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**A VIEW FROM THE USA: MANAGERIAL
CHALLENGES, TECHNOLOGICAL CHANGE,
SOCIAL TRENDS, AND THE COMING
AGE OF DEMOCRATIC HEROISM
IN THE 21ST CENTURY**

This paper is a “broad brush” attempt to understand the contemporary United States. Using a 1993 BusinessWeek article “The Virtual Corporation” as its point of departure the paper presents significant developments in economics, political philosophy, and technology over the last few decades and how they have redefined business, education and society in the United States of America. It concludes with an observation that these trends will converge into an age of democratic heroism.

To even the casual observer we are living in interesting times. It seems that every aspect of life, whether political, social or economic, is undergoing rapid change. Internationally, with the rise of China and Russia, the U.S., while preeminent, is no longer the world’s last super power. Technologically, the Internet is expanding from the “Internet of People” to the “Internet of Things,” where such mundane things as light bulbs and appliances will be connected to the Internet (Gershenfeld – Vasseur, 2014). General Electric has developed already a one billion dollar business on the Internet of Things (Hardy, 2014). Three D printing offers the promise of distributed research and development and manufacturing. (Gershenfeld, 2014; Vance, 2010) Socially, applications for smartphones and PCs structure social and work relationships, where individuals have more opportunity to interact but with reduced face-to-face contact. Economically, while we have numerous ways to conduct commerce, the individual seems to be left more and more to their own devices. Long-term employer/employee relationships and union membership are in decline and free market capitalism and libertarianism are increasingly accepted as the foundation of economic and political life.

In the United States, these trends, while developing for some time now, are perhaps harbingers of a fundamental reordering of the social economic and political life beyond anything we have seen in the recent past. For companies, this may mean a continuation of these deve-

lopments. For management, these developments will necessitate innovative new strategies to address opportunities resulting from the convergence of the underlying trends in the business environment.

The most elemental change is in the realm of technology and the Internet, a trend gaining momentum for at least the last twenty-plus years. Twenty-one years ago, BusinessWeek published a prescient article predicting the future of the business.

“You know the problems. They’re the stuff of Management 101. If you run a big, complex company, you battle every day to get things done faster. If you’re at the top of a small one, you often struggle to find the resources to make a difference.

In today’s world of fast-moving global markets and fierce competition, the windows of opportunity are often frustratingly brief. Few companies boast the in-house expertise to quickly launch diverse and complex products in different markets.

Ever hear of the virtual corporation? Before you roll your eyes, think again. In the view of many leading business thinkers, what sounds like just another bit of management-consultant cyberspeak could well be the model for the American business organization in the years ahead.”

The article envisioned a business world composed of a central business organization which provided direction and continuity. Around the primary business organization are temporary relationships and associations a firm could summon depending upon circumstances and needs. The new corporation would become an “evolving corporate model (and) will be fluid and flexible – a group of collaborators that quickly unite to exploit a specific opportunity. Once the opportunity is met, the venture will, more often than not, disband.”

Transaction Cost Analysis, Core Competencies and Organizational Decentralization

The BusinessWeek analysis is similar to Coase’s transaction cost analysis.

“(A)lthough production could be carried out in a completely decentralized way

by means of contracts between individuals, the fact that it costs something to enter into these transactions means that firms will emerge to organize what would otherwise be market transactions whenever their costs were less than the costs of carrying out the transactions through the market. The limit to the size of the firm is set where its costs of organizing a transaction become equal to the cost of carrying it out through the market. This determines what a firm buys, produces and sells.” (Coase, 1988, p. 7)

From Coase’s perspective, depending upon the cost of the activity, a firm has the choice of whether to perform it in-house or secure it by means of market transactions.

Similarly Ezrati argues,

“In the old model (large-scale formal organization)...the production process was linear. Each step depended entirely for its input on the output of another division of a single, overarching firm. Everything was located in close proximity. But as specialized, high-value production replaces mass production of relatively simple items, this structure will no longer serve... Firms increasingly will source and sell across a web of suppliers and buyers, not necessarily divisions of the parent firm.” (2014, p.89)

These developments have two profound implications: outsourcing and reengineering. Transaction cost analysis allows firms to focus on those activities vital to firm success and seek to contract the less vital or merely necessary to others, whose key activities are vital to them. Thus, the focus becomes core competencies and corporate strategy becomes the pursuit of core competencies that will insure the future success of the firm.

Prahalad and Hamel (1990) define core competencies as

“(t)he collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technology...

