WHAT TO DO WHEN MACHINES DO EVERYTHING

HOW TO GET AHEAD IN A WORLD OF AI, ALGORITHMS, BOTS, AND BIG DATA

MALCOLM FRANK,
PAUL ROEHRIG, AND BEN PRING

WILEY

Contents

Preface		*ix*
Chapter 1	**When Machines Do Everything**	**1**
	Like It or Not, This Is Happening	*3*
	Digital That Matters	*4*
	Playing the New Game	*6*
	But Will I Be Automated Away?	*8*
	Getting AHEAD in the Age of the New Machine	*9*
Chapter 2	**From Stall to Boom: We've Been Here Before**	**13**
	When Machines Do Everything, What Happens to Us?	*14*
	But Haven't Our Computers Made Us More Productive?	*15*
	Carlota's Way	*16*
	Riding the Waves	*17*
	Three Big Reasons Why a Boom Is About to Occur	*21*
	From Stall to Boom, a Time of Optimism	*31*
Chapter 3	**There Will Be Blood**	**33**
	Predictions of Massive Job Losses via AI	*33*
	Manual vs. Knowledge Labor: As Goes the Factory, So Goes the Office?	*36*
	Don't Confuse Jobs with Tasks	*38*
	Don't Overlook the Job-Growth Story	*40*
	The Pace of This Transition	*42*
	Getting AHEAD in a Time of Churn	*43*

Chapter 4 **The New Machine: Systems of Intelligence** **45**
Defining the New Machine *46*
Meet the Machine: Anatomy of a System of Intelligence *50*
Systems of Intelligence in Action *56*
What Does "Good" Look Like? Attributes of a Successful System of Intelligence *59*
From Vapor to Value *63*

Chapter 5 **Your New Raw Materials: Data Is Better than Oil** **65**
Turning Data from a Liability into an Asset *66*
Managing the Data Supply Chain *68*
Business Analytics: Turning Data into Meaning *70*
If It Costs More than $5, and You Can't Eat It, Instrument It! *71*
The Home-Field Advantage of Big Companies *73*
Data Is Job One *76*

Chapter 6 **Digital Business Models: Your Five Ways to Beat Silicon Valley** **77**
Hybrid Is the New Black *81*
Avoiding the Four Traps *82*
Five Ways to Mine Gold from the New Machines *90*
The Management Opportunity of a Generation *92*

Chapter 7 **Automate: The Robots Aren't Coming; They're Here** **95**
Automation Is Not Optional *96*
Software Should Be Eating Your Core Operations *102*
What to Do on Monday? Flick Your Automation-On Switch *107*
Automation Is a Means, Not an End *113*

Chapter 8 **Halo: Instrument Everything, Change the Game** **115**
Every "Thing" Is Now a Code Generator *116*
Become a "Know-It-All" *120*
What to Do on Monday? Capitalize on Code *124*
Digits over Widgets: The Next Age of Business and Technology *132*

Chapter 9 **Enhance: Amplify Human Performance with the New Machine** **133**
Stone Age, Bronze Age, Iron Age . . . Digital Age *135*
Enhanced Jobs Will Be Protected Jobs *136*
Smart Robots Make Smarter Hands *141*
What to Do on Monday? Partner with Systems of Intelligence *145*
You + New Tools = Enhancement *151*

Chapter 10 **Abundance: Finding Your 10X Opportunities with the New Machine** **153**
What to Do on Monday? Find Abundance in Your Organization *157*
Increasing Prosperity by Lowering Prices *165*

Chapter 11 **Discovery: Manage Innovation for the Digital Economy** **167**
R&D Without AI Is No R&D at All *171*
Discovery Is Hard, but Not as Hard as Being Irrelevant *176*
What to Do on Monday? Don't Short Human Imagination *176*
Create Your Own Budding Effect *185*

Chapter 12 **Competing on Code: A Call to Action from the Future** **187**
AI for Pragmatists *188*
The Digital Build-Out Is Here *189*
Align the Three M's *190*
Move AHEAD *191*
Courage and Faith in the Future *192*

Acknowledgments *195*
Photo Credits *197*
Disclaimers *199*
Notes *205*
Index *223*