Autonomous Business: CIOs Must Forge the Next Macro-strategic Shift

Brian Prentice

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It's Time to Jump to the Next "S" Curve of Tech-Enabled Business Value Innovation
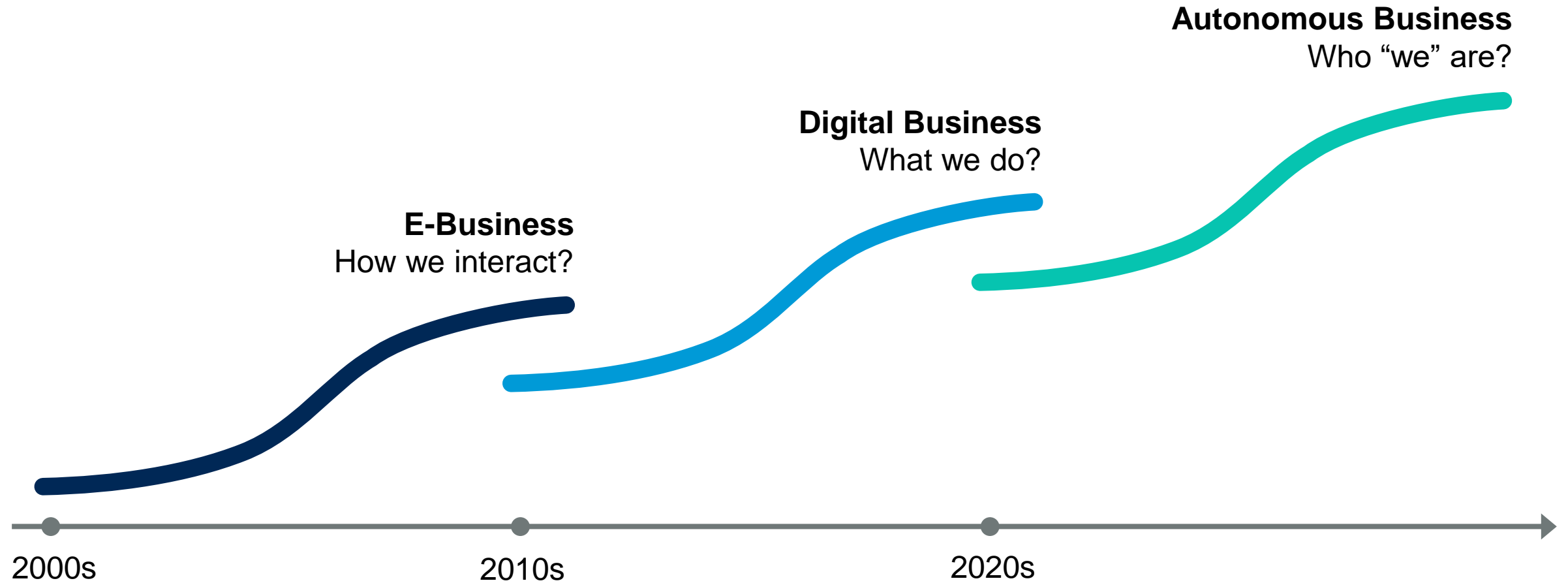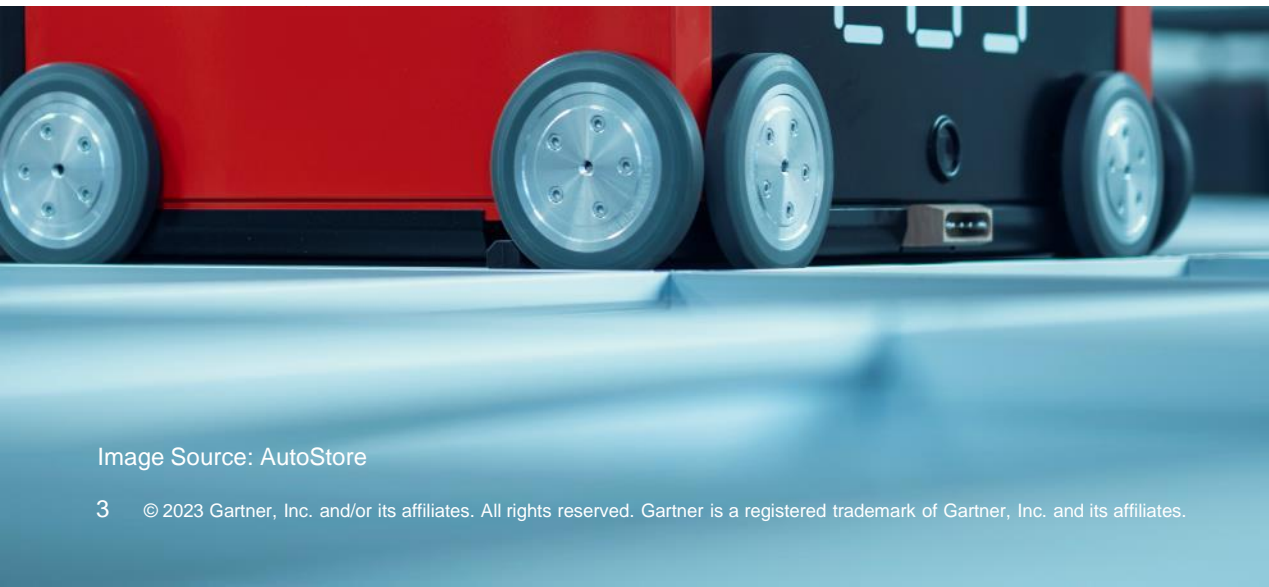
Autonomous Business
Who "we" are?

Digital Business
What we do?

E-Business
How we interact?

2000s   2010s   2020s

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We = Human + AI

Image Source: AutoStore

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CIOs should introduce the new business thinking that AI enables (not just the tech).

If you don't … expect hype-driven flailing, stumbling and waste.

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Artificial Intelligence

Digital

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AI is the tool.
What's the business change?

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Autonomous Business Is …

- A style of business …

- Partly governed and operated by self-learning software agents ...

- Serving autocomposing, and autoadapting products and services ...

- To machine customer prevalent markets ...

- Operating in a programmable economy ...

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"Autonomous" in What Sense?