...If core competence is about harmonizing streams of technology, it is also about the organization of work and the delivery of value”

“...The skills that together constitute core competencies must coalesce around individuals whose efforts are not so narrowly focused that they cannot recognize the opportunities for blending their functional expertise with those of others in new and interesting ways”. (p. 28, 82)

The focus on core competencies allows a firm to concentrate on what it must achieve to become or remain successful. As Porter (1996) reminds us, strategy is the quest for long term competitive advantage, where advantage is not only doing things well but doing things in ways that are not easily duplicated.

The “Toyota Way” is a good example of how core competencies contribute to sustained competitive advantage. Everything done by the company is focused upon customer value (Liker, 2004, p. 9). Toyota is a good illustration of Peter Drucker’s admonition that the only purpose of a firm is to make customers because customers are the firm’s only justification to exist (1954, pp. 52–56). The ability to make customers and develop long term relationships with them is the essence of success. Through a firm commitment to customer value, Toyota has managed to forge operational excellence into a strategic weapon. While this may appear a contradiction to Porter’s warning not to confuse strategy and operations, Toyota has seamlessly intertwined them both. Every competence, R&D, marketing, manufacturing and so forth, focuses on customer value. Moreover, by using effectively human resources and focusing on a team approach, Toyota is positioned to be successful.

This is illustrated well by the launch of the Lexus luxury product line (Liker, 2004, pp. 43–50). The Toyota products were known in the marketplace as dependable though unstylish transportation. The luxury market is different. Toyota approached this segment differently. While they conducted the typical competitive product analysis of BMW and Mercedes to benchmark the industry leaders, which confirmed that the Germans focused primarily on quality engineering, Toyota also conducted consumer market research which indicated that, while the vehicle was indeed transportation, customers saw the product more as an accessory and status symbol. The result was an aesthetically pleasing car which redefined the luxury automobile market.

The work of the Lexus development team illustrates how specialties come together to produce competencies. Toyota assembled marketing, design, engineering and manufacturing personnel (skills and competencies) into teams to develop the product. Their human resources approach may be characterized as a modified or hybrid matrix management approach. Members were selected on the basis of both technical expertise and personality (a demonstrated ability to think innovatively). The approach was modified matrix management because, while team members can from particular functional groups, they reported directly to a project manager rather than to both the project and functional management. This eliminated conflict of interest and created conditions where everyone focused exclusively on the project.

The focus on the development of core competencies, exemplified by the Lexus example, illustrates how the development of capabilities and skills contribute to outsourcing. As firms

become more specialized in the activities which contribute to its success, they become willing to seek in the market those necessary functions that are not mission critical, but are core to other business. Consequently, firms outsource their data centers to technology companies like IBM, and now Amazon, and payroll, benefits administration and human resources to ADP, necessary activities but not core to most businesses. This process of outsourcing contributes further to the development of the “virtual corporation” because firm become less integrated and business becomes more decentralized with supply chains composed of many firms.

Technology, Reengineering and Disruption

In a recent article Justin Fox criticizes the continuing focus on disruptive innovation (2014). He argues that it is unlikely that small innovative companies will displace the large, successful ones any time soon. While acknowledging that disruption certainly takes place he embraces the idea that these occurrences are extremely rare. He goes on to support the idea that Christensen’s idea of disruption is overblown, since it is not as wide spread as Christensen asserts. He may be correct that the next free smartphone retail App may not displace Wal-Mart but Amazon started small and surely disrupted the retail industry and now cloud computing.

In the Innovator’s Dilemma Christensen (2000) analyzes the reasons why some well established firms such as Sears and Digital Equipment Corporation either lost industry leadership or failed completely. In his analysis there is a close connection between innovation and technology. Christensen defines technology broadly.

“(T)echnology... means the process by which an organization transforms labor, capital, materials and information into products and services of greater value. All firms have technologies... The concept of technology therefore extends beyond engineering and manufacturing to encompass a range of marketing, investment and managerial processes. Innovation refers to a change in one of these technologies.” (2000, p. xiii)

Innovation is important and perhaps easy to recognize after the fact. Amazon was indeed disruptive but to be so required a series of information technology innovations elsewhere. These are, but not limited to, innovations in computer components such as processor chips, integrated circuits, computers, communications and the world-wide web. Amazon was

founded in 1994 and went live in 1995. To do so it needed the processor chip innovations of Intel, founded 1968, the Internet, founded as the Arpanet in 1969 and the World-wide-Web in 1989, not to mention a host of other innovations that enabled them. What seems disruptive in retrospect is often a series of incremental, though connected, innovations that on the one hand enable an innovator to see possibilities but also present managerial dilemmas to established companies on the other. To Christensen's credit he recognized that innovations in one industry, when connected to innovations in other industries provide the visionary with the opportunity to launch something truly disruptive and revolutionary.

