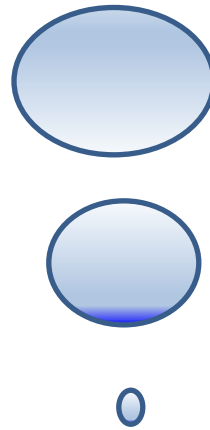


**WinterGreen Research, INC.**



**New Industrial Revolution:  
Market Shares, Strategies, and Forecasts,  
Worldwide, 2019 to 2025**



[www.wintergreenresearch.com](http://www.wintergreenresearch.com)  
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**WinterGreen Research, Inc.**  
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**CHECK OUT THESE KEY TOPICS**

**New Industrial Revolution: Lowering the Total Cost of Computing, Leading Industrial, Communications, Financial, and Agricultural Revolution Based on Information Services and Smart Technology**

<b>New Industrial Revolution</b> Smart Manufacturing Drones Robots Biomaterials 3D Printing Additive Manufacturing smart devices, smart networks, mega data centers, self-driving cars Artificial intelligence MEMs Distributed Processing Smart Systems Self-Driving Cars Internet of Things	<b>IoT</b> Personal Health Wellness Smart cities Smart buildings Electric vehicles Ride sharing Online retail Drone delivery markets Biomaterials Bitcoin Blockchain Cryptocurrency Digital economy Digital Currency Plm Software	<b>Mega Data Centers</b> Data Center Infrastructure, Enterprise Application Augmented Reality Industry Trends Enterprise Application Market Financial Ledger Internet architecture Transactions in real time Enhanced security Collaborative business Across enterprise boundaries
--	--	---

**New Industrial Revolution: Technology Evolves To Provide Automated Workflow and Real Time Digital Economy**

**New Industrial Revolution: Market Shares, Strategies, and Forecasts, Worldwide, 2019-2025**

LEXINGTON, Massachusetts (July 28, 2019) – WinterGreen Research announces that it has published a new study: **New Industrial Revolution Market Shares, Strategy, and Forecasts, Worldwide, 2019 to 2025**. The 2019 study has 376 pages, 159 tables and figures. Worldwide markets are poised to achieve explosive growth generating several new trillion-dollar markets as the digital economy takes hold. Across the industrial spectrum smart devices and robots prove their value by managing digital information in real time across enterprise boundaries, encouraging collaborative business efforts. Lowering the costs of manufacturing and logistics management is a key benefit.

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This study provides the bare outlines of 25 new trillion-dollar market segments, describing how the New Industrial Revolution will unfold. Each section provides a brief market description of market opportunity, market change, market forecasts, and market shares in many of the leading market segments impacted by the New Industrial Revolution. Rapid change in how business is conducted and how people are cared for is an exciting new development in business and industry.

Trillion-dollar markets are expected to develop as a result of AI and collaborative robot development. The companies that have stakes in the current tech industry sector will benefit greatly if they can keep up, if they can fund innovation at the pace needed to stay competitive and if they have mega data center IT that supports building innovative projects with a couple people in a few hours instead of a large team over several months.

An example is the smart manufacturing, industry 4.0, changes brought in part by robots and logistics automation. Manufacturing robots are being improved to make possible implementation of a series of automated operations that replace single step operations. The ability to provide operation of robotic sequential operations with multiple steps to the sequence of automated process for manufacturing creates far more sophisticated automated workflow.

The new industrial revolution brings unparalleled levels of automation and efficiency to every aspect of life. Every man, woman, and child will have a smart phone soon. Even babies like them. They represent a must have device, on hand all the time, even close at hand while we sleep.

The world is at the dawn of next generation of mobile networks, to be based on broadband. Networks bring broadband 5G that is transformational. 5G is an innovation platform that enhances mobile connectivity of information. It enhances existing services by implementing automation of simple process. It opens capabilities for mechanical actuators that are managed automatically by sensors and information from Micro-Electro Mechanical sensors (MEMs).

Moving past a nefarious history, the blockchain market moves into rapid growth mode as the digital economy takes hold. As the banks and finance industry move into the modern age of real time transaction processing, blockchain is a core enabling technology. This market segment previously has been held back in part by the outdated aspects of the mainframe computing technology. Blockchain is spurred by more modern ways to manage global transactions across national borders from IBM, Microsoft, and Accenture.

Digital technology is dominant worldwide. The digital computer technology that managed data in batches is outdated, now digital data is managed in real time over the Internet. Blockchain brings digital technology into real time computing systems management. It has the ability to change all aspects of the digital economy, including conducting business, delivering healthcare, shopping, enhancing education and learning, entertainment, and staying connected with a social world.

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Cryptocurrency is becoming increasingly popular. Distributed ledgers support the payment system for digital currency to operate in decentralized mode, by eliminating the need of intermediaries to centralize processing. It virtualizes tracking and trading anything of value via creating digital money. Credit cards become an essential part of the blockchain process.

Demand for robotic technology is growing among the largest users of IBM cloud capacity. IBM 60 cloud data centers see blockchain growing to be one of the top applications in use. IBM blockchain digital ledger market is growing rapidly, a much-needed event for big blue. IBM has been one of the key companies behind the Hyperledger consortium, a nonprofit open-source project that aims to create efficient standards for commercial use of blockchain technology.

Microsoft enterprise customers are making the transition to cloud services and blockchain on Azure. Modernizing transactions to digital economic collaboration support is key to success in modern business environments. Blockchain Cloud Service, helps customers extend existing applications like enterprise-resource management systems. Microsoft expanded its partnership with consortium R3 to make it easier for financial institutions to deploy blockchains in its Azure cloud.

