



WORK
TO
LEARN



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A photograph of Heather E. McGowan, a woman with curly hair and glasses, wearing a black and white striped sweater. She is holding a small black object in her right hand and gesturing with her left hand. The background is a blurred stage setting with a white screen.

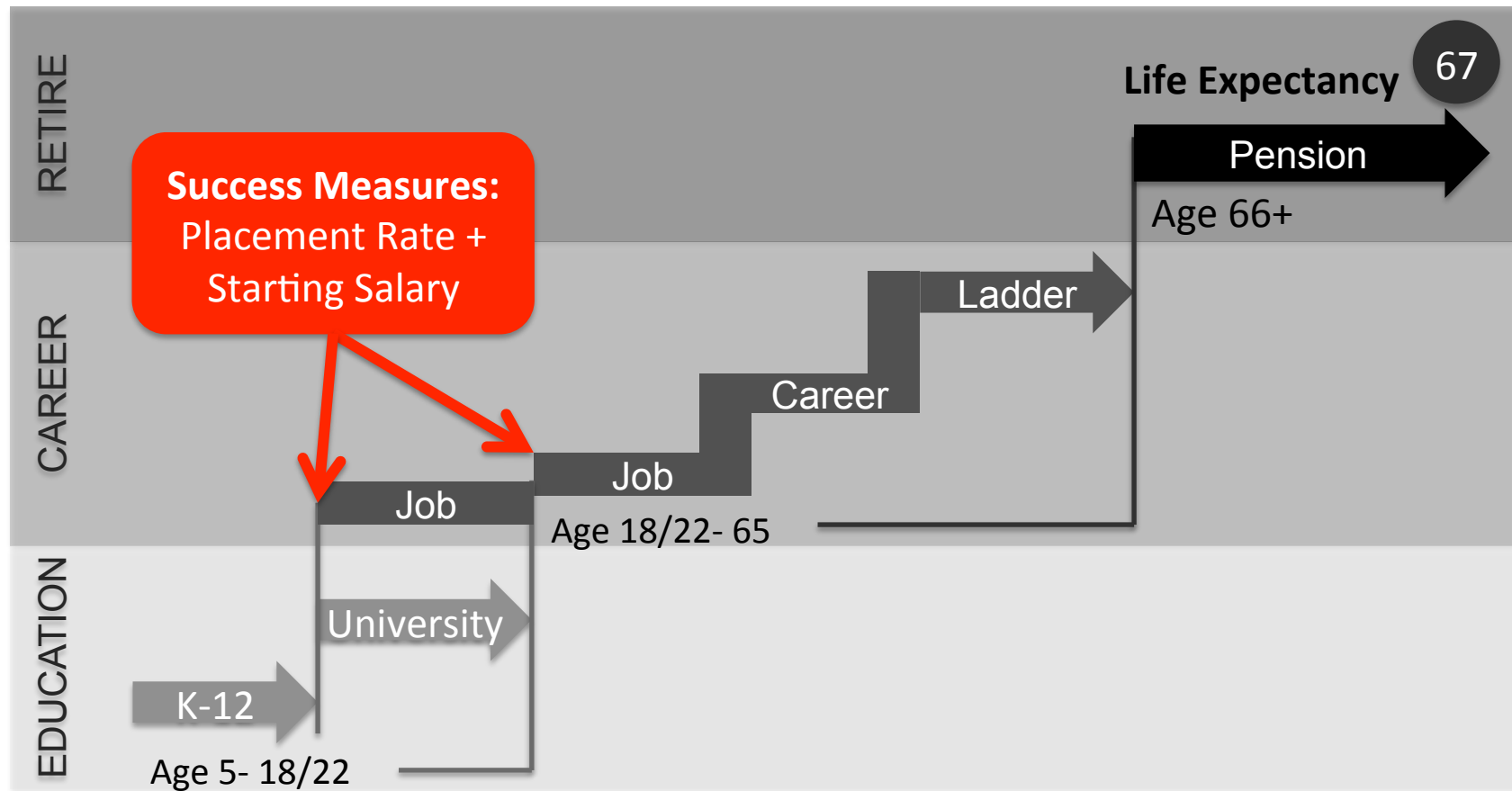
Heather E. McGowan

Roles:	Consultant Author Keynote Speaker
Focus:	Future of Work + Future of Learning
Clients:	Corporate and Higher Education
Passion:	Explaining Shifting Context

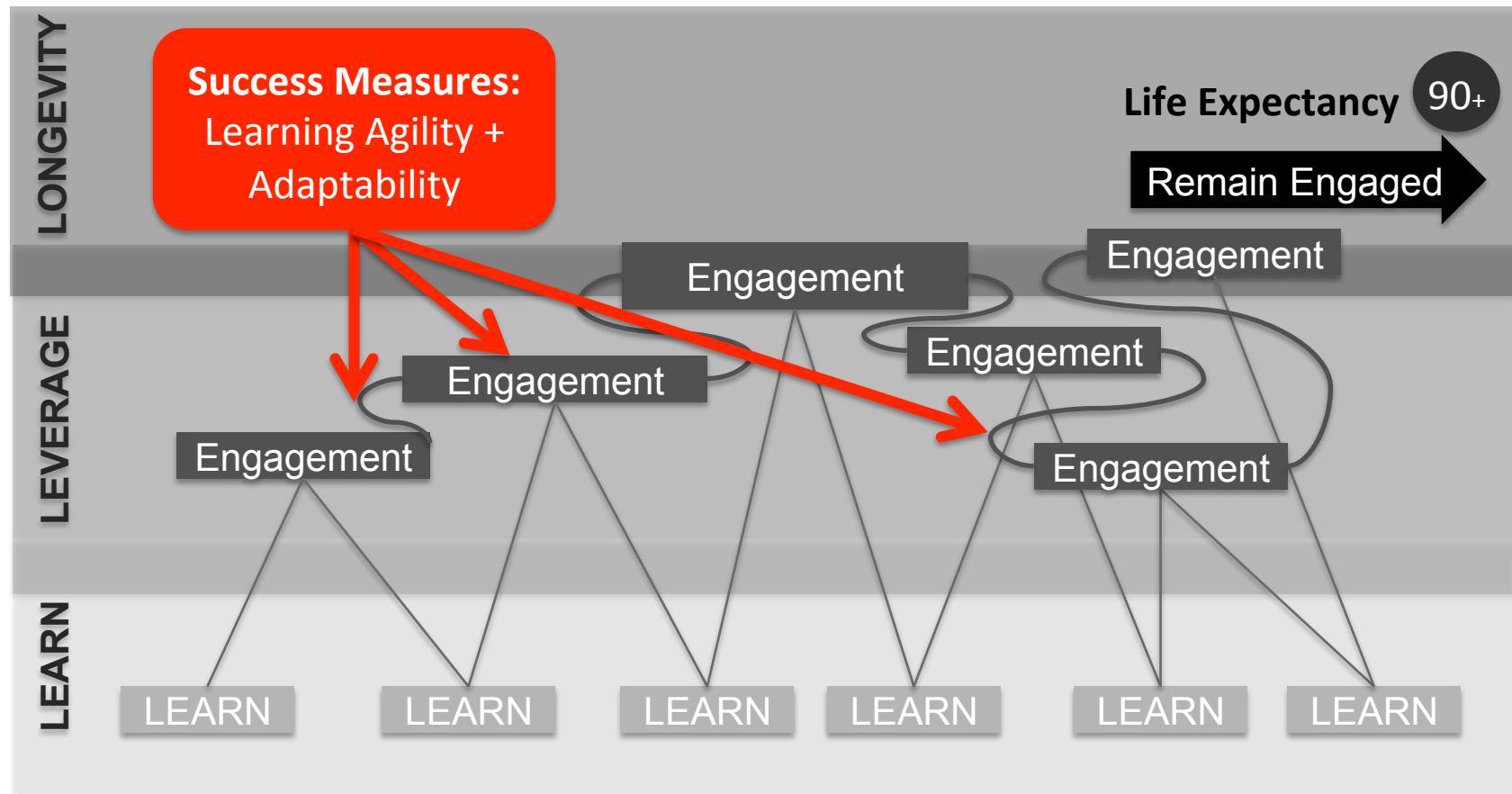
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NATURE OF WORK: Old Economy Paradigm (Context)



NATURE OF WORK: New Reality Paradigm



PAST: We Learned (In Order) To Work,

NOW: We Must Now Work (In Order) To
(Continuously) Learn.

CONTEXT

CONTEXT: What is Small Business



Small Business = >500 Employees

# of Employees	0	1-4	5-9	10-19
Employees	N/A	6 M	6.5 M	8 M
Revenue/Firm	\$44k	\$400k	\$1.2 M	\$2.4M
Total Revenue	\$1 T	\$1.4 T	\$1.2 T	\$1.4 T
# of Entities	24 M	3.6 M	1 M	600,000
2007	22 M			
1997	15 M			

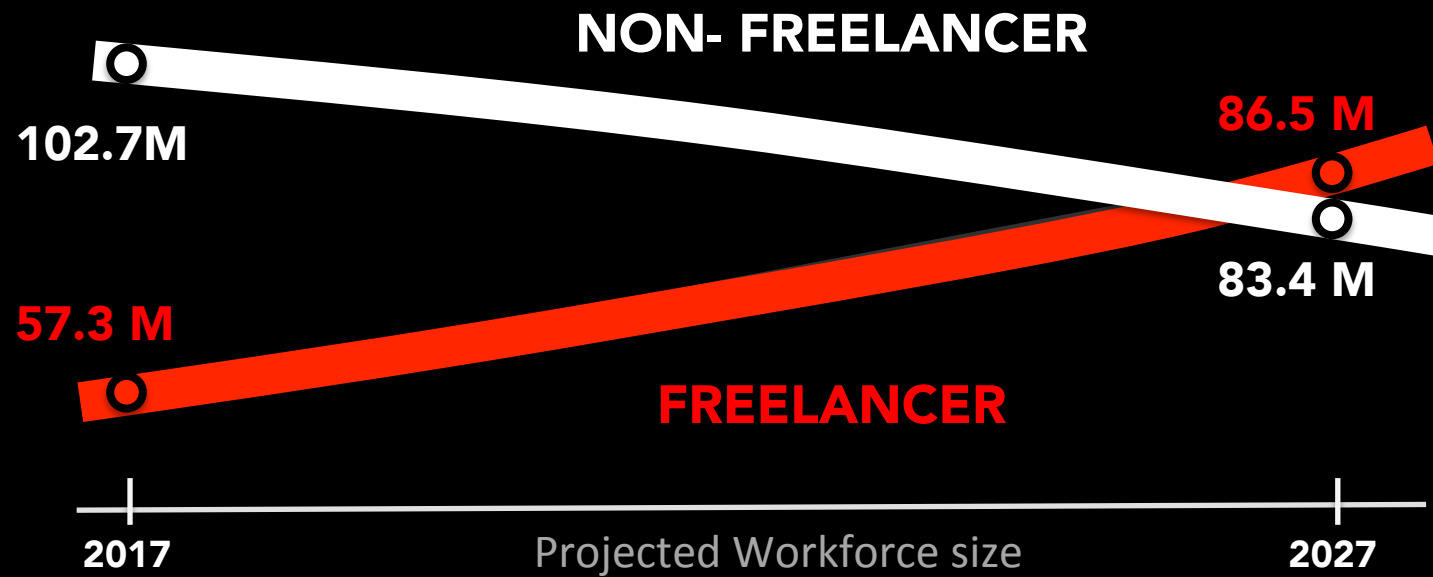
Companies with Zero Employees

Data: US Census 2014

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CONTEXT: The Majority Of Workers Will Be Freelance By 2027

