

November 2022

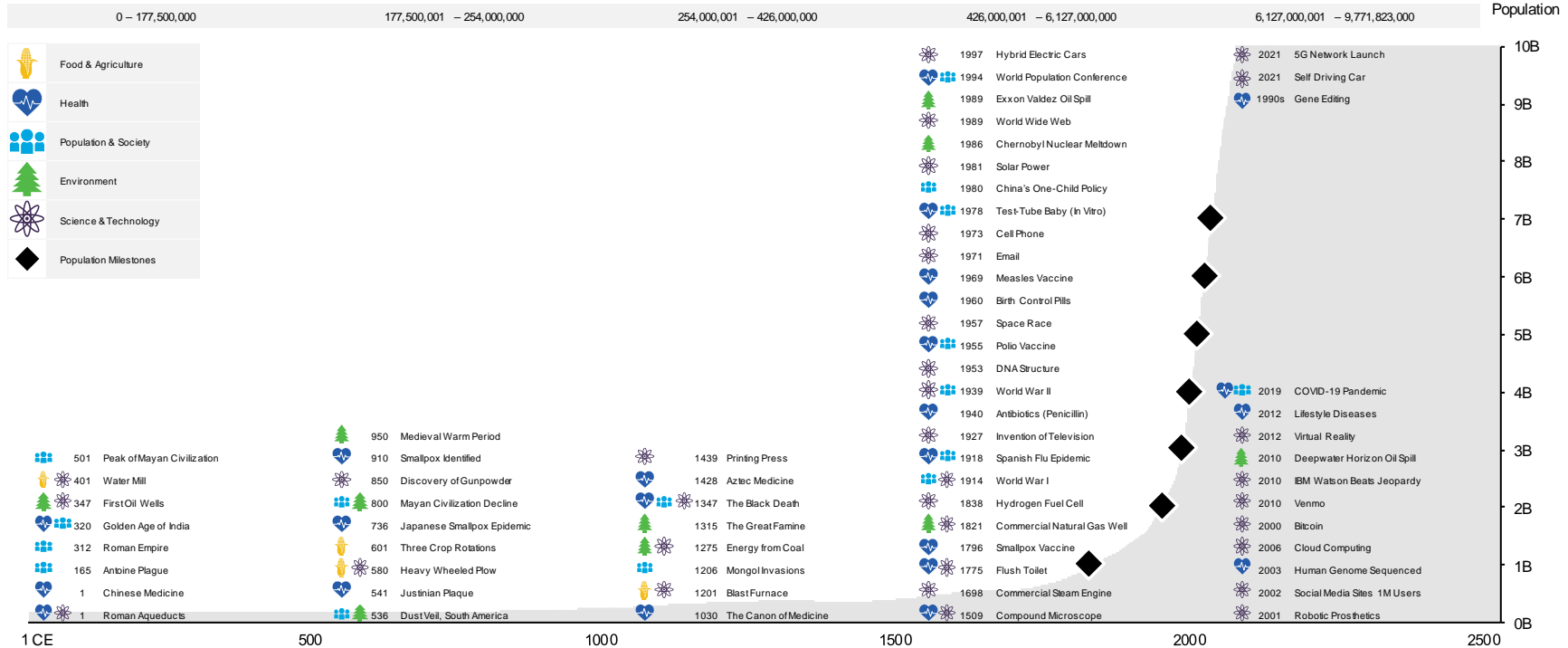


Today's challenges are tomorrow's opportunities

George Saffaye, Global Investment Strategist



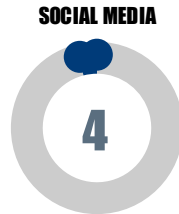
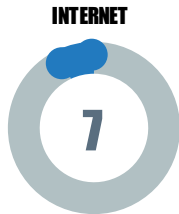
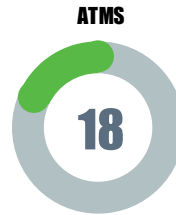
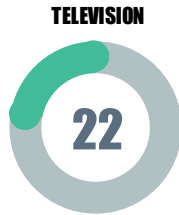
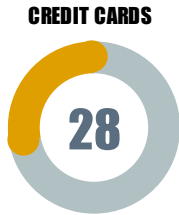
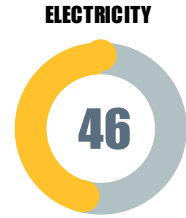
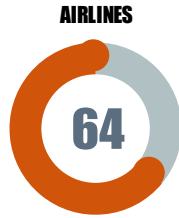
The Pace of Innovation & Disruption is Accelerating at an Unprecedented Rate