The IT innovations which allowed the launch of Amazon also underlie the reengineering championed by Michael Hammer and James Champy. This led to the "process reengineering," "downsizing" and "right-sizing" movements of the 1990s and beyond. According to Hammer and Champy IT innovations allowed for a fundamental rethinking of business organization which would lower costs, increase efficiency and make organizations more profitable and efficient.

Hammer and Champy urged managers to think differently. Instead of asking how technology would allow a firm to perform its current operations better, they asked how could new things can be done?

"Reengineering, unlike automation, is about innovation. It is about exploiting the latest capabilities of technology to achieve entirely new goals. One of the hardest parts of reengineering lies in recognizing the new, unfamiliar capabilities of technologies instead if its familiar ones...(T)he great power of mini-computers, and then PCs, did not lie in doing what large machines already did but in giving birth to entirely new classes of applications...(T)he real power of technology is not that it can make the old processes work better, but that it enables organizations to break old rules and create new ways of working – that is, to reengineer." (2001, p. 89, 94)

Reengineering may be viewed as an extension of Christensen's idea of organization as technology. IT allows the rethinking of how inputs are organized in on-going organizations, think clerical administration and engineering departments, and the creation of entirely new organizations and applications, think Facebook and LinkedIn. All this means a fundamental rethinking of human activity, organization and relationships.

There are several implications to the developments in IT and reengineering. Clearly these processes continue with little evidence of a slowing trajectory or velocity, which means a continuation of current disruption and its extension to other economic and social organizations

not yet seriously affected, e.g. higher education. It is difficult to predict how applications and hardware will develop or the many ways they will be creatively developed and deployed. “Thanks to advances in circuits and software, it is now possible to make a Web server that fits on (or in) a fingertip for \$1.” (Gershenfeld - Vasseur, 2014, p. 60) Equally important is that the process will be difficult to contain and control. While Fox may be correct that it is difficult for the upstart to dislodge the established; it is equally hard for the established to discourage a stubborn upstart. It can buy them, which seems to be an almost daily occurrence.

On the most basic level this means that more and more tasks, and perhaps not simply routine tasks, will be done by intelligent machines, with a new set of relationships between machines and people. Brynjolfsson and McAfee make a persuasive argument that we are now in the second machine age with the development of what they call brilliant technologies (2014). They argue that developments in computers and other digital advances are doing for mental power – the ability to use our brains to understand and shape our environments – what the steam engine and its descendants did for muscle power (pp. 7–8). For example, they cite IBM’s Watson as illustration of significant developments in computer pattern recognition to the point where a machine could win against game show champions and robots that will be able to work alongside humans, not only without the risk of injury but also to prevent harm (pp. 26–37). Jeffrey Immelt, General Electric CEO, sees a *rebirth of manufacturing* in the United States (2012). By applying computers and innovative organization methods using team work and technology, GE is reviving appliance manufacturing in a long dormant facility and hopes to replicate this elsewhere in the United States. This is in line with Brynjolfsson and McAfee’s observation that future employment will hinge on the ability of workers to interact with increasingly more powerful and capable computers and other intelligent devices. In other words, reengineering will continue, where both machines and individuals will need to have the skills and capability to complement each other. This takes Peter Drucker’s concept of the “*knowledge worker*” to a higher level (2001, 2006).

Drucker understood that the nature of work was moving away from physical to mental labor, from muscle to brain. This will change the nature of organizations as well as the relationship between employees and the firm and among knowledge workers.

“The center of gravity is moving fast from manual and clerical workers to knowledge workers who resist the command and control model that business took from the military 100 years ago. Economics dictates change, especially the need for large businesses, to innovate and to be entrepreneurs. But above all, information technology demands the shift.” (2006, p. 127)

Drucker is describing a highly decentralized organization where knowledge is specialized and contribution and responsibility are increasingly moving out from the center.

“Even if employed full-time by the organization, fewer and fewer people are “subordinates – even in fairly low-level jobs. Increasingly they are ‘knowledge workers.’ Knowledge workers are not subordinates: they are ‘associates.’ For, once beyond the apprentice stage, knowledge workers must know more about their job than their boss does – or else they are no good at all. In fact, that they know more about their job than anybody else in the organization is part of the definition of knowledge worker.” (2001, p. 78)

Drucker realized that knowledge workers may not be full-time employees, that technology was important and teamwork essential. Drucker’s recognition that workers may not be full-time employees adds an additional dimension to the process of decentralization.

