Tom Haigh - thaigh@sas.upenn.edu - SHOT 2000 Abstract

Inventing Managerial Information: Systems Men and the Computer, 1957-1967

The Systems and Procedures society was founded in 1947 and boomed through the 1950s. The "systems men", as they called themselves, drew upon the long history of system in business and on the cold-war prominence of "systems engineering" to present themselves as the heirs of Taylor, applying the latest scientific and engineering ideas to the white-collar world of administration. The actual duties of its membership were more mundane and technical - but as corporate staff experts they proliferated along with the multi-divisional corporate form itself. Their work centered on the documentation and improvement of clerical procedures, the coordination of inter-departmental administrative systems and the consolidation of inefficient forms and reports. They aspired (usually forlornly) to recognition as management experts, to whom executives had delegated a vital managerial task.

My paper focuses on the complex relationship between these "systems men" and the new technology of computing. During the mid-1950s large American corporations turned in large numbers to electronic computers. An extraordinarily powerful emblem of technological modernity, the computer brought new prestige and responsibility to the punched card "machine accounting" supervisors to whom it was entrusted. Over the next decade these lowly mechanics were to transform themselves into "data processing managers" in a campaign for higher professional and organization status that threatened to eclipse the dreams of the systems men.

Systems men faced a dilemma. Many individuals shifted careers to become computer-oriented "systems analysts". They praised the computer as powerful tool that would attract the attention of senior management and give them the authority to organize systems on a cross-departmental basis, consolidating and reorganizing corporate functions as required. But to most the computer was merely one, often overvalued, tool among many. Focusing on a single technology would make them mere "technicians" or "artisans" - destroying the very pragmatic "generalism" that was at the heart of their claim to managerial expertise.

The solution was to switch from "data" to "information". During the early 1960s, systems men, consultants, academics and computer manufacturers allied to reconstruct businessmen's dominant perception of the computer (and, much more slowly, its actual hardware and software). It was no longer to be a mere processor of data, but the heart of a mighty "total management information system". Tying together all administrative processes, it would serve managers at all levels with instantly updated information. Before this era, "information" was used in business circles only as a loose synonym for "intelligence" - implying human communication and the act of informing another. Forms, reports, files, telegrams, punch charts and graphs were important things, but were not lumped together into a single category.

Rather than merely replace clerks, the computer would provide "intangible" but business-wide benefits from better decision making. Manufacturers hoped to sell masses of expensive and newly diverse equipment. The systems men saw a way to assert control over corporate computing while strengthening their claims to managerial authority. This vision was soon ubiquitous in discussion of the role of computers in business - though it was rarely even approached in practice. Acceptance of "information technology" and "managerial information" created for the first time an abstract, disembodied idea of "information", while simultaneously demarcating it as belonging to a particular set of professional groups and technologies. Historians should therefore be very careful when applying such temporally and culturally specific ideas to earlier periods.