vamstar

Report/

State of the MedTech Industry in 2024 and Outlook for 2025 →

Preface

2024 has stood out as a year defined by extraordinary resilience, groundbreaking innovation, and transformative change. With unwavering pride, we unveil the *"State of the MedTech Industry in 2024 and Outlook for 2025"* — a comprehensive report that shines a spotlight on the pivotal trends, pressing challenges, and unparalleled opportunities shaping the future of our sector.

At Vamstar, we understand the profound impact that technological advancements and evolving market dynamics have on the healthcare landscape. The past year has been defined by breakthroughs in artificial intelligence, the expansion of digital health platforms, and an increasing focus on operational efficiency and sustainability. These developments underscore the importance of agility and collaboration in navigating an environment that demands both innovation and precision.

This report encapsulates a comprehensive synthesis of our in-depth research, market intelligence, and perspectives from industry leaders. It explores the key forces propelling transformation—ranging from the integration of AI across market access, pricing, sales, and tendering processes, to the advancement of AI-powered diagnostics, and the urgent imperative for supply chain resilience amidst global uncertainties.

As we set our sights on 2025, the opportunities ahead are vast and intertwined with complexity. The industry's trajectory hinges on its ability to align technology with patient-centric care, adapt to regulatory evolution, and forge new pathways in underserved markets. At Vamstar, we remain steadfast in our mission to empower organisations with the tools and insights necessary to thrive in this era of change.

I invite you to explore this report with the same curiosity and commitment to excellence that defines our work at Vamstar. It is our hope that these findings inspire bold strategies, collaborative innovation, and meaningful progress across the MedTech ecosystem. Our team remains at your disposal to support your journey and drive success in this evolving landscape.

With best wishes,

Praful Mehta
Chief Executive Officer, Vamstar

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Executive Summary

The medical technology (MedTech) sector in 2024 navigated a complex landscape marked by strategic consolidation, technological innovation, and significant operational challenges. The year was characterised by profound industry shifts that tested the resilience and adaptability of leading companies.

Strategic Consolidation and Market Reshaping

The year witnessed transformative mergers and acquisitions that redefined the competitive ecosystem:

- → *Johnson & Johnson acquired Shockwave Medical for $13.1 billion, significantly expanding its cardiovascular portfolio with innovative intravascular lithotripsy (IVL) technology.*
- → *BD (Becton, Dickinson and Company) purchased Edwards Lifesciences' Critical Care business for $4.2 billion, strengthening its advanced patient monitoring capabilities.*
- → *Boston Scientific completed a $3.7 billion acquisition of Axonics, enhancing its sacral neuromodulation technologies for treating overactive bladder conditions.*

These strategic moves not only diversified product offerings but also positioned companies to lead in high-growth market segments. Strategic acquisitions and divestitures are reshaping portfolios to align with growth opportunities. Leading firms are pursuing programmatic acquisitions in adjacent markets and step-out deals targeting unmet patient needs. Divestitures, meanwhile, are unlocking dormant value and enabling sharper focus on core strengths.

Supply Chain Resilience and Optimisation

Global economic uncertainties prompted comprehensive supply chain transformations:

- *Semiconductor shortages and geopolitical tensions challenged industry stability.*
- *Medtronic implemented a regional manufacturing model to mitigate global transportation risks.*
- *Baxter International adopted a dual-sourcing strategy to reduce supplier dependency.*
- *BD integrated predictive analytics into inventory management, achieving a 20% improvement in forecast accuracy.*

Technological Innovation Driving Growth

Breakthrough technologies emerged as key differentiators:

- *Abbott Laboratories launched Lingo™, a next-generation continuous glucose monitor with advanced AI algorithms.*
- *Siemens Healthineers introduced Luminos Q.namix, an AI-powered imaging platform revolutionising diagnostic workflows.*
- *Boston Scientific's AGENT™ Drug-Coated Balloon set new standards in minimally invasive cardiovascular interventions.*

Workforce and Operational Realignment

The industry has been undergoing significant restructuring while investing in AI capabilities for digital transformation:

- *Major players announced layoffs affecting over 14,000 employees.*
- *Increased focus on operational efficiency and strategic realignment.*
- *Implementation of AI in key commerical use-cases.*

Financial Performance and Market Dynamics

By December 2024, the industry faced considerable headwinds:

- *Approximately 65% of top 200 MedTech stocks traded near 52-week lows.*
- *Investor expectations for profitability remained unmet.*
- *Margins became critical valuation metrics.*
- *Performance variability across global markets, with particular challenges outside the United States.*

The 2024 MedTech landscape demonstrated the industry's capacity for resilience, innovation, and strategic adaptation. Companies that successfully balanced technological advancement, operational efficiency, and strategic investments were best positioned to navigate the complex global healthcare technology ecosystem.

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Key Highlights of 2024

Industry Overview

Global Market Growth

The MedTech sector displayed remarkable resilience in 2024, achieving a robust growth rate of 5–7% despite global macroeconomic pressures. This expansion was fuelled by surging demand across key categories, notably wearable devices and AI-enabled diagnostic and surgical solutions, highlighting a shift towards unit volume growth over price hikes.

Abbott Laboratories, for instance, reported substantial adoption of its Lingo™ continuous glucose monitoring system, underscoring the growing appeal of AI-driven, patient-centric technologies. Similarly, Boston Scientific's AGENT™ Drug-Coated Balloon catalysed increased procedural volumes, solidifying its position in coronary intervention innovations.