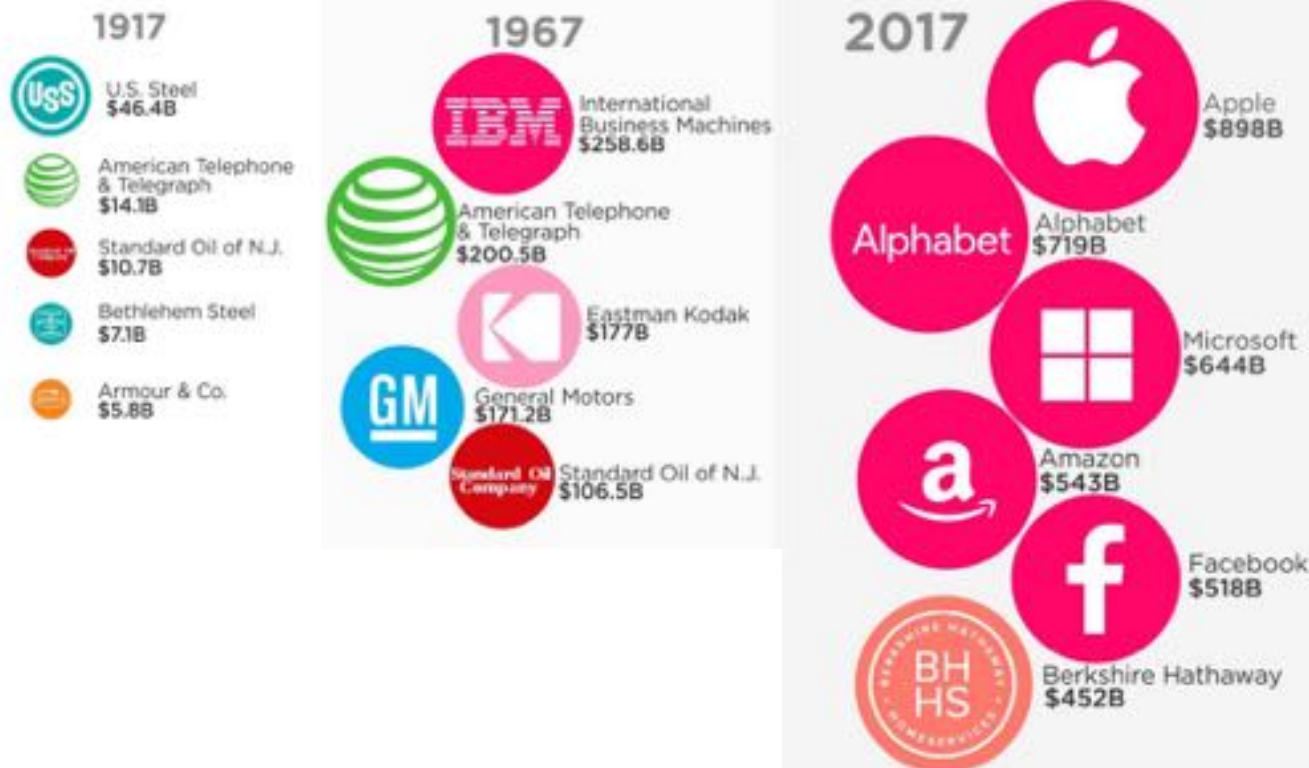


Data: Freelancers Union and UpWork (World Economic Forum)

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CONTEXT: Largest Companies (Market Cap) of The Last 100 Years



Graphic: Visualcapitalist.com

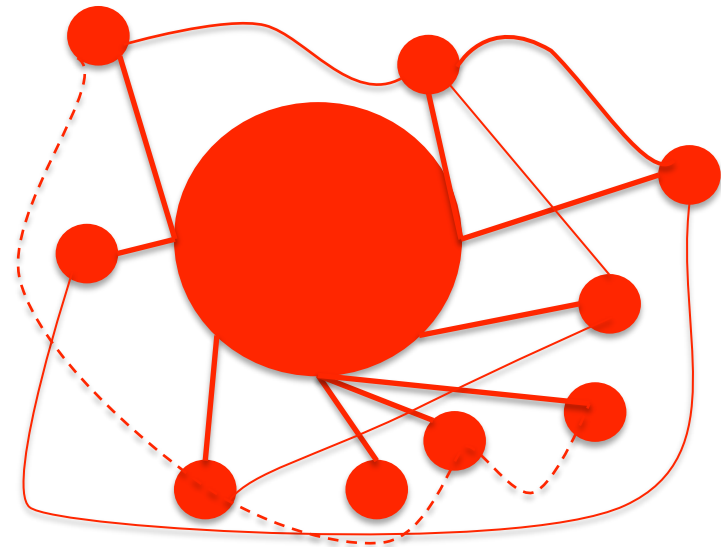
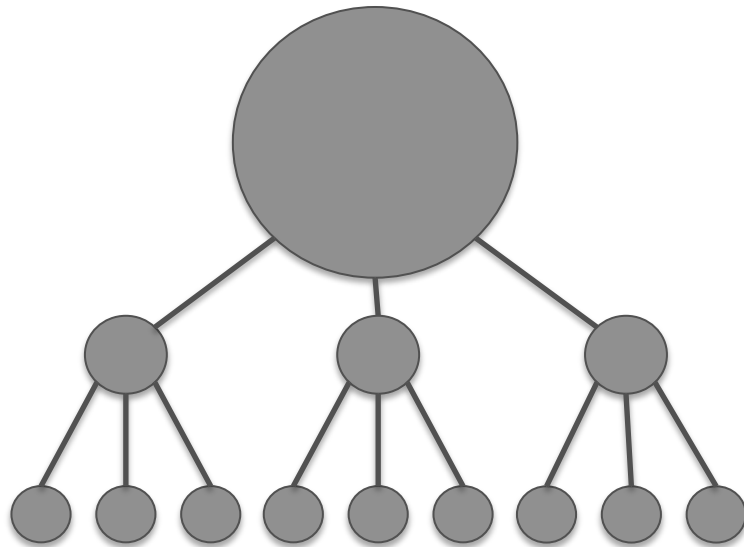
Concept Credit: Scalable Production vs. Scalable Learning (John Hagel, Deloitte)

1917:
Value Extraction
Of Natural Assets

1967:
Human Made Assets
(Scalable Production)

2017:
Rapid Reinvention of
Digital Assets
(Scalable Learning)

