Introduction: New Rules of Business

The First Industrial Revolution used water and steam power to mechanize production. The Second used electric power to create mass production. The Third used electronics and information technology to automate production. Now a Fourth Industrial Revolution is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. These include artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. This technological revolution will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.

(Excerpted from an article by
Klaus Schwab, World Economic Forum)

I have found this excerpt to be prophetic and, therefore, wanted to use it to set the stage for Section 1 of this book and establish a connection with what's playing out in front and all around us. It is

important to understand that the velocity and magnitude of change we see in this digital age are unprecedented. I like to use the term VUCA (volatile, uncertain, complex and ambiguous) to describe this changing world around us. VUCA captures the essence of the digital age, and I have often used these two terms interchangeably across the book.

To win any game, it is important first to understand and master the rules of the game. It is the same in business. My submission is that the VUCA world or the Digital Age is very different from the world we have seen so far, and thus we need new rules of business to succeed. Therefore, I have focused Section 1 to understand what is different in this VUCA world/ Digital Age, why enterprises are facing challenges to adapt, and what new principles and approaches they should consider.

Some of the factors in the VUCA World that have led to this unprecedented velocity of change include – technology disruption, changing expectations of customers who are digitally savvy and demand high quality experiences and solutions, an explosion of data from multiple touchpoints, geopolitical uncertainty, shortening business and product cycles. 'Incremental thinking no longer works, If you don't think differently, someone else will and cannibalize you.' Therefore, we need a new mindset and set of principles to succeed in this digitally disrupted world or risk losing unrecoverable ground.

Most enterprises have embarked on some variation of Digital Transformation programs. However, the impact of these programs often falls short of expectations. There are many reasons for this, which we explore across this section, but the core issue is that enterprises have not recognized how much business fundamentals have changed in the Digital Age. They continue to take their existing business models, infrastructure, and approaches and apply it to digital age problems and opportunities. It is clear if you apply old world formulas to new world situations, your outcomes can only be sub-optimal.

In this section, I present the logical thread of how the fundamentals are changing, what are the challenges being faced and what should be the new principles and approaches at three different levels:

- First, the general level of VUCA world and overall implications for business
- Second, getting down to Digital Transformation
- Third, delving specifically into the technology elements of digital

Across these three levels, I see some common themes:

1. **It has to be an end-to-end transformation**. While technology is the key driver of digital, it is only one of the pieces of the puzzle. The success or failure is often because the other factors get missed. Strategy, Organization Structures, Processes, Talent, etc., have an equal and often more important role to play. End-to-end transformation can often be a cliché, but in this case, it is very apt.
2. **Strategy-to-Execution boundaries are getting blurred**. The pace of change in every aspect of the digital age, whether customer expectations, competition, or technology, is very high. Therefore, the traditional lines between strategy and execution, 'the what and the how', are blurring at all levels, whether business strategy or technology execution. This change from sequential to iterative feedback loops is a fundamental change. Every aspect of execution, from organizational structures to processes to infrastructure to leadership mindsets, needs to reflect that.
3. **Two-Speed Execution is essential**. Speed and Experimentation are key characteristics of the digital age. It puts a huge focus on execution and short-term impact. At the same time, the need to place long-term bets does not go away. You have to think big and bold, and not be stuck in the incremental. So you need both short-term execution and long-term bets. I call this two-speed

execution, and managing this duality across levels is essential to success in the digital age.

4. **Learning from Digital Natives**. Born in the digital age, companies like Google, Amazon, Apple, and others have been remarkably successful. Their success is not just founded on technology but on a new way of doing business. While every start-up is not a success and every legacy enterprise is not doomed to failure, I believe there is a lot legacy companies can learn from the digital natives.

I have tried to reflect these common themes across the chapters in Section 1.

Chapter 1: Winning in the VUCA World: Key Principles and Transformation Priorities for Enterprises

In this chapter, I have tried to provide insights into forces shaping the VUCA world and how the unprecedented velocity of change could be disruptive for many, but it also presents an opportunity to get ahead for those enterprises who are able to understand the new rules and transform themselves. I propose eight new rules of business, which I believe are essential for every enterprise to internalize and adopt.

Chapter 2: Digital Transformation in Business: An Introduction

In this chapter, I have tried to provide a better understanding of the key aspects of digital transformation. It operates at two levels, changing how a business interacts with customers using technology and leveraging technology to automate or digitize operational processes to drive greater efficiencies and reduce turnaround time. I also introduce the core steps of a digital transformation journey and the technology building blocks involved.

Chapter 3: Framework for Digital Transformation.

Part One - Six Reasons why Digital Demands a New Business Paradigm

As we move to the next stage of the digital transformation dialogue, it is important for us to be aware that the business impact of transformation initiatives has been underwhelming in a number of enterprises. Therefore in part one of the two-part series, I share my observations on the fact that a digital business is fundamentally different from traditional ones in at least six ways: the customer is younger and more demanding; there is an explosion of data; the velocity of change is unprecedented; technology is not a support function, it's at the core; a 'right the first time' approach does not work, and last, digital problems are highly interdisciplinary.

Chapter 4: Framework for Digital Transformation.

Part Two - Five Rules for Successful Digital Transformation

In part two of this two-part series, I propose that having recognized that drivers of digital are different, enterprises need a new mindset and a new approach to succeed. I have recommended a five - point action plan: rethinking the business model adapting to the needs of a digitally savvy customer, anchoring digital programs on business KPIs, harnessing the power of data, taking an integrated end-to-end approach, and implementing with a two-speed model

Chapter 5: Maximizing Returns from Digital Technology Investments

Part One – Why the Problems Persist

In the next two chapters, I shift gears and go deeper into the technology aspects of digital transformation. Enormous resources are

being poured annually into digital technology initiatives. However, there continues to be a gap between the promise and impact of these initiatives. The primary reasons for this are legacy processes and IT infrastructure that are not agile and unable to handle big data or other expectations of the digital age. If the current technology infrastructure and processes don't get upgraded, firms will be stuck trying to catch up and thus playing defense.

Chapter 6: Maximizing Returns from Digital Technology Investments

Part Two: Play Offence, not Defence

In this chapter, I lay out the high-level technology principles to address the problems identified in the previous chapter. To change the play from defence to offence and compete, legacy firms can learn from the digital natives. It should leverage the tremendous advancements in cloud technology and adopt a cloud-native architecture; build agile processes that enable experimentation, measurement and adaptation; and adopt a Two-speed approach to implementation.

Chapter 7: Building Scalable Models in the VUCA World: the CIO view

In my final chapter in Section One, I have tried to bring key insights from conversations with many CIOs. Most industry leaders realize that the VUCA environment is here to stay and that it has far-reaching implications across three dimensions: people, process, and technology. Digital transformation is an unavoidable organizational imperative in such an environment, so much so that **technology strategy has now become 'The Strategy'** for enterprises. The only way to Win in this VUCA world is to build a customer-centric organization with leaders as the change agents and with an agile

architecture that delivers high quality experience to the end customer.

This section is a clarion call for all of us to understand the impact of VUCA and the Digital Age, and the fact that time tested business strategies and assumptions need to be questioned, and you need new principles and approaches to be successful.