- Functioning separately or independently

- Not requiring external direction; independent

- The capacity to make informed, local decisions

- Self-governing

- Intelligent software and software-enabled machines, can act more autonomously

- People who are augmented by intelligent software, can act more autonomously

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AI-Powered Augmentation Will Impact Every Layer of an Organization Over the Coming Decade

Programmable Economy

- Autonomous Operations
- Augmented Leadership and Professions
- Machine Customers
- Autocomposing and Autoadapting Products

Pyramid (top to bottom):
- Board
- Executives
- Managers and Professionals
- Supervisors
- Workforce, Processes and Assets

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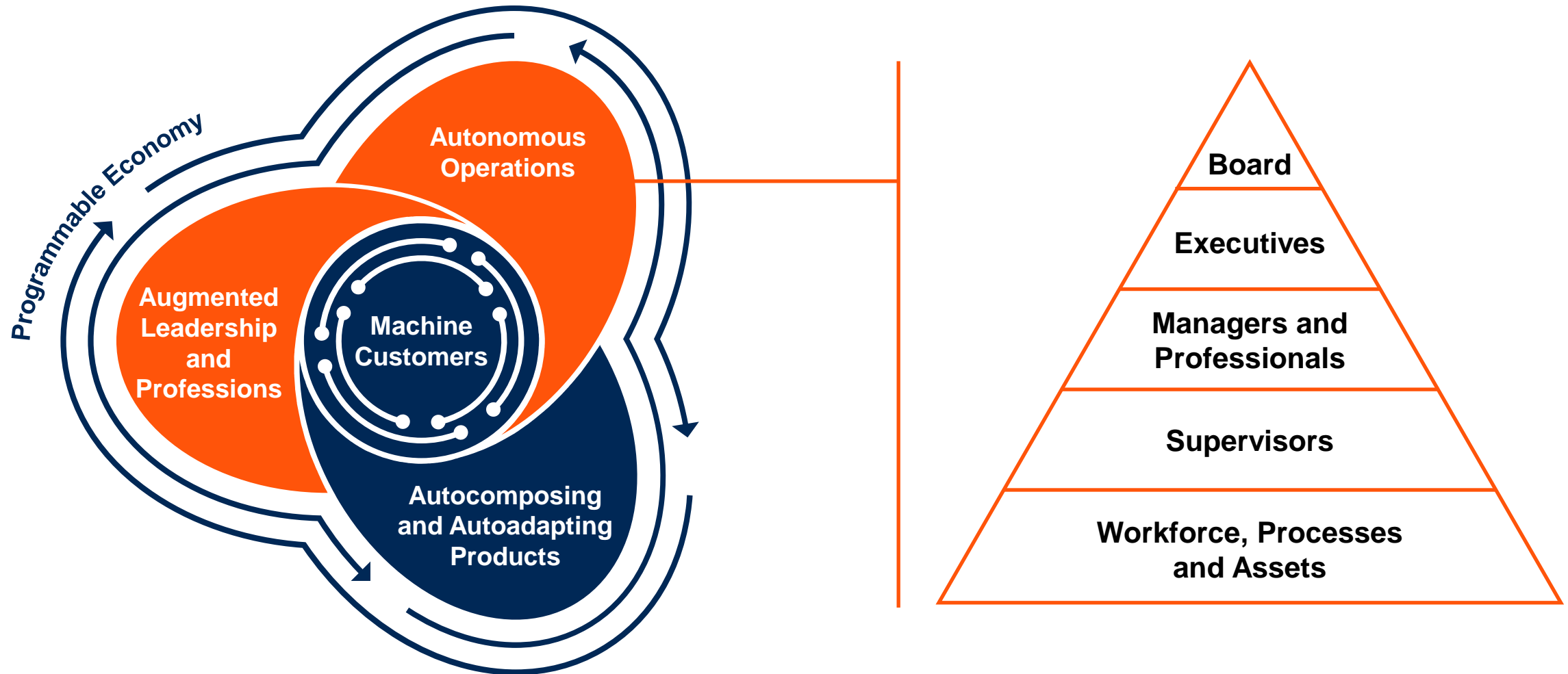
A Revolution in Ways of Working for <u>All</u> Levels and Roles

Board Bot

Executive Advisors

Augmented Leadership and Professions

Autonomous Operations Management

Cobots and Robots

LLM AI-powered strategy, planning, legal and compliance advice

Generative-AI-augmented negotiation, contract drafting, product design, software coding, copywriting …

Low human oversight or lights out, learning algorithm-determined production
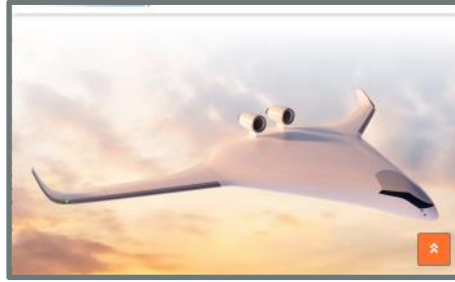
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Autonomous Operations Emerging in Many Places

Ford has patented autonomous cars returning themselves to the creditor if payments are missed.

BOXY has deployed over 50 franchise-operated autonomous minimarts without staff or check-outs.

