

POINT OF VIEW

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# Changes in the structures of U.S. companies: action implications for executives and researchers

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## Abstract

I draw primarily on two recent works to describe recent and ongoing changes in the business environment and in the structure of U.S. companies. Based on these changes, I describe what I see as action implications for executives and scientists, especially organization scientists. The first-described of the two works focuses on what today's large, traditionally structured companies must do to remain competitive in the changing business environment. The second work focuses on the proliferation of non-traditionally structured companies and on the effects of these companies on the more traditionally structured companies, and on society. My motivations for suggesting certain action implications for executives and scientists are two. One is that, as I will explain in some detail, some of these changes in the business environment are dangerous to businesses. The other is that a particular to-be-described change in the mix of structures of U.S. companies has seriously adverse effects on U.S. society.

**Keywords:** Environmental change, Organizational change and redesign, New organizational forms, Societal changes, Recommended executive actions, Recommended research directions

## Introduction

In this paper I suggest actions that executives and researchers should take or should consider taking in response to ongoing changes in the business environment and in response to some ongoing structural changes of U.S. companies. My motivation for this effort is that some of the ongoing structural changes have seriously adverse effects on U.S. society. My suggestions are prompted by two authoritative works that describe these structural changes. The first-described of these works (Galbraith 2012) is an article focused on the structural changes that today's traditionally organized companies must enact to outperform other traditionally organized companies competing in the same markets. The second of the works (Davis 2016a) is a book that focuses on the decline (in numbers) of traditionally organized companies, on the evolution of new organizational forms, and on the effects on society of these two phenomena. (These authors, and I, are more knowledgeable about business environments where free enterprise is prevalent than about other business environments. Thus what is said here extrapolates best to nations where free enterprise plays a significant role in the nation's economy).

### **The future of organization design**

I begin with Galbraith's *The future of organization design* (Galbraith 2012) because it reflects the interface between attention to then-current issues as contrasted with attention to the evolution of newer organizational forms. Galbraith (2012) describes new-to-them structural features that traditional hierarchically structured companies must incorporate into their current designs to outperform their similarly designed competitors. It describes primarily responses to recent changes in then-current organizational environments rather than responses to evolving and more novel environments. Thus, as the reader will see, it serves as a baseline for the subsequent piece by Davis (2016a). At the time that his article was published, Galbraith was President and Founder of Galbraith Management Consultants and had authored several books on organization design. In his earlier academic career Galbraith was a highly regarded scholar in the area of organizational information processing.

In his article, Galbraith (2012) first calls attention to four changes in the business environment and explains how each will cause large hierarchically-structured companies to become more complex. These environmental changes are: (1) technological changes associated with the Third Industrial Revolution (e.g. modern information and computing technologies and 3D printing); (2) the shift from an economy of mass production serving mass markets to an economy of mass customization and segmented markets; (3) increases in the number and variety of stakeholders; and (4) the need to accommodate market differences across regions and nations. Related to the matter of future changes in the business environment, Galbraith speculated that Big Data (see Readings on this subject) "could very well be the next strategic emphasis of future enterprise organizations" (Galbraith 2012, p.4; see also Galbraith 2014a,b).

As an example of how complex these new structures can become, Galbraith (2012) notes, with respect to (4) above, the creation and implementation of regional business unit teams which (1) focus on one particular region, (2) focus on one customer, (3) report to a global business unit, and (4) report to the several functional units at the top of the global business unit. More generally, to cope with their increasing complexity and the interdependence of their units, Galbraith suggests that companies should increase the scope of expertise in the Office of the CEO and enhance lateral communication. His suggestions for enhancing lateral communications are to exploit the growing variety and capability of information and communication technologies and to create a company culture of shared values and cooperation.

