

Innovation of Legislative Process

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**03.**

Technology &  
Legislative Drafting  
In The United States

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# 03 Technology & Legislative Drafting In The United States

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The Massachusetts State House  
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Technology has had a profound impact on legislative drafting in the United States over the past 25 years. In the early 1990s, many American legislative staff were still drafting bills on a typewriter, as their predecessors had done 90 years before. At that time they were also

\* Professor Kealy delivered this keynote speech in September 2014 at a conference on legislation held in Seoul, Korea. The conference was sponsored by the International Association of Legislation (IAL) and the Korean Legislative Research Institute (KLRI).

amending bills with a pen; as had been the practice since the 1600s. Since then, there have been tremendous changes: computers, sophisticated word processing, data bases of legislative documents, internet research and drafting sessions conducted remotely have all changed the way a legislature does business and the way we go about drafting a bill.

I began thinking about this topic a few years ago when I heard IAL's president, Wim Voermans give a presentation in Cape Town, South Africa. He talked about how the first automobiles looked like the horse carriages that came before. With time, and new technological advances, however, cars began to look completely different to serve new purposes and to maximize the new technology.

We now have new and amazing new technological tools at the disposal of legislatures—those very traditional and slow to change institutions. This raises several questions: what technology has made an impact on legislatures? How has that technology changed the process of drafting and passing legislation? and will legislatures change to maximize the technology available to them?

## **I The impact of technology on an ancient process**

These questions are especially pertinent in the United States. Some of our legislatures have been operating for a very long time— in fact, my home state of Massachusetts' legislature, which is called the Great and General Court of the Commonwealth, has been meeting continuously since 1629. In America we also have a very complicated legislative structure:

We have 51 legislatures, and with only one exception, they are all bi-cameral. The House of Representatives and the Senate in each legislature have their own rules, traditions, and customs. To become law, a bill must go through a complex process involving several substantive and financial committees in each chamber, floor debate and amendment, often a conference committee between the chambers, executive amendments and possibly a veto, and then veto override procedures by the legislature. This is a complicated process that someone from a parliamentary system may rightly view as “messy” and “disorganized.” There are

many points in this process where a bill may be amended, and what the president or governor or their executive agency requests for legislative language is rarely, if ever, passed in that form. In addition, in our system, only a fraction of the bills come from the executive. Most are drafted by or at the request of individual legislators. And the number of bills is enormous. In Massachusetts, a state of 6 million people, and with 200 members of the legislature, there will be over 6,000 new bills filed in January in anticipation of the new legislative session. 1,100 more bills will be filed in Utah's legislature, which represents about 2.9 million people.

These are hyper traditional organizations that do not change quickly or easily. In Massachusetts, one of the hotbeds of technological innovation in the United States, bills are still printed on paper—blue paper if they originate in the Senate and tan paper if they originate in the House. Those paper bills are carried, often with handwritten notations, between the two chambers by young men and women called pages. When I worked in the Senate we had stacks of blue “An Act” paper, so called because of the pre-printed first words at the top of the page. In the mid 90s, we would type the bill title and language onto the page; by the 2000's we would send the blue paper through the printer and hope we had aligned the bill language properly.

When I first started with the legislature, one of the largest offices on our floor was the Legislative Documents Room. Every legislative document was printed many times and stored in small numbered mailboxes, in magnificent varnished shelves that must have been 150 years old, in case a legislative staff member, lobbyist, activist, or member of the public came in and asked for a copy of a bill or report by its number. By the early 2000's, however, nearly every legislative document was posted on-line and easily accessible through a computer. And yet the Legislative Documents Office persisted. It lasted another 8 or 9 years, with its staff of 5 or 6 people spending their days reading the newspaper, watching a small television and hoping someone—anyone— would come in. Finally, the legislature closed this office, and this year is finally transforming the unused space into a new hearing room.

## II My Survey

To prepare for this presentation, I surveyed members of the two professional and non-partisan drafting offices in Congress and similar drafting offices in each state. I received responses from Congress and nearly 20 state legislatures spread throughout the country. The respondents were a very experienced group— they had a combined 517 years of legislative drafting experience, with an average career of nearly 23 years.

This short survey asked the following questions:

- How satisfied are drafters with the technology in their office and for their legislature?;
- What technological change has made the greatest impact—either positively or negatively — on their work?;
- Has technology changed the way they draft or assess legislation?;
- Has technology changed the legislative process in a positive or negative way?; and
- Has the legislature, as an institution or in part, resisted technology based changes?

