Readings ReadMe for LM3-IT7833- IT Policy

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## The IT7723 Story So Far

**In LM1**, we explored definitions, concepts and history of information technology (IT), the IT profession and what it includes and means to be an IT professional. We also prepared to work together throughout the course to increase our skills and capabilities to contribute to the IT profession, e.g., develop an IT Professional Tool Kit. Since IT is so large and ubiquitous, we also set the scope of this course for each of us to focus on IT strategy, IT policy, IT governance and at least one IT subject-matter domain (e.g., database, programming, security, user experience, web, etc.) pertinent to our IT practice.

**In LM2**, we explored strategy in general, business strategy, IT strategy and the relationships between business strategy, IT strategy, value creation, etc. Three key observations we made are: 1) the main goal of the IT function is *maximizing and sustaining value* for the organization; 2) the main purpose of the IT strategy is *alignment* of the IT with the organization; 3) IT strategy should guide the organization’s use of their limited IT resources in maximizing the value of IT to the organization. We also reviewed the role of frameworks, models, and best-practices in aiding strategic planning, and covered specific tools and templates for strategic planning as well.

## Advice on what to do in LM3

After reading A3, the exercise associated with LM3, we suggest spending 2 to 5 hours exploring the readings linked here. Make sure that as you read that you think about what you read in terms of IT policy and your IT practice and transfer information as appropriate (with citations) to your A3, D2L Discussion, your IT7833 Tool Kit, your notes in an annotated bibliography, your IT7833 IT Professional Perspective Presentation, etc.

## What is Policy?

The Wikipedia page on “Policy” (<https://en.wikipedia.org/wiki/Policy>) defines “policy” as “a deliberate system of principles to guide decisions and achieve rational outcomes.” As we learned in LM2, IT strategy sets goals of *what* we want to achieve, that is, our *intended outcomes*; so, IT strategy sets the outcome goals and IT policy provides a *systematic way* to get to those outcome goals for IT. Furthermore, Wikipedia’s description of policy bridges to governance: “Policies are generally adopted by a governance body within an organization” and we will cross that bridge to governance in our next learning module, LM4.

Wikipedia defines a “policy framework” (<https://en.wikipedia.org/wiki/Policy_framework>) as a “document that sets out a set of procedures or goals, which might be used in negotiation or decision-making to guide a more detailed set of policies, or to guide ongoing maintenance of an organization's policies.” This is a disambiguation page that steps off to other pages for specific subject matter domains; two or three of these pages are relevant to IT, including the NIST Cyber Security Framework (<https://en.wikipedia.org/wiki/NIST_Cybersecurity_Framework>). Unlike “IT strategy,” Wikipedia has no specific page for “IT policy.” The article on policy makes the important point that policy is useful in business decision making and action because IT policy systematically guides the organization to achieve rational outcomes, namely the business’ goals. To me, this is an important function of the organization’s IT policy with an impact on IT7833: IT policy should guide the organization’s actions so that they use their limited IT resources to achieve strategic goals and outcomes thereby maximizing the value of IT to the organization.

## What is IT Policy?

We now want to focus on IT policy. To get us started, we have defined initially “IT policy” as:

Administrative and operational procedures allowing and facilitating the disciplined and systematic implementation of sound and safe IT in support of organizational goals and business processes

As a reminder, our initial definition of IT strategy from LM2 is:

Plans to, over the long term, align the IT function with the mission, strategic plans, goals, needs, business model and values of the overall organization and support fulfilling efficiently and effectively its business processes.

It is worth noting here that we set plans for IT through IT strategy and then use IT policy to *implement our IT plans in a systematic and disciplined manner*.

In this definition the main function of the IT policy is *systematic and disciplined implementation* of the IT with the organization. There are other definitions of IT policy that you should know about.

