

## **Alfred Dupont Chandler (1918-2007): business historian and strategist**

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**“My goal from the start was to study the complex interconnections in a modern industrial enterprise between structure and strategy in an ever-changing external environment.”** Alfred Chandler on *Strategy and Structure* (endnote 1)

**“The basic theme of *The Visible Hand* is that in the most vital sectors...of the economy the visible hand of managers replaced the invisible hand of the market forces in coordinating flows and allocating resources.”** Chandler on *The Visible Hand* (endnote 1)

**“Such [organizational] capabilities—both in facilities and [managerial] skills—provided the competitive advantage...Organizational capabilities are the heritage on which continuing competitive strength and profitability of enterprises and industries rest. Once created they have to be maintained. Their maintenance is as great a challenge as their creation, for facilities depreciate and skills atrophy. They can be destroyed far more quickly than they can be created and maintained.”** Chandler on *Scale and Scope* (endnote 1)

The noted business historian, Alfred (Al) Dupont Chandler, Jr., the author of hundreds of journal articles and numerous books, died in May. As a Harvard professor in the 1970s, he revitalized business history: as a career choice for historians, as a serious branch of history and as a source of research that contributed to the fast-moving field of strategic management.

Born in 1918, Chandler was awarded his doctorate from Harvard in 1952 for a history of a great-grandfather and founder of Standard & Poor's Corporation, Henry Varnum Poor [2]. At this time he was an Associate Professor of History at Massachusetts Institute of Technology (MIT). Along with teaching a course on American Economic and Business History [1], Chandler assisted with editing President Theodore Roosevelt's letters [3], and through discussions regarding possible strategy courses at the United States War College gathered data for the first of his revolutionary business histories, *Strategy and Structure* [1, 4]. Chandler also assisted in the production of only extant “business record” [1, 5] of Alfred Sloan, former head of General Motors, the person considered by many to be the founder of modern business management.

Between 1963 and 1970 Chandler taught in the History Department of Johns Hopkins University. During this time he worked to edit the papers of President Dwight D. Eisenhower [6] and Pierre S. Du Pont [7], giving him insight into both military and business strategy on a grand scale [1, p 213]. In 1970 Chandler returned to Harvard where he discovered that teaching MBAs greatly assisted his business history research [1]. In the late 1970s *The Visible Hand* was published [8] at the very time Chandler had embarked on a grand-scale project, “the collective histories of the largest industrial companies over an extended period of time” [1]. While at the European Institute for Advanced Studies in Management (EIASM) in 1978, Chandler made the decision to “focus on the industrial and enterprise histories of three nations,” Britain, Germany and the USA [1]. It would take many years of seminars, conferences and research collaboration with already established historians and graduate students from all over the world before the third of Chandler’s histories was published, *Scale and Scope* [9] in 1990.

His 100-year research horizon in *Scale and Scope* provides overwhelming evidence for the importance of looking at scale and scope as key determinants of strategy. *The Visible Hand*, which examines the railroads as the first modern enterprise, illustrates what management is and it offers the modern reader an opportunity to revisit the basics of management that are too often taken for granted. Considered together, the three business histories represent in-depth accounts of large organizations from the late nineteenth century to the 1940s. Publication of *Scale and Scope* also capped the end of his active Harvard Business School life, although he continued to research and publish as an emeritus professor.

In the two decades that were to follow his leaving fulltime teaching, Chandler tackled the history of the modern industrial world. He concentrated on the information industry (*Inventing the Electronic Century* [10]) and the chemical and pharmaceutical industry (*Shaping the Industrial Century* [11]).

