d1 - Examples of Security and Privacy Issues

Discuss the tools available to model the workflows of core business processes. How would you include the data elements related to the workflow processes in the model?

Response Guidelines

Respond to at least two other learners, sharing why you agree or disagree with the ethical or legal obligations they identified.

Resources

Course Resources

Undergraduate Discussion Participation Scoring Guide

Unit 5 >> Communication in Data Governance and Stewardship

Introduction

Unit 5 is the final unit of this course and is designed to integrate all earlier learning competencies and objectives in IT4200, stressing the additional competency of communicating the business and IT concepts and processes effectively in written form. Effective communication includes not only the organization of one's information and logical conclusions, but doing so with high-level writing skills and following APA 6th edition format, so that all such papers are ready to submit for publication.

Learning Activities

u05s1 - Studies

Reading

Review your readings throughout the course to clarify any aspect of the project for which you need additional information.

Research

Use the Capella Library or the Internet to complete the following:

- Search for resources commonly used by the informatics industry for data governance and stewardship to
 fully support all factual assertions you make in the development of your research paper for this unit. All
 citations must be from reliable sources which may come from the readings in Units 1–4, from searching in
 the Capella library, or from any other search engine on the Internet that will result in reliable references.
 See the Guide to Reliable Resources.
- For authority on APA format and style, use the Publication Manual of the American Psychological Association (APA), 6th edition or the tutorial <u>The Basics of APA Style</u>.
- For specific, hands-on instructions on setting up Word for APA 6th edition, open up a blank Word
 document and view <u>APA Format Citations-Sixth (6th) Edition</u> (start and stop).

Resources

u05a1 - Communication in Governance and Stewardship

Use the following scenario to complete your assignment.

Choose a business based in the United States. The business may be fictional or based upon an actual business but must be of sufficient size to need an integrated client-server computer system and appropriate software for the type of business. It may be a startup or existing company but in need of a modern system to manage a business that is data-dependent in many ways. The business may have as its mission manufacturing, distribution or retailing, health care, purely service, or any combination of these purposes.

You will be researching and writing this paper as the newly hired data management steward, reporting to the CIO of the company. Your goal is to write a documented paper that can be used both by management and IT staff, particularly database managers and technicians, to set the tone for the careful setup and management of the company's data assets. You will be using all concepts and processes you have learned in this course.

Assignment Requirements

For this assignment, research and write a scholarly paper in APA format (approximate body length of 10–15 pages), in which you include the following. See the Communication in Governance and Stewardship Scoring Guide for more information on how your work will be graded.

- 1. Describe the core processes of the company and identify how those processes are related to data.
- 2. Use a program like Microsoft Visio to model the business flows related to the updated business processes. Include the chart as an inline illustration or as an appendix to this paper.
- 3. Evaluate the impact of process flows in developing effective core processes related to data.
 - Identify the core processes within an organization that involve the use of data.
 - Explain the governance issues that relate to core processes within an organization that involve the use of data.
 - o Apply governance activities that relate to core processes that involve the use of data within context.
- 4. Illustrate an example of data governance.
 - Identify the range of activities that might fall under the umbrella of data governance.
 - Research the critical success factors specific to a particular data governance activity.
 - Apply a specific data governance activity within context.
- 5. Apply legal and ethical issues to specific examples of core data processes.
 - Identify legal and ethical issues that impact governance of core data and related processes.
 - Describe legal and ethical issues that impact governance of core data and related processes.
 - Illustrate the impact of legal and ethical issues that impact a specific example of governance related to core data and processes.
- 6. Apply information security and privacy regulations.
 - Identify information security and privacy regulations that impact governance of core data and related processes.
 - Describe how security and privacy regulations differ across organizational types and industries.
 - Illustrate the impact of security and privacy regulations within context.
- 7. Follow APA (6th edition) style and formatting guidelines, use references and citations, and create a document that is clearly written and generally free of grammatical errors.

	APA	Publication	Manual
_	<u>/ \ </u>	<u>i ublication</u>	Manual

u05d1 - Communication of Course Objectives

Course Reflections

Share with the other learners what you have found most informative about the course and how you can apply what you have learned in future endeavors.

Response Guidelines

Respond to at least two other learners, sharing why you agree or disagree with the ethical or legal obligations they identified.

Resources

Course Resources

Undergraduate Discussion Participation Scoring Guide