“The debate over telecommuting ...raises an important issue, but it’s not simply about workplace flexibility or telecommuting, but rather the fundamental nature of work itself. By 2020, more than 40% of the US workforce will be so-called contingent workers, according to a study conducted by software company Intuit in 2010. That’s more than 60 million people.

We are quickly becoming a nation of permanent freelancers and temps. In 2006, the last time the federal government counted, the number of independent and contingent workers – contractors, temps, and the self-employed – stood at 42.6 million, or about 30% of the workforce. How many are there today? We have no idea since 2006 was the last year that the government bothered to count this huge and growing sector of the American workforce.

Traditionally, being self-employed used to come with a social stigma; you were self-employed if you couldn’t get a “real job.” Work was inconsistent and so was the pay. Today, the opportunities for contingent, project-based work are exploding, as is the development of tools that allow people to work independently across industries like software, design, marketing, legal services, architecture, healthcare, and engineering.” (Quartz Daily Brief, 2014)

These developments are truly significant and if trends continue more and more people will work non-traditionally. Adding Brynjolfsson and McAfee to the mix brings us the central role of the cooperative efforts of machine and worker as well as the possibility, and perhaps the necessity, of virtual teams working over space and time.

This makes education ripe for disruption. Similar to the developments that reengineered business, higher education is on the cusp of a radical transformation. Christensen, following his analysis in *The Innovator's Dilemma*, has applied his ideas to higher (2000). He had this to say in a recent Boston Globe Op-Ed piece.

“How important is disruption in higher education? Tuition costs have been ballooning faster than general inflation and even faster than health care. And what do we get in return? Nearly half of all bachelor's-degree holders do not find employment or are underemployed upon graduation. At the same time, employers have not been satisfied with degree candidates. Two recent Gallup polls showed that although 96 percent of chief academic officers believe they're doing a good job of preparing students for employment, only 11 percent of business leaders agree that graduates have the requisite skills for success in the workforce. And this is all occurring while higher education leaders were convinced that they were innovating all along.” (Christensen and Weise, 2014)

This situation will place more emphasis on education and educational institutions because the knowledge worker is someone who is not only educated but one who is able to adapt to a changing world through *life-long learning*. Educational institutions will, of necessity, become adaptive and dynamic because they are essential to individual, institutional and social success. In many ways education, especially higher education is stuck in pre-digital pedagogy and medieval statuses. To think that educational institutions are exempt from the changes and processes taking place elsewhere is naïve. To be fair, there are innovative faculty and institutions who are early adopters of *online pedagogy* (Kolowich, 2014).

The Southern New Hampshire model is so disruptive to the traditional educational model that it is worth quoting at length.

“As one of the first full-time faculty members at Southern New Hampshire’s online college, Ms. Caldwell taught 20 online courses last year: four at a time for five terms, each eight weeks long. The textbooks and syllabi were provided by the university; Ms. Caldwell’s job was to teach. She was told to grade and give feedback on all student work in 72 hours or less.

During her nonteaching term, Ms. Caldwell worked on developing a course of her own, in environmental ethics. She did all of that work from her home office in Virginia. She was paid \$55,000 plus benefits. It was a modest salary compared with those of professors at many other universities, but certainly a step up from the \$2,200 per course she was making as an adjunct.

Ms. Caldwell’s stint as a full-time instructor is part of a pilot program that Southern New Hampshire University has conducted over the last year at its College of Online and Continuing Education, an online arm of the university that serves 37,000 students, mostly working adults. The university wanted to see if having full-time instructors would improve student performance and retention, especially in writing-intensive courses.

The college, which now relies on a stable of 2,700 adjunct instructors to staff its online courses, says that the pilot was a success and that it will hire 45 full-time faculty members by the end of the summer, including some from its existing adjunct pool. This is a small but significant step for Southern New Hampshire, which has become a model for nonprofit universities building large-scale online programs.

Online institutions that serve nontraditional students are booming. Meanwhile, doctoral candidates vastly outnumber available tenure-track faculty jobs at traditional colleges. In such times, Ms. Caldwell’s experience may be the template for many doctoral students who aspire to a life in academe.

The new faculty members at Southern New Hampshire’s online college will not conform to the classic archetype. They will not enjoy the trappings of living and teaching in a college town; the faculty members will work remotely – sometimes hundreds of miles from the university’s headquarters, in Manchester, N.H.

They will not be encouraged to publish books or articles. If they “perish,” it will be because they failed to provide frequent, helpful feedback to students – a standard that the university enforces with constant monitoring and data-crunching.