His contributions to the field of strategy were significant, though not always immediately influential in the business sector. Although Chester Barnard had discussed “strategic factors” within organizations [12] it was not until the 1960s that concepts of whole-of-business strategy were being formulated. Harvard business professor Kenneth Andrews and others had begun stating that clear goals must be set and that managers were responsible for supervising the achievement of the goals [13]. Chandler, through his histories, revealed that pressures from the external environment, such as a change in market dominance, changes in consumer need, etc., can force a change in the way a corporation does business. This meant that, to cope with a discontinuity a new direction or strategy must be formulated. This new strategy may not work if the internal environment doesn’t support it and so a change in structure is required

[4]. Chandler showed that in four successful, large American corporations of the 1920s, the change in structure included becoming multidivisional (M-form) [4].

During the late 1960s and early 1970s the field of strategy was largely influenced by consultants, such as the Boston Consulting Group, but few academics. However, in a few years, when the external environment once again made a major impact on business—for example, the oil shocks of 1973 and 1979 [14]—Chandler’s Pulitzer Prize winning book *The Visible Hand* was published [8]. Although the book made a major impact in the field of history [15] it had little effect on the field of strategy. By the 1980s strategic management was dominated by academics such as Michael Porter [16]. Business management and strategy were in the grip of ideas about new and better ways to “do it” [14, fig. 15] But in 1990, Chandler’s *Scale and Scope* once again was welcomed and widely acclaimed by the historians with the term *Chandlerian* beginning its appearance when discussing business history. Chandler’s publication apparently made minimal impact on the business community except to reinforce concepts of *strategy and structure*. For practitioners of the time, strategy was about dynamics, core competencies, and commitments [14].

Looking back, a modern historian’s view on what Chandler has contributed to strategy can be exemplified by his own words regarding three of his works quoted at the start of this article To these insights one must add the take-home message from *Shaping the Industrial Century* [11]—that of innovation through new scientific learning, to which Chandler added the concept of nurturing would-be entrepreneurs.

Managers who complain that they don’t have time for the lessons of history argue that strategy is about looking forward not backward. And business historians publish in their own journals, not in those aimed at business leaders. So why should the strategic management disciplines or business managers be interested in business history? The historian Booth [17] sums up the counter argument succinctly—“because historical-knowledge is self-knowledge” [17].

### Endnotes

[1] See the chapter by Alfred Chandler “History and Management Practice and Thought” pp. 205-236 in Bedeian, A.G. (ed.) (1992) *Management Laureates: Collection of Autobiographical Essays*, (vol. 1), Greenwich CT: JAI Press. The use of the word strategy by Chandler in “*Strategy and Structure*” is discussed by Thomas McCraw in his (1988) “Introduction: the intellectual odyssey of Alfred D. Chandler, Jr.” in A.D. Chandler, Jr. and T.K. McCraw (eds) *The Essential Alfred Chandler*, pp. 1-21, Boston: Harvard Business School Press on page 12.