According to Susan Eustis, leader of the team that prepared the study, “The rise of many new trillion-dollar markets is unique in the history of capital experience. Economic activity in the world economies is set to experience tremendous growth, leveraging artificial intelligence technology sectors breaking the old slower growth trends and growing rapidly.”

New sectors grow at penetration rates, then slow to an average of 35% growth per year in very large segments, this is market growth at a pace that is unique. That trends of slow growth shifts with the new industrial revolution as many new sectors open opportunities within existing sectors that grow as fast as 100% per year. The world economy is forecast to accelerate in 2020 and beyond, with global growth projected. The new industrial revolution is far different from the earlier industrial growth trajectories. Sectors impacted by the new industrial revolution grow rapidly and they grow big.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

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WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Key Words: New Industrial Revolution, Smart Manufacturing, Drones, Robots, Biomaterials, 3D Printing, Additive Manufacturing, smart devices, smart networks, mega data centers, self-driving cars, Artificial intelligence, MEMs, Distributed Processing, Smart Systems, Self-Driving Cars, Internet of Things, IoT, Personal Health, Wellness, Smart cities, Smart buildings, Electric vehicles, Ride sharing, Online retail, Drone delivery markets, Biomaterials, Bitcoin, Blockchain, Cryptocurrency, Digital economy, Digital Currency, Plm Software, Mega Data Centers, Data Center Infrastructure, Enterprise Application Augmented Reality , Industry Trends, Enterprise Application Market, Financial Ledger, Internet architecture, Transactions in real time , Enhanced security, Collaborative business, Across enterprise boundaries ,

## Companies Profiled

### Selected Market Leaders

IBM  
Microsoft  
Accenture  
ABB:  
Amazon  
b+m Surface Systems GmbH  
Facebook  
Goldman Sachs  
Intel  
JP Morgan Chase  
Lincoln Electric / Wolf Robotics  
Microsoft  
Thales  
Google  
BMW

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Mercedes  
Tesla  
DJI  
Parrot S.A.  
IBM  
Amazon  
Intel  
Wolf Robotics  
Mellanox Technologies  
NVIDIA  
Softbank ARM

### **New Industrial Revolution: Market Shares, Strategies, and Forecasts, Worldwide, 2019 to 2025**

#### **Report Methodology**

This is the 825th report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

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The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2016. With 2010 and several years prior to that baseline, market projections were developed for 2017 through 2023. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

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This research includes reference to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

### YOU MUST HAVE THIS STUDY

#### **New Industrial Revolution: Market Shares, Strategies, and Forecasts, Worldwide, 2019-2025**

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#### **New Industrial Revolution: Executive Summary**

The study is designed to give a comprehensive overview of the New Industrial Revolution market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

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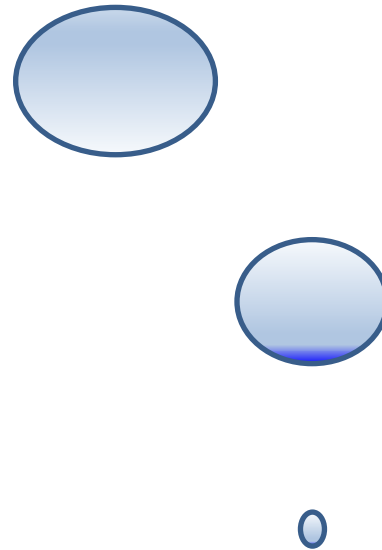
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## **ABOUT THE COMPANY**

**WinterGreen Research**, research strategy relates to identifying market trends through reading and interviewing opinion leaders. By using analysis of published materials, interview material, private research, detailed research, social network materials, blogs, and electronic analytics, the market size, shares, and trends are identified. Analysis of the published materials and interviews permits WinterGreen Research senior analysts to learn a lot more about markets. Discovering, tracking, and thinking about market trends is a high priority at WinterGreen Research. As with all research, the value proposition for competitive analysis comes from intellectual input.

**WinterGreen Research**, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology.

Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

The studies provide primary analytical insight about the market participants. By publishing material relevant to the positioning of each company, readers can look at the basis for analysis. By providing descriptions of each major participant in the market, the reader is not dependent on analyst assumptions, the information backing the assumptions is provided, permitting readers to examine the basis for the conclusions.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

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## About the Principal Authors

**Susan Eustis**, President, co-founder of WinterGreen Research, is a senior analyst. She has done research in communications, healthcare equipment, and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, multiprocessing, electronic voting, and oxygen management. She is the author of recent studies of the drone and robot marketing strategies, Internet equipment, biometrics, biomaterials, a study of Internet Equipment, Artificial Intelligence, IoT, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst in 2012, 2013, 2014, 2015, and 2016. She has been twice featured on the cover of the Women of Distinction magazine. She was cited in a recent Time Magazine article and major media articles on Youth Sports market growth.

**About the WinterGreen Research Team:** The WinterGreen Research Team is comprised of senior analysts that prepare the market research and analysis that is offered to the client and developed using an iterative process to achieve a final study. Typical projects include providing market/viability research. The team can look at how drones can be applied to critical infrastructures safety, including: type of market existing, Barriers, forecast demand and competitors, SWOT and competitive advantages, Price Analysis, product design recommendations (marketing orientation).

Research is typically for many different regions or localities, for example EU countries including Spain, UK, Nordic, Germany, and France. Typical projects profile the United States and areas of Asia. It is common to three representative countries from South America, Brazil, Argentina, Chile, and Mexico. Representative countries from Asia APAC typically include Japan, China, India, and Australia.

Critical infrastructure safety, including: type of market existing, barriers to entry and to faithful execution of product provision, forecast of demand, market share, SWOT, competitive advantage of major competitors, identification of new technologies and new companies, price performance analysis, product design recommendations, and marketing considerations are typical topics covered.