Discussion:

Historical Concepts of Business Enterprise

Harold D. Woodman
Purdue University

Business History Conference: Morning Session II
Historical Concepts of Business Enterprise

Discussion of Papers by Roy and Uselding

By

Harold D. Woodman
Purdue University

The title of this session, "Historical Concepts of Business Enterprise," is general enough to include a great variety of topics--as these papers amply prove. Mr. Roy's analysis details the problems and effects of operations and systems technologies. Mr. Uselding discussed the work of two economic theorists who, he says, offer significant insights for the business historian. We have, then, essays in industrial engineering, and in methodology.

As the discussant who, among other things, is supposed to draw the three papers together to see what they add up to, I am hard pressed. The strident call for the application of the "new economic history" to business history--which I certainly expected from my economist colleagues when I accepted this task--is absent. But more important, the familiar, traditional signposts--the entrepreneur, the case study, the story of the growth of the individual firm--seem to be missing or in unfamiliar guise. This I think, is all to the good, for it reflects the fact that business history is moving in new and, I believe, fruitful directions. Indeed, although I shall attempt to fulfill the discussant's task by dealing with each paper separately, I should note at the outset

that taken together the central contribution of these papers is that they serve to turn our attention to new ways of doing business history.

I

The vision Mr. Roy presents is awesome--even frightening in its implications. He tells us of new machines which think and learn and of the prospect of machines that will not only do a complicated series of tasks, but will also repair and maintain themselves and, through the "learning process" (as a teacher of human beings, I must put this in quotes), adjust to new needs. The result, we learn, will make management so difficult that the machines will make management decisions.

Where have all the people gone? The workers are gone as are the managers. All we have left are the "practitioners" of "sophistiacted quantitative methods which have come to play near-dominant roles in decision making" who, because of their skill are able "to move into positions of power." And, of course, there are the consumers of all the things these machines will produce. And here is the rub. I am reminded of the remark attributed to Walter Reuther, I believe, who, after being shown the automatic lathes and the automatic machines boring engine blocks in an auto factory asked how many Fords automatic lathes and boring machines purchased every year.

The prospect of cybernetic factories without people turning out millions upon millions of automobiles, or refrigerators, or

anything else seems to me to be a vision of science fiction, not reality. And it is unrealistic not because, as Mr. Roy concludes, "the present generation of young people seems disenchanted with the pursuit of affluence," but because the system does not work when supply bears no visible relationship to demand.

To say only this much would be to do Mr. Roy's fine paper an injustice. In the course of his analysis of technological change in modern industry. Mr. Roy has raised a number of very important problems for the business historian. It seems to me that his analysis focuses our attention on the decision making process in modern, large-scale business. In a word, he forces us to consider the role of the business leader.

We have exerted great effort and spilled much ink over the morality of the business leader while giving far less attention to the decision making process itself. Our emphasis on the individual firm has produced much work of great merit, but at the same time it has often obscured the role of the business leader. Too often we assess the executives' leadership ability by the success or failure of his firm without analyzing precisely how the executive made his decision.

In analyzing the role of the business leader, it might be useful to distinguish between the collection of data and information and the decision itself. Systems analysis, market forecasts, cost estimates, consumer preferences--these may be classified as data collection. The same may be said of organization

both of the work of production and distribution as well as of problems relating to leadership, company organization, lines of command, and similar matters. Modern technology in the form of computers, new machines, and the mass media and the researches of social scientists, industrial management specialists, and psychologists can provide immense amounts of data. Sometimes these data alone suggest, indeed, force a decision. A study which shows that, say, the introduction of computer billing would cut costs sufficiently to pay for the capital outlay in a short period of time virtually dictates that the innovation will be accepted. In such cases, decision making is easy enough.

In such a situation, decision making is easy because the meaning of the data collected in unambiguous, i.e. the possible unknown variables which may upset the conclusion suggested are minimal. True enough, they are not altogether absent; disruptive events of a fortuitous nature may always upset them.

In many other cases, however, the proper decision is far less obvious. The information required may not be available (because the means to get it are unknown or the costs of getting it are too high). In this case, the decision maker must make his decision on imcomplete information. Presumably, it is in this area that the high priced company executives are able to use their skills or abilities to make the proper decision. But how do they do it? How, in fact, <u>do</u> they earn their keep? What is the executive in the IBM advertisement thinking as he walks his lonely

vigil on the beach or meadow? IBM notes modestly that it cannot make the decision for him, but it claims that it provides him with "not just data, /but with/ reality." If this were in fact true, then the meandering executive should stop wasting his time and get back to his office and his computer. But, of course, the computer does not provide him with reality; it leaves the executive short of reality and therefore with a real decision making problem.