Cargo airline **Ameriflight** has tentatively committed to buy 20 pilotless cargo planes from Natilus.
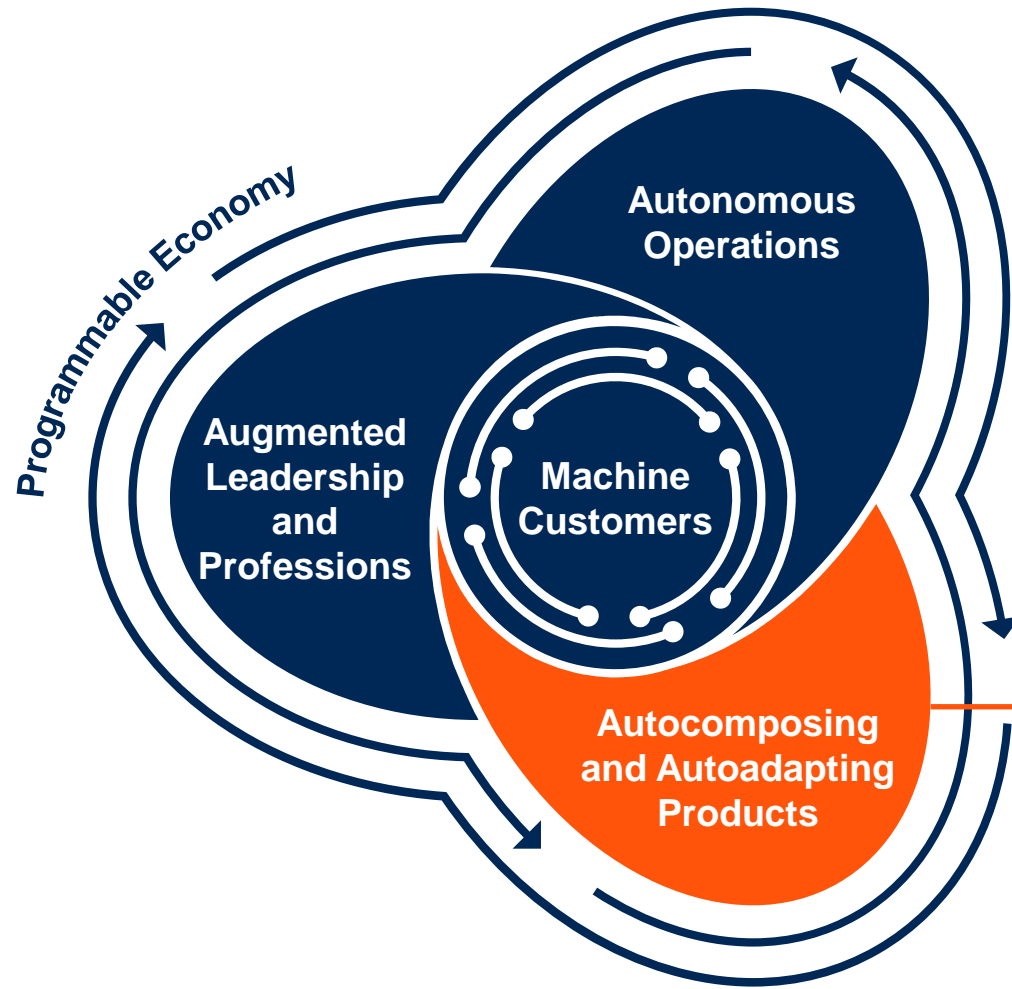
Maersk has deployed shelf scanning drones for inventory management in its U.S. warehouses.

John Deere has demonstrated its autonomous tractor and made multiple autonomous ag. Acquisitions.

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AI-Powered Products Will Self-Refine Their Value Proposition During Production and Beyond

Programmable Economy

Autonomous Operations

Augmented Leadership and Professions

Machine Customers

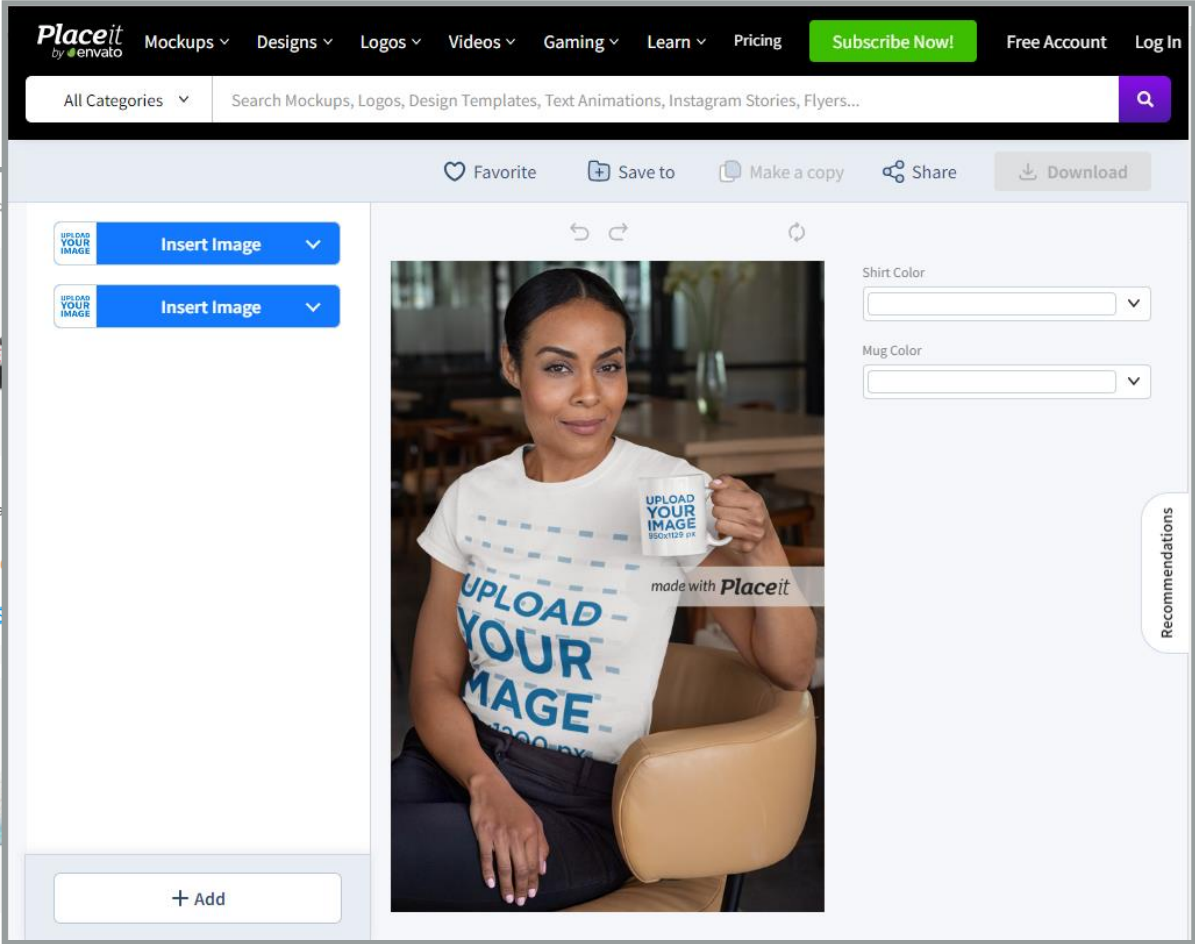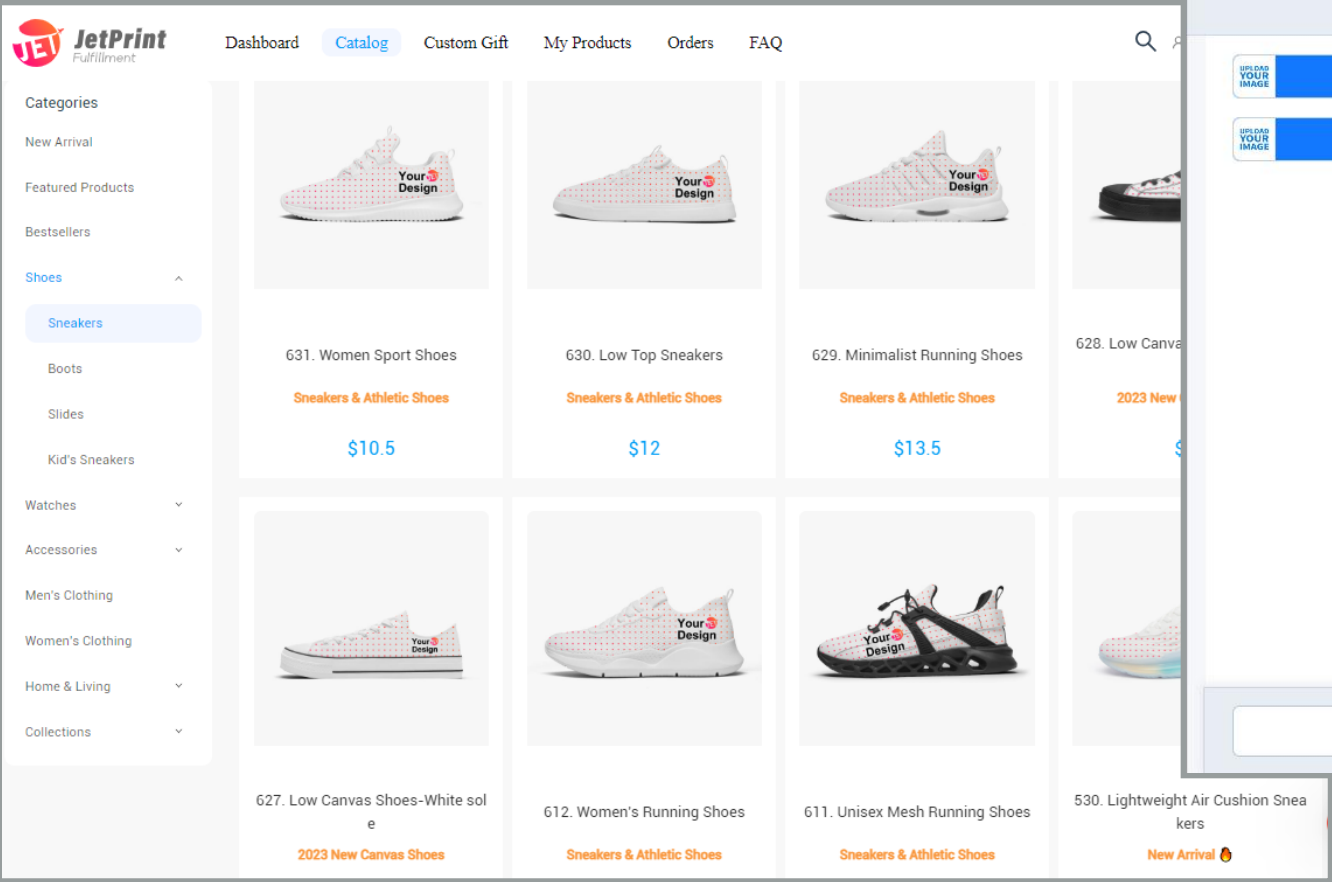Autocomposing and Autoadapting Products