CONTEXT: Our World Was Complicated But It Is Now Complex



COMPLICATED



COMPLEX

Context: The Road Ahead

Past 10+ Years



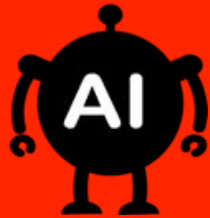
Internet
1995



Smart
Phone
2007



Automated
Manufacturing



Process AI



Advanced
Materials

Next 10+ Years



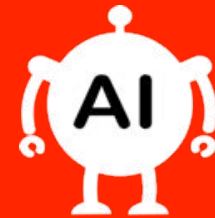
Robotics



Driverless Car

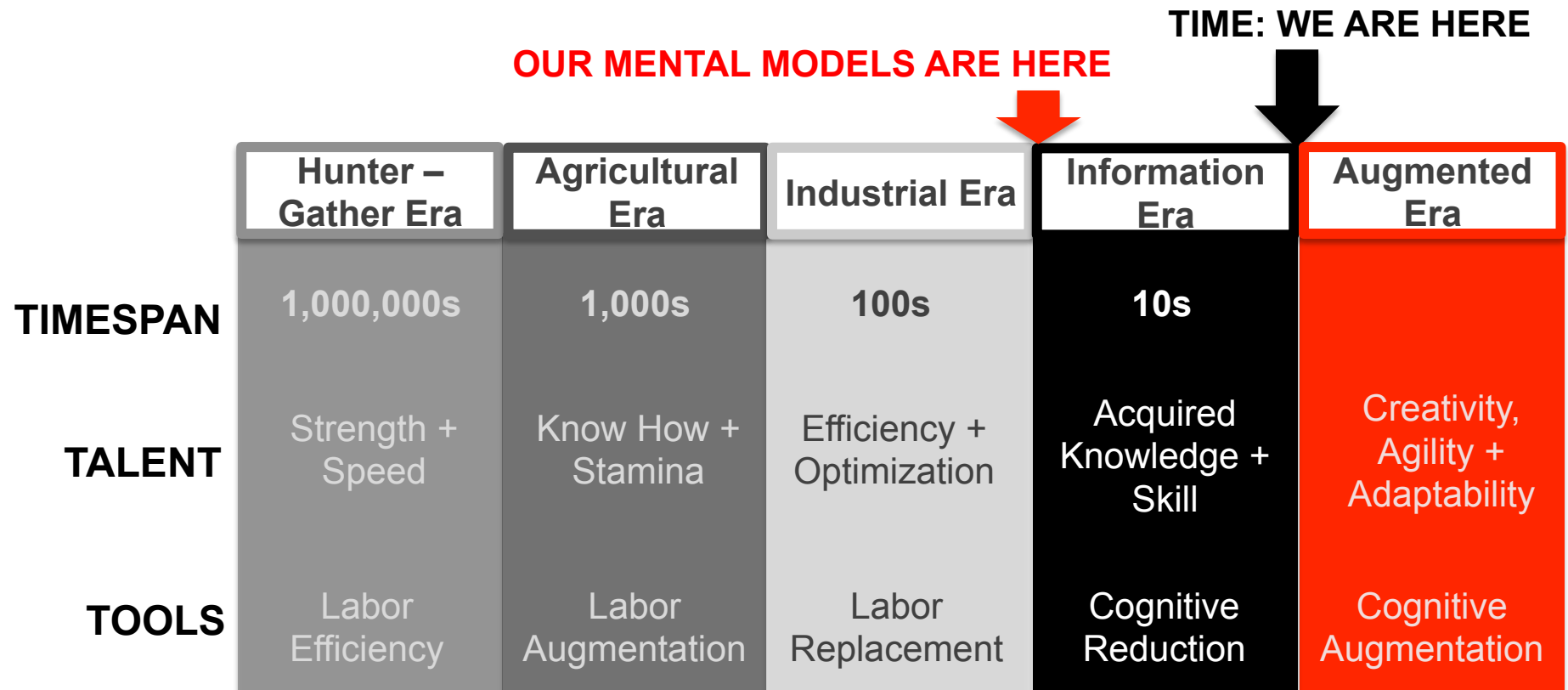


Internet of Things



Social AI

Context: Talent Shifts in The Next Era

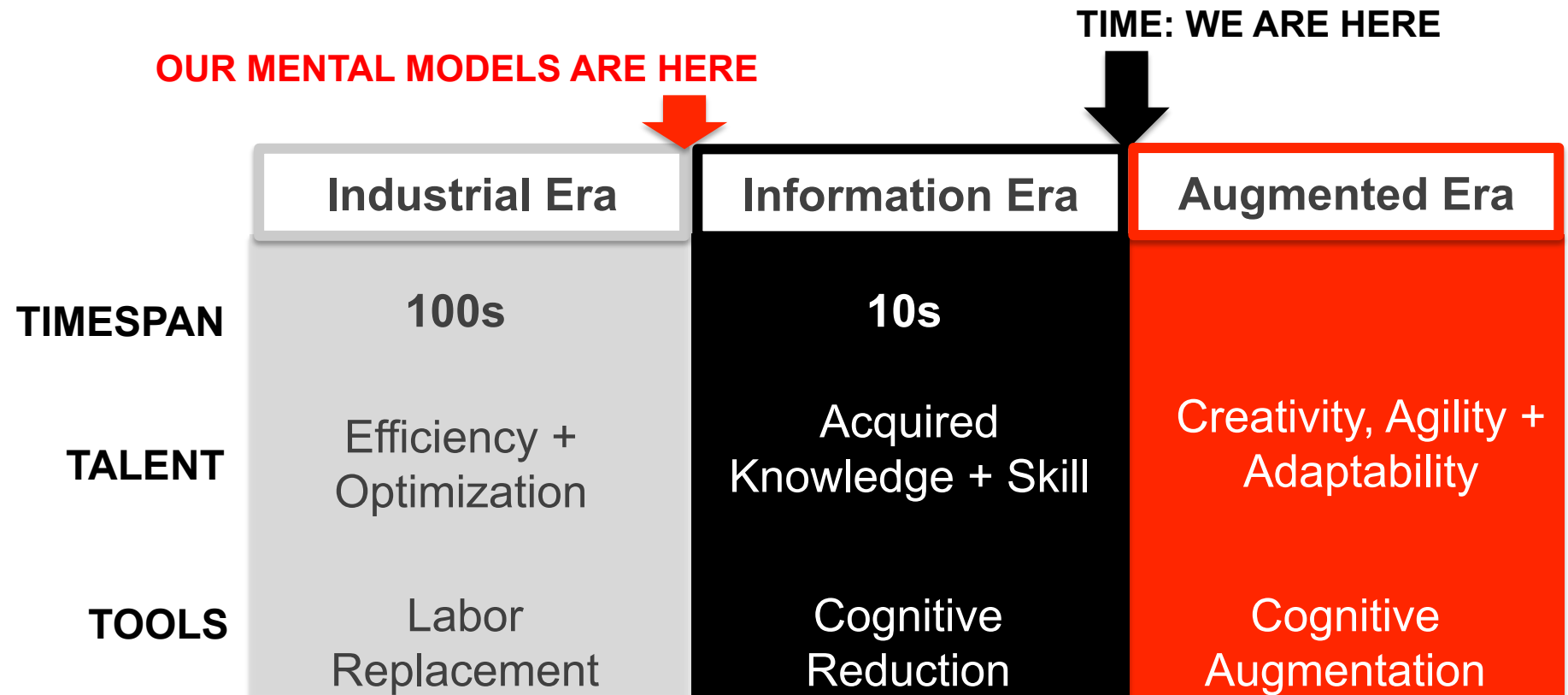


Concept of Augmented Era © Jeff Kowalski, CTO Autodesk

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Context: Talent Shifts in The Next Era

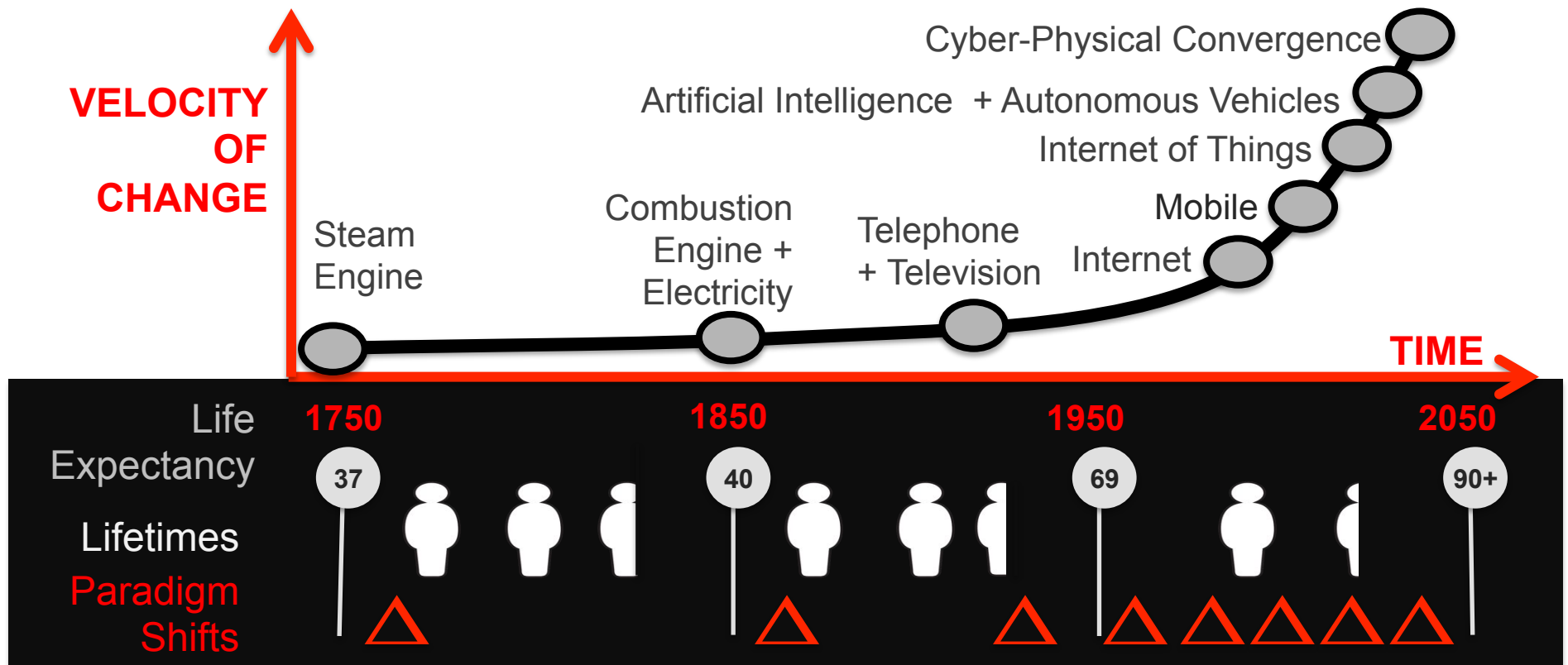


Concept of Augmented Era © Jeff Kowalski, CTO Autodesk

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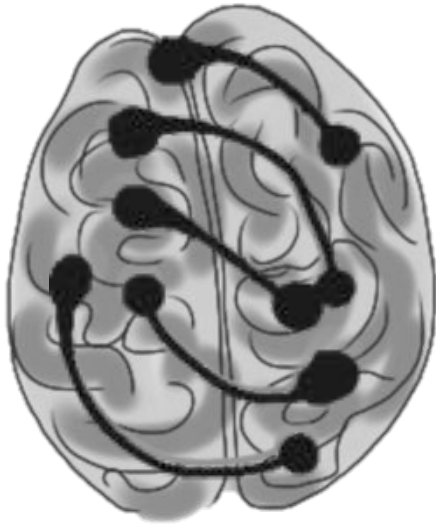
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Context: Change Requires Adaptation

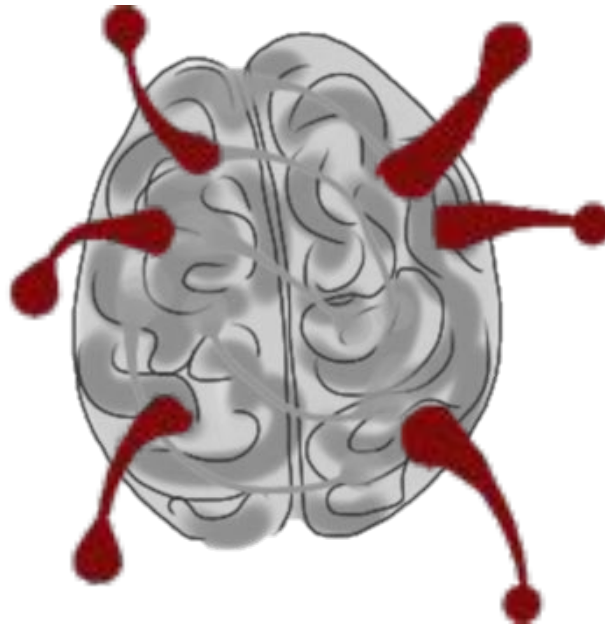


© Chris Shipley + Heather McGowan

Context: The Illiterate of the 21st Century (Asimov)



