THE FUTURE IS DEFINED BY TWO MAJOR EVENTS

I. POST PANDEMIC 'NEW NORMAL'

"Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next."

- The Pandemic Is a Portal, Arundhati Roy

I. GENERATIVE AI REVOLUSION

"This is a printing press moment"

- Sam Altman, OpenAI

HOW DID WE GET HERE?

- **IN 2019 DIGITAL TRANSFORMATION (DT OR DX)**
  - Priority for < 70% of firms
  - < 40% large firms <28% SMEs actually implementing

- **OUR 2019 RESEARCH FOUND:**
  - Lots of hype but…
  - Most companies taking a 'wait and see' approach

"HUMACHINE"

- New form of enterprise introduced in 2019

- Combines human *creativity, innovation, judgment* with the mechanical efficiencies of machines - *economies of scale, big data processing, and AI.*

- Combines humans and machines in a symbiotic relationship – as co-workers.

THE HUMACHINE
Humankind, Machines, and the Future of Enterprise

Nada R. Sanders, Ph.D.
John D. Wood, Esq.
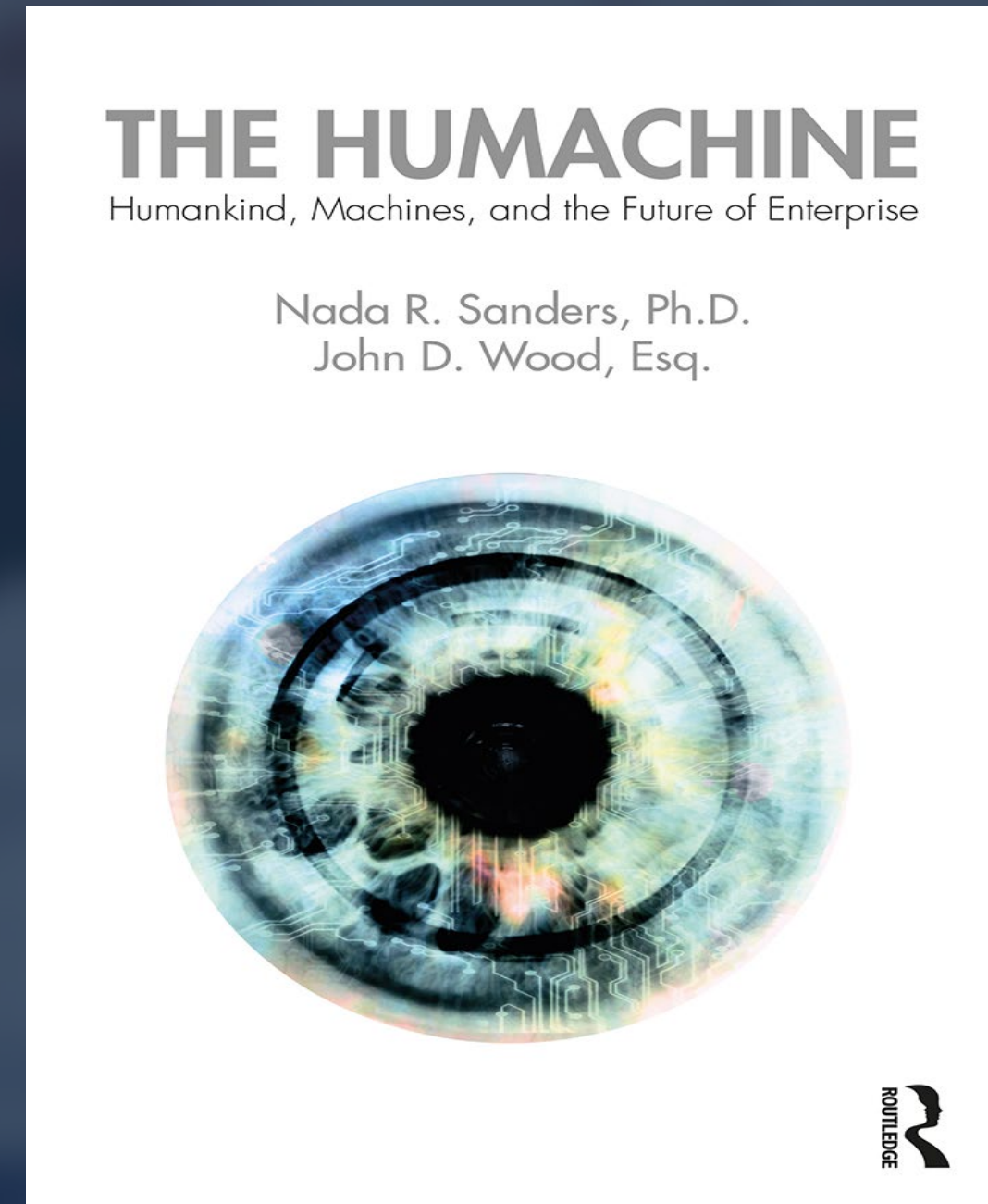
THEN THE PANDEMIC HAPPENED

