The Rise of the Digital Society, Generation Z, and Management Challenges in the 21st Century: A Review Essay

Shahid M Shahidullah*

Department of Sociology and Criminal Justice, Hampton University, USA

Submission: April 05, 2018; **Published**: April 26, 2018

*Corresponding author: Shahid M Shahidullah, Department of Sociology and Criminal Justice, Hampton University, USA,
Email: shahid.shahidullah@hamptonu.edu

Introduction

Many scholars believe that the nature of management and bureaucracy did not significantly change from what it was in the Egyptian civilization some ten thousand years ago, or in medieval church and kingdoms about one thousand years ago, or in the emerging days of industrialization about two hundred years ago. The older civilizations of Egypt, India, China, Greece, and Rome were built around complex bureaucratic organizations. The era of oriental despotism was vastly organized around hydraulic bureaucracies. But in no stage of civilization, man's societal existence remained so deeply embedded into organizational bureaucracies as it is at the present time. A modern society has been rightly described as an "organization society" [1] and modern man as an "organizational man" [2]. The prototype of modern organizations emerged when medieval kingdoms began to disintegrate paving the way to the rise of modern states, and large-scale industrialization began to replace the traditional family-centered modes of production at the beginning of the eighteenth and nineteenth centuries. Systematic studies on the nature of bureaucracy and management also began with the birth of social science in the nineteenth century.

One of the missions of classical social science was to examine the directionality of modern organizations and explore the predicaments of modern man within the emerging complex bureaucracies of the industrial-capitalist civilization in the west. It was on basis of the writings of such classical social scientists as Adam Smith, Saint Simon, Max Weber, and Emile Durkheim that a rational or a bureaucratic paradigm of management was discovered. In the realm of management, the whole of the twentieth century, in fact, was a debate with the paradigm of rational bureaucracy. The paradigm of management advanced by Max Weber, based on the history of social and economic transformation in Europe in the early nineteenth century, discovered the centrality of command and control, essentiality of hierarchy, rationality of technical expertise and written rules, and the compelling need for division of labor and role specializations. Weber further theorized that the rise of Protestantism, particularly its Calvinist variety, gave rise to a distinctive cultural mentality in the west and that was to apply science and technology in organizational management [3]. The modern organization, for Weber, was the institutional expression of this unique cultural mentality or what he called "instrumental rationality." Weber, however, alerted future management elites about the possibility of disenchantment with rational bureaucracy and the dehumanizing consequences of extreme hierarchy and rationality in modern bureaucracies.

In the first half of the twentieth century, the rational model of management was further refined by the discovery of the notion of scientific management by Frederick Taylor and Henri Fayol. In the realm of management, the whole of the twentieth century was, in fact, a debate with the ghost of Weber, Taylor, and Fayol [4-6]. From the 1950s and 1960s, the rational model of management came under serious attacks from a variety of social science perspectives including sociology, psychology, economics, history, and political science. From that time, ideas began to grow how organizations should be seen as a biological organism that evolves, grows, dies, and disintegrates. Conceptions began to develop to explore the human dimensions of management [7-10] and the role of information and ecology in shaping management styles and principles. Peter Drucker in the 1960s brought a new paradigm by calling to view an organization as a social system and not merely as an economic enterprise. Drucker invented the ideas of organizational ecology, human resource management, knowledge worker, strategic management, visionary management, and corporate culture [11,12]. In the 1980s and 1990s, ideas also began to emerge about "bi-sexual" workforce, diverse demography, and the expanding global market.

These conceptual developments brought social science much closer to management studies from the later part of the twentieth century [13,14]. The major context and the realities of management in the twenty-first century are the advent of the digital economy, the expansion of the social media, and the rise of a new generation of youths very different in culture, politics, and psychology. While the managerial leaders of today must always use and explore the conceptual gains and discoveries

of the past, they must also strive to develop a new paradigm of management in the context of the changing realities of the 21st century. The following section of this essay will examine some of the challenges of the digital society and the advent of the Generation Z to contemporary management.