LEARN



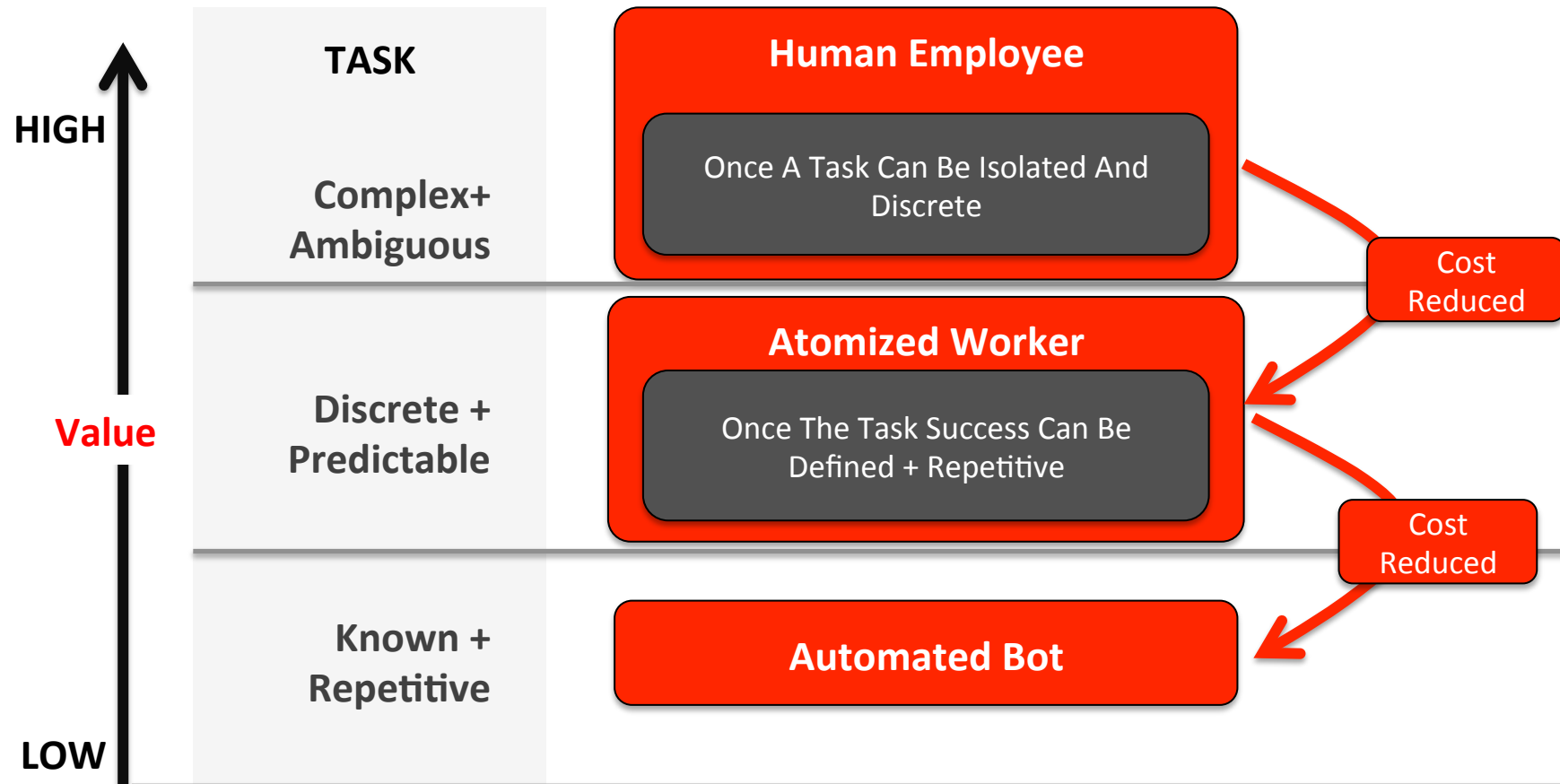
UNLEARN



RELEARN

Image credit: Giulia Forsythe

CONTEXT: Machine Capabilities Enter Human Cognitive Labor Domains



CONTEXT: The Impact of Atomization, Automation, and Augmentation

ATOMIZED



AUTOMATED

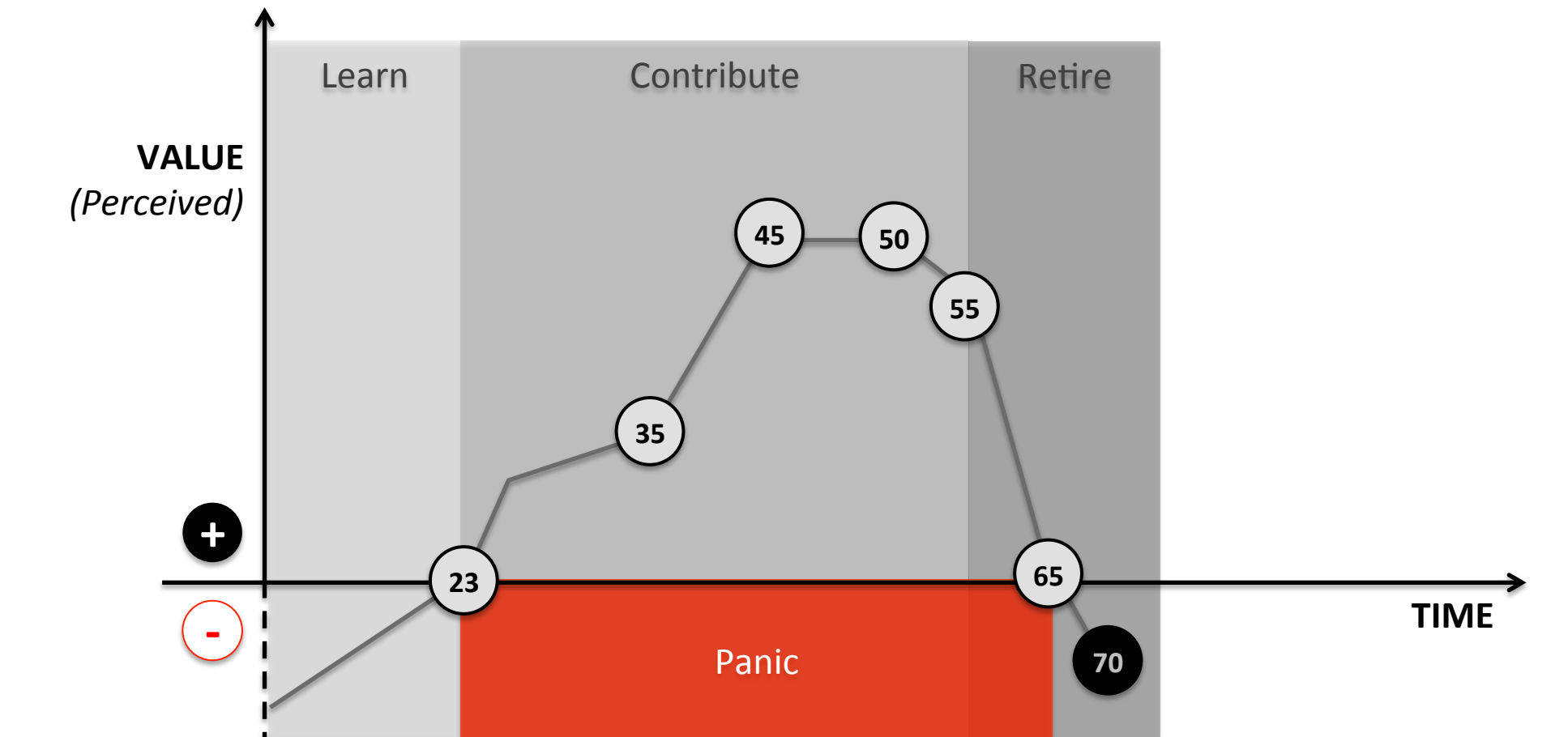


