Introduction

"I'm not a futurist. I only describe the present to the 98% of people who are not there yet."

— Richard Thieme, technology expert

In just twenty years, between 2000 and 2020, some 75% of our lives will change dramatically. We know this because it happened once before. Between 1900 and 1920, life changed. We moved from an agrarian farming way of life to an industrialized way of life. Now it is all happening again.

The way we work is changing. The way we live is changing. The way we learn is changing.

These changes are causing tremendous uncertainty, doubt, anxiety, and stress. Those of us who are adults grew up in the Industrial Age of the last century. We are now moving from a time in which we were fairly certain of the basic facts about life and of the rules that applied to it, to a time when we are not quite sure what is real and what is not real.

This ambiguity will be with us for another ten to twenty years. Living with the ambiguity, and feeling comfortable with discomfort, is not easy.

Our purpose in writing this book is to discover how our lives are changing, and to understand what lies ahead, by looking back at our great grandparents' generation, the generation that was alive during the last time society experienced such a dramatic change. We call this dramatic change in how we work, live and learn a "nine shift."

What Nine Shift Means

The term "nine shift" is used to describe the great changes taking

place in our lives right now. What we are experiencing in how we use our time and how we experience life derives from the phenomenon that nine hours in your day will be spent entirely differently in 2020 than they were spent in 2000.

There are 24 hours in a day. We have no real discretion with roughly 12 of those hours. We need to eat, sleep, and do a few other necessary chores in order to maintain our existence. That hasn't changed much through the centuries, so far.

That leaves approximately 12 hours a day where we, as individuals, do have some discretion. That includes work time, play time, and family time.

Of those 12 hours, about 75%, or 9 hours, will be spent totally differently a few years from now than they were spent just a few years ago. Not everything will change, but 75% of life is in the process of changing right now.

The same kind of change occurred between 1900 and 1920 as well. Frederick Allen called it "the big change" in his 1952 book by the same title. (1) We call it a *nine shift*.

What this means is that nine hours in your day will be spent entirely differently in 2020 than they were spent in 2000. That is an enormous change. That is a *nine shift*.

The last time we experienced this *nine shift* in society was between 1900 and 1920. The driving force of the last century, the 20th century, was the automobile. The automobile and the way the automobile was made — the mass production factory — shaped how people worked, how people lived, and how they learned, for the last 100 years. The auto is not a symbol for the 20th century. Instead, the car and the car factory literally changed most of life.

So many common features of life today would not have been widely present without the car. They include offices, suburbs, fast food restaurants, company organization charts, unified school districts, and many more aspects of life that are considered "standard" today.

People in society are so dependent on the car that to do without one for a week would be an enormous burden for the majority of us. We simply have no readily implementable back-up plan to working and living without a car, even for a week.

The car shaped and defined the 20th century. It had an almost negligible impact on the 19th century, and as we will see, the automobile is going into steep decline and will have a much reduced and non-dominant role in the 21st century.

Now there are arguably more important inventions than the automobile. Electricity and the printed book are two examples. But neither shaped the 20th century as the auto did. And neither were confined to the 20th century like the auto has been. Electricity had a much greater impact on society in the 19th century than the auto, and it will have a much greater impact on society in the 21st century than the auto. The importance of the printed book has continued for five hundred years, and even with the advent of digital communication it is unlikely that we will see its influence wane in the newest age.

As we will see, the Internet is behaving exactly the same way as the automobile did 100 years ago in its impact on society. The auto is not used here as an "analogy," which is defined as something "somewhat similar." Instead the influence of the Internet on our lives is exactly a replay, a mirror, of the influence of the auto on society 100 years ago. The outcomes will be different of course, but the forces and how those forces interact and change our lives, are the same.

This book is not really about the Internet. It is more about the consequences and changes of the Internet, about how the Internet is changing how we work, live and learn in this century. It is about the tremendous transition from one way of life to another that we are undergoing between 2000 and 2020.