None of the College of Online and Continuing Education faculty members will be on a tenure track; in fact, the college will decide each year whether to keep each faculty member around. But Gregory W. Fowler, chief academic officer at the college, says, “The assumption is that these people will be with us for a long time unless something goes particularly wrong.” (Kolowich, 2014)

There are several reasons why it will be difficult to resist the application of digital technology in education. As mentioned above, early adopters have embraced already online pedagogy. Economic pressures will also motivate change. There is a debate in the United States on the subject of the value of higher education. The cost of tuition has risen sharply over the years even as the number of full-time faculty has decreased and adjunct and non-tenure track faculty have increased. According to the Association of Governing Boards of Universities and Colleges in 1969, approximately 27% of faculty were in non-tenure track positions. By 2009, the number had increased to almost 67% (AGB, 2014). Even with the increase of contingent faculty, many without benefits, the cost of higher education continues to climb.

Student expectations will also demand change. Young people are often described as “*digital natives*” because they were raised with technology. They text, tweet, have Facebook accounts and so forth making them very comfortable using technology. They are also accustomed to the flexibility that technology provides. Well-constructed online courses provide students the opportunity to take classes when it fits their schedule rather than the registrar’s. Moreover, the technological world will most likely be their employment experience. This is not a trivial matter, especially when students are pressured to participate in extra-curricular activities and meet graduation requirements during their college experience, as well as the necessity of some students to work while attending school. Online courses, in addition, change the focus of education from the traditional, lecture pedagogy, where students sit passively in classrooms, to one where students more actively participate in their education, which compliments their digital skills and where *faculty roles must change from presenter to guide*. It is beyond the scope of this paper but this type of education may also require fewer research professors and more faculty equipped to work effectively in the new environment. Small wonder that many faculty are threatened by the new pedagogy.

In addition to satisfying student needs and expectations, online pedagogy offers a way to reduce costs and increase revenues. Cost reduction may be realized through decreased use of physical space, since online courses need not use classrooms as well as the ability to reach a larger number of students. Since flexibility is valued by students, an online course can enroll a large number of students at the same time without the need for significant physical space. If the course used a recording technology such as video taping, space would not be necessary at all. Furthermore, the use of analytics technology would allow faculty to monitor student participation, something more difficult to accomplish in large lecture halls.

Which leads us to MOOCs, Massively Open Online Courses. What was described above is what might be called a LOCC, a large online campus course, which eliminates the need for large lecture hall courses. MOOCs are controversial because of their low completion rates. True, but like many new, innovative technologies, they are both novel and incomplete. Think of the early PC which, by today's standards is primitive. It had a slow processor, little memory, and one floppy diskette drive. Today, PC processors are much faster and have gigs of memory, and terabytes of storage and are on the cusp of becoming displaced by mobile smart devices and cloud computing. Furthermore, what is possible for institutions of higher education is the extension of reach. Technology allows for both larger classes and a wider marketplace. Colleges and universities no longer need focus only on campus based education but can attract students from a much wider geography, even perhaps the world, through online pedagogy. Technology also allows the possibility of joint ventures among colleges to improve course offerings, share resources and so forth. For example, why does a multi-campus institution need to duplicate courses when one can serve several sites? Similar to the changes in business over the last decades, the educational world will change with independence and responsibility moving away from the center to the periphery. Along with fewer full time, benefited employees, there will be more contingent faculty, more student involvement in their education, more opportunity for them to take classes at multiple institutions and more pressure on resources and demands upon institutions. Indeed, it will be possible to obtain an education from virtually anywhere: home, coffee shop, wherever. If the United States is to maintain its leading position in higher education it will need to develop new skills, competencies and organizations. Given the past experience from other sectors of the economy and society, education will change fundamentally.

Free Market Capitalism and the Redefinition of the Individual and Society

Perhaps the most well-known principle of free market capitalism is Milton Friedman's admonition for a company to maximize profit (1970). While he limits this principle with

the qualification that it be done through the established rules of the game, the rules envisioned by free market capitalism give firms wide latitude in the pursuit of profit.

While this principle is important, free market capitalism is not simply an economic philosophy but more importantly a moral system demanding a complete reorganization of political, social and economic life. Both Friedman and Hayek, perhaps the most famous proponents of free market capitalism, demand a reestablishment of Nineteenth Century Liberalism, where the individual was paramount and the role of the state limited (Romar, 2009).

