THINKING IN POLICY TERMS

". . . All the grandiose visions of e-democracy, universal access to human knowledge, and (God help us all) the Semantic Web, are dependent on changes in the law, in the policy, in the sticky, non-quantifiable elements of the world. . . . The best we can hope for is to use technology to enable the human interaction that will solve them."
—CORY DOCTOROW

Technology is a lot more fun than policy. Most library technology people probably find it a lot more interesting as well. But library technology does not operate in a vacuum. Technology and policy have always interacted, in the library field as elsewhere. Those interactions have become more complex and need to be more visible.

This issue will show some of the ways that technology, policy, and libraries interact. You need to consider library technology in a policy framework. Don't expect easy answers: Most policy-technology relationships are messy.

Policy above Technology?

Consider these words from Cory Doctorow, a technology aficionado and science fiction writer who also represents the Electronic Frontier Foundation, one of many non-governmental groups concerned with policy and technology:

> The last twenty years were about technology. The next twenty years are about policy. It's about realizing that all the really hard problems—free expression, copyright, due process, social networking—may have technical dimensions, but they aren't technical problems. The next twenty years are about using our technology to affirm, deny, and rewrite our social contracts: All the grandiose visions of e-democracy, universal access to human knowledge, and (God help us all) the Semantic Web, are dependent on changes in the law, in the policy, in the sticky, non-quantifiable elements of the world. We can't solve them with technology: The best we can hope for is to use technology to enable the human interaction that will solve them.
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> On that note: I have a special request to the toolmakers of 2004: Stop making tools that magnify and multiply awkward social situations ("A total stranger asserts that he is your friend: click here to tell a reassuring lie; click here to break his heart!") ("Someone you don't know very well has invited you to a party: click here to advertise whether or not you'll be there!") ("A 'friend' has exposed your location, down to the meter, on a map of people in his social network, using this keen new location-description protocol—on the same day that you announced that you were leaving town for a week!"). I don't need more "tools" like that, thank you very much.[1]

While Doctorow's examples and primary concerns have little to do with library technology, his overall thrust is central to this issue of *Library Technology Reports*. Those who disagreed with Doctorow—and most people commenting on these paragraphs took issue with him—fall into two general categories. Some people think technology will solve all problems, and that the problems cited by Doctorow aren't important. Others say technology and policy have *always* been intertwined.

Take Doctorow's first paragraph. Remove the first two sentences and the first clause in the fourth sentence (from "The next twenty years" to the colon). You now have a cogent statement of why you need to consider policy as part of any library technology. Technology provides tools. Policy provides context to make tools work to improve the human condition.

Frequently Political But Not Always Partisan

Policy may be political, but the politics don't always break along party lines or other traditional lines. With copyright, for example, Democratic office-holders tend to be at least as protective of extreme copyright as Republicans.

Policy issues that most affect libraries and technology can result in strange coalitions. Libertarians, evangelical Christians, and the most liberal groups may unite on one side of a policy issue—the same groups that are at one another's throats on another issue. Libraries and publishers, traditional allies, find themselves at odds over technology policies.

Don't expect to see "Republican" or "Democrat " and "liberal" or "conservative" used much in the remaining chapters. Those labels don't seem to matter much when policy and technology interact.

Why Policy Matters

Why should you care about policy when your real concern is technology? Policy issues can make certain uses of library technology undesirable or questionable (for example, see Chapter 3, "Technology, Privacy, Confidentiality, and Security"). Enforceable policy (laws and regulations) may make desirable library technologies and uses of library technology impossible, either by outlawing them directly or by outlawing the developments that would make them feasible.

Conversely, technology can undermine policy when developed and used without consideration of applicable policies. Some true believers in the power of technology go so far as to assert that restrictive policies (even when they're law) don't matter, because technological development will make them irrelevant. That's not a safe bet in general. It's not a *feasible* assumption for library technology, since libraries should and must be law-abiding institutions.

Good policies support good technological uses and vice-versa, but it's rarely that simple.

The most important reason to pay attention to policy issues, and to consider policy when evaluating and implementing technology, is that your library is likely to suffer consequences for failing to do so. As with every aspect of technology-policy interaction, those consequences can be complicated.

The other primary reason to pay attention is because neither policy nor technology stands still. You and your library can influence policies (and refine your own). With foresight, you can find new technological approaches that avoid policy-related problems you've spotted in current solutions.

Fred W. Weingarten of ALA's Washington Office discussed technological change and the evolution of information policy in the December 1996 issue of *American Libraries.*[2] He concluded with seven assertions. While Weingarten's discussion related to information policy (a subset of those policies that affect library technology) and libraries as a whole, it's worth repeating three of those assertions here as indications of why library technologists need to care about policy and why it's complicated:

> 2. Because policy in many ways defines institutional roles and arbitrates interests among them, the outcomes of [information policy] decisions can have a profound impact on the future of libraries, what they are, and what they do.