- [2] Chandler's doctorate is entitled *The Pen in Business: a Biography of Henry Varnum Poor*. It was later published as *Henry Varnum Poor, Business Editor, Analyst, and Reformer* by Arno Press, New York in 1981.
- [3] In many biographical accounts of Chandler you read that he was an editor of the following publication, Roosevelt, T. and Morison, E.E. (eds) (1950, 1954) *The Letters of Theodore Roosevelt*, Cambridge, MA: Harvard University Press. This is not the case; he helped edit the letters and wrote essays regarding the letters but is not on the title page of the volumes.
- [4] Chandler, A.D., Jr. (1962) *Strategy and Structure: Chapters in the History of the Industrial Enterprise*, Cambridge, MA: Massachusetts Institute of Technology Press. This book, first published by an academic press, was very quickly republished by Doubleday as a popular Anchor series and was reprinted many times by both publishers. The most recent republication was by Beard Books in 2003. The Japanese were the first to translate the book in 1967 and again in 2004, followed by the French in 1972, the Italians in 1976 and the Chinese in 2002. The book was preceded by Chandler's 1956 article "Management decentralization: an historical analysis" in *Business History Review* volume 30 pages 111-174 which has been reprinted in Wood, J.C. and Wood, M.C. (eds) (2003) *Alfred P. Sloan*, London: Routledge on pages 329-383.
- [5] The autobiography by Alfred Sloan, published in 1963 as *My Years with General Motors*, Garden City, NY: Doubleday is now one of the few records. Andrea Gabor in her 1999 book *The Capitalist Philosophers*, New York: Times Business on page 274 indicates GM burnt Sloan's and GM records, but note the burning of records was done at the request of Sloan, according to David Farber in his 2002 biography *Sloan Rules: Alfred P. Sloan and the Triumph of General Motors*, Chicago: University of Chicago Press.
- [6] The first five volumes published in 1970 *The Papers of Dwight David Eisenhower: the War Years*, by Johns Hopkins Press and the sixth volume with Louis Galambos published in 1978, *The Papers of Dwight David Eisenhower: Occupation, 1945*.
- [7] Chandler and Stephen Salsbury worked on the du Pont papers and in 1971 published *Pierre S. du Pont and the Making of the Modern Corporation*, New York: Harper & Row. The book was republished by Beard Books, Washington DC in 2000.
- [8] Chandler, A. D. (1977) *The Visible Hand. The Managerial Revolution in American Business*, Cambridge, MA: Belknap Press. The book was reprinted in 2002. Once again the Japanese were quick to translate this book (1979) followed by the Italians (1981), Chinese (1987) and the French (1988).
- [9] Chandler, A. D. (1990) *Scale and Scope: the Dynamics of Industrial Capitalism*, Cambridge, MA: The Belknap Press of Harvard University Press. Belknap Press issued a paperback edition in 1994. The book was quickly translated into Japanese (1993) and French (1992, 1993), Spanish (1996) and later into Chinese (2006). There was a large colloquium published in volume 44 of *Economic History Review* in 1990 with many essays on the book.
- [10] Chandler, A. D. (2001) *Inventing the Electronic Century: the Epic Story of the Consumer Electronics and Computer Industries*, New York: Free Press

- [11] Chandler, A. D. (2005) *Shaping the Industrial Century: the Remarkable Story of the Modern Chemical and Pharmaceutical Industries*, Cambridge, MA: Harvard University Press
- [12] Barnard, C.I. (1938, 1968) *The Functions of the Executive*, Cambridge: Harvard University Press. See also the comments by Pankaj Ghemawat in his article "Competition and business strategy in historical perspective" in volume 76 *Business History Review*, pages 37-74.
- [13] Andrews published few books in the late 1950s early 1960s, for example *Problems of General Management: Business Policy: a Series Casebook. Instructor's supplement* in 1961 and *Business Policy: Text and Cases* in 1965, with Edmund Learned and Roland Christensen (W. Guth was also an author in 1965). His ideas were summarised later in his book *The Concept of Corporate Strategy*. Note that field of "business policy" was later re-named as "strategic management" within the business schools (see Rumelt, R.P. *et al.* (1991) "Strategic management and economics", *Strategic Management Journal*, 12, 5-29). See also the comments by Pankaj Ghemawat *loc. cit.*
- [14] Ghemawat, P. (2002) "Competition and business strategy in historical perspective", *Business History Review*, 76: 37-74.
- [15] John, R.R.J. (1997) "Elaborations, revisions, dissents: Alfred D. Chandler, Jr.'s, *The Visible Hand* after twenty years", *Business History Review*, 71, 2: 151-200.
- [16] Bartlett, C.A. and Ghoshal, S. (1991) "Global strategic management: impact on the new frontiers of strategy research," *Strategic Management Journal*, 12, Special issue: Global strategy: 5-26, see also Ghemawat *loc. cit.*
- [17] Booth, C. (2003) "Does history matter in strategy? The possibilities and problems of counterfactual analysis," *Journal of Management History*, 41, 1: 96-104.

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Key words: Alfred Chandler, business history, *Strategy and Structure*, *The Visible Hand*, *Scale and Scope*, external environment