To understand what has happened already in the 21st century, to understand what is happening today, and to understand what will be happening between now and 2020, all we need to do is to revisit the years 1900 to 1920.

Most all of the fundamental changes in our society in this century will take place before 2020. We know this because most all of the fundamental changes in 20th century society took place between 1900 and 1920.

In 1900 society was in the Agrarian Age. The predominant occupation was farming. A majority of people lived either on a family farm or in a small town (less than 2,000 people). We will explore more what life was like then, but most of us have little knowledge about life in 1900.

In just a short period of time, just twenty years, society went from being an agrarian society to being an industrial society.

By 1920, almost all of the major inventions of the century had seen the light of day. They included radio, movies, airplanes, the gasoline engine, and more.

About the only device to have a major impact on us that had not yet been invented was the television. Yet even there, "the visual language for television was established by 1920," according to television and communications expert Kathleen McMonigal .(2)

More importantly, by 1920, almost all of the major aspects of 20th century life had emerged. They include suburbs, commuting, offices, factories, the National Football League, women's right to vote, and possibly most importantly, the ubiquitous organization chart or pyramid.

So the time period to analyze is 1900-1920. Life in the 19th century before 1900 looked a lot like life in 1900. And life in the 20th century after 1920 looked fundamentally the same as life in 1920.

The leading business thinker regarding this metamorphosis from the Industrial Age to the Internet Age has been Peter F. Drucker, who invented the term "knowledge worker." Notes Drucker, "Both in its speed and its impact, the Information Revolution uncannily resembles its two predecessors within the past two hundred years, the First Industrial Revolution of the later eighteenth and early nineteenth centuries, and the Second Industrial Revolution of the late nineteenth century."⁽³⁾

Drucker notes, "The Next Society will be a knowledge society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its work force." And he concludes, "All this suggests that the greatest changes are almost certainly still ahead of us." In this book, we will take two magical mystery trips. One will be back to the time of your great grandparents (give or take a generation, depending on your age). The other magical mystery trip will be forward just a few years. Both scenarios will be very unfamiliar, both are equally exciting and ripe for exploration.

There are two halves in the period of transition from one society into another. The first half, the first decade (2000-2010), is characterized primarily by the unraveling of the old society. The second half, the next decade (2010-2020), will be characterized primarily by the reformulating of society around the new way. At the juncture of the two decades, around 2010, is the turning point from the old society to the new society.

Here are the critical time periods we will look at:

1990-2000 and 1890-1900

Technology first introduced. Intellectual excitement and creativity. 2000-2005 and 1900-1905

New way grows; old way becomes dysfunctional, but is still dominant.

2005-2010 and 1900-1910

Conflict and chaos as the new way challenges the old way.

2008-2012 and 1908-1912

Turning point in society.

2010-2020 and 1910-1920

Old way gives way to new way.

2020 and 1920

New way is clearly dominant and accepted. The old way is clearly in decline.

Some of these changes in life are fairly fundamental. For the sake of symmetry, we will describe nine of the most important changes coming and going on right now.

What we know, and what many other technology and economic experts have widely documented, is that the Internet, and the World Wide Web in particular, is a profound new technology that has already fundamentally affected our economy. We know that we are moving from an industrial economy to an information economy. We know that the number of knowledge workers is dramatically increasing and will become a significant part of the workforce.

From this, we are alone, at present, in predicting that all of these nine shifts are occurring and will become commonplace by 2020.

Shift One. People work at home.

Commuting to an office will become a rarity, a thing of the past. A significant part of the workforce will work from home or telecommute.

Shift Two. Intranets replace offices.

Offices will diminish as primary work places. Intranets will replace physical offices for most businesses, companies and nonprofit organizations.

Shift Three. Networks replace pyramids.

The basic organizational structure of life in the last century, the organization chart or pyramid, goes into steep decline. It is replaced by a superior organizational structure, the network.