### **The vanishing American corporation**

Galbraith knowledgeably described and speculated about changes in a world where he had a great deal of experience – a world of large hierarchically structured companies and the business environment that they inhabited. In contrast, let us turn now to a description of a different world, the world described in *The Vanishing American Corporation* (Davis 2016a). The author of this book is another highly regarded scholar, known especially for his expertise in strategic management and in organizational change and redesign. He recently served as Editor of the prestigious *Administrative Science Quarterly*. His previous book, *Managed by the Markets: How Finance Reshaped America*, received the Academy of Management's Best Book of the Year award in 2010. Early in his book, Davis (2016a) calls our attention to a little recognized fact. "The number of

American companies listed on the stock market dropped by more than half between 1997 and 2012” (Davis 2016a, p.X). Why so? Phenomena that contributed, and still contribute, to this decline (in the number of companies) include foreign competition, mergers, acquisitions (some hostile), and the fact that newly founded businesses were and are more often being sold to existing companies rather than becoming independent companies that replace some of the companies that disappear (Davis 2016a). The current aggressively-acquisitive propensity of today’s giant corporations is also a factor in the ongoing numerical decline of companies (The Economist, 2016; Wooldridge, 2016).

One of the two most important features of Davis’ 2016 book is its enlightening explanation of how newly evolving organizational forms contributed to, and are increasingly contributing to, the demise of the traditionally structured multi-tiered companies listed on the stock market. While modern information and communication technologies enhance coordination in traditionally structured companies, Davis (2016a) explains how these technologies also often enable smaller, less complex companies to provide the same or similar goods or services as do traditionally structured companies – but at lower cost and/or more rapidly – and thereby grow in number. The other very important feature of Davis’ 2016 book is its explanation of how the changes in the nature, and in the mix, of organizational forms are also factors that contribute to unemployment, inequality, and declining upward mobility.

These smaller and less complex companies achieve lower costs and more rapid service by using modern information and communication technologies to draw on the capabilities of other companies or individuals to provide the less complex company’s missing business functions. What, specifically, are the structures of these small companies? Davis (2016a) describes two swiftly evolving structural forms: (1) a highly adaptive *prime-contractor network*, such as Nike, and (2) a *platform structure* that enables business enterprises to provide rapid customer service and to operate with extremely low labor costs, such as Uber.

#### ***Prime contractor networks***

Dynamic networks of contractors evolved in the 1970s and were described in 1986 (Miles and Snow, 1986) as a distinct organizational form. “Dynamic” implied fluidity in multiple features of a network, but principally its membership, contrasting it with a fixed network. The locus of authority may vary, but a network with a prime contractor with authority to add or delete members is most common. A prime contractor network is the organization structure chosen by many entrepreneurs, as it minimizes the capital required by the prime contractor to initiate production of goods or services. A network of contractors is also often the structure that remains after a traditionally organized company contracts out many components of its value chain and generally all of its components that are not part of its value chain. The network form enacts the idea that “companies should do just one thing really well – design, manufacturing, marketing, whatever – and collaborate with others for the rest” (Davis 2016a, p.70). Nike, the largest sneaker and athletic wear company in the world, “was a pioneer in recognizing that their value added was in design and marketing, not assembly” (Davis 2016a, p.2). Nike held on to the high value-added tasks. Davis refers to this process and its resultant structure as “Nikefication”. “Thanks to the Web and the increasing availability of contractors, vertical

disintegration has spread to nearly every corner of the American economy . . . Nikefication is now standard practice across corporate America” (Davis 2016a, p.77). Early in their evolution, in the 1970s, network organizations varied in the extent of their centralization of authority. Today it appears that networks with a prime contractor such as Nike are the most common. For the interested reader, I note that in his 2014 book, Galbraith first explores the network strategies and industry structures that influence which capabilities the prime contractor should own and build and then focuses on network design (see Galbraith 2014a, p.149-183). What features contribute to the increasing pervasiveness of contractor networks? There are three: (1) Nikefication enables a prime contractor’s top management to focus its attention on the business function in which the company has its competitive advantage, rather than focusing on a variety of business functions; (2) subordinate contractors gain the advantages of specialization (e.g., focused R&D) and often serve multiple prime-contractor companies, thus enabling the subordinate contractors to produce and sell their goods and services at prices lower than their prime-contractor customers could achieve themselves; and (3) prime contractors, by adding and/or deleting subordinate contractors, can adapt more rapidly to changing markets, changing technologies, and other changes in the business environment than can traditionally organized companies.