4. We will be negotiating new policy bargains with a host of new players, both opponents and allies. Just as we have not dealt with them before at any great depth, so they are unfamiliar with us. So we will have a lot of work to do familiarizing people with us and learning about them in turn.

5. We will not have the option to go back, to make policy change that restores the world as it was. That does not mean that we should not draw on history and tradition to define our interests; but we are going to have to rearticulate what those interests are in terms of new technology.[3]

Technology and Policy: Some Clichés

It is a cliché to say that a cliché is a truth repeated too often. You may not be aware of some sayings relating to technology and policy that may be clichéd yet are still important. Some of these include:

You can't change just one thing. You can't implement a new technology in the library and assume that everything else in the library will continue unchanged. It almost never works that way. That's one reason *all* technology must be viewed in a policy framework—so the changes can be predicted and considered.

There are always unintended consequences. You can assume that every new technology will have effects you didn't intend and didn't plan for; some of those consequences won't become clear until the technology has been in use for some time. As a result, it's not enough to consider new technologies in a policy framework. You need to be aware that existing technologies continue to change the library.

Every solution causes new problems. You may be able to find a technological solution to one set of problems, but you can be assured the technology will cause new problems. The best you can hope for is more problems will be solved than are created.

The Myth of Policy-Neutral Technology

One cliché of technology is that no technology is good or evil in and of itself; any technology can be used for good or evil. While that may be true, it's also misleading. Technological developments are rarely policy-neutral. Most new developments carry direct or indirect policy implications.

Formal Policy Sources

Policy that affects technology manifests in various ways. Laws formalize policy, make policy rigid, and provide penalties for ignoring policy. *Proposed* legislation reveals the trends and divisions in emerging policy; this may be the area that deserves your closest attention. Those aren't the only forms of policy, however. For technology to serve your library most effectively, they may not be the most important.

Laws

Direct effects of laws on library technology tend to be obvious. You know that you can't make a CD-R copy of a library audio CD for each library user that wants the music, even though your library PCs may have CD burners. Doing so would be a clear violation of copyright.

Legal issues aren't always that clear. Your library operates in a web of laws

at the city, state, and federal level. Those laws may not affect technology consistently. For example, privacy is a constitutional right in California—part of the law. That has one set of implications for library technology. But the USA PATRIOT Act and similar federal laws include elements that violate personal privacy—with a conflicting set of implications for library technology.

The Digital Millennium Copyright Act (DMCA) passed with little controversy. At the time, the assumption was that it would "simply" maintain the ability of copyright holders to be rewarded for distribution of their works, rather than having that ability swept away by an uncontrolled profusion of digital copying techniques. That's not the way it's turned out. In practice, DMCA serves as a barrier to innovation and information in several areas, hamstringing technology that could serve valid library and other needs. (See Chapter 2, "The Copyright Spectrum," for more on copyright and technology.)

Proposed Legislation

If law and library technology interact in complex ways, proposed legislation can be even more confounding. Proposals relating to technology proliferate, sometimes with several conflicting proposals in a single area. Few legislators and legislative staff members are technological experts. Most proposed legislation in these areas comes from lobbying groups and special interests. (We're all special interests to some extent, including libraries.)

Libraries need to maintain awareness of proposed legislation that affects library technology. Because such legislation can be misleading, this can be difficult. The title of a bill may have little or nothing to do with its contents. For that matter, its apparent intention may have little to do with the likely results of implementation.

Any technology-related bill with "children" in the title requires special attention. Of late, "protecting the children" has been used to identify any number of laws that affect adults far more than children. The same is true of bills with "peer-to-peer" or "piracy" in the title. Chances are, the peripheral effects of such bills far outweigh the direct purposes.

Case Law

Given the complexities of technology-related policy, you should expect much of that policy to exist in the form of case law—court rulings that modify legislation and establish policies that don't arise from legislation.

Consider the Children's Internet Protection Act (CIPA). As enacted, it required those public and school libraries accepting certain forms of federal money to install and operate filtering software on all computers with Internet access. The act established conditions under which libraries *could* override the software for adult users.

As CIPA was upheld by the Supreme Court, however, it appears that libraries *must* override filtering software for adult users on request, without asking for a reason and without delay. Failure to do so could invite a suit against the library for its implementation of CIPA, rather than against CIPA itself (unless it can be shown that it is impossible to do such fast-and-easy overrides).

That's just one example. As with much case law, CIPA's status is not entirely unambiguous. Some filtering advocates argue that the Supreme Court could not have intended this result. Most lawyers and commentators, however,

read the CIPA decision as effectively gutting the law as it relates to adults. CIPA as case law is very different than CIPA as passed by Congress.