Shift Four. Trains replace cars.

The automobile, the dominant mode of transportation in the last century, loses its dominance and becomes a peripheral and supplemental mode of transportation. Trains and light rail become the dominant mode of transportation.

Shift Five. Dense neighborhoods replace suburbs.

Suburbs, and suburban sprawl, come to a halt and then recede. Towns and cities are reformulated around dense communities composed of shops, stores and homes within walking distance of a light rail station.

Shift Six. New social infrastructures evolve.

The increasing inequality in wealth between the rich and the rest of society comes to a halt. The issue of inequality of wealth in society is addressed and a variety of social reforms are implemented to restore more of a balance in income distribution.

Shift Seven. Cheating becomes collaboration.

New values, work ethics and behavior of the 21st century take over. Boys are leading the change in values and behavior, just as they did 100 years ago.

Shift Eight. Half of all learning is online.

The traditional classroom rapidly becomes obsolete. Half of all learning is done online, changing the nature of how we learn and how we teach.

Shift Nine. Education becomes web-based.

Brick and mortar schools and colleges of the past century become outdated. All education becomes web-based, providing a better education for both young people and adults.

We will explore each shift in detail. Each one is a logical outcome of a whole series and system of forces that are set in motion by the dominance of a new technology. That new technology for us right now is the Internet and World Wide Web.

For our great grandparents' generation, give or take a generation depending on your age, the same system of forces were set in motion by the dominance of a new technology, the automobile, exactly one hundred years ago.

While the outcomes, of course, are different, the forces and the way the forces impact our work, life, and education, are exactly the same.

Future Predictions

None of the nine shifts described in this book are future predictions. They are all taking place right now and we see them and experience them on a daily basis. Thus Richard Thieme's comment rings true for us.⁽⁶⁾

While much of this book may seem to be future predictions, it is a present reality to us, our family, our staff, our organization, and to a fair number of others with whom we communicate. Julie goes so far as to say that what we are describing is not the present, but the past. A recent past to be sure, but that these changes have already taken place. Most of us just do not know it yet.

About Us

Julie Coates has lived in all three ages, the Agrarian Age, the Industrial Age, and now the Internet Age. She grew up on a subsistence farm in the rural South, and experienced the extended family, home-grown vegetables, fall canning rituals, and going to church three times a week. She watched as her father made the transition from the farm to the factory.

As "the world's oldest baby boomer," Julie is also an authority on the demographics of learning. She currently teaches an online course called Generational Learning Styles.

William A. Draves grew up in a family that was involved in the creation of the Industrial Age. His great grandfather started several factories, one of which became a Fortune 500 company.

He works from a home office, has created a virtual office for his organization, and teaches online.

Julie and Bill, along with Greg Marsello, form the senior management team for the Learning Resources Network (LERN), the leading association in the world in lifelong learning. LERN is currently the largest online provider of professional development for professors in higher education to teach online.

Beginning in 1995, Julie, Bill and Greg initiated the transformation of LERN into a virtual organization. Thus our research has evolved out of three engagements: a) a personal and family history interest; b) our work in leading several thousand providers of lifelong learning and continuing education; and c) our own organization's transition to a virtual organization, and to a structure that is positioned to operate effectively in the 21st century.

About This Book

The purpose of our research is twofold:

1) Business.

Nine Shift is a business book. It describes how your own work organization should change and transition into the Internet Age in order to remain viable and successful. After reading this book, you will understand the major shifts your work organization must go through to remain successful in the 21st century.

2) Personal.

To help you individually in your personal and emotional journey through the current period of uncertainty and ambiguity. Our lives are moving from a reality with which we grew up to an entirely new and unfamiliar environment. We each will need to live with that ambiguity as our lives change. After reading this book, your comfort level will increase about that ambiguity and you will feel better about addressing the personal challenges ahead.

Welcome to our story. Welcome to Nine Shift.