It would be tempting to conclude that it is in this area that we find our entrepreneurs, those great innovators who are responsible for economic growth. In one sense, we do. The bold leader who is unafraid to make a decision, to attempt an innovation, and who succeeds is indeed the entrepreneur, be he a robber baron of the 1880's or a top manager of a conglomerate in the 1970's.

But this does not say enough. We are still faced with the problem of understanding how he makes his decision. Since the only reason he may have for not being able to make a relatively risk free decision is that good information is not available, it follows that he makes his decision on the basis of hunch, guess, common sense and, if this is the case his success--if he achieves it; failures are not termed entrepreneurs--is based on what we may perhaps best call luck.

True enough, such decision makers may have certain kinds of experiences which give them insights others lack and which thereby decrease the risk and diminish the amount of pure luck involved.

But these experiences must be of a rather general nature, more in the nature of hunches or feelings than in the area of secure knowledge. Otherwise this experience would not be in the private possession of the decision maker but would be part of general knowledge, available to all and hence more in the nature of technical knowledge.[4]

In short, the most important decisions, that is, those that cannot be made by a technician, are made by lucky guesses (lucky, i.e., if they succeed). If the company is rich enough and the manager's position secure enough, the bad or unlucky decisions can be hidden, glossed over, or made to appear unimportant next to other more successful decisions. (A casual glance at company reports after a bad year will bear this out.)

None of this is meant to denigrate the contributions of such business leaders as Henry Ford or Alfred Sloan who made key innovations in technology and organization which others followed, adapted to other conditions, and improved upon. Such men were obviously able to see problems, assess possibilities, and risk change and their success in their own firms as well as the string of imitators who copied them are ample evidence of the significance of their innovations. They were able, to use Changler's terminology, to work out effective structures to match the strategy of their firms. Others had to follow or face the devastating competitive consequences.

The fact remains, however, that many of these key decisions

come to little more than a decision to try something to see if it works. This in turn, brings us back to Mr. Roy's very important analysis, for he shows very clearly that trying something to see if it works becomes increasingly difficult and dangerous in the face of the modern technology he describes. A number of conclusions seem clear:

1. The new technology requires new kinds of education for the managers if they are to understand it and assess its consequences.

2. The new technology narrows the options open to the decision makers. Mr. Roy informs us that "a balanced, continuous, automated, or cybernetic system cannot be dissected into its component parts; each and all are necessary, the aggregation becomes both the system and the operation." This, obviously, prevents trying out something piecemeal to test its results. The manager must decide to take it or leave it. The enormity of the ensuing consequences--whatever the decision--is clear.

3. The new technology makes management decisions more difficult because of the expense and the short life of the potential innovation.

4. The new technology multiplies astronomically the older problems associated with high overhead costs with the consequent high costs per unit of production when production is not at capacity or optimum levels. Therefore the need to have some control over the market so as to be able to introduce meaningful

planning becomes even more essential and this, inturn, introduces a key political dimension to the problem.

In short, Mr. Roy has introduced us to a range of problems which business historians have only begun to investigate.

II

Mr. Uselding's analysis of current trends in business history argues that what he calls the "organizational synthesis" is too narrow in scope. Paradoxically, Mr. Uselding argues that this narrowness of approach is evident despite the interdisciplinary nature of the work of the organizationalists. He maintains that work would achieve greater breadth if business historians adopted "a single disciplinary point of view and techniques," namely, economics. However, by economics, Mr. Uselding means the economic theories of Joseph Schumpeter and Thorstein Veblen rather than those of more modern theorists. Consequently he mentions no role for the new economic history to play in business history--and for good reason. For the strengths he sees in Schumpeter and in Veblen--the emphasis on process, on long-run developments--are presicely the shortcomings of the econometricians.[5]

Although Mr. Uselding does not denigrate the contributions of the organizationalists, he is skeptical that the "Weberian concepts of organization" can offer an adequate framework for the study of business history. First, he expresses his "doubt that one intellectual wellspring such a Weber is likely to offer a conceptually complete framework for treating all the issues that arise in

connection with large scale business enterprise and other institutions of interest." With this I am certainly inclined to agree, but I do so with some hesitation, first because I am not convinced that Messrs. Chandler, Galambos, and Cochran make this claim and second because Mr. Uselding offers neither analysis nor examples to show these inadequacies. He seems to be saying that the Weberian analysis does not have all the answers which is true enough, but such an assertation certainly does not give us any concrete insight into the shortcomings of this particular approach.