Regulations

Much of the policy that directly affects library technology, as well as other technology, comes from such regulatory bodies as the Federal Communications Commission (FCC). In particular, the FCC has issued rulemakings—and could do more of this in the future—such as the Broadcast Flag, a rule that could limit profoundly certain technological developments that may benefit libraries.

Notoriously, special interests that fail to move their agendas through Congress will try four other tactics: state and local legislatures, regulatory agencies, international agreements, and contract law.

Treaties and Proposed Treaties

Why did the United States need to eliminate registration as a requirement of copyright and extend copyright protection by another twenty years? In both cases, one justification was "harmonization"—the legislation was needed to carry out treaties the United States had signed.

The next question doesn't always get asked. What role did the United States play in establishing the treaty clauses that require new United States legislation? The answer may reveal the final, back-door method of establishing desired policy—slipping it into a treaty, then calling for harmonization with the new "international" requirements, some of which may not exist in other countries.

The World Intellectual Property Organization (WIPO) is one of several organizations that regularly work on matters affecting policy and technology. As technology activists in the United States have become more aware of such efforts, it's become evident that United States interests use WIPO as a way to restrict user rights within the United States. But with WIPO considering a new and more user-oriented agenda, that may be changing.

Policy via Contract

Contractual agreements can override laws and other policies. When technological implementations involve contracts (as they frequently do), those contracts may work for or against library and other policies. At one extreme, a contract may be so one-sided and impossible to negotiate that a court would consider it unconscionable—but that requires taking the issue to court. More typically, contracts will serve the policy preferences of whichever party is able to negotiate more adroitly or has more power to walk away from the contract.

As with state and local laws, little more will be said here about policy via contract. But there are two fundamental issues that librarians dealing with technology need to be cognizant of:

- You may be agreeing to contracts more often than you realize, and some contracts (such as the click-to-agree screens for most software installations) may be impossible to negotiate and difficult to understand.
- The time to change a contract so it serves *your* policies as well as those of the other party is when you're in negotiation. Once signed, a contract has the force of law.

Local Policies

Your library has many policies, some formally established and some informally implemented. Those policies must exist within the pattern of formal regulations and must also guide library use of technology. Library policies should always reflect the library mission. Such policies should be used to guide technology; they *should not be* guided or controlled by technology.

There may be other local policies that affect library technology and lack the force of law. The library's parent organization—be it city, county, college, university, corporation, school, or special district—will probably have technology policies that affect library capabilities, and may have nontechnological policies that require attention when planning uses of technology.

Social Policies and Other Less Formal Sources

You'll see a number of organizations mentioned in later chapters and summarized in Chapter 7 ("Sources and Resources"). Most of these organizations work on policy—establishing recommended policies and attempting to guide formal policy efforts in desired directions.

These nongovernmental organizations may deal with specific policy issues or may work toward overarching policy frameworks. You and your library should consider the work of these organizations, see whether their initiatives and general policy constructs make sense to you, and either participate in or follow their work as appropriate.

Library Activism on Policy Issues

Library technology must work within a complex web of policy. Libraries should not be passive and work with whatever policies exist. In other words, libraries need to identify policies that would make their use of technology most effective and work toward those policies. Formal library efforts may be restricted by the nature of the library itself, but librarians have considerably more flexibility.

In essence, push for the policies you need. Encourage change in those laws and regulations that work against the technology policies that serve your library and its users. The American Library Association (ALA) and other library organizations work on technology policy and have been effective in several cases. You should make sure that the work of ALA and other organizations suits your own policy requirements as much as possible.

By the time you reach Chapter 7, you should be aware of a range of policy issues that affect your library's use of technology. If you're not happy with the combinations, don't assume you have no power to change them.

Putting Technology in a Policy Framework

This quick treatment can't begin to show all of the ways that formal and informal policies influence library technology. Once you see technology

within a policy framework, you'll discover many other interactions. There may be technological developments that have no policy implications and aren't affected by existing policies. But there aren't many and they're likely to be relatively unimportant.

The next twenty years may not be about policy rather than technology—but everyone who works with technology needs to appreciate the policy framework surrounding use of that technology. That need has become more evident in the new century; it will not disappear after 2025.

Notes

[1] Cory Doctorow, Boing Boing weblog, (www.boingboing.net), December 2003. In one of the common ironies of the Internet, these paragraphs and some additional commentary were written for another Web site—but the appropriate archives for that Web site (diepunyhumans) no longer appear to exist. If you search "Doctorow policy twenty years" in a Web search engine, you should find many sites—weblogs and others—that quote one or both paragraphs and either agree or (more commonly) disagree with them. The hotlink to the original was not working at the time this was written.

See www.diepunyhumans.com.

[2] Fred W. Weingarten, "Technological Change and the Evolution of Information Policy," *American Libraries* 27, no. 11 (Dec. 1996): 45–47.

[3] Ibid., 45–47.

See www.otal.umd.edu/Olive/Multi-D.html for a long list of citations and experiments in this area in the late 1990s.