Source: NIMNA, Population Connection. Note: Population data post 2016 based on projections. NIMNA has reviewed the above research and believes the findings are still valid even without the inclusion of more recent data.

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The Road to Ubiquity is Getting Shorter

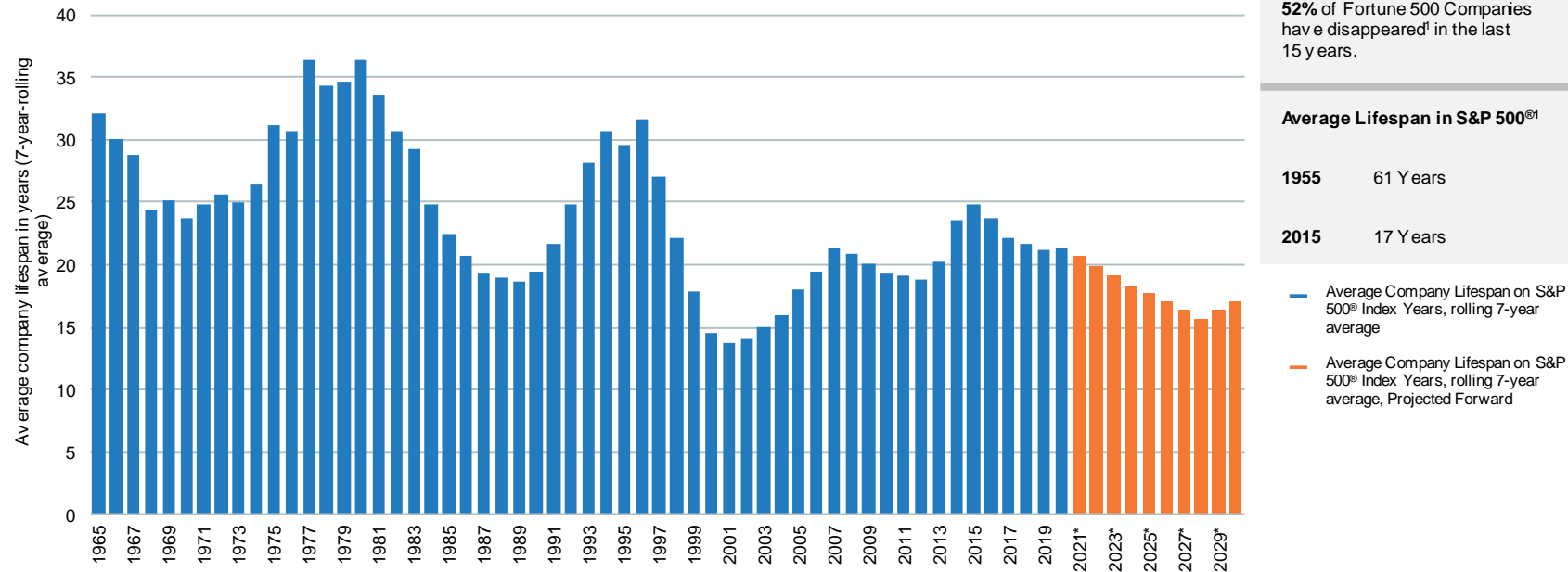


Investment Must Reflect the Realities of a Changing World

Whether through acquisition, bankruptcy, or other means, average company life spans have dropped sharply