In the *Road to Serfdom*, Hayek criticizes planning as the worst form of social control and threatens the elimination of individual freedom. This is echoed in Friedman's *Capitalism and Freedom*. For Hayek, the fundamental social principle is liberty defined as "that condition of men in which coercion of some by others is reduced as much as possible in society" (Hayek 1960, p. 11). Similarly, Friedman argues that there is only one fundamental value in free market capitalism: freedom (2002, p. 12). Planning and the subordination of the individual to organizations limits freedom whereas the society envisioned by both Friedman and Hayek provides the most freedom because it expands the area of individual responsibility.

For Hayek,

"Most rules of conduct are thus not derived by an intellectual process from the knowledge of the facts of the environment, but constitute the only adaptation of man to these facts which we have achieved, a 'knowledge' of them of which we are not aware and which does not appear in our conceptual thought, but which manifests itself in the rules with which we obey in our actions. Neither the groups which first practiced these rules, nor those who imitated them, need ever have known why their conduct was more successful than that of others, or helped the group persist." (1976, p. 21)

Similarly, Friedman states:

"Historical evidence speaks with a single voice on the relationship between political freedom and free markets. I know of no example in time or place of a society that has been by a large measure of political freedom, and that has not used something comparable to a free market to organize the bulk of economic activity." (2002, p. 9)

When the first society started central planning they began the road to serfdom. When the first society started free market capitalism it began a journey toward freedom. For either

society the outcome was not known initially; now it is a well-established principle. However, it should be obvious by now that free market capitalism results in a far better and moral society because it produces more wealth through individual freedom and responsibility.

In a less well-known work, Hayek explores human psychology to understand how people develop their individual outlook. In *The Sensory Order*, Hayek develops his analysis of the individual from philosophy to psychology. In this work Hayek is attempting to understand human behavior on an individual level as well as attacking the behavioral stimulus response model (Caldwell, 2004, p 271). An individual's perception of the world is the result of the reception of stimuli from the physical world, through the sensory organs that result in the development of a perceptual map and model. Physiologically, our bodies will act similarly to stimuli. How an individual's reacts will be determined by their psychological map and model. The psychological map is the foundation upon which stimuli are categorized and understood and represents an individual's basic understanding of the world. Hayek argues that the map is semi-permanent, the result of historical experience, subject to gradual change and not completely identical to another individual.

“This ‘map’ of the relationships between various kinds of events in the external world, which the linkages will gradually produce in the higher nervous centres (sic), will not only be a very imperfect map, but also a map which is subject to continuous though gradual change.... The maps which will thus be formed in different brains will be determined by factors which are sufficiently similar to make those maps also similar to each other. But they will not be identical... the mere fact that for each individual the map will be subject to constant changes practically precludes the possibility that at any moment the maps of two individuals should be completely identical” (1952, p. 110).

The model is how the individual perceives a given situation and is based upon the map. In one sense the model is a map-within-a-map (1952, pp. 115).

While individuals may understand a given situation in a similar way, the understanding will not be identical. Several individuals can attend a sporting event, understand the rules governing how the sport is played and agree on who won the event. They may not, however, agree on what was the best part or most important play in the contest nor which team member contributed most because each individual may “see” the game differently. Different perceptions of the situation based upon individual maps and models can cause entirely different reactions and behaviors.

There are important implications of his view of human psychology. In the first place, there will be sufficient commonality in maps to allow individuals to participate effectively in a situation. Secondly, there are sufficient differences for each participant to understand and engage a situation in a different way. One person's reality will be different from another's. There are two further implications of this. If planned outcomes are desired, then agreement must be achieved through persuasion or coercion. Since individual maps and models are different, persuasion will have limits and coercion will be ineffective, immoral and doomed because it denies the diversity and richness of human behavior by imposing a single outlook on all. One important implication is the idea that individual maps are subject to gradual change over time and "factors which are sufficiently similar" can lead to similar outlooks. Since at least Friedman's 1970 article arguing for profit maximization, there has been a focus on profit maximization whereby today it is almost universally accepted in the United States. Since Regan's election in 1980 the mantra of libertarians, conservatives and free market capitalists has been a crusade against big government and for an increase in individual freedom and responsibility. Liberals have been on the defensive for years now.

Furthermore, if the perception of reality is relative to individual maps and models then morality must be relative to individual viewpoints. Beyond some basic abstract rules that can be known and accepted in a similar way by each individual, individual understanding and responses to situations will be different because each reality will have some different aspects. Simply put, each person's reality is both unique and correct.