Wikipedia (<https://en.wikipedia.org/wiki/Technology_policy>) follows the work of Lewis Branscomb and defines the more general “technology policy” as concerning the “’public means for nurturing those [technology] capabilities and optimizing their applications in the service of national goals and interests.’” (On a personal note, Lewis Branscomb was the IBM Chief Scientist when, along with a few thousand other scientist/engineers, I was hired to help create the Human-Computer Interaction (HCI) and User Experience (UX) areas of computing; hiring us was a prime example of “nurturing technology capabilities.”) Taking some liberty with Dr. Branscomb’s words, we can step this definition down from the nation to the organization as follows:

IT policy concerns the organization’s means for nurturing IT capabilities and optimizing their applications in the service of organizational goals and interests.

The CIO-Wiki provides no separate definition of IT policy, but makes it a part of IT governance (<https://cio-wiki.org/wiki/IT_Governance#Corporate_Governance_of_Information_Technology>) stating that IT governance “is a set of rules, regulations and *policies* that define and ensure the effective, controlled and valuable operation of an IT department.” (We added the emphasis.) The CIO-Wiki situates IT policy within the organizational governance and organization’s governance of IT governance.

We suggest you spend an hour or two exploring the above websites and their definitions and choose or develop your own working definition of “IT policy.” As you do so, think back to your understanding of IT strategy from LM2 to establish an understanding of the relationship between the two; also, think forward to anticipate the relationship between IT policy and IT governance in LM4.

## Example IT Policies, IT Policy Templates and IT Policy Setting Advice

Most private organizations want to make their key IT policies public and universally used, because that increases their security and helps to manage risk. Fortunately for this course, many government agencies and universities also make their IT policies public and additionally provide sound advice on IT policy setting and implementation, including templates, case studies, research, etc. Here is a sample and you will see much of the IT policy work is focused on cybersecurity:

EDUCAUSE Review 2016 Article on Cyber Risk Policy- <https://er.educause.edu/articles/2016/2/crafting-and-implementing-a-policy-to-reduce-cyber-risks>

NIST Cybersecurity Framework- <https://www.nist.gov/cyberframework>

Over the past five years, this framework has taken a dominate position in the IT cybersecurity domain. We predict any time you spend learning (more of) it now will pay dividends throughout your career. It is worth spending an hour or two now to learn more about it. Exploring the links on the left margin of the main page is a great exploration and learning strategy. For those just starting, the Wikipedia page (<https://en.wikipedia.org/wiki/NIST_Cybersecurity_Framework>) might be a better first stop for those new to NIST cybersecurity.

NIST Cybersecurity Resources-

In addition to the Cybersecurity Framework, the NIST has multiple web pages and multiple reports and documents to assist with IT policy in the area of cybersecurity. Here are a few examples:

Cybersecurity topics portal page- (<https://www.nist.gov/topics/cybersecurity>)

NIST has a web portal devoted to: “… practical cybersecurity and privacy through outreach and effective application of standards and best practices necessary for the U.S. to adopt cybersecurity capabilities.”

NIST Computer Security Resource Center- (<https://csrc.nist.gov/publications/>)

This is a portal page to many resources (guidelines, standards, advice etc.) that can be used as a basis for setting IT policy in the cybersecurity and security-related areas (e.g., access procedures, change management, configuration, disaster recovery, privacy, resilience, risk management, etc.). Make sure you come to an understanding through your exploration of what is included in each publication series: FIPS, SP, NISTIR and ITL Bulletins. It is worth an hour or so to explore, especially two Legacy Documents in the FIPS Series:

199- Covers Confidentiality, Integrity, Availability

<https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.199.pdf>

200- Covers U.S. government security requirements- (policy base)

<https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.200.pdf>

Wikipedia Request for Comment (RfC)- Community Consensus Password Policy-

<https://en.wikipedia.org/wiki/Wikipedia:Security_review_RfC>

The Georgia Technology Authority’s (GTA) IT Enterprise Policies, Standards and Guidelines-

<https://gta-psg.georgia.gov/book-page/enterprise-policies-standards-and-guidelines>

The GTA sets policy, standards and guidelines for the state agencies’ IT organizations to follow. This site is a very informative web portal about IT policy within Georgia and is worth an hour or so of your time to explore.

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<https://www.usa.gov/government-works>

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