Average Company Lifespan on S&P 500® Index

Years, rolling 7-year average



The Shift From Industry 1.0 To 4.0 Has Taken Over 300 Years

Industry 5.0 is expected to digitalize the entire manufacturing ecosystem

	Revolution	Theme	Key Features
	Industry 1.0	Mechanical Production	<ul style="list-style-type: none"> Mechanical production powered by water and steam power Timeframe: End of 18th Century
	Industry 2.0	Mass Production	<ul style="list-style-type: none"> Introduction of assembly lines and use of electrical energy Introduction of telegraphy in 1840 and telephony in 1880 Ford used 'Taylorism'² to implement care assembly line Timeframe: Beginning of 20th Century
	Industry 3.0	Application of IT	<ul style="list-style-type: none"> Use of electronics, IT, and industrial robotics to improve automation of production First micro-computer in 1971 Apple founded in 1976 Timeframe: Start of 1970s
	Industry 4.0	Cyber-physical production systems	<ul style="list-style-type: none"> Digital supply chain Digital products, service, and new business models Autonomous machines and virtual environments Timeframe: 2010 - 2030
	Industry 5.0	Complete digital ecosystem	<ul style="list-style-type: none"> Virtual customer interface and virtualized processes Flexible, virtual, and integrated value chain networks Completely connect ecosystems Timeframe: 2030 onwards

Source: Statista, "In-Depth: Industry 4.0 2021, Statista Digital Market Outlook" – published June 2021. ¹Taylorism - Named after the U.S. industrial engineer Frederick Winslow Taylor, this theory laid down the fundamental principles of large scale manufacturing through assembly line factories. NIMNA Modifications.

Innovation Driven Opportunities



New Business Models

The IoT can help companies create new value streams for customers, speed time to market, and respond more rapidly to customer needs.



Real-time Information on Mission-critical Systems

Enterprises can capture more data about processes and products more quickly and radically improve market agility.



Diversification of Revenue Streams

The IoT can help companies monetize additional services on top of traditional lines of business.



Global Visibility






The IoT could make it easier for enterprises to see inside the business, including tracking from one end of the supply chain to the other.



Efficient, Intelligent Operations

Access to information from autonomous end points will allow organizations to make on-the-fly decisions on pricing, logistics and sales and support deployment.

Digitalization and New Technologies

Digitalization Activities	Key Technologies
 <p>Collect, store and transmit data</p>	<ul style="list-style-type: none"> ▪ Sensors and tracking (e.g. RFID) ▪ Communications interface & standards, 5G ▪ Cloud-based storage and service models
 <p>Analyze data</p>	<ul style="list-style-type: none"> ▪ Predictive Analytics ▪ Product life management (PLM) software
 <p>Interact with data</p>	<ul style="list-style-type: none"> ▪ Virtual reality ▪ Mobile/Tablet/Watch ▪ Visualization tools (e.g. Tableau) ▪ Crowdsourcing (e.g. sentiment analysis)
 <p>Product digitally</p>	<ul style="list-style-type: none"> ▪ Additive manufacturing techniques (e.g. 3D printing) ▪ Advanced Robotics ▪ MES software
 <p>Protect data</p>	<ul style="list-style-type: none"> ▪ Cybersecurity & digital trust ▪ Blockchain

MOBILITY INNOVATION

Mobility Innovation is the disruptive, transformational shift in how we use, power and control all means of mobility. It profoundly impacts businesses, governments and consumers by materially altering interactions across the mobility landscape.

See Additional Information in Disclosure Statements.