Autocomposing products are autotailored in production — responding to demand signals.

Autoadapting products continue to update and evolve in customer use, after sale.
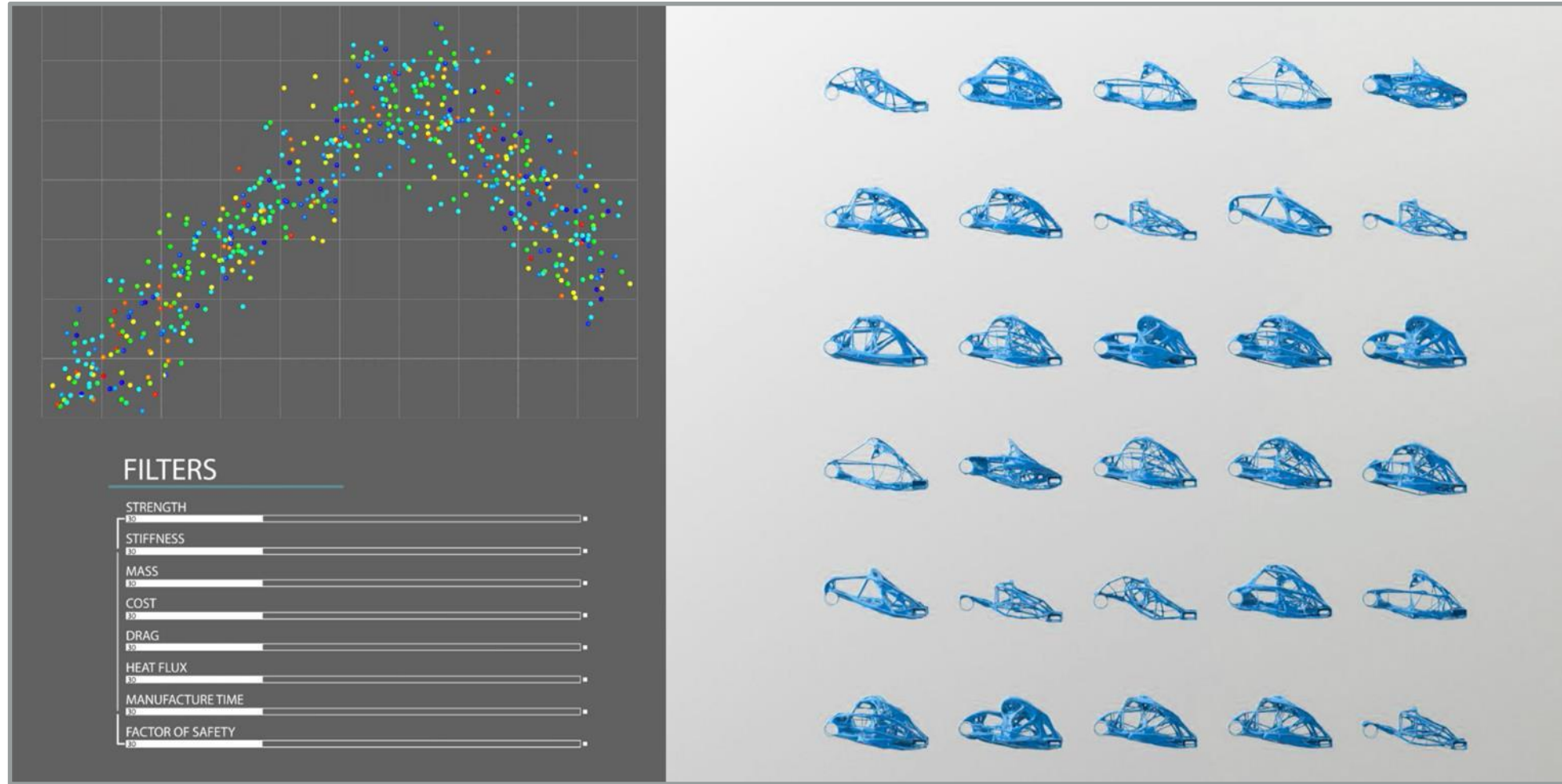
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Mature Dropship Mock-Up and Print On-Demand Services

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Generative Design to Create and Compose

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Additive Manufacturing to Make Variations

Source: Relativity Space

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"When *Vision* finds itself in an environment it doesn't easily recognize, its confidence level can decrease … In such cases, Vision **takes pictures so that it can learn from its experience and improve its own performance.** This process is essential to all machine learning systems."