AUGMENTED

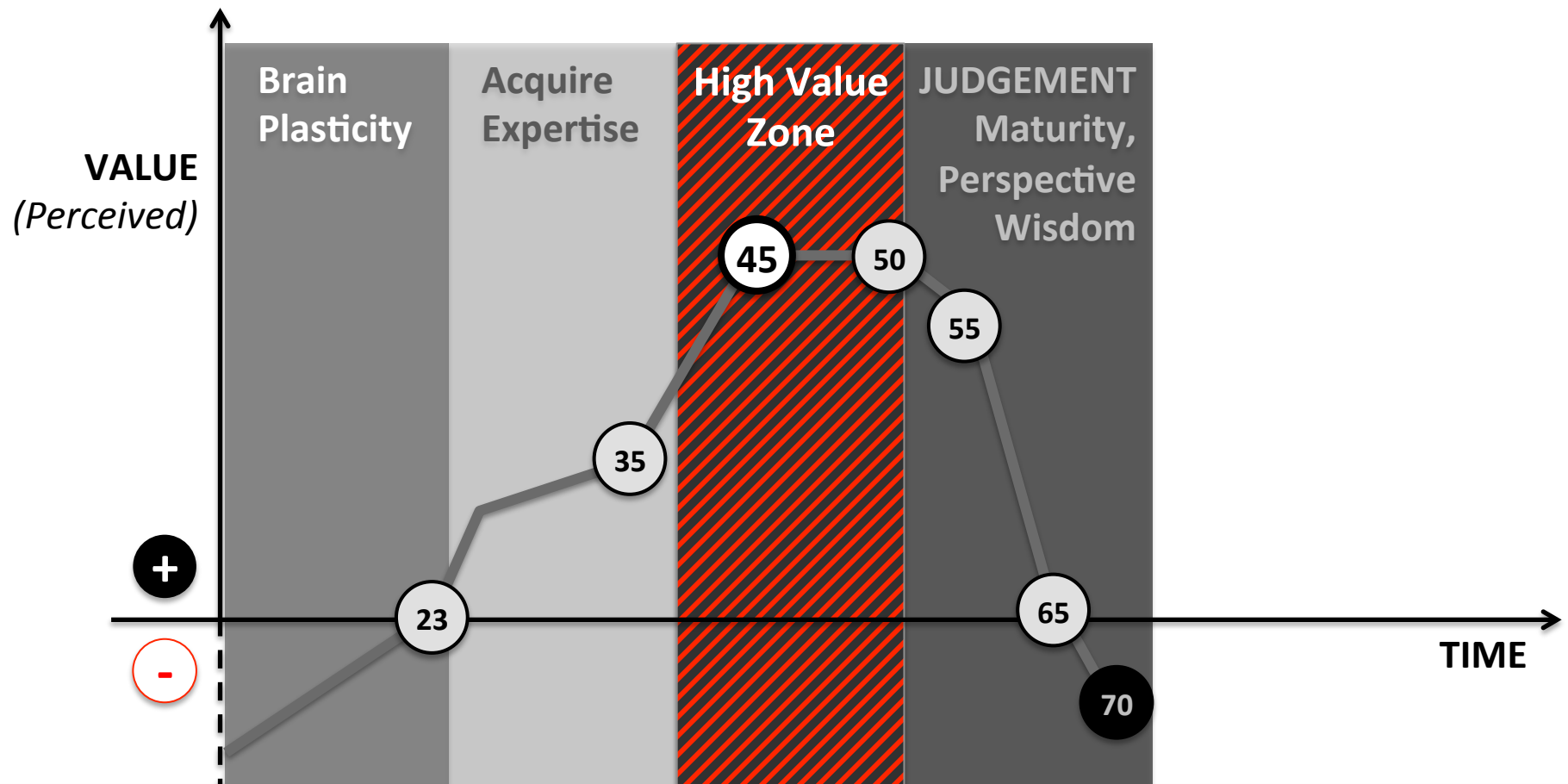


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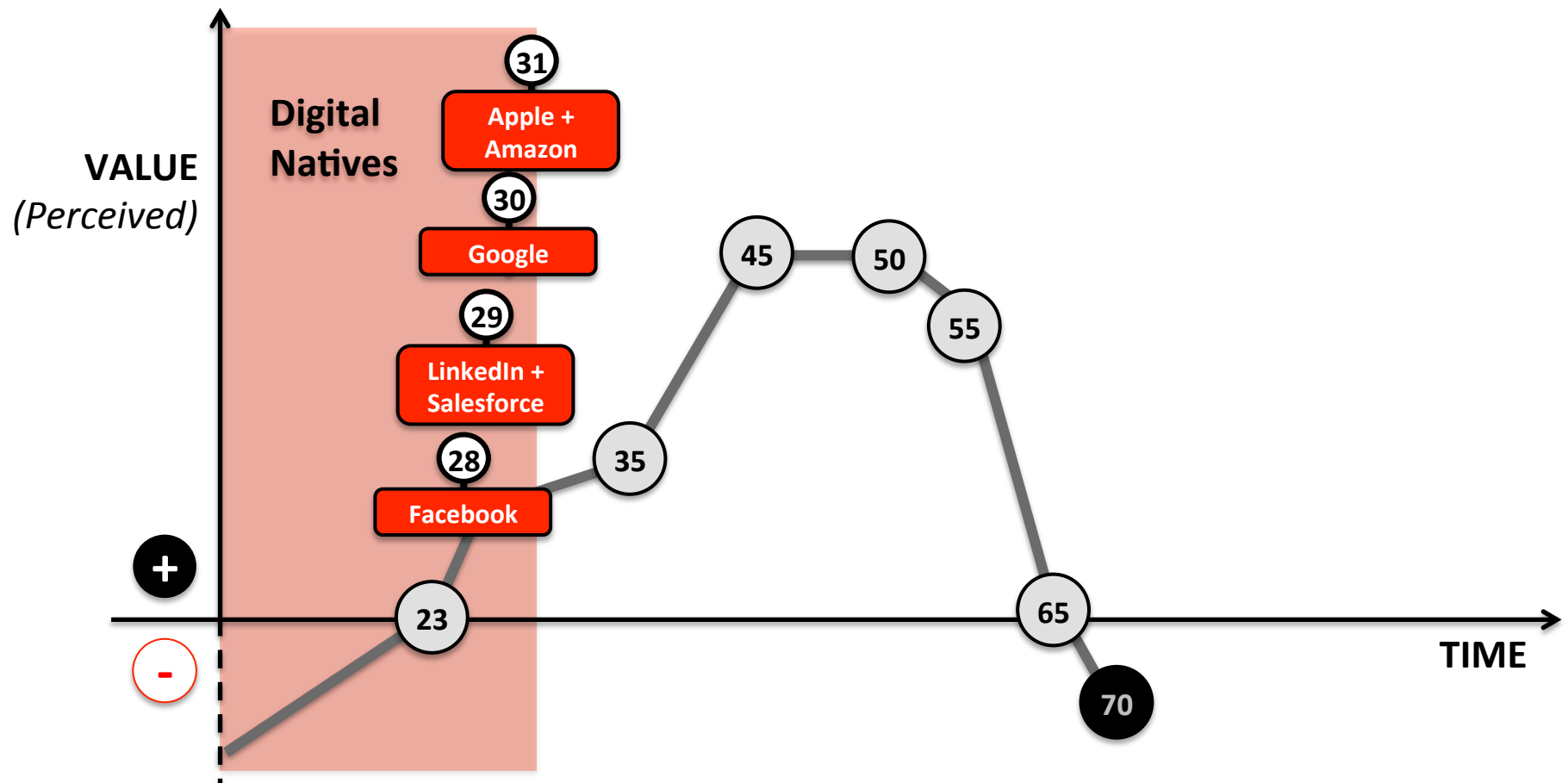
CONTEXT: The Career Arc (The Old Model)



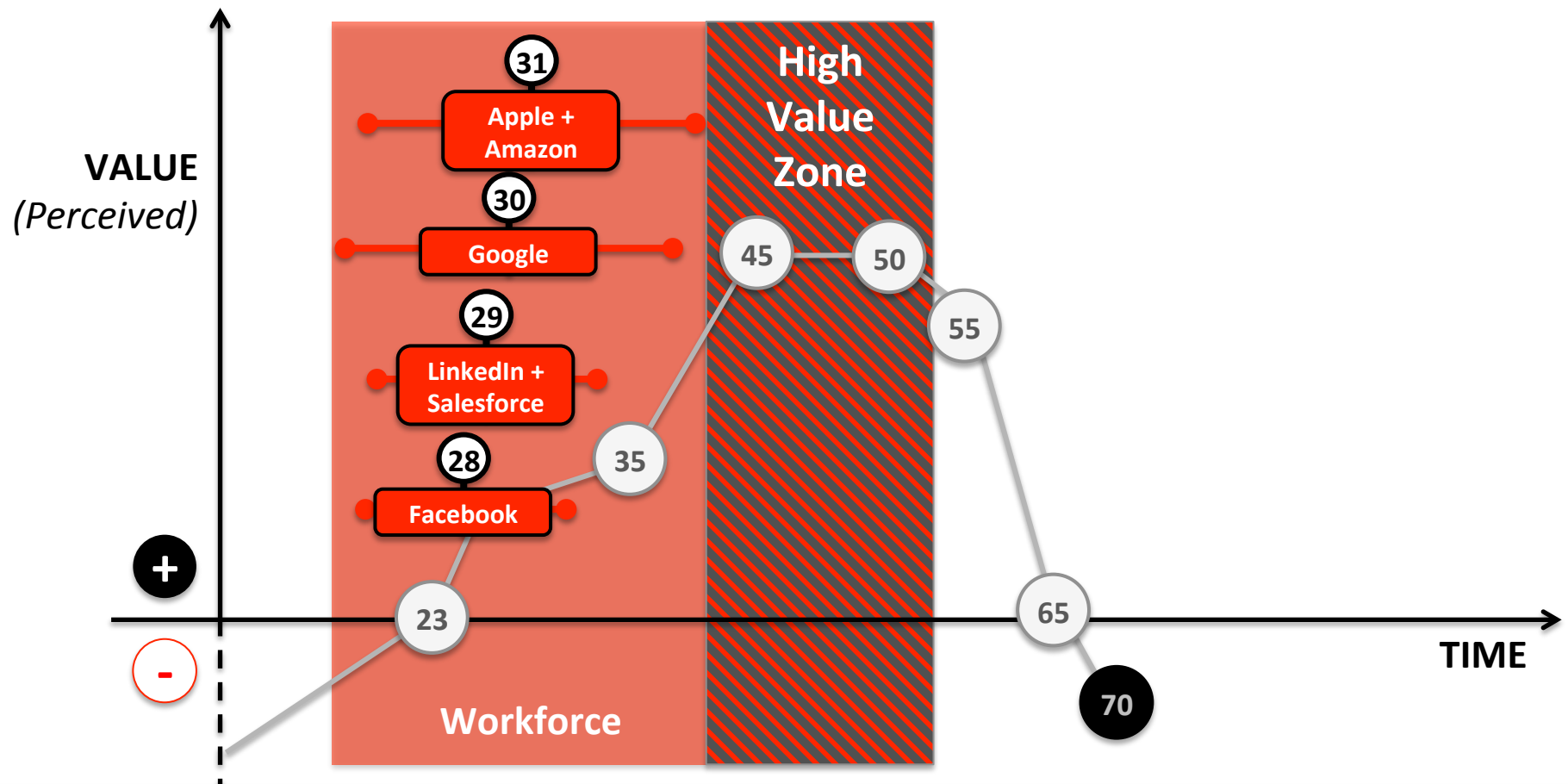
CONTEXT: The Career Arc (The Old Model)– Perceived Value