The challenge, then, is to motivate individuals and channel their efforts productively socially and economically. For Hayek, market based societies, motivate individual self-interest, where self-interest does "not mean egoism in the narrow sense of concern with the immediate needs of one's proper person" (Hayek, 1948, p. 13). Instead, it should mean that individuals "ought to be allowed to strive for whatever they think desirable" (Hayek, 1948, p. 15). Not only should individuals be allowed to seek what they consider desirable; they must also be responsible fully for their choices and behaviors. When these conditions are met, all society should experience a more just and wealthy society.

The moral rules in free market capitalism are few, where its most basic rule is the respect of other people's freedom. Therefore, individuals in a society based upon free market capitalism must adhere to a respect for property, contracts and the rule of law to support both, beyond that they are free to pursue their individual self-interest. Friedman goes on to argue that one important implication is that free market capitalism expands both freedom and responsibility because it requires the individuals to take responsibility for their lives (2002, pp. 12–13). Freedom plays out in markets and everyone is free to participate or not, which means

that everyone is responsible for the quality of their own lives and develop their own moral compass. This is of fundamental importance. Neither society nor the state must legislate morality, especially rules redistributing wealth, nor seek any outcome other than the result of market competition. Markets should determine wealth and progress. Whatever the outcome of the individual pursuit of self-interest within free markets is both proper and moral. Or as Pope remarked: “One truth is clear, Whatever is, is right.” (Pope, Verse X, 2014)

Conclusion: The Coming of Democratic Heroism

Little could Bryne, Brant and Otis (2014) realize how prescient they were when they wrote in their BusinessWeek article, “If it becomes widespread, the virtual model could become the most important organizational innovation since the 1920s. That was when Pierre S. Du Pont and Alfred P. Sloan developed the principle of decentralization to organize giant, complex corporations.” Today, technology and the knowledge worker contribute to the potential of even more decentralization. Technological developments and transaction cost analysis demand it. The trend is for fewer people working in large organizations with lifetime employment and generous benefits, or any benefits. For example, according to the US Bureau of Labor Statistics, in 1980, 80 per cent of private sector US workers were enrolled in defined benefit pension plans. In 2011 the number dropped to 18 per cent. With the advent of individual retirement plans, we can expect this number to drop further. With the passage of the “Affordable Care Act” the number of employees covered by employer sponsored health insurance plans falls too (Irwin, 2014). While it is true that the Obama administration has published regulations preventing employers from ending their health insurance plans a new administration, legislation or court case could change the situation. Liberals view the passage of “ObamaCare” as the culmination of Roosevelt’s New Deal and Johnson’s Great Society. Ironically, however, free market capitalists can look at it as part of the foundation of free markets. When coupled with the end of employee pensions, a more universal health care system means that workers are no longer tethered to employer benefits packages and can move from one employer to another. Moreover, they can choose to work less than full-time if they wish because health care and retirement programs are available independent of employment, making them more free and independent, providing them the ability to develop their own, individual life style.

There are many definitions of democracy and a full discussion of the concept is beyond the scope of this paper. Two concepts are central to democracy: equality and freedom, both critical to any understanding of the term. Freedom means more than choosing one’s leaders.

It also requires a wide area of individual responsibility, where someone can make important choices and control their destiny. Contemporary conditions require individuals to assume responsibility for their future through the acquisition of the skills and capabilities necessary to secure their future. Politically, educationally and economically we can expect this trend to develop further. Say's and Schumpeter's definitions of the entrepreneur will help to understand how this may play out.

Say defines the term as

“(t)he knife-grinder’s craft requires no occupancy of land; he carries his stock in trade upon his shoulders, and his skill and industry at his fingers’ ends; being at the same time adventurer (entrepreneur), capitalist, and labourer. (Sic)

It is seldom that we meet with adventurers in industry so poor, as not to own at least a share of the capital embarked in their concern. Even the common labourer generally advances some portion; the bricklayer comes with his trowel in his hand; the journeyman tailor is provided with his thimble and needles; all are clothed better or worse; and though it be true, that their clothing must be found out of their wages, still they find it themselves in advance.” (Book I, Chapter V, para. 9, 10, translator uses the term adventurer instead of entrepreneur)

In this definition, the entrepreneur is an independent person who owns both his knowledge and the means to apply it, which is, in many ways, no different than today's knowledge worker. While the knowledge workers need employment, with their own tools, skills and knowledge they can be independent of employers, especially if there is no longer a good benefits package to attract them.

Schumpeter (1983) defined the entrepreneur as someone who creates new products, technologies and processes, which redefines markets, businesses processes and industries and results in new competencies and competitive advantages (p. 66). His *entrepreneur is a visionary and courageous individual, who finds delight in “getting things done, or simply of exercising one’s energy and ingenuity.”* (p. 93) Well-known entrepreneurs such as Jobs (Apple), Gates (Microsoft) and Bezos (Amazon) fit this definition and are heroes to many.