— Landroid Vision and Data Privacy
   Neural Networks and Personal Information

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Programmable Economy

Autonomous Operations

Augmented Management

Machine Customers

Autoadapting Products

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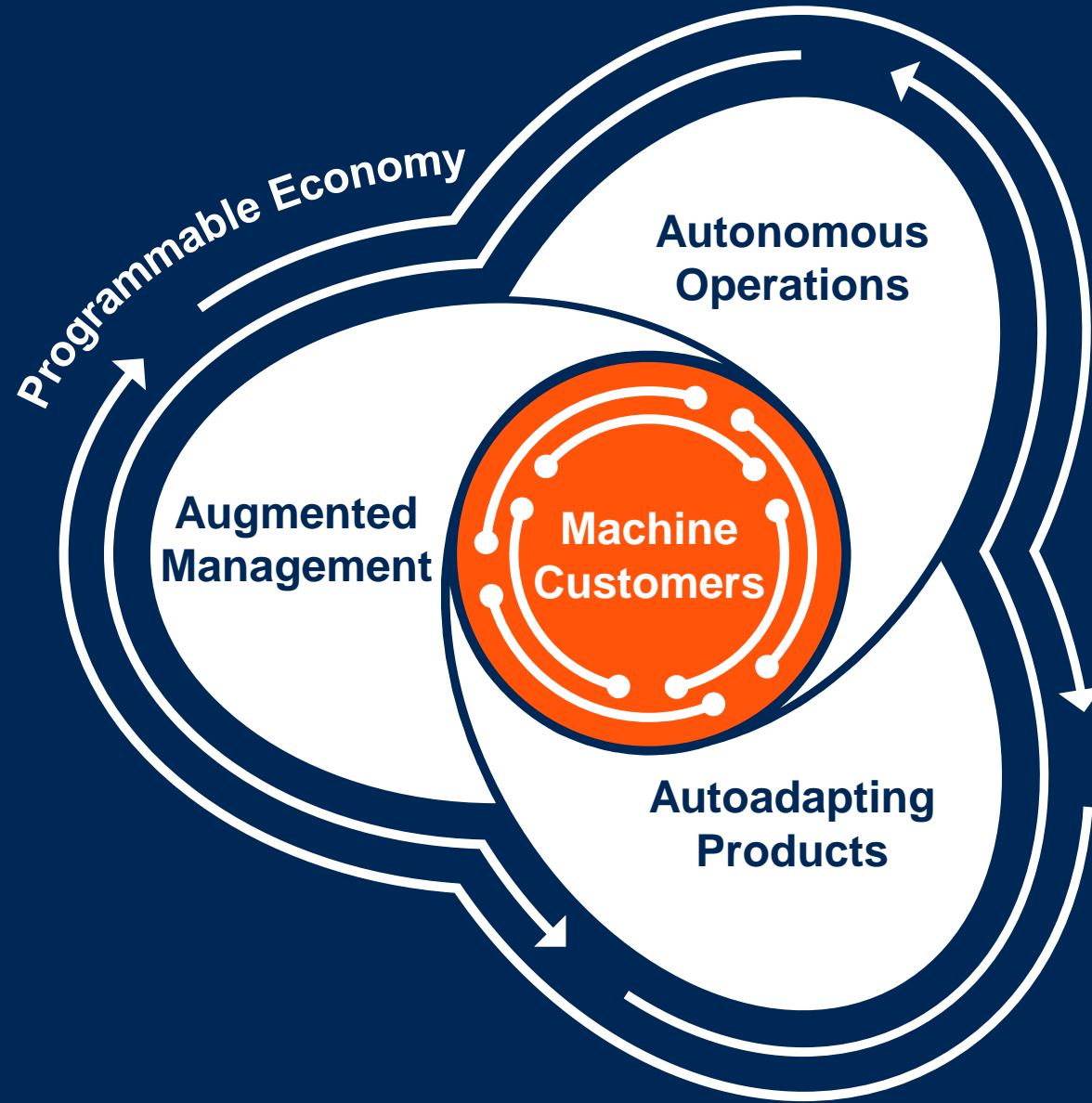
Being a customer is another kind of work.

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GPT has already renegotiated a utility bill — twice! Voice synthesis is now almost perfect.

How Do You Know It's Not a

Machine Customer

Calling?