Digital Society and Management Challenges

Digitalization—a process of integrating information communication technology to work, service, and production—has been rapidly expanding since the beginning of the 21st century. The process started in the 1980s, but it has been moving at an unprecedented speed with the birth of the third generation of internet connectivity through the web about ten years ago. It is estimated that out of the world's 7.3billion people, about 3.5billion are connected through the Internet [15]. The third generation of web—WEB-3—is making the world of work more connected, mobile, portable, global, open, and knowledgeable. It is estimated that today about ninety-eight percent of Americans, ninety-five percent of American college students, and ninety percent of the new millennial use the Internet. About seventy-three percent of households in America have broadband connections, and sixty-four percent of Americans use smart phones [16]. The advent and the advance of digitalization have brought enormous possibilities for organizational innovations, growth, and expansions. A report from the Mckinsey Global Institute [17] noted that "As digitization accelerates, the United States has a major opportunity to boost productivity growth. Looking at just three big areas of potential—online talent platforms, big data analytics, and the Internet of Things— we estimate that digitization could add up to $2.2 trillion to annual GDP by 2025, although the possibilities are much wider" (p. 8).

The rise and expansion of the digital society, however, have brought many challenges for the new managerial elites of the 21st century [18]. The first is the challenge of rapid integration to digitalization- the need for structural innovations from within to integrate the new generation of Internet and Web-3 technology. The McKinsey Global Institute's 2015 report rightly observed that "Competitive dynamics are increasingly determined by who develops the right digital assets. Sectors such as media are moving from physical to digital products, and companies in all types of industries are building massive data repositories. Among the most prized assets are digital platforms, such those created by Facebook, iTunes, eBay, Amazon, LinkedIn, and Airbnb" (p. 18). The rapid digitalization of organizations brings a challenge for creating a new digital workforce [17]. The challenge of the digital workforce is both internal and external. Internally, many organizations in the wake of digitalization will see a rapid displacement of middle-skill workers. It is estimated that by 2025 about 8-12 million jobs will be displaced from corporate America because of digitalization. Externally, the challenge is to recruit, train, and sustain a new generation of workforce committed to engaging in digital innovations in products and services, software and platform developments,

and advanced data analytics. This will particularly demand from today's managerial leaders' innovative programs of harvesting digital talents from all groups of people including women and racially and ethnically diverse groups of minorities [19,20]. For many mainstream managerial elites, the acceptance of the future profile of the digital-workforce, however, may need a significant change of the mindset [20-22].

The rapid digitalization has also brought a new challenge of digital security or what it is commonly described as cyber security. In the digital economy, the growth and survival of an organization are intimately connected to its ability to ensuring digital security. The creation, mining, and analysis of big data can bring enormous strategic advantage to an organization, but it must also be able to secure the data and privacy of the citizens. It is projected that "By 2020, over one-third of all data will live in or pass through the cloud. In 2020, data production is estimated to be 44 times greater than it was in 2009; experts estimate a 4,300 percent increase in annual data generation by 2020" [23]. With the rapid growth of data production, data breaches are also expanding at an alarming rate. In 2010, 94 million personal data were stolen from TJ Max; in 2013, 70 million data were comprised of Target; in 2014, 144 million data from eBay, 56 million from Home Depot, and 76 million from JP Morgan Chase were compromised; and in 2015, 80 million personal health-related data were compromised from Anthem. In 2016, personal data from 56 million Uber users were compromised. In 2016, about 50 million private data from Face book were stolen by Cambridge Analytica and its data mining results were used in support of a presidential candidate in the national election of 2016. In 2017, 145 million credit information and other personal data were compromised from Equifax. One of [15] recent Internet Security Threat Reports noted that about forty percent of data breaches in 2016 were related to personal financial information. The report further noted that the personal identity of about 1.1billion people was stolen by hackers in 2016. The growing problem of cyber security, so, is another major challenge for management in the advancing age of digitalization. The cost of cyber security is projected to be about $93 billion in 2018. A recent report from the McAfee Lab [24] described this challenge in the following way: "By increasing our use of predictive analytics, improving security visibility with both organizational assets and decentralized data, and reducing our use of dedicated agents, we can increase our effectiveness in the threat defense lifecycle" (p. 10).