The respondents stated that most of the technological changes have had a positive impact. They are able to work more quickly, are more efficient, and they are more confident in their work product. This group reported significant drawbacks as well, particularly the perception that drafting can be done in a very short period of time and the loss of face to face meetings to discuss important policy details. I will deal with each of these aspects and what they mean for the potential future of legislation.

## III How satisfied were drafters with their technology?

In regard to the first questions; how satisfied are drafters with the quality of the technology both in drafting offices and for the legislature in general, on a scale of 1 to 10, with 1 being

poor and 10 excellent. The responses showed a very high level of satisfaction with the technology—much higher than I expected. All together, the average rating for the quality of technology in the drafting office was 8.37 and only nominally lower for the legislature as a whole at 8.32. Not surprisingly, the drafting offices in Congress, with all of their resources, reported the highest score of 10. Only three states gave their technology scores as low as 6.

I was surprised by how high the scores were, given the state of the US economy over the last several years, which has had a particularly dramatic effect on the annual budgets of the states. The states have had little money to preserve existing programs, so I expected that technological advancements would have been delayed, causing lower scores. In fact, several states reported major technological upgrades over the past few years, although a few reported that they will be getting new technology now that the economy has improved.

I was also surprised to see the scores for the drafting offices and the legislatures as a whole being so similar. This was due in part to my own experience in the Massachusetts Legislature, where the drafting offices had much better access to on-line research than lawyers working for individual lawmakers or committees. Three states did report that they had better technology than the rest of the legislature, but two states reported that they had slightly worse technology than the legislature as a whole. It should be noted that these two states were the two states that reported the greatest dissatisfaction with their technology.

In some ways, however, the results were not surprising. The people responding were the most senior members of their offices, and probably who made the decision to purchase the technology they had. If I heard from more younger drafters, they may have taken a more critical view of the technology at their disposal. In addition, many of these older drafters knew what life was like before computers and e-mail, so all of the cumulative changes led them to give higher score, whereas young drafters, who have never known a world without laptops and video conferencing, would take a dimmer view of what legislatures have to work with. In fact, I had one state with two responders: one senior drafter and one with only 1.5 years of service. While the experience drafter gave their legislature's technology an 8.5, the new drafter only gave a 6.

#### **IV What technological change (if any) has made the greatest impact (either positively or negatively) on your work? and Has technology changed the way you draft or assess legislation?**

The answers to the questions, “what technological change (if any) has made the greatest impact (either positively or negatively) on your work?” and “has technology changed the way you draft or assess legislation?” were varied:

**Computers**: one state did not have computers at all as late as the year 2000, and another state got their first computers in 1995.

**Laptops**: one drafter particularly appreciated the ability to work from home.

**The internet**: one experienced drafter suggested that the internet has had the greatest impact with more thorough legal research and the ability to quickly and thoroughly assess legal issues and craft legal opinions. In addition, drafters can easily research related laws and see how other states have dealt with similar problems. The ability to search existing law electronically helps greatly with consistency, cross-referencing and indexing statutes. The internet not only gives greater resources to the legislative staff, but dramatically improves transparency for the public in that they can easily see where a bill is in the system and what changes have been made to a bill.

**E-mail**: the ability to deliver bills and amendments electronically. Also the ability for outside actors such as agencies, civil society and lobbyists to offer input on bills.

**Local area networks**: for moving documents through the system and allowing a secure system for drafters, policy makers and the clerks to draft and re-draft legislation. One state reported that they are now able to do far more work with fewer staff members.

**Drafting platforms**: software that create a mostly paperless system and eliminates the need for literally cutting and pasting paper during the amendment process. Some of these are developed for the individual legislature’s needs and some are commercial programs that are



later tailored to the legislature's specification. For example the US House and a few state's drafters are now using XML to draft, amend and tag legislation rather than using traditional word processing systems. This speeds up the "mechanics of drafting," allowing more time for research and other time consuming aspects of drafting and allows collaboration across a variety of devices and systems within government. This movement will continue to improve in the next few years; several legislature report working on even more powerful programs that will make amendments a redline of current laws for enhanced readability, and automatic engrossment. Other states report desiring these systems, but are held back by the cost, which can be in the millions of dollars.

**Session management systems:** In only the last 15 years, several states report having added searchable databases with a variety of legislative materials such as: bill requests, legislative language, correspondence, memos, research, speeches and talking points. These replace forms, files of paper, notebooks and file cards. Drafters now can create a legislative record, and track legislation with a great deal of ease.