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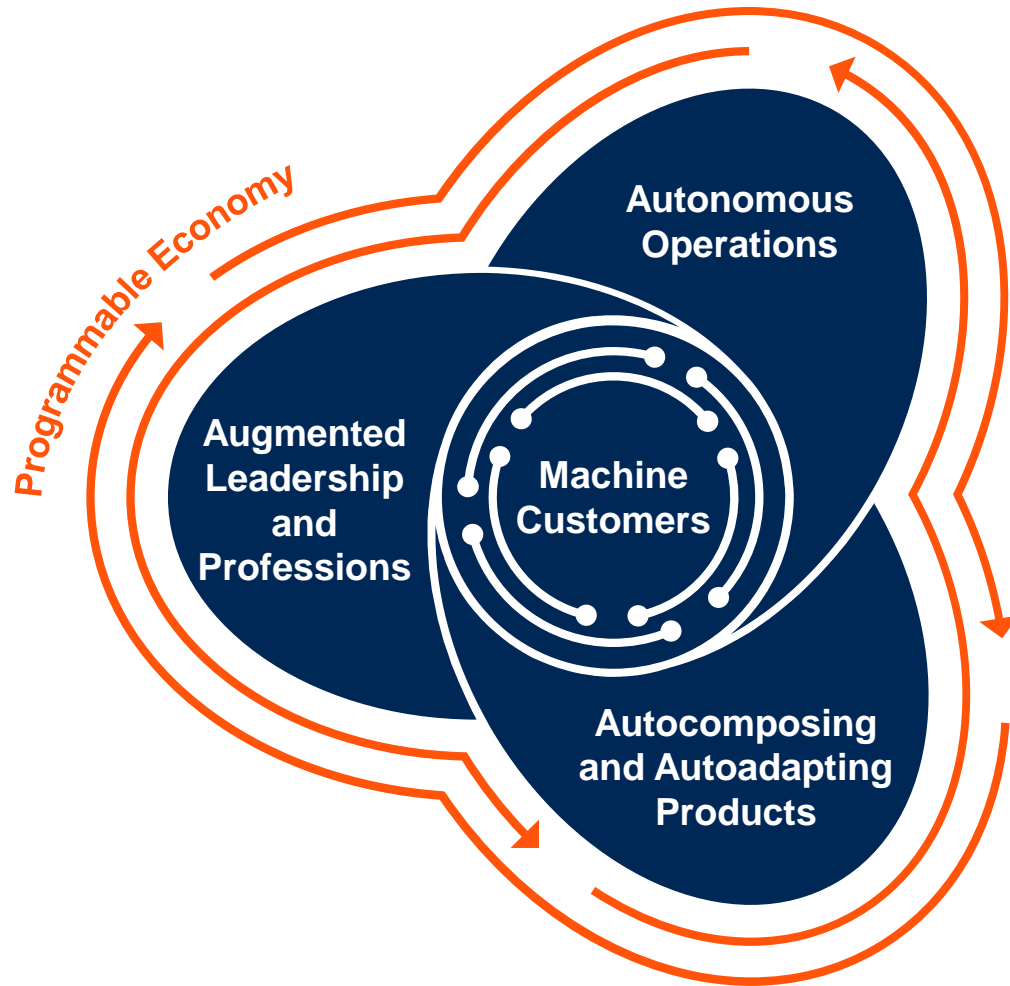# Machine customers
will become complete
economic entities ...

... that spend
what **they** earn.

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To Really Take Off Autonomous Businesses Will Necessitate a Programmable Economy

Programmable Economy

- Autonomous Operations
- Augmented Leadership and Professions
- Machine Customers
- Autocomposing and Autoadapting Products

- Immutable trusted ledgers
- Rapid open, collaborative evolution of new trading mechanisms
- Decentralized control
- Smart contracts
- Innovative tokens
- Self-sovereign ID

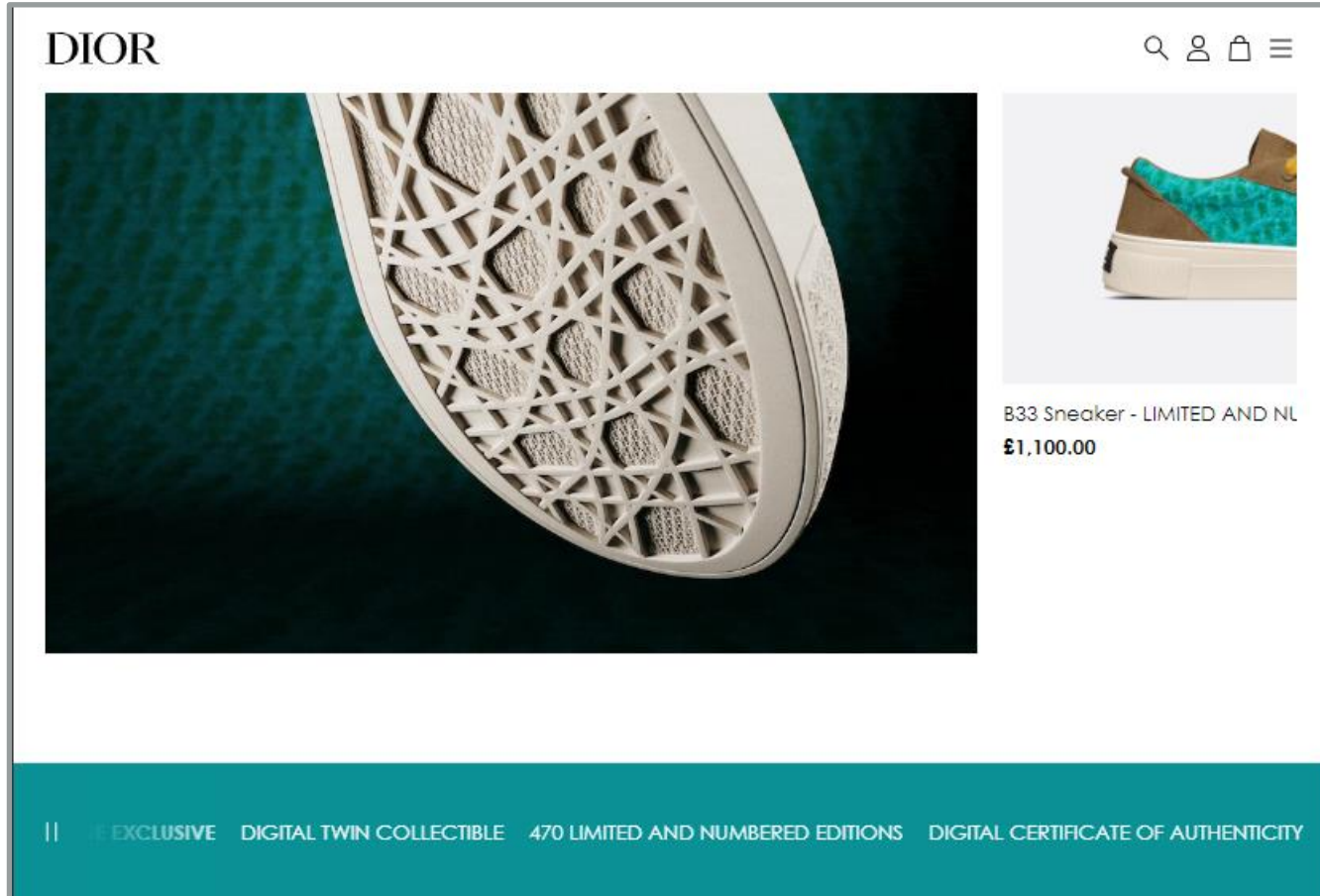Gartner.