#### ***Platform-facilitated companies***

Another organizational form, relatively new in terms of its pervasiveness, is a platform facilitated enterprise, often designed to maximize the speed of customer service and/or to minimize labor costs. In America, Uber is currently the most conspicuous example of a platform-facilitated company. A platform is a specific combination of information and communication technology that connects different groups of people and allows them to engage in mutually beneficial exchanges (such as do Uber’s drive-partners and their customers). Uber’s “drive-partners are not employees (absolutely not!) but independent micro-entrepreneurs. They do not work for Uber: They work for themselves. . . . Such organizations provide the platform for a market that matches those who have tasks to do with self-starters willing to do them” (Davis 2016a, p.124, see also Davis 2016a, p.145) (parentheses enclosed phrase in this quotation is Davis’). “Amazon’s Mechanical Turk (MTurk) is another platform that offers ‘Turkers’ the chance to engage in ‘Human Intelligence Tasks’ (HITS) for a piece rate determined by how much they bid” (Davis, 2016a, p.124). It is important to note that not only do these platform structures reduce labor costs; they also exploit the capabilities of modern information and communication technologies to maximize the speed of customer service.

The generally flat and/or relatively simple structures of Nike-like and Uber-like companies provide a level of agility beyond that of traditional multi-tiered organizational forms. This feature, along with earlier-mentioned lower labor costs and fast service, is enabling such companies to contribute to the numerical decline of America’s corporations and other multi-tiered companies. (Such companies may have many employees, but Nike-like companies do not have nearly as many as they would have if they did not use subcontractors and Uber-like companies do not have nearly as many as they would have if they hired all of their partners as employees).

### **Implications for executives**

What are the implications, for executives, of the several important changes in the business environment described by Galbraith (2012) and Davis (2016a)? The answer to this important question fits within the answer to two other important questions – What are the forth-coming broad-scope changes in the business environment? What are the implications for executives of these broad-scope changes in the business environment?

### ***Major changes in the business environment***

Specifically, the current business environment is, and will become, even *more complex*, *more dynamic*, and *more dangerous* than ever before. Why more complexity, dynamism, and danger? *The growth in scientific findings* that occurred in the past few decades prompted and facilitated considerable growth in product development, the effectiveness of engineering technologies, and the variety and capabilities of manufacturing, transportation, and information and communication technologies. These phenomena in turn have led to availability of many *new products and services*. These new products and services have prompted, via entrepreneurship and intrapreneurship, *increases in the number and variety of companies* producing goods and services. These *companies* compete with each other. As a consequence of the increased effectiveness of transportation and communication technologies, *companies are more able to take markets away from each other*. In sum, today's business environment is *more complex* (increased number and variety of competitors), *more dynamic* (faster rate of arrival of new products and services and increased effectiveness of transportation and communication technologies), and *more dangerous* (increased capabilities of competitors following from increased effectiveness of transportation and communication technologies). These phenomena will almost certainly continue to increase (Huber 2004, p.15-44).

It is not only companies with traditional multi-tiered structures that are endangered by the increasing number of contractor networks and platform structures. Business organizations of all forms must be capable of adjusting quickly because the environments of all business organizations now contain an increasing number of very agile potential competitors armed with the weapons of fast customer service, low labor costs, and new or improved products. If an invader's move is not quickly identified and correctly interpreted, the associated delay – added to the time needed for decision making and decision implementation – can result in the loss of a market and perhaps the failure of the executive's enterprise. The implication that I draw from the above, and that dominates all others, is that today's and tomorrow's executives must create and formally maintain proactive processes that anticipate, identify, and interpret changes in their company's environment (Huber 2004, p.45-76). Of course deciding how to choose responses to externally generated threats and how to enact the associated remedial structural or process changes are also important and time absorbing. But these important procedures already exist in the repertoire of any experienced CEO or Executive Office. What will distinguish survivor companies from non-survivors will be their creation of, and attention to, early warning systems. These systems will be most effective if their manager is, or reports to, a high-level executive.

### ***Readings for executives and other managers (see References below)***

Burton et al. (2015); D'Aveni (1994); Davis (2016a,b); Eisenhardt et al. (2010); Evans et al. (2006); Galbraith (2012); Galbraith (2014a,b); Gawer and Cusumano

(2002); Gilad (2003); Huber (2004); Miles and Snow (1986); The Economist (2016); Wooldridge (2016).