Generation Z and Management Challenges

One of the major discoveries in social science is that every generation is unique in terms of its values, attitudes, choice, and preferences. The generation Z, described sometimes as the post-millennial generation, is qualitatively a very different tribe. According to one study [25], this unique tribe in the world as a whole is comprised of about 2.6 billion youths. Of them about "75 million…reside in the U.S.…and their ranks are diverse: 55%

Generation Z members nationwide are non-Hispanic Caucasians, 24% are Hispanic, 14% are African-American, 4% are Asian, and 4% are multiracial or other" [26] It is a generation very different from the baby-boom generation of the 1950s or the generation X and Y of the 1990s. This is a generation that has grown up with the expansion of the Internet and the social media—Facebook, Google, Twitter, LinkedIn, and YouTube. This is a generation that is socialized not just by their parents and schools but also by a generation of unique brands and corporations such as Starbuck, Uber, Apples, and Google [27,28]. The generation Z prefers virtual work and virtual communications. They are curiously engaged in virtual shopping and largely price-neutral. They are more oriented to cognitive innovations, critical thinking, and communicative competence through the virtual world. It is also a new "Leisure Class" [29]. They want to control their own time and schedules and design their own work pace and environment. The Generation Z, in a sense, brings a challenge to Maslow's paradigm of the "Hierarchy of Needs." This generation was born with the passion to begin their work, not with as much concern with physical safety and security as with "love, esteem, and self-actualization" [30]. They are also politically and socially more liberal. They are more diverse and more tolerant of racial, sexual, and religious diversities. They are more open and global, and more intolerant of racism, sexism, bigotry, and ultra-nationalism [31].

It is estimated that by 2019, the Generation Z will comprise about 30 million of U.S workforce. The advent of the new workforce of Generation Z is one of the vital managerial challenges in the workplace of the 21st century [32-34] The Forbes Coaches Council rightly claimed that in today's corporate world, the Generation Z cannot be grown and groomed with the age-old ideas of command, control, and hierarchy. They "crave flexibility and freedom," they demand "environments where they can thrive," they excel at change and adaptation," they do not want a "traditional workplace hierarchy," they are "multi-tasking self-starters" and they "need constant stimulation [pp. 1-3].

Conclusion

Social Science and Management in the 21st Century

From the days of the classical sociology of Max Weber in the late the late nineteenth century, the advent of the paradigm of "scientific management" by Frederick Taylor in the early twentieth century, and the birth of the concept of learning organizations by Peter Drucker [11,12] in the late twentieth century, social science has remained intimately connected to management studies, particularly to examine the impact of social, economic, and technological transformations on management. Peter Drucker [11,12] rightly asserted that some of the concepts and canons of social science must remain as the basic principles of understanding the complexity of management such as the notion of social systems and structures, the ideas of learning and cognition, the notions of cultural relativity and diversity, and the issues of social change and transformation.

Since the 1970s, social science has been consistently predicting about the emergence of a new type of society and a new civilization centering on new discoveries in science, knowledge, and technology. The emerging society from that time was being described in many terms such as the "post-industrial society", the "knowledge society," the "cybernetic society," and the "global village." With the birth of the Internet in the late 20th century and social media in the first decade of the 21st century, the world began to see the emergence of a civilization of a truly different kind. This is the age of digitalization—the virtual world of work, actions, dreams, and demonization—that brought in its wake a new breed of youths described as Generation Z.

The emergence of digital society and the rise of Generation Z are two of the major challenges for management in the 21st century. The advent of digital society will demand changes in the traditional modes of command and control, the old paradigm of the organizational hierarchy, and the conventional styles of harvesting organizational skills and innovations. In the age of digitalization, the survival and the growth of an organization will significantly depend on how it steers itself in the virtual world. The crucial task of an organization today is the harnessing of innovations by utilizing the Internet and the social media, recasting organizational visions and missions, and restructuring organizational designs and architectures. The twenty-first century began with the rise of a new breed of youths who are qualitatively very different from that of earlier generations. This new breed of youths—the Generation Z—has emerged with an entirely different mindset and a different culture. They live differently, and they value different things. Their skills, values, beliefs, perceptions, attachments, and attitudes are unmatched by those of previous generations. By 2025, the Generation Z will comprise most of the workforce both locally and globally. The generation Z is the catalyst for change and transformations in the digital society. The redefining of today's organizational visions, structures, and cultures by integrating digital technology and harvesting the skills and creativity of the Generation Z will remain two of the most significant challenges for management in the coming decades of the 21st century.