"Every math based model collapsed. None of the assumptive parameters could be trusted. It is not an indictment on the science … But an indictment on the belief that those technologies eliminate the need to be agile" – CEO, Large Software Co.
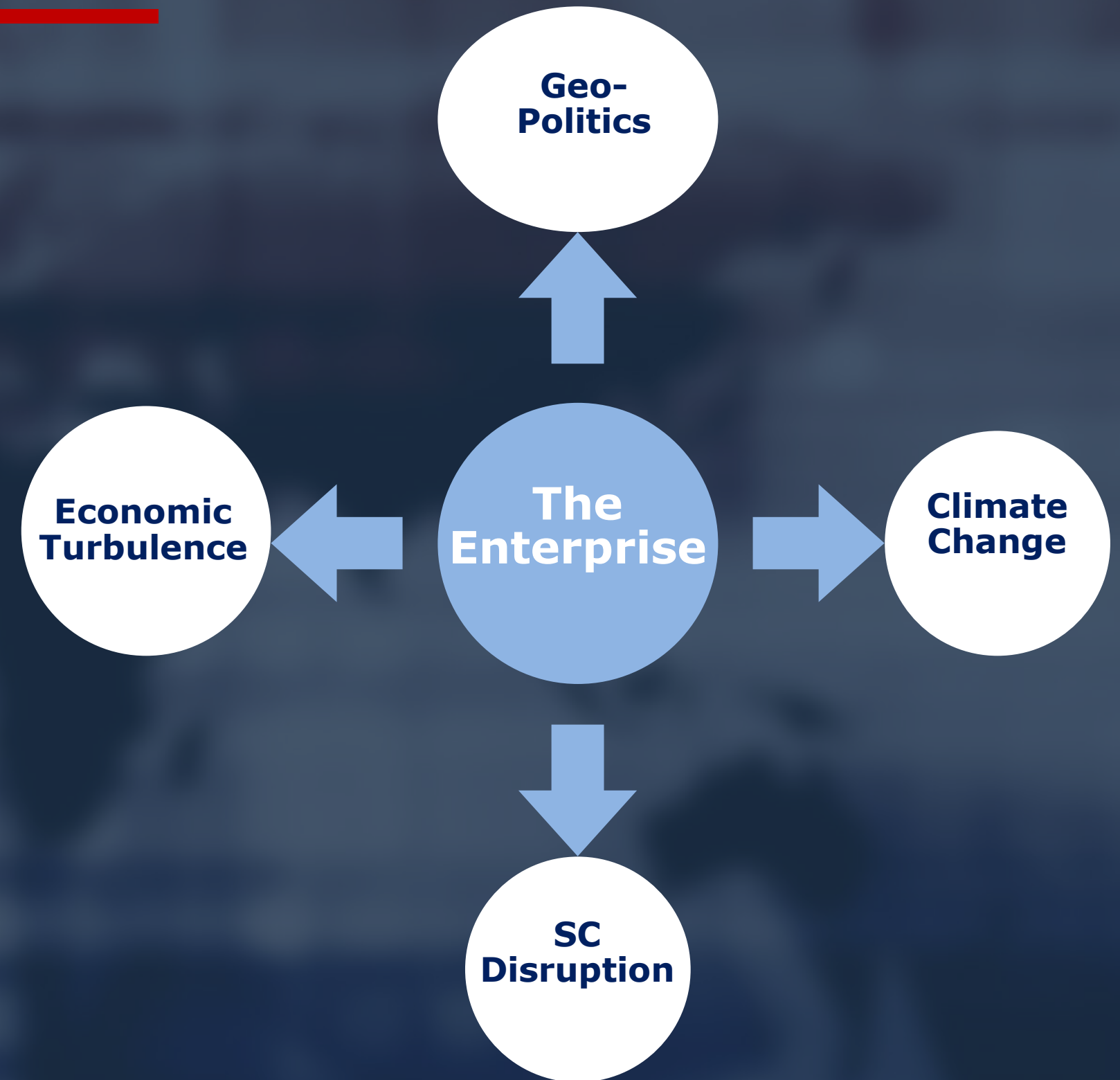
NEW NORMAL: TURBULENCE & COMPLEXITY