In addition to its rich articulation and discussion of the changing mix of structural forms of U.S. business enterprises, i.e. fewer large multi-tiered companies, more contractor networks, and more businesses using platforms, Davis' 2016 book contains a second major contribution. Davis describes and explains at considerable length three important and negative societal outcomes of the decline in the number of large multi-tiered companies: (1) disappearance of the social safety net; (2) rising economic inequality, and (3) declining upward mobility. The existence of these adverse outcomes prompts my suggestions for studies by organization scientists, psychologists, and economists.

### **Implications for researchers**

I begin by suggesting research that assesses the effects – on employees, employers, and society – of decreases in the number of traditional hierarchically structured companies and increases in the numbers of dynamic networks and platform structures. Miles and Snow (1986) coined the term *dynamic networks* to emphasize that the contractor networks of which they spoke were changeful in their membership, strategy, structure (e.g. centralization of authority), and management processes. Prime-contractor networks fit within what was meant by dynamic networks.

### ***Effects on employees and employers***

The contractors in network structures generally have few hierarchical levels compared to the number of levels in traditionally organized multi-tiered companies. Thus few career ladders are available, resulting in less opportunity to move upward and improve one's status and income. What are the psychological and behavioral effects of these conditions? For example, what are the differences in employee productivity, absenteeism, and turnover, perhaps especially among professionals? What are the costs of such differences, if differences exist, to employers? Further, there is the issue of job stability. In contractor networks, are the prime contractors of the network more prone to delete organizational components than are traditionally organized multi-level companies? Put differently, is employment stability less for workers in contract networks than in complex organizations? Such seems likely, as prime contractors' experience and structure may enable them to replace the deleted functional component with a more suitable component more quickly and with less frictional cost than can a more complex multi-tiered company. If employment security is less for employees in contractor companies, what are the consequences in terms of mental health of employees or in terms of worker-initiated employer change? Regarding worker-initiated employer change, what are the consequences for employees who choose to manage their own career progression across employers?

The partners of an Uber-like platform company are not employees, have no physical workplace in the company's property, and are generally in competition with other partners at all times. They have no jobs, only tasks. What are the consequences of these conditions in terms of partner turnover and mental health? For many partners, it would seem that there would be a low sense of affiliation with the company or with their peers, and perhaps a low sense of alignment with a collective goal possessed by either

of these entities. What are the effects of such conditions? High turnover? Poor mental health? A positive sense of control and independence?

### ***Effects on society***

I suggested above that job loss might be more likely for employees of contractor companies. If so, a social consequence is unemployment, at least for a period of time. As network organizations become more common, it appears likely that society will encounter multiple financial and social costs associated with *increased unemployment*. Returning to the matter of the loss of career ladders, Davis convincingly explains (2016a, p.127-149) how the decline in the number of multi-tiered companies has contributed to *rising inequality* and *declining upward mobility*. These three conditions are outcomes of a variety of broad economic and societal factors, as explained by economists and other social science scholars (e.g., Thomas Piketty, Robert Reich, Jeremy Rifkin). Here we've seen, thanks to Davis (2016a), that changes in the nature, and in the mix, of organizational forms are also factors that contribute to increased unemployment, rising inequality, and declining upward mobility.

### ***Readings for researchers (see references below)***

Bird (1994); Evans et al. (2006); Frankel and Reid (2008); Ocasio (2011); O'Mahony and Bechky (2006); Schreyogg and Sydow (2010).

### **Conclusions**

The main conclusion of this paper for executives is that they must create and formally maintain three proactive processes, processes that anticipate, identify, and interpret changes in their company's environment. The relevance of this conclusion for the field of organization design is that researchers should attempt to discover or create, and articulate for executives, tangible, minimally abstract versions of these three proactive processes, versions that account for the moderating factors relevant to the firm's industry and other specific environmental factors. The main conclusion of this paper for researchers is that they should assess the effects — on employees, employers, and society — of (1) decreases in the number of traditional hierarchically structured companies and (2) increases in the numbers of dynamic networks and platform structures. The relevance of this conclusion for the field of organization design is that organization design does not have effects on only organizational performance and adaptability, but also on the (1) availability of society's social safety net, (2) economic inequality, and (3) upward mobility. To the extent that these effects are costly or otherwise negative to society, researchers must join policy makers in finding ways to alleviate these negative effects.

### **Competing interests**

The author declares that he/she has no competing interests.

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