We can combine the two definitions into democratic heroism. A hero is some who attains a high purpose or noble end. Whether one fulfills Say's version and develops and preserves their competitive advantage in the labor market through the acquisition and maintenance

of knowledge, or Schumpeter's changing the world, all are equally heroic and markets provide the freedom to succeed.

"It's the freedom to get out there ourselves. It's the freedom without which we can never summon the ideas and images we need to meet the demands and opportunities of our markets. And it's more obvious sorts of freedom, too: freedom from stifling hierarchies, from organizational 'slots' and 'boxes,' and from the corpse of memory...

That, finally, is the message of this book: Free markets need free men and women to invent the future." (Champy, 1996, p. 205)

Or as Hayek put it.

"It is one of the greatest tragedies of our time that the masses have come to believe that they have reached their high standards of material welfare as a result of having pulled down the wealthy, and to fear that the preservation or emergence of such a class would deprive them of something they would otherwise get and which they regard as their due. We have seen why in a progressive society there is little reason to believe that the wealth which the few enjoy would exist at all if they were not allowed to enjoy it. It is neither taken from the rest nor withheld from them. It is the first sign of a new way of living begun by the advance guard" (Hayek, 1960, pp. 120, 130).

From a managerial perspective, the organizational assumptions, principles and processes need to change. Fluid and temporary organizational structures will need to be understood and deployed appropriately. Organizational cultures will need to change and the processes and institutions which transmit culture, such as educational institutions will need to evolve to perform this function. Motivational practices will need rethinking since the definition of employer/employee relationship and loyalty is evolving. Recruitment and retention practices will not only change but become mission critical to the organization. While organizations will continue to require core members to maintain continuity, membership will change depending upon business and skills needs. Furthermore, as companies need to acquire employees on a contingent basis they will need an efficient mechanism to identify candidates. The growth of professional social media in addition to LinkedIn could provide a method to identify candidates or teams of candidates who have the requisite skills to successfully complete projects.

“But there’s an area where signs are emerging of “different networks for different types of people”: professional networking. We’ll start with the obvious. LinkedIn is the dominant professional social network. It has become the system of record for the online resume for many professionals. And the growth of LinkedIn as a blogging platform shouldn’t be underestimated.

That said, it’s interesting to note some recent fundings (sic) of companies that could reasonably be called “LinkedIn for X.” Forty percent of all U.S. doctors are now on Doximity, a company that recently announced a \$50 million dollar funding round. Sermo and HealthTap play in this space, as well. None of these networks are exactly like LinkedIn, which is kind of the point. What doctors want and need (HIPAA compliance anyone?) is different from what other professionals want and why a site like Doximity might resonate with them more than LinkedIn.

Consider another area for professionals: People with previous military experience. RallyPoint is billed as “LinkedIn for the military” and recently raised a \$5.3 million round. Once again, they aren’t the only game in town, as startups like Hirepurpose are entering the fray. While LinkedIn has made admirable strides toward assisting veterans in finding employment (witness LinkedIn for Veterans), the growth of these vertical networks speaks to a market need. Finally, there’s a group of individuals where LinkedIn has struggled to find product-market fit over the years and it’s a big one: college kids. A notable vertical network here is Piazza, which recently raised an \$8 million round from Khosla Ventures. Piazza now has nearly a million college students leveraging its Quora-style Q&A platform and has very compelling engagement metrics.

The notion of a social network for every type of employee might be far-fetched, though. It’s not as if coffee baristas have a compelling need to join a network of other coffee baristas. Vertical professional networks are likely to be the most attractive to highly skilled knowledge workers. Think software engineers (GitHub), mechanical engineers (GrabCad), data scientists (Kaggle) and academics (Academia.edu and ResearchGate).” (Techcrunch.com)

It may not be farfetched, however, to suggest that the United States, and, perhaps, other parts of the world, are experiencing *a fundamental redefinition similar to the industrial revolution* where new, economic, social and political relations are being fundamentally redefined.

Proponents of free market capitalism can argue that should the trends discussed above continue and the United States continue developing on the path of increased freedom and individual responsibility, it will have little to fear from rising or reemerging powers. It will remain the most dynamic and innovative economy and society, and secure its leadership within the international community. More importantly, however, the United States will remain on course to realize its founding objective: to chart a new route to individual self-fulfillment based upon individual freedom and responsibility.

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