HAZARDS:

- Multiple and simultaneous impact

- Enterprises have no time for recovery

- No end in sight to hazard impact

COMPLEX INTERDEPENDENT SYSTEMS:

- Elevates the risk of cascading failures

- What once were local shocks now have
  global consequences

Geo-Politics

Economic Turbulence ← **The Enterprise** → **Climate Change**

SC Disruption

WHAT DOES A 'NEW NORMAL' REQUIRE?

- **Re-skilling leaders for a 'new normal'**

- **Innovation Mindset & Culture**

  - 91% of businesses engaging in DT 2023

  - AI spending to double from 2023-2026

  - Focused Innovation (e.g. FedEx, Amazon)

- **Adopting Tech Rapidly & Strategically**

- **Scenario planning & ideating**

- **Enterprise restructure**

- **Built in agility to quickly pivot**

THE 'BIG BANG' OF AI

LLM Revolution: ChatGPT, Bing, Bard, DALL-E, Midjourney

"This is a Promethean moment we've entered — one of those moments in history when certain new tools, ways of thinking or energy sources are introduced that are such a departure on what existed before that you can't just change one thing, you have change everything." – *Thomas Friedman, March, 2023*

AlphaFold A.I. solved protein folding problem:

"It has taken decades of slow experiments to reveal the structure of more than 194,000 proteins. AlphaFold A.I. predicted structures for more than 200 million proteins over two weeks" - *Science News*

"STOCHASTIC PARROT"

- **DIZZYING PACE OF DEVELOPMENT**

- **HALLUCINATIONS**

- **GUARDRAILS**

- **RAPID ADOPTION**

   - Walmart uses chatbot for vendor negotiations
   - Wendy's using chatbot for drive-through window orders

HYPE & CONFUSION

- AI & Digital transformation (DT) are #1 corporate concern for 2023

- 2023 poised to spend $4.7 trillion (4.3 % up from 2022)

- 70% of all DT initiatives do not reach their goals

- Many executive:

  - *"Under pressure to do something"*
  - *"Struggling to justify ROI"*
  - *"Struggling not to lose sight of business objectives"*

- Reality: Just acquiring technology is not enough

WHAT CEOs ARE SAYING

- **New Ways of Forecasting Needed**

  "Better scenario planning; Better ways of combining human insight with AI."

- **New Concerns**

  "Data validity, bias, accuracy, interpretation, information vs. knowledge"

- **New Human Skills Needed**

  "Interpersonal skills, communication skills, ability to work with others"

  " Domain expertise" – Don't get rid of experienced talent

THE OPTIMAL PARTNERSHIP

WHAT MACHINES *CAN* DO

- Process large data sets
- Precision & accuracy
- Flexible & can scale
- Strength & speed

WHAT MACHINES *CANNOT* DO

- Only as good as the data
- Lack creativity & innovation
- Cannot explain decisions
- Lack empathy & emotion