Mr. Uselding's second reason for being skeptical about the Weberian analysis is that he shares "some of Stigler's misgivings about interdisciplinary enterprise." In the interests of "exactness" and "precision" (and with the sacrifice of some breadth), he opts for what he calls a position "close to a single disciplinary point of view, economics." On this point, I would first like to shide Mr. Uselding a bit for his parochialism. Only an economist writing business history would call using economic theory a single disciplinary point of view. The historian using economic theory in his work would consider his approach as interdisciplinary as the historian using sociological theory in his work.

But my real criticism of this point is that the Stigler-Uselding "misgivings" about interdisciplinary work are simply unjustified. Our views of what constitutes a discipline change radically over time because of changes in method, subject matter, approach, and goals. For example, today many who call themselves

economists or physicists are as much mathematicians as they are economists or physicists. In most large graduate schools there are departments of statistics, computer science, and linguistics, but who would argue that historians, economists, or sociologists can be safely ignorant of these disciplines? An interesting and significant development in graduate schools in recent years reflects this situation. Graduate deans are finding that many students (particularly in the sciences at the moment, but the trend is spreading) are pursuing multiple masters and even Ph.D degrees. They do this not by starting their education over again, but mainly by using courses and training necessary in one area to get a degree in another. Thus, a student pursuing a Ph.D. in physics finds that in meeting the requirements of the physics department he also meets the requirements (or at least most of them) for an M.A. in mathematics or computer science or statistics--or all three. What this reflects, of course, is that what has evolved as individual discipline often requires interdisciplinary work as the discipline itself evolves. The formation of interdisciplinary committees which begin to grant degrees and then sometimes become separate departments is a reflection of the same development. In short, disciplines are alive and constantly changing.[6] To have misgivings about interdisciplinary enterprise is to adopt a static and very conservative position which says, in effect, that the wisdom that has created what is, is the best of all worlds.

Obviously, neither Stigler nor Uselding would carry their misgivings to the conclusions I have drawn, but by raising the issue in the way they have, they have made my strictures pertinent. I would argue that the only sensible approach would be to adopt the methods and the discipline necessary to solve a given problem and not be concerned about the question of whether interdisciplinary studies are in some abstract way either good or bad.

And this is precisely what Mr. Uselding quite correctly does. Having raised questions about the efficacy and the adequacy of the organizational analysis, he seems to turn right around and accept the fundamental features of that analysis via Schumpeter and Veblen and what he calls their "common bond of institutional analysis.' The effects of large scale production and complex technology on the entrepreneurial function, the decreasing importance of the market as the sole economic regulator, the "interaction between forms of economic behavior and the institutional environment," and the need to draw upon "the insights and concepts of other social sciences"--these Mr. Uselding argues are the insights and avenues of analysis that Schumpeter and Veblen shared. But these are the very features that give distinction and originality to the work of Cochran, Chandler, and others of the so-called organizational school.

I would conclude, then, by arguing that good business history will be best served not by arguments over the value of inter-

disciplinary work or over the relative values of a Schumpeter of a Weber, but by seeing the development of business within the context of general political and social history. What makes Schumpeter, Veblen, Smith--and I would add Marx--important is not simply their particular approaches but the fact that they all considered the particular in the context of the general. Good recent work in business history is good precisely because it recognizes this fact. We shall, of course, continue to require the detailed analyses of particular business firms but if these analyses are to be more than the raw data for later studies they must be set in a wider context. The great significance of the work of Cochran, Chandler, and others lies precisely in this area.

Business is part of an economic, social, and political system. If particular decisions businessmen make are often merely in the context of their own firms, the parameters in which these decisions take place are set by the system in which business operates. Nor are the decisions themselves merely business decisions: When the manager of a large conglomerate and multinational firm makes a business decision, it is usually a decision having profound social, political, and even diplomatic importance. In very different ways each of these interesting and provocative papers leads us to this important conclusion.

FOOTNOIES

I wish to thank my colleague Vernard L. Foley for his aid in preparing this comment.

1. Adam Smith, The Wealth of Nations (New York: Modern Library, 1937), p. 325.

2. Ibid., p. 712.

3. Ibid.

4. For an entertaining view of "irrationality" among the managers, see Graham Cleverley, Managers and Magic (New York: E. P. Dutton & Co., Inc., 1973).

5. I have discussed this point in detail in "Economic History and Economic Theory: The New Economic History in America," Journal of Interdisciplinary History, III (Autumn 1972), 323-350.

6. I should add also that disciplines (and their concrete reflection--departments) are often the result of more than pure scholarship. How many "disciplines" arise from the activities of empire builders, from the pressures of government and private granters of funds, and from political, judicial, or student pressures?