Catalysts for Mobility Innovation



ENVIRONMENTAL

CO₂ Emission Global

Grid Modernization

Health & Safety

Recycling



REGULATORY

Inflation Reduction Act

Urban Congestion

Road Safety

Data Privacy



CONSUMER

US Inflection in Demand

Auto Replacement Cycle

Global Demographics

Digital Engagement



INNOVATION

Computing

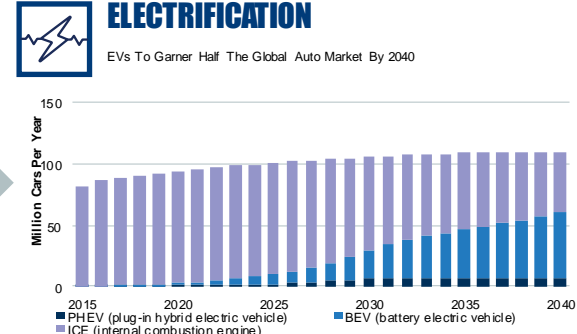
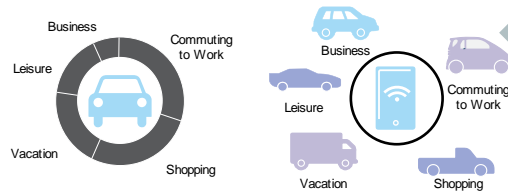
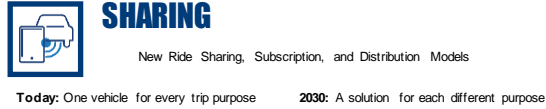
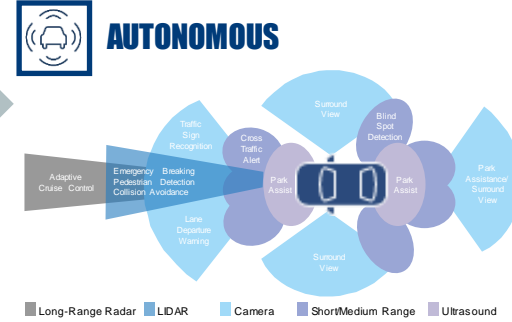
Battery Chemistry

Supply Chain Transformation

New Service Models

Mobility Innovation

Key Drivers



Source: Bottom Left: McKinsey Center for Future Mobility (Sep. 2017). Bottom Right: Bloomberg New Energy Finance as of May 21, 2018. NIMNA has reviewed the above research and believes the findings are still valid even without the inclusion of more recent data.

BLOCKCHAIN INNOVATION

Blockchain Innovation encompasses the diversified use of distributed ledger technology (synonymously known as blockchain technology) – a software that permits the creation of provable and immutably unique digital fingerprints. At its core, this breakthrough capability protects against duplication in the digital age, representing a transformational shift in trust-dependent ecosystems.

Why Blockchain?

Benefits to businesses

INCREASES

Revenues



- Customer Experience
- Secondary Markets



Speed

- Real Time



Security

- Immutable & Encrypted



Transparency

REDUCES

Costs



- Process Efficiency
- Reduce Waste
- Eliminate Redundancies



Fraud

- Secure Transactions
- Permanent Records



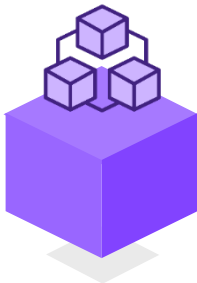
Risk

- De-centralized
- No single point failure

Blockchain Adoption Segments

The E-T-F Opportunity

ENTERPRISE BLOCKCHAIN



Focus:

Transfer of goods, services & data

Optimize business processes and data, enhance cybersecurity, and minimize/eliminate the roles of intermediaries across and beyond the enterprise.

Examples:

Shipping/Logistics
Supply Chains
Cyber Security

TOKENIZED ASSETS



Focus:

Transfer of physical assets

Greater liquidity, transparency, and accessibility with faster and cheaper transactions than existing markets.

Examples:

Real Estate
Carbon credits
Collectibles

FINANCIAL SYSTEMS



Focus:

Transfer of value

Faster execution and settlement than traditional trades, reduced costs, increased accessibility, operational simplification, and automated compliance.

Examples

Insurance
Payments
Lending

SMART CURES INNOVATION

Smart cures treat diseases by targeting the underpinning genetics that drive those diseases. We believe this new class of drugs will provide functional cures for many diseases over the next decade, sometimes with as little as a single dose. The Smart Cures Innovation strategy encompasses companies that are developing gene therapy, gene editing and gene modulation, as well as the supporting companies that help fuel the development of these drugs. These treatments are powered by remarkable advancements in science and represent some of the most potent drugs seen to date.