Expect Steady Stealth Progress Toward 'B-BAU'

Blockchain Business-as-Usual

Expectations

Time

Innovation Trigger | Peak of Inflated Expectations | Trough of Disillusionment | Slope of Enlightenment | Plateau of Productivity

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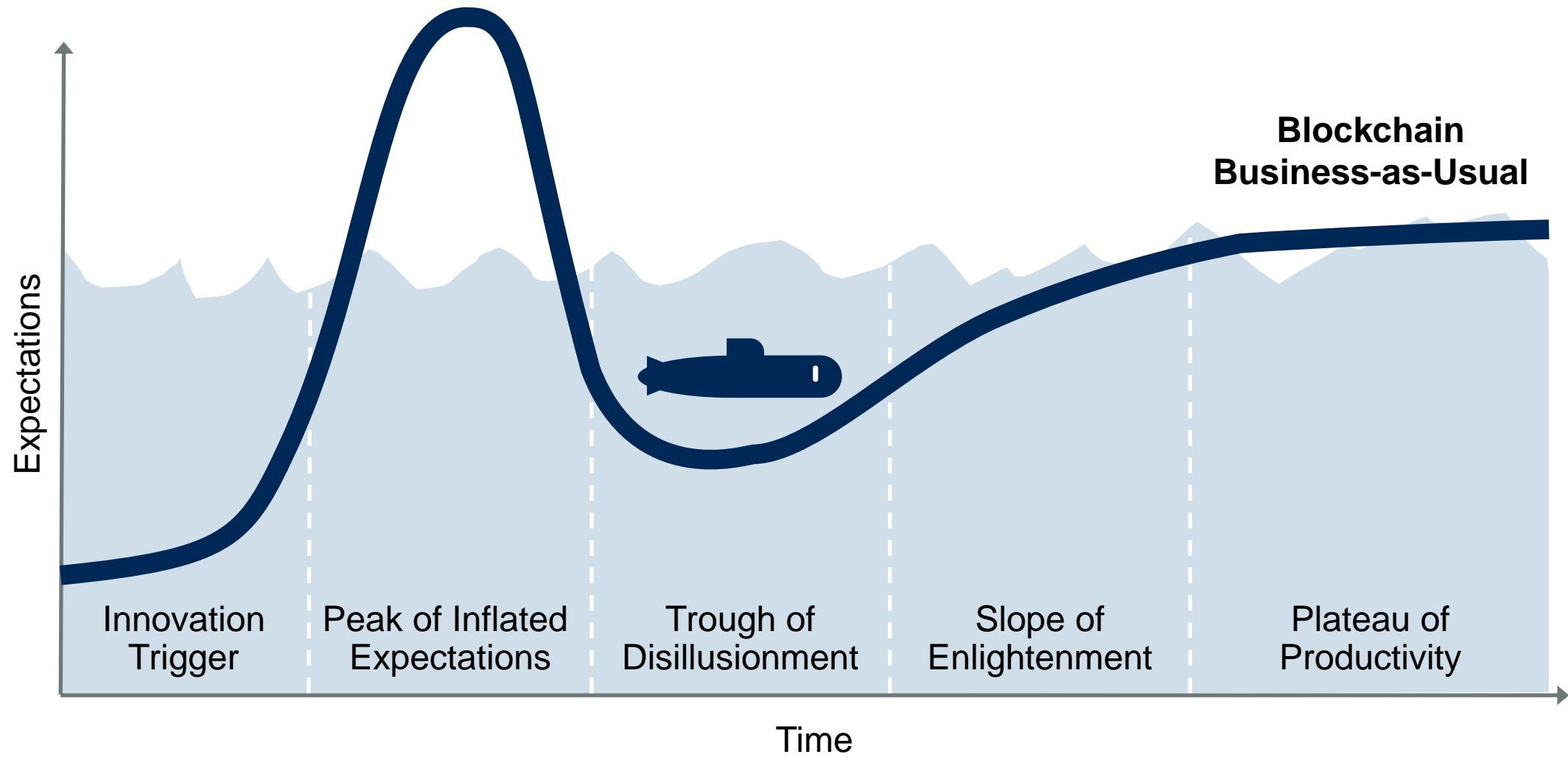
You Don't Have to Say "NFC," "NFT" or "Blockchain"

Dior B33 Digital Twin Collectible,
Sneaker Product Innovation — Introduced Mid 2023

"Each pair also includes an **encrypted key** that leads to a personal, **secure platform** offering dedicated services. Within this space, everyone can access the shoes' **certificate of authenticity,** additional information on the different stages of the manufacturing process and even announcements for future sneaker launches."

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In the C-Suite, CIOs Are Well-Positioned to Pioneer
So, Lean in and Lead Now

- Rational balancing of risks and returns

- Arbitration between competing ideas

- Understanding of data corpus assets

- Ability to sort tech sector hype from reality

- Political experience of digital transformation

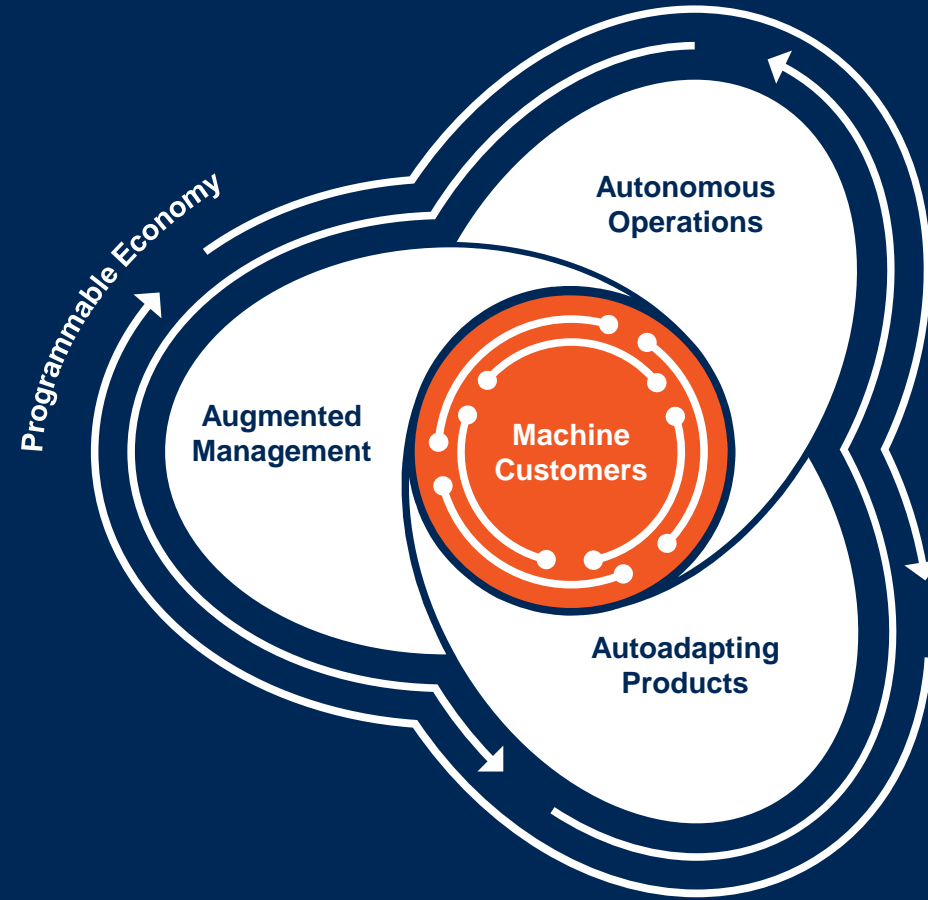- Option to use IT itself as a safe sandbox

