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The Attorney as Knowledge Worker

BY JASON COOMER, WILLIE BUEHLER, AND BOB BINDER

*"Man's mind, once stretched by a new idea, never regains its original dimension."*¹

— Oliver Wendell Holmes

The practice of law, once stretched by new technology, will never be the same. Like it or not, advances in Information Technology (IT) have changed the way lawyers and other knowledge workers collect, process, and produce information. Lawyers unable or unwilling to use new technology tools to collect and manage the vast amounts of information available and needed to practice law in the 21st century will be at a competitive disadvantage that may put them out of business.

The Rise of the Knowledge Worker

The term "knowledge worker" was coined by Peter Drucker to describe someone who adds value by processing existing information to create new information that could be used to define and solve problems. Knowledge workers include lawyers, doctors, diplomats, law-makers, software developers, managers, and bankers.² Lawyers have specialized knowledge through their training in the law that they apply to their practice; and

few, if any, create a physical product other than paper or documents.

As humankind developed from bands, to tribes, to chiefdoms, to states, specialization of labor created economic benefits that allowed workers who were not needed for survival to gather specialized knowledge for the betterment of society and their own advancement. These early knowledge workers were leaders, rule-makers, and healers.

From early man until the middle of 20th century, there were relatively few knowledge workers in most economies because most of the workforce was needed for survival. Before 1900, about 90 percent of the U.S. population worked in agriculture. Around the beginning of the 20th century in the United States and other developing nations, the Industrial Revolution began to pull people off the farm and into factories. In many of these developing countries, including the United States, the economic benefits of the Industrial Revolution created what Marx termed industrial surplus. This industrial surplus, instead of being used to keep the working class down as Marx had predicted, was invested in research and development, education, and organization leading to an explosion in information and technology which in turn

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created a demand for a large number of specialized knowledge workers.

These knowledge workers have created advances in technology allowing greater productivity and efficiency, but with a side effect of fewer and fewer workers being needed to perform the essentials that make society run. These advances have caused major shifts in the work force that have in turn caused a profound impact in the way we practice.

With the explosion of knowledge workers has come an explosion of specialized information. The large variety and vast amounts of specialized knowledge in our society has forced lawyers to become more specialized. Further, advances in mass production, communication, transportation, and distribution have expanded trade and communications between businesses all over the world.

This new global economy has created multinational corporations and increased international trade, creating a demand for large law firms and litigation groups that can handle larger and more complex litigation disputes and business relations. In fact, the general solo practitioner who handles all types of law is being supplanted by teams of lawyers who handle specialized areas of law.

Lawyers and Resistance to Change

Though many lawyers use new technology in their practices, many more are resistant to change until absolutely necessary. One reason for this is that the practice of law in the United States and England is based on tradition and *stare decisis*. Another reason is the large initial investment it takes to practice law. This barrier to entry limits the supply of attorneys, allowing over the short run less efficient methods of practicing law. This problem may be exacerbated by the increasingly specialized knowledge needed to practice in many areas of law and the investment of time in learning a new area of specialized knowledge. This further limits competition and decreases the pressure on attorneys to change in order to adapt to their environment.

Working against this resistance is the second law of thermodynamics that tells us that over time all things tend to break down, becoming less ordered, and tending toward disorder and chaos or entropy. This law has been applied to all systems including biological, chemical, and social systems. As systems evolve, order is created not in spite of the chaos and entropy, but because of it. Evolution and growth are a

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result of a system slipping into chaos and then reorganizing itself at a higher level of complexity and functioning. This reorganization allows the system to survive and continue functioning and in our society is one of the main functions of lawyers.

As the amount of information needed to practice law increases, the practice inevitably becomes more disordered and chaotic. Because lawyers are limited in the amount of information they can process, computers and technology are necessary to survive and continue functioning. Hence, technology has allowed the knowledge worker to evolve and process a greater amount of information than ever before, helping us avoid information overload, disorder, and chaos.

Knowledge Management: Conquering Information Overload

As information becomes readily available and abundant, it will be imperative to an attorney's survival to adapt to the techniques used to grasp and transform specialized knowledge as it relates to the law. The process of managing information through technology is commonly known as "knowledge management." (For an excellent weblog of knowledge management concepts and resources, see <http://excitedutterances.blogspot.com>.) Attorneys who effectively use knowledge management tools will have a significant edge over others who do not. This will become increasingly important as technology continues to improve, knocking

down traditional geographic barriers and creating competition.

From a global perspective, China, India, and other developing nations are pushing to become more information-based, creating a large demand and supply of international knowledge workers. This will create a market for attorneys who can process vast amounts of information, especially in protecting copyrights, patents,

and other information from theft. However, with it will come competition. From a regional perspective, attorneys can now handle distant matters through the use of technology, including online collaboration, e-filing, and videoconferencing. This technology encourages firms to become larger in order to process vast amounts of information and handle multiple claims across large regions, which in turn creates increased local competition from information hubs such as Austin, Houston, and Dallas. These competitive pressures, combined with the thousands of new attorneys being produced each year, illustrate the importance of using technology to stay competitive.

This new legal world replaces the traditional briefcase of papers with electronic devices and moves at the speed of light through fiber optics. Applying Albert Einstein's theories on space and time to the future of information technology, knowledge workers might someday send information through space at speeds fast enough to slow time, allowing them to steal back time while collecting, managing, and processing information. Though we may not be able to physically travel at light speed, the information we need to practice law will, freeing us from the potential chaos and dense black holes of information overload.

Notes

- 1 Oliver Wendell Holmes, *A Father's Book of Wisdom*, compiled by H. Jackson Brown, Jr., 65 (1988)
2. http://www.nelh.nhs.uk/knowledge_management/km3/knowledge_worker.asp