The BIG Picture of the Smart Cures Innovation Technologies

Gene Tech can theoretically make every protein in the human body “druggable” creating an enormous whitespace of opportunity

TRADITIONAL SMALL MOLECULES

(Ex. Pills)

- Historical drugs
- Limited disease treatment capabilities
- Extra-cellular
- Ex. Cholesterol, Diabetes, and High Blood Pressure pills
- Timeline: Last 150 years

MONOCLONAL ANTIBODIES

(Ex. Injectable Proteins)

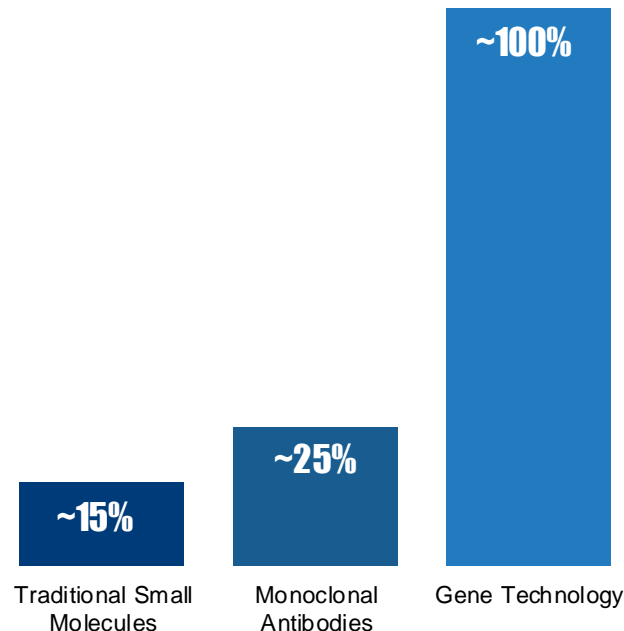
- Biotech 1.0 drugs
- Expands protein targets
- Extra-cellular
- Ex. Rheumatoid Arthritis, Psoriasis, and many Cancer Therapies
- Timeline: 1990's to today

GENE TECHNOLOGY

(Ex. Classical Gene Therapy, Cell-Based Therapy, RNA-Based Therapy, Genomic Guided Treatments & Gene Editing)

- Biotech 2.0
- Potential to address and CURE every human disease at its source
- Intra-cellular
- Enhanced by the power of Genomics, Proteomics and Artificial Intelligence
- Ex. Rare Diseases (DMD), Cancer (Leukemia), Common Diseases (Diabetes)
- Timeline: Today

Targetable Proteins in Human Body



Why Now? Target Market Sizes Are Very Large

Genetic Medicines target large un-met needs

RARE DISEASES

3.1 million people with rare
monogenic diseases¹ in
US x \$500K/Treatment =
\$1.5 Trillion TAM (Monogenic)

CANCER

1.45 million new US
cancer diagnoses² per
year x \$100k/Treatment =
\$145 billion TAM

COMMON DISEASE

95% of the almost 8 billion
global population has health
problems >33% have more
than 5 ailments³
**\$ Highest TAM in Healthcare,
Incalculable (Multigenic)**



Current Investment Themes



FRONTIER

Bio-Physical Economy
Blockchain Tokenization
Creator Ecosystems
Nuclear Renaissance
Quantum Computing
Regenerative Agriculture
Synthetic Biology
Virtual and Augmented Reality
Virtual GRID
Wearables



EMERGING

Advanced Manufacturing
Agriculture Tech
Artificial Intelligence
Cannabis
Climate Adaption
Consumer Discovery
De-Globalization
Edge Computing
Embedded Finance
Enterprise Blockchain
Factory Automation
Gene Therapy
Healthcare Delivery
Household Formations
Mobility Innovation
Multiomics
Smart Ecosystems
Social Infrastructure
Space
Sports Betting



ESTABLISHED

5G
Consumer Data
Cyber Security
Digital Transformation
Fintech
Frictionless Economy
Healthcare Innovation
Internet of Things
Longevity
Public Commercial Construction
Residential Construction
Sustainability



PAST

Activist Government
Baby Boomers
Commercial Aerospace
Commodities Supercycle
Construction
Healthcare Reform
Private Commercial Construction

The value of investments can fall. Investors may not get back the amount invested. Income from investments may vary and is not guaranteed.

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