

From Gutenberg to Juan Doe: The Dulling of Quills, The Inking of Fingers, and the Bluing of Collars

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Print as the Impetus to Societal Change—a Historical Perspective

The graphic communication industry has experienced a vast amount of change over the past 500 years. Since Johann Gutenberg's invention of moveable type made of lead, tin, and antimony, to the introduction of Steve Job's Apple Computer, technology has ultimately been the guiding force for which this industry has progressed. Most importantly, the people who have worked in this industry have inevitably felt this change. Whether through the loss of jobs, inadequate training, attrition, or lack of interest and/or insight on behalf of the work force, the advent of technology has generated significant change, not just in terms of economics or finance, but on a socio-cultural plane that sets apart the classes associated with the working environment, i.e. the white-collar and blue-collar workforces.

Measuring changes that have occurred within the graphic communication industry can be expansive, complex, and stagnating. Technology, albeit, has affected every business entity in the world. Moreover, the printing business, or craft as it was once recognized, required skilled artisans and craftsmen to produce the printed word that became the cherished information appropriately disseminated among the masses of individuals within a given community. Generally this occurred in the form of a book, or flier, poster, or writ. Because of the value placed on this information, the printery was well respected—as were the employees who assisted in producing the end products. Over hundreds of years and the evolution of offset lithography, printing has become less expensive and faster. Technology alone has moved this craft-based industry into a highly profitable volume-producing commodity. As production speeds have increased, output volumes inevitably have become larger, and, as a result, the demands upon the workforce have become greater thus prompting significant growth in the labor force. The ironic turn of events associated with technology is that it constantly improves. Newer technology consistently replaces older technology. Because of the advances made in the field of Computer Integrated Manufacturing (CIM) and automation, printing equipment—once requiring a three-person crew—now only

requires a single person. Additionally, with such rapid changeover regarding technology placement, much knowledge (both tacit and explicit) is lost resulting in a poorly informed, minimally trained workforce.

As equipment became more and more automated in the 1980's and production volumes increased ten-fold, business and corporations starting purchasing and installing even more technology. While management became entranced on focusing on the bottom-line and increasing production yields, the blue-collar workforce fell to become a second and often third priority with regards to training and advancement. New technologically advanced equipment requires comprehensive and expensive training. As a result, more white-collar personnel and middle-management became trained in the operation of the equipment. However, lacking daily operation experience, this "trained" workforce still required the daily production equipment operators to assist them. Many businesses were unable to realize the increase in profits or efficiencies because of the communication gap that existed between the two forces.

Additionally, as the printing press was becoming retrofitted with computer interfaces and remote diagnostic devices, and e-mail transactions became the protocol for interdepartmental communication, press operators were forced to write reports, memorandums, and maintenance logs (among other items) electronically. Confused by the overall sophistication of the automation placed on their printing equipment, compounded with their inexperience or lack of ability to communicate through writing composition, the force has become disenfranchised, disengaged, and fearful of employment termination.

How can five hundred years of technological innovation in an industry founded on the skills of a rhetorician-craftsman-artist-editor have evolved into a class system comprised of blue-collar workers who, through the impetus of technology, are inadequately prepared to communicate discourse through electronic written media? The primary objective of this forum is to explore modern social theories that focus upon societal change, most specifically, as it relates to technology. Works from theorists such as Birkerts, Blumer, Ferre, Patterson, Rubin,