## **V Has technology changed the legislative process in a positive or negative way?**

Next I asked, "Has technology changed the legislative process in a positive or negative way?" Overall, the responses were very positive, with most drafters citing improved efficiency, speed, accuracy and far less paper than was needed in the future. Others cite increased productivity that allows fewer staff members to complete more work in a shorter period of time. The fact that legislative materials, including floor debate, hearings and legislative history materials, are now more available to the public was also mentioned by multiple states as a positive change.

One state offered that they expect the technological changes to be positive, but for the time being, the new technological and old paper based systems are operating in tandem. Old habits die hard.

The responses, however, were not uniformly positive. One state reports that technological advancements have reduced the “analytical quality of requests submitted to the drafting office.” Presumably with 1st drafts that are copied from other states or drafted as a response to a news report from earlier that morning. Similarly, one drafter complained that technology allows other legislative actors to become sloppy in their requests for legislative materials.

Another office complained that the new technologies cause more and more drafting to be done by e-mail, rather than bringing multiple actors together to discuss and negotiate what the policy and legislative language should look like.

The most common complaint was that legislators now had an expectation that legislative drafting can and will be done very quickly. This creates an expectation of “instant gratification” for drafting requests, whereas legal research, thorough analysis and careful legislative drafting still require a fair amount of time. A very interesting comment came from one longtime drafter who pointed out that the younger legislators prize expediency and want to use technology to speed up the legislative process. In contrast, older legislators don’t want to use technology, but want to rely on the deliberative nature of the legislature to slow down the process.

I was surprised that none of the drafters included what I think is a very serious problem that was identified by my friend and colleague Toby Dorsey identified in a recent law review article. Toby wrote of outside actors, particularly special interests, will “draft”—often poorly because it is language they are submitting to many legislatures— legislation for their financial and ideological benefit and e-mail the language to their allies in the legislature. These legislators will then forward the language to the professional drafting offices to “check for technical problems” or to put the language in “proper form” without any analysis or further thought given to the proposal. This reduces the drafting offices to mere technicians—and is a true waste of their abilities.

## **VI Has the legislature, as an institution or in part, resisted technology based changes?**

Next I asked “Has the legislature, as an institution or in part, resisted technology based changes?” I asked this question based on my own experience with the Massachusetts Legislature. I spent 9 years working with legislators and senior staff, and the way they sometimes approached technology was at times comical—at times frightening. My friends and I watched on—and laughed—the first time a laptop computer or an iPhone made its way onto the floor of the Massachusetts House or Senate and the members gathered around it, acting as though they were looking at an artifact that had been dropped from Mars. I also saw an older legislative drafter become befuddled and angry when he was forced to start using the “track changes” and “comment” functions on Microsoft Word rather than marking up a bill with his beloved red pencil.

Therefore, I was surprised that most respondents said that there had not been much resistance to technological changes. A few states reported that certain legislators had resisted at first when they were given a laptop or asked to change how they acted to accommodate the new technology, but that the resistance was short lived. One drafter was especially philosophical stating, “technology always meets with resistance” but that progress was being made. Other states reported that the changes were incremental and that slowly—but surely, the legislators and staff were adjusting to the new technology.

A few states reported that resistance was mostly on financial and there would be greater technological advances if not for the difficult fiscal situation many states still find themselves in.

Maybe the technological advance that has met with the most resistance in a few states is the webcasting of committee hearings and floor debate. This rings true with my own experience. At one point, my employer wanted to audiotape committee hearings to create a legislative record. This proposal met so much resistance from other committee members and leadership that it was never implemented. Legislators are constantly worried that they will misspeak and be embarrassed and will oppose any measure that increases this possibility. In one state,

legislative business may be seen on the web in real time, but it is not archived. That state's governor, however, has begun recording the committee and floor debates and archiving them independent of legislative authority.

## **VII** Where do we go from here?

### **a. Change the legislative process to meet the new technology**

So, now that new technologies have become so integrated into the legislative process, what will happen in the future? The final question of my survey was, "If you could change any part of the legislative process, the legislature as an institution, or legislative drafting by utilizing modern technology, what would it be?"