References

1. Presthus R (1962) The Organizational Society: An Analysis and a Theory. Random House New York, NY, USA.

2. Whyte W H (1956) Organizational Man. Simon and Schuster Publishing Company New York, NY, USA.

3. Weber M (2013a) Protestant Ethic and the Spirit of Capitalism. Merchant Books (abridged edition), New York, NY, USA.

4. Weber M (2013b) Economy and Society (Vols. 1-2). University of California Press Oakland, CA, USA.

5. Taylor FW (2014) The Principles of Scientific Management. Create Space Independent Publishing Platform New York, NY, USA.

6. Fayol H (1949) General and Industrial Management. Pitman Publishing Company London, UK.

7. Argyris C (1962) Interpersonal Competency and Organizational Effectiveness. The Dorsey Press, Homewood, USA.

8. Likert R (1961) New Patterns of Management. Harper and Row Publishers, New York, USA, pp. 273-275.

9. Mayo E (1960) Human Problems of an Industrial Civilization. The Viking Press New York, NY, USA.

10. Maslow A (1970) Motivation and Personality. Harper and Row Publishing Company, New York, NY, USA.

11. Drucker PF (2006a) Innovation and Entrepreneurship. Harper Business Publishing Company New York, NY, USA.

12. Drucker PF (2006b) The Practice of Management (reprinted from 1954 edn). Harper Business Publishing Company, New York, NY, USA.

13. Blau P (1974) On the Nature of Organizations. John Wiley and Sons Publishing Company, New York, NY, USA.

14. Etzioni A (1975) A Comparative Analysis of Complex Organizations. The Free Press (revised edn) New York, NY, USA.

15. Symantec (2017a) Internet Security Threat Report, Vol (23).

16. Mckinsey (2015a) Digital America: A Tale of the Haves and Have-Mores.

17. Mckinsey (2015b) Cracking the Digital Code: McKinsey Global Survey Results.

18. Anascombe J & Jamjoum AK (2018) Winning the Digital Innovation: Turning Scale and Legacy into Strengths.

19. Ibarra H (2015) Act like a Leader, Think like a Leader.MA. Harvard Business School Press, Cambridge, USA.

20. Hewlettt SN (2014) Brain Power: Leveraging Your Best People across Gender, Race, and Other Divides. Rare Bird Book New York, NY, USA.

21. Amabile T (2011) The Progress Principle: Using Small Wins to Ignite Joy, Engagement, and Creativity at Work. Harvard Business Review Press, Cambridge, USA.

22. Rigby D Sutherland J, Takeuchi H (2016) Innovation: Embracing Agile. Harvard Business Review, p. 40-50.

23. Lord N (2018) The History of Data Breaches.

24. McAfee Lab (2017) Threat Predictions Report.

25. Howland D (2017) How Generation Z is transforming the shopping experience.

26. LinkedIn Talent Solutions (2018) The Digital Workforce of the Future: Acquire, Build, and Grow Tech Talent.

27. Tulgan B (2013) Meet Generation Z: The Second Generation within the giant "Millennial" cohort.

28. Veblen T (2016) The Theory of the Leisure Class Create Space Independent Publishing Platform. New York, NY, USA.

29. Maslow A (2013) A Theory of Human Motivation (reprinted from 1943 Edition). Martino Fine Books New York, NY, USA.

30. Stilman D, Stilman J (2017) Gen Z: How the Next Generation Transforming the Workplace Harper Business, New York, NY, USA.

31. Koulopoulos T, Keldsen D (2016) Gen Z Effect: The Six Forces Shaping the Future of Business Routledge, London, UK, pp 256.

32. O'Boyle C, Atack J, Monahan, K (2017) Generation Z enters the workforce.

33. Forbes Coaches Council (2017) Generation Z: 12 Important Things Companies Need to Understand.

34. Symantec (2017b) Internet Security Threat Report. Volume 22.