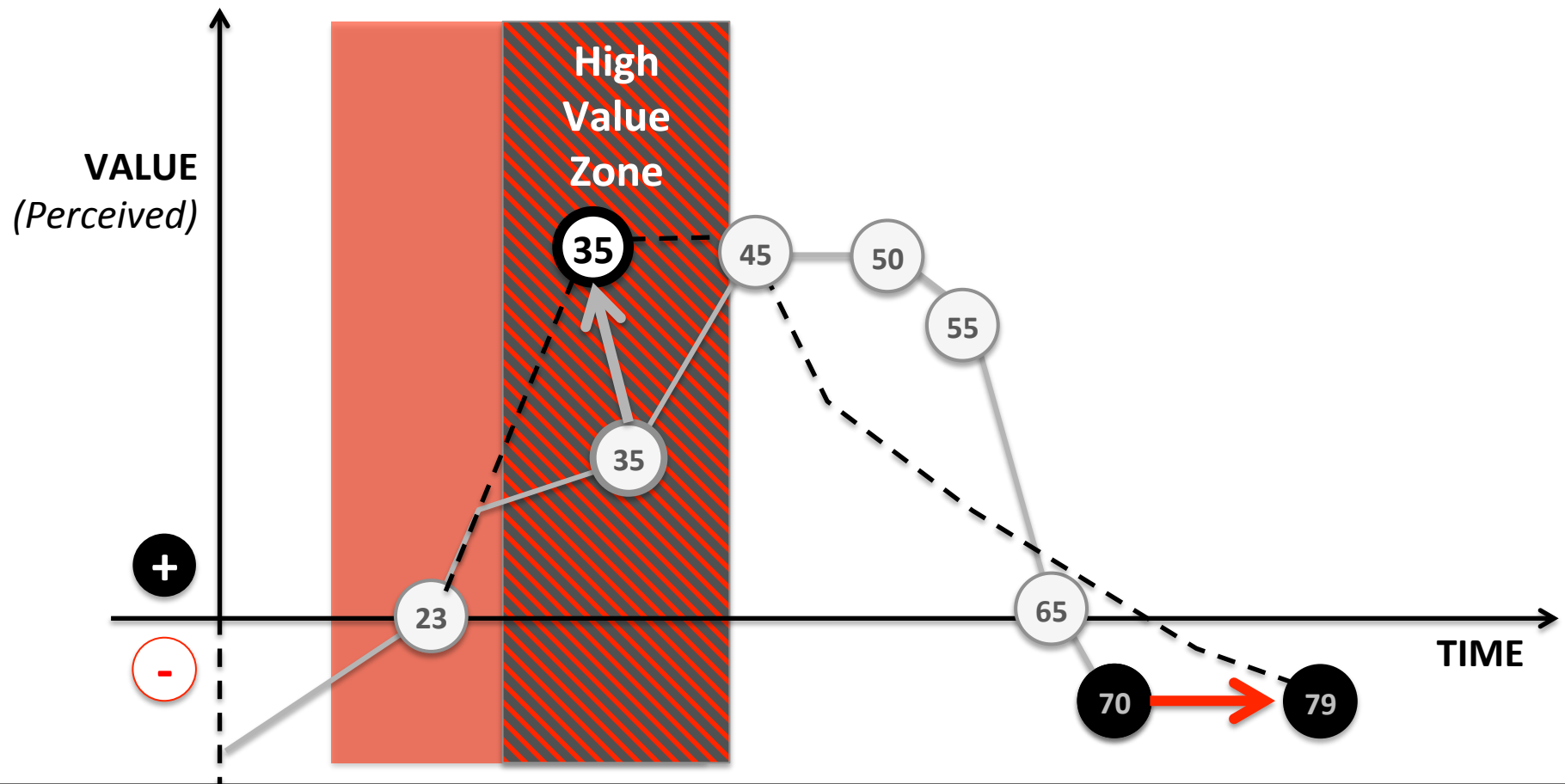
CONTEXT: New Economy + Digital Natives



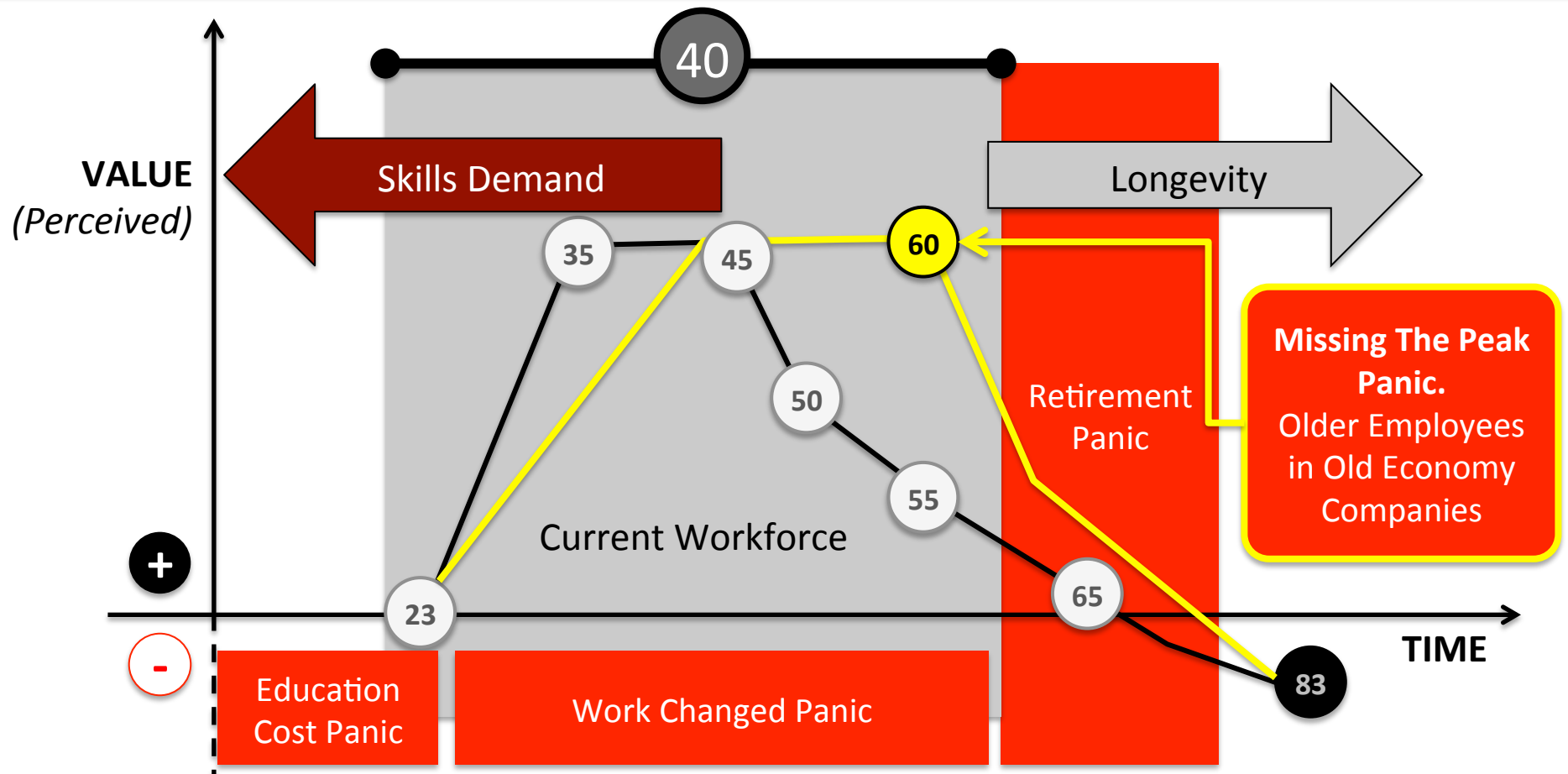
CONTEXT: Career Arc + Shifting High Value Zone



CONTEXT: The Career Arc + Longevity



CONTEXT: The Career Arc and The Panic Zones



SO WHAT DO WE DO?

Why We Must Retire These Questions

What Do You Want To
Be When You Grow Up?

65%

Job That Do Not Exist Yet

What Is Your Major?

47%

Automated by 2033

What Do You Do?

27%

Work In Their Major

17

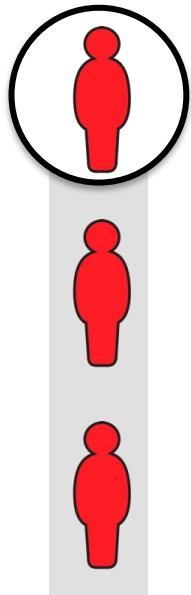
Jobs

5

Industries

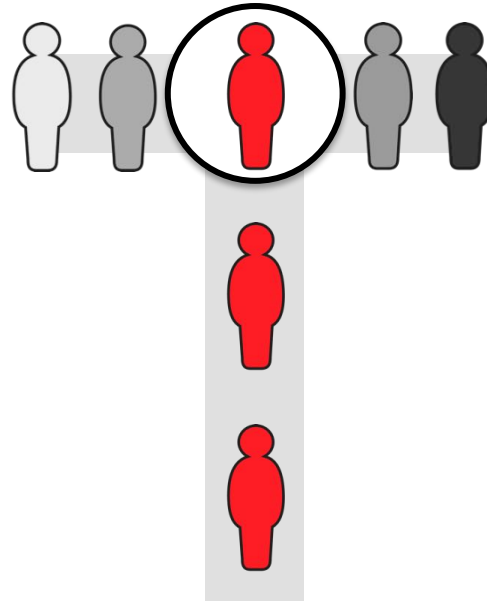
Expertise Shifts: The I to the T to the X

DISCIPLINARY



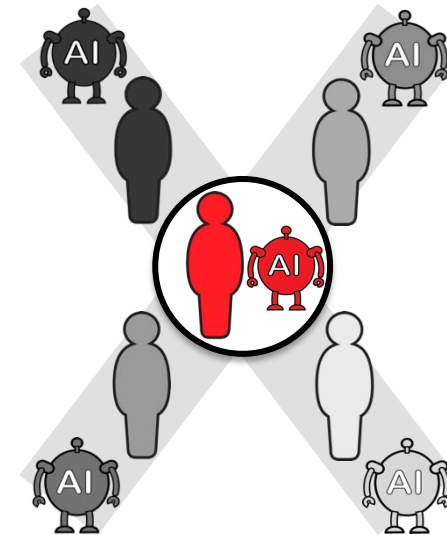
MULTI-DISCIPLINARY

(T-Shaped)



TRANSDISCIPLINARY

(Human-Machine + Disciplinary Convergence)



Stocks of Knowledge* (Educated)