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Action 1:
Shift your exec team to think more about the business of autonomy, less about the tech of AI.
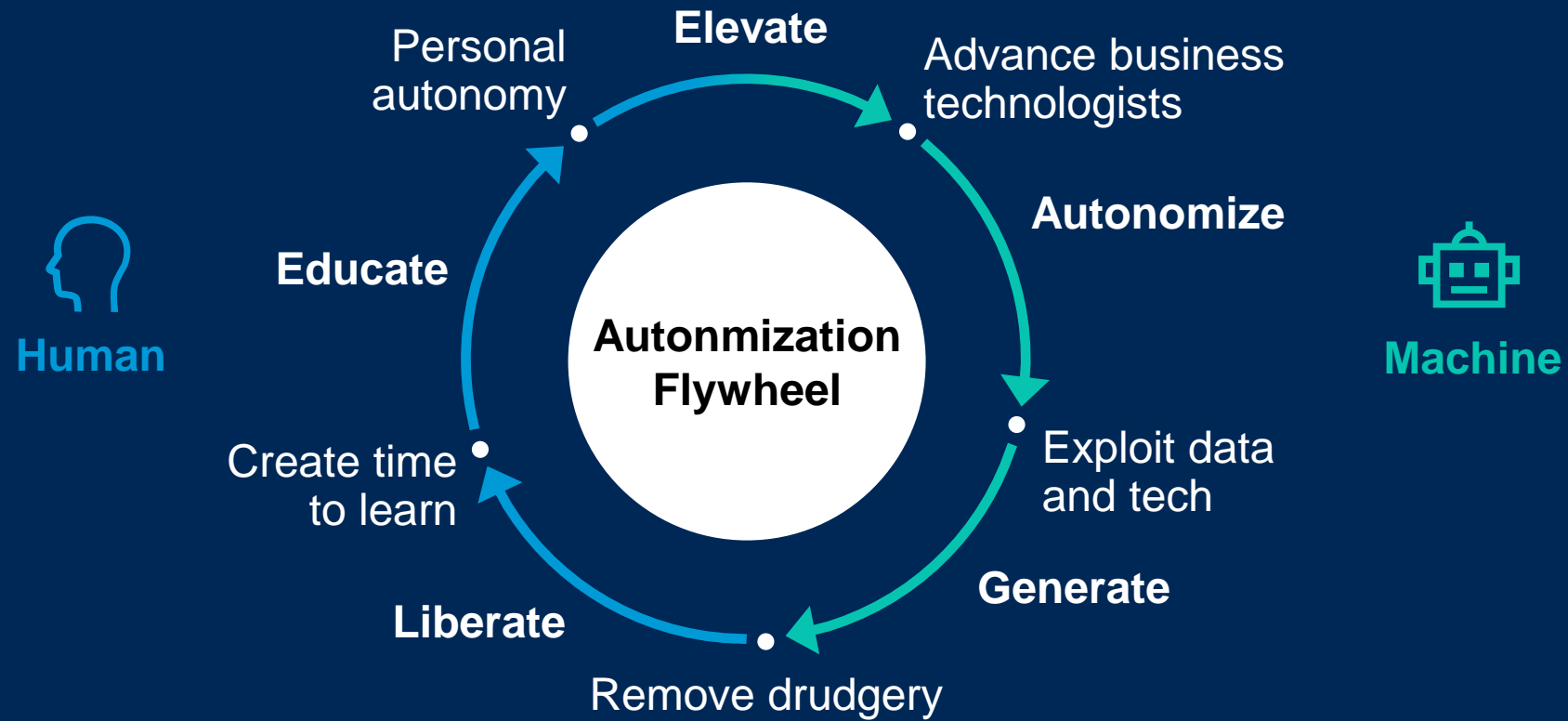
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Shift your exec team to think more about the **business of autonomy,** less about the tech of AI.

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Action 2:
Induce deep policy
belief in autonomization.

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Induce deep policy **belief in autonomization.**

Autonmization Flywheel

Elevate — Personal autonomy → Advance business technologists

Autonomize → Exploit data and tech

Generate → Remove drudgery

Liberate → Create time to learn

Educate

Human

Machine

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Action 3:
Be customer zero
for autonomous.

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Be customer zero for autonomous.

1 **Lead by example**

2 **Measure productivity gains**

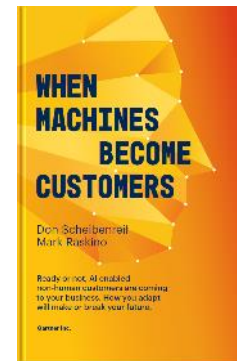**3** **Capture and transfer management learning**

- AIOps
- GenAI code assistants
- AI-based contract management
- Documentation summarization
- Legacy translation and replacement
- GenAI for UX content
- AI-augmented office software
- Process mining and automation

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Ready or not, the AI-powered autonomous business world is coming. It's your opportunity to lead or to lose.

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Recommended Gartner Research

🔍 **[Building a Digital Future: Autonomic Business Operations](#)**
Marc Kerremans and David Cearley

🔍 **[Quick Answer: When Will Organizations Adopt Autonomic Technology and Business?](#)**
Nick Jones and Arun Chandrasekaran

🔍 **[What Comes After Digital Business? Exploring the Era of Autonomous Business](#)**
Frank Buytendijk, Jeff Cribbs, Don Scheibenreif and Others

🔍 **[Autonomous Things: Technology Use Cases for R&D](#)**
Ella Yan

🔍 **[When Machines Become Customers](#)** (2023)

WHEN MACHINES BECOME CUSTOMERS
Don Scheibenreif
Mark Raskino
Ready or not, AI enabled non-human customers are coming to your business. How you adapt will make or break your future.

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