Here, the respondents were surprisingly reluctant to offer suggestions. Many simply replied, "none" or "not sure." Others suggested that they would simply seek to keep modernizing systems. A drafter stated that while their legislature readily adopts to new technology, the legislators would resist changes to procedural changes. One respondent gave a similar, but a more philosophical answer: "Technology should respond to and support the legislature and its process and needs and not be a means of changing these or the driver of change."

I disagree. Technology has already changed the way legislatures operate in significant ways and will continue to do so in the near future. For all of the good and valuable contributions these tools offer, legislators and their staff must be aware of and guard against the problems these tools can also create.

For example, having special interests drafting and electronically submitting legislative language directly to a legislator, which is then forwarded to the professional drafters for "cleaning up," is a significant problem. It has become too easy for a legislator to "draft" and promote legislation without the careful design and assessment that a professional drafting office can provide.

Another example is that as we move closer to a paperless process, legislatures will need to adapt new policies and procedures to back up what is increasingly done electronically. Obviously, technology is vulnerable to hacking, viruses and malfunction. Legislatures should plan to create divisions or repurpose existing offices to archive legislative business in paper form, what one respondent called a “bible copy” that can be used as the official record if the computers fail.

Maybe the greatest threat to the legislative process going forward is the very thing that makes technology so appealing—its efficiency. One respondent stated, “the efficiency of technology is at odds with the deliberation and delay that is so valuable in the legislative process.” Although new efficiencies are welcome in true emergencies; those are few and far between. The vast majority of bills benefit from the slow, deliberative process where research and careful analysis is prized.

The existing legislative rules and procedures that slow down the process to respond to the problems of the 18th and 19th centuries: slow travel to the capitol; slow communication; representatives who may not have been educated or even illiterate; and the ability of powerful political factions that could force through legislation with out proper scrutiny from other legislators and the public.

The process must now be changed with technology firmly in mind. The rules must slow down the process to allow a drafter the time for proper research, analysis, and careful drafting.

Perhaps these rules could dictate a certain amount of time between 1st and 2nd reading that will give the drafter time to do their job properly.

Perhaps the rules should dictate that for bills scheduled to be reported from a committee, there must be at least one face-to-face meeting of stakeholders to work out policy and drafting issues, rather than relying on a string of e-mails.

Perhaps the rules should dictate that instead of “reading” the bill to the legislators on the floor, bills and amendments must be posted on-line for a certain period of time to provide transparency for legislators, the media, and the public.

## **b. Use the technology to aid underprivileged countries**

Technology has also opened a new and exciting avenue for legislative drafting. Legislation to date has been an isolated and often a purely local endeavor. Policy, and the laws that reflect the policy, have always been formulated in the parliament building, or in the short space between the executive's mansion and the legislature. Legislators looking for ideas might look to other states or countries for recently passed or revised laws, but there has been little opportunity for collaboration.

This situation is changing in a very positive way. For the last several years I have been involved with the African Parliamentary Knowledge Network (APKN). Founded at a 2008 continent wide conference held in Cairo, Egypt, this Network seeks to create opportunities to offer support and information for the benefit of African parliaments that are attempting to assert their important role after decades of dominance by “Big Man” presidents.

For the last several years, my students and I have supported this valuable work through my School's Africa i-Parliaments Clinic. For each clinic, we solicit projects from parliaments around Africa—typically a model bill that has been drafted by an international organization, or by the President's office, which members of parliament wish to see redrafted to reflect parliamentary priorities. We work on these projects, utilizing evidence-based legislative methods, with the client and with several volunteer drafters, parliamentarians, and experts from every part of Africa. We operate with the guiding principle that only the client parliament can decide for itself what is the best policy or legislative language—all in an effort to empower, and not replace, parliament through international assistance.

The tools are commonplace now, but extraordinary too: e-mails, video conferencing, cloud based services such as Google Drive to store and share materials and to revise legislative language together in real time. New African drafters and students at African universities can participate and learn alongside my law students. The clients receive the legal and policy support they desire and the rest of the Network gets a chance to offer their experiences and learn from the client parliament.

There are so many places where a desire for democratic institutions must be fostered and assisted. Some legislatures have been very generous in this endeavor. The European Parliament and the Parliament of Great Britain in particular have lent their resources and expertise to the APKN effort. In addition, the Parliament of Scotland has built a partnership with the nation of Malawi to provide links between their parliaments and civil society in each country.

Still, there is so much more that can be done. I ask all of the members of this great organization to consider how else we can use the technological marvels currently available to us to support the work of our brothers and sister drafters working in emerging and fragile democracies around the world