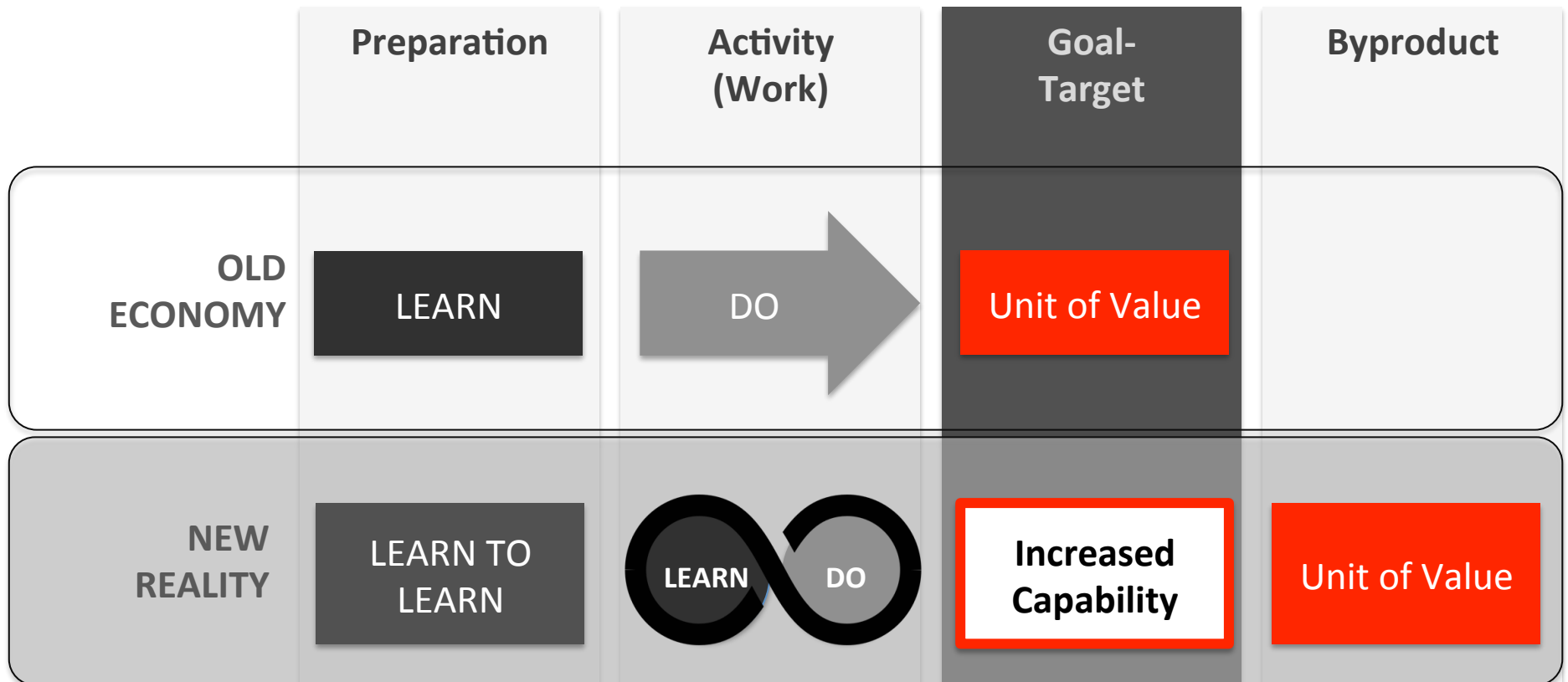
Flows of Knowledge* (Learning Agility)

**Stocks and Flows of Knowledge (John Hagel, Deloitte)*

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New Paradigm = New Goals



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Do You Focus On Applications or Operating Systems?

**Learning Agility + Agency =
Operating System**



**Ability to Create New
Knowledge**

**Predetermined Skills =
Applications**



**Ability to Access Existing
Knowledge or Skills**

Three Principles of Universal Learning Design

WHAT of LEARNING



Content-

HOW of LEARNING



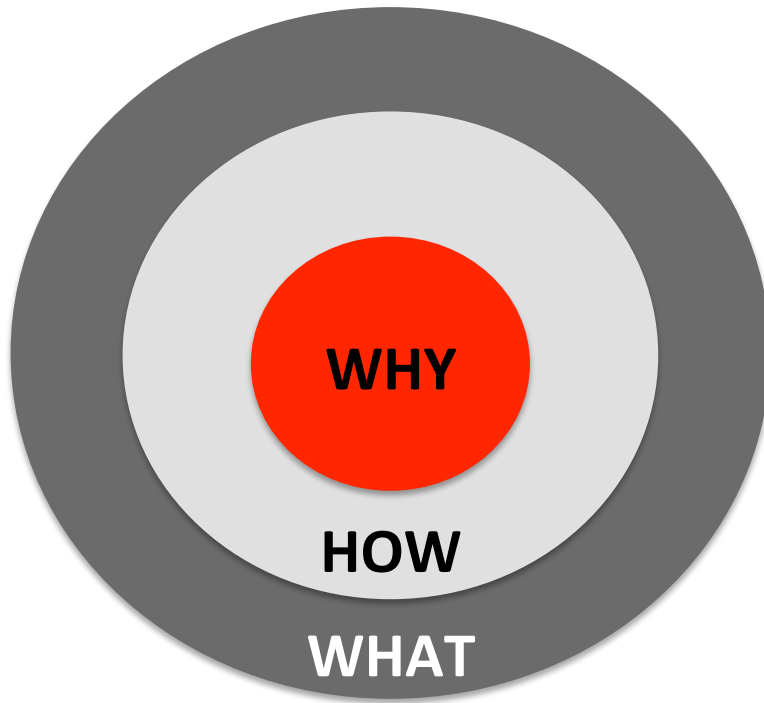
Expression

WHY of LEARNING



Engagement-
Motivation

(Sinek) Start With Why



WHAT The
Company Sells

PRODUCT

HOW The
Company Is
Special

PROCESS

WHY The
Company Exists

PURPOSE

Start With Why: Simon Sinek

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(Sinek) Start With Why: Apple



WHAT

PRODUCT

Computer

iPod

iPhone

Streaming

We Make Computers And Electronics

HOW

PROCESS

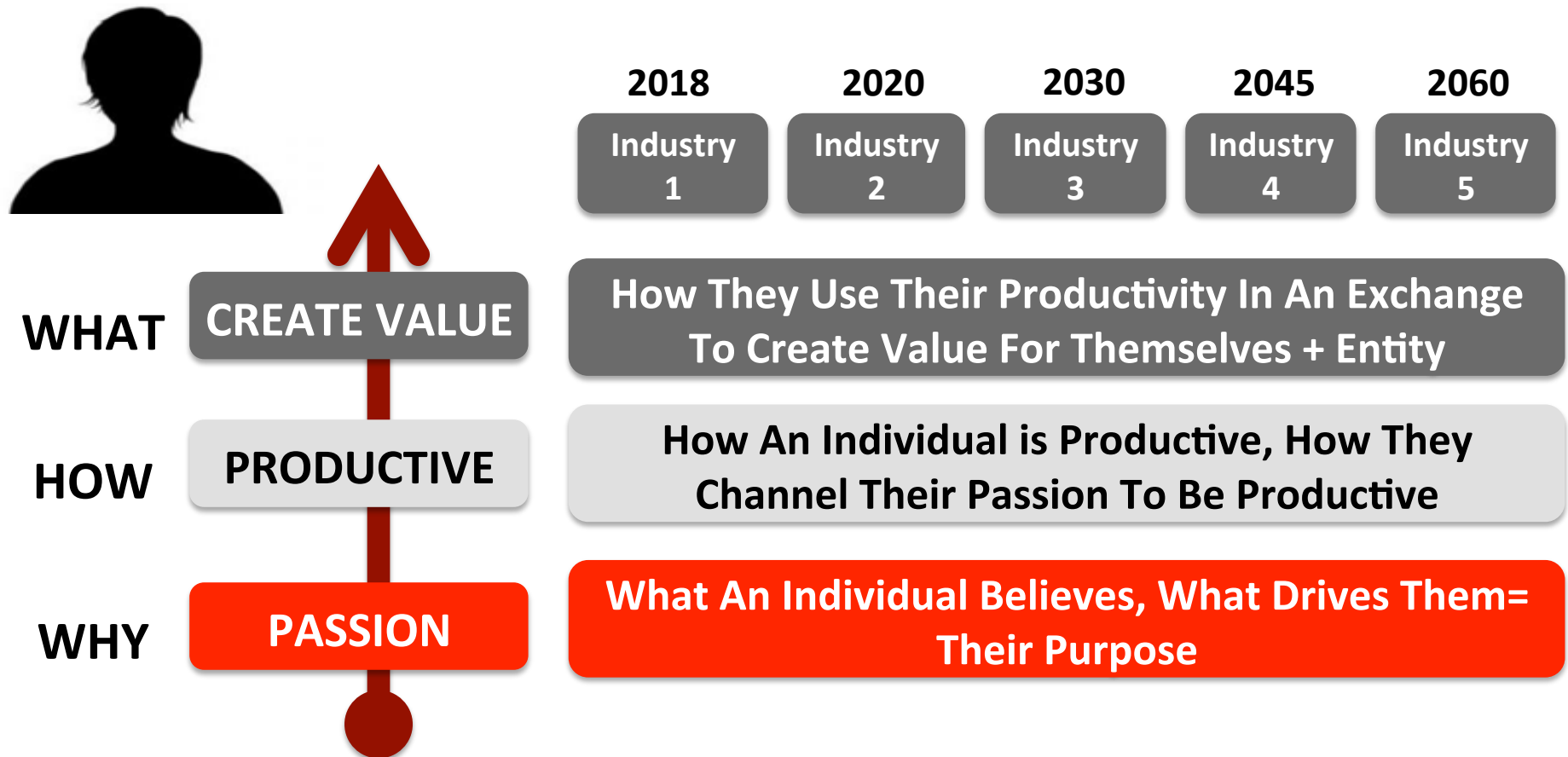
We Challenge The Status Quo By Making
Technology Easy To Use