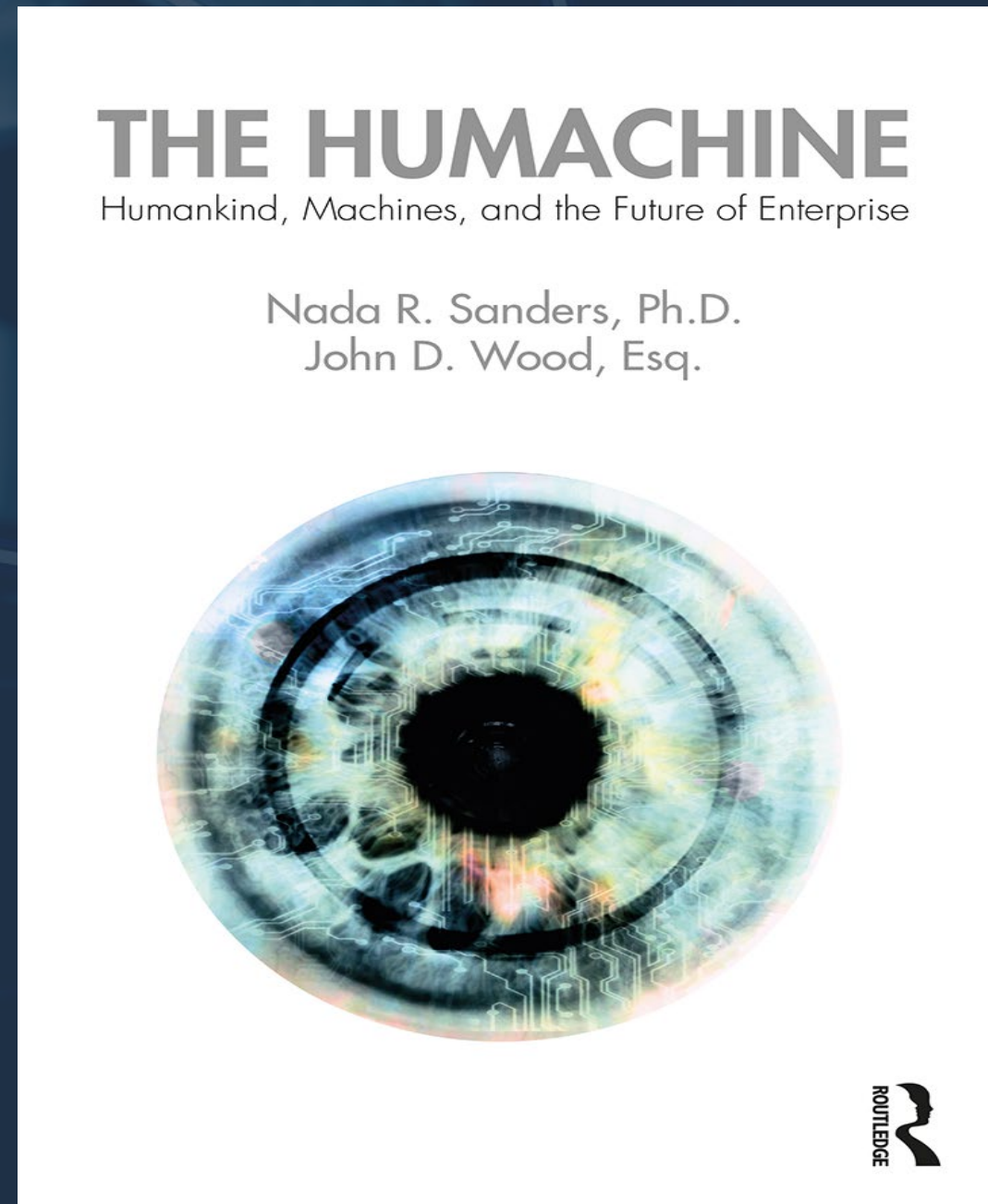## COMPLEMENTARITY

WHAT HUMANS *CAN* DO

- Connect unrelated areas
- Creative & innovative
- Can explain decisions
- Have empathy & emotion

WHAT HUMAN *CANNOT* DO

- Have processing limitations
- Subject to cognitive biases
- Inconsistent
- Physical limitations

FORCASTING IN THE 'NEW NORMAL'

- **Crises & turbulence are the 'New Normal'**

- **Forecasting**

    - Requires Human & Technology Partnership

      (*"The Humachine"*)

    - Ideation Rooted in Data

    - Flexible Structures & Systems Thinking

    - Risk Assessment & Mitigation Strategies

THE FUTURE WILL NOT LOOK LIKE THE PAST

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THANK YOU