WHY

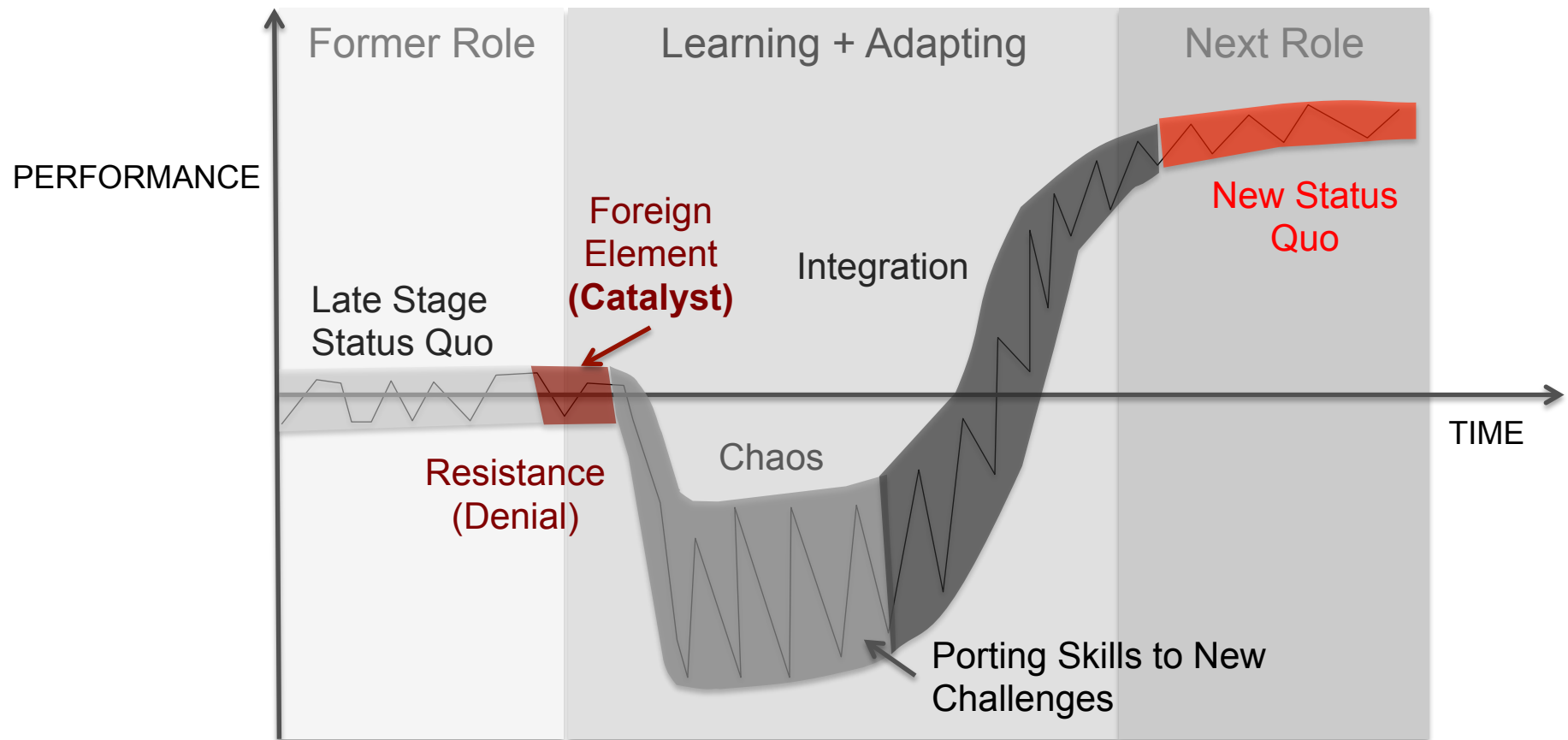
PURPOSE

In Everything We Do, We Challenge Status
Quo, We **THINK DIFFERENT**

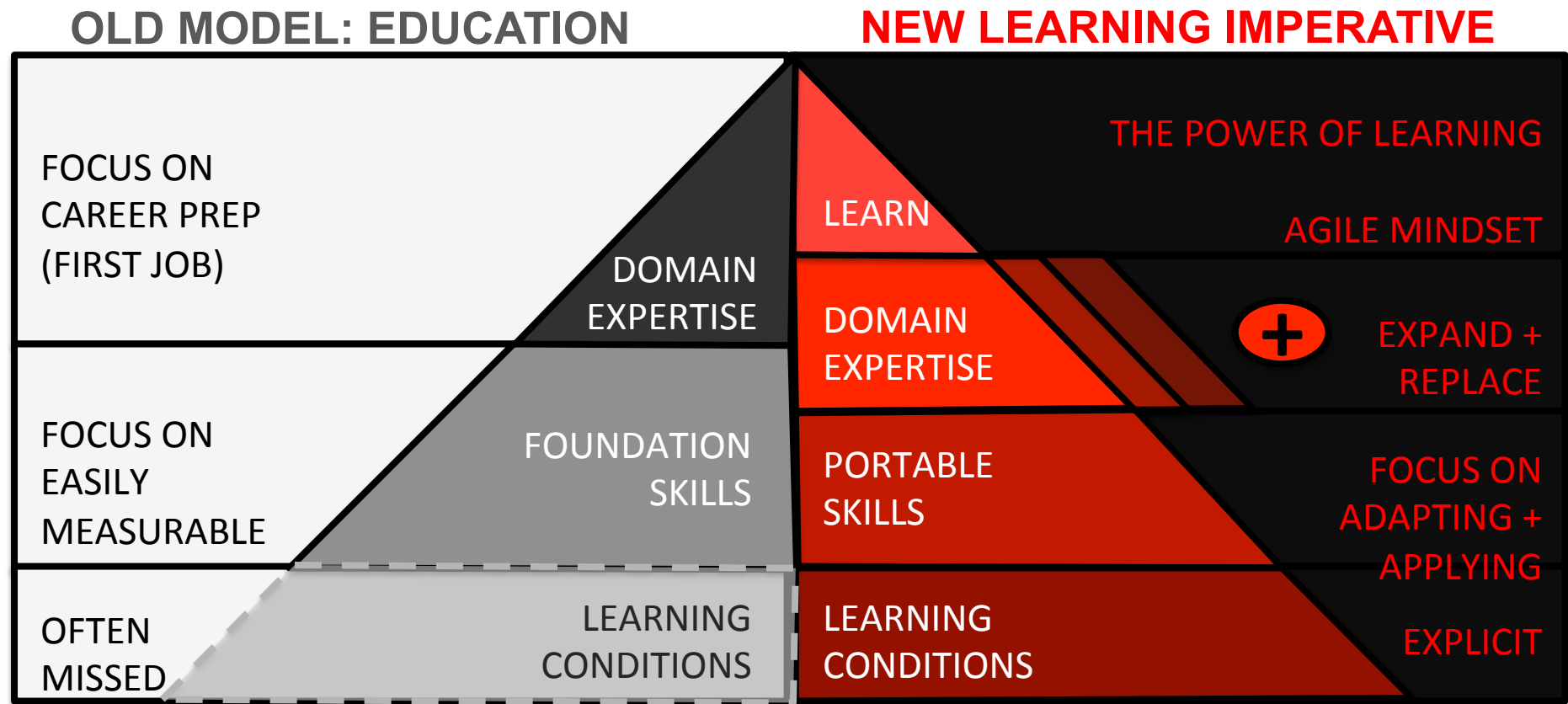
(Sinek) Start With Why: Students



Satir Change Process Model (Modified)



How Do You Adapt: Prioritize Learning Agility



Emerging Solutions: **Agile Learning Mindset**

Learning Agility

(Learning + Unlearning,
Learning Styles)

Adaptability

(Navigate Ambiguity,
Unstructured Problems)



Uniquely Human Skills

(Empathy,
Social Intelligence,
Creativity, etc.)

Agency

(Motivation,
Self Awareness,
Personality Types)

Emerging Solutions: 10 Future Skills To Build Mindset



Design Mindset

Sensemaking

Social Intelligence

Novel + Adaptive Thinking

Art of Humanness



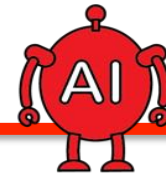
Transdisciplinarity

New Media Literacy

Cross Cultural Competence

Virtual Collaboration

Navigating the New World



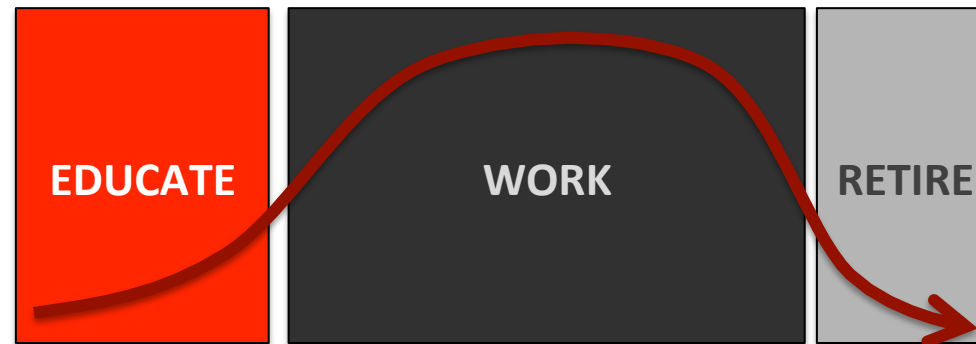
Computational Thinking

Cognitive Load
Management

Working With Bots

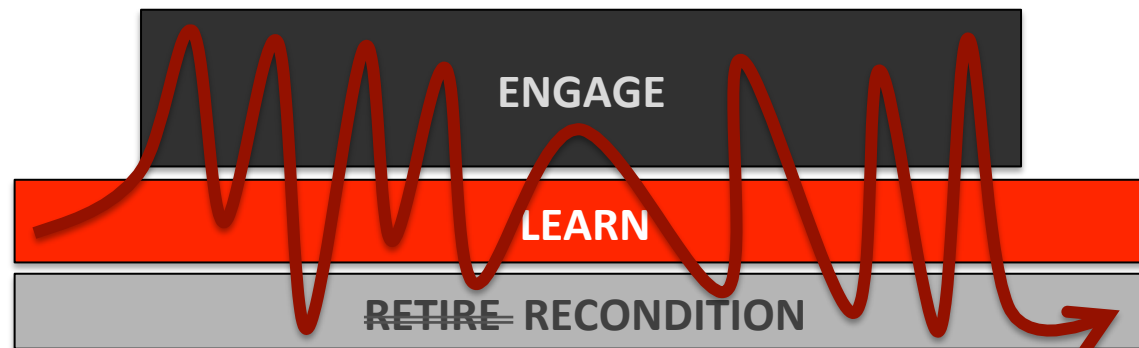
New Economy Shifts Life Blocks

**OLD
ECONOMY**



Lifespan = 73 Years

**NEW
ECONOMY**



Lifespan = 90 Years

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Summary:

- The Future Of Work Is Learning
- New Questions + Definitions of Self (Purpose vs. Practice)
- Social And Emotional Support For Adaptation
- Shifting Life blocks: Rethink Work + Learning
- New Institutions To Support These Emerging Realities.



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