Minimally invasive procedures further bolstered market dynamics, with patients and providers favouring solutions that reduced recovery times and improved outcomes. In parallel, emerging markets played a pivotal role, driven by investments in healthcare infrastructure and government initiatives in regions like China, which prioritised affordable access to advanced medical tools.

By embracing cost-effective, scalable technologies, the industry not only adapted to economic constraints but also positioned itself for sustained growth in diverse and underserved markets. This adaptability underscores MedTech's evolving focus on delivering impactful, accessible solutions globally.

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Regional Market Analysis

NORTH AMERICA

North America maintained its leadership in innovation and market size, driven by advancements in digital health solutions and strong investment in R&D. However, economic pressures, particularly reduced volumes of elective procedures, created headwinds for growth. Companies such as Medtronic reported robust adoption of AI-integrated surgical technologies, underscoring the region's commitment to innovation despite economic challenges.

EUROPE

Europe faced profitability challenges due to stringent regulatory compliance costs associated with the MDR and tender-driven pricing pressures. However, sustainability initiatives gained traction, with Siemens Healthineers leading efforts in energy-efficient manufacturing processes and eco-friendly product designs.

02 / Key Highlights of 2024 / continued

ASIA-PACIFIC

The region experienced robust growth fueled by rapid adoption of digital health technologies and significant investments in healthcare infrastructure, particularly in China and India. Notably, Abbott Laboratories expanded its presence in Asia with scalable solutions tailored for the growing middle-class population, driving high unit sales in wearables and diagnostics.

EMERGING MARKETS

Infrastructure limitations and uneven regulatory environments presented challenges, but demand for value-segment products remained strong. For instance, Baxter International increased its focus on affordable medical devices in Latin America and Southeast Asia, leveraging local manufacturing hubs to reduce costs and improve market accessibility.

Key Performance Indicators

REVENUE GROWTH

Revenue growth in 2024 was largely attributed to increased unit sales in high-demand segments, bolstered by key tendering and contracting successes. For example, Abbott Laboratories secured significant contracts with major healthcare systems in North America for its Lingo™ continuous glucose monitoring system, which resulted in a surge in unit sales driven by its advanced AI features and accessibility. Similarly, Boston Scientific's AGENT™ Drug-Coated Balloon achieved strong market penetration through successful tenders in Europe and Asia, where its adoption for coronary procedures was widely endorsed by healthcare providers. In emerging markets, Medtronic's value-based contracting approach in India and Brazil, offering bundled solutions for diabetes care, further supported sales growth by addressing affordability and accessibility challenges in these regions.

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MARGIN PERFORMANCE

Margin improvements in 2024 were largely driven by targeted digital transformation initiatives, portfolio re-alignment, and strategic operational adjustments. Medtronic optimised its manufacturing processes through the integration of AI-driven analytics, which reduced production inefficiencies and addressed supply chain challenges, contributing to cost savings. Baxter International implemented a dual-sourcing strategy that stabilised margins by mitigating risks associated with single-source dependency. Furthermore, BD successfully leveraged long-term tender contracts in Europe and North America, securing predictable revenue streams and operational efficiency. For example, BD's five-year supply agreement with a major European healthcare consortium not only streamlined logistics but also ensured stable pricing amidst inflationary pressures.

INNOVATION METRICS

R&D investments surged in 2024, driving the approval of several breakthrough products that underscored the industry's commitment to innovation. Siemens Healthineers debuted its AI-powered Luminos Q.namix imaging platform, which enhanced diagnostic accuracy and streamlined radiography workflows, earning widespread adoption in European markets. In April 2024, the Symani Surgical System by Medical Microinstruments (MMI) became the first FDA-approved robotic platform for microsurgery, enhancing precision in delicate procedures. Additionally, companies like Know Labs and Afon Technology made significant strides in developing non-invasive glucose monitoring systems, utilising radiofrequency and optical sensing techniques to aid diabetes management without the need for fingerstick testing. These innovations highlight how targeted R&D spending in 2024 accelerated the development of transformative medical technologies tailored to patient-centric care.

2024 Top Product Launches

Company	Month of Announcement	Type of Product Launched
Abbott	January	Protality™ Nutrition Shake
Abbott	November	PneumoShield 14
Abbott	November	AVEIR™ VR Leadless Pacemaker System
Abbott	May	XIENCE Sierra™ Stent
Abbott	October	GLP systems Track
Abbott	June	Lingo™ and Libre Rio™ CGM Systems
Accuray	August	Accuray Helix™
Accuray	June	Accuray Precision® Treatment Planning System
Abiomed	October	Impella ECP
Abiomed	December	Expanded Indication for Impella Heart Pumps (Pediatric)
Agfa-Gevaert	April	Anapurna Ciervo H3200
Agfa-Gevaert	March	Jeti Condor RTR5200 HS
Agfa-Gevaert	March	Jeti Bronco

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Company	Month of Announcement	Type of Product Launched
Align Technology	October	iTero™ Intraoral Scanner
Align Technology	November	Invisalign® Palatal Expander System
Alcon	November	PRECISION7
Alcon	November	Voyager™ DSLT
Alcon	November	UNIFEYE™ and UNIPEXY™ Gas Delivery Systems
Alcon	September	SMARTCataract DX
Alcon	September	NGENUITY 1.5
Alphatec Spine	July	EOS Insight
Ambu	April	aScope™ Duodeno 2 and aBox™ 2
Artivion	December	AMDS Hybrid Prosthesis
AtriCure	October	cryoSPHERE MAX™
Avanos Medical	November	CORGRIP® SR
Barco	October	Coronis OneLook
Barco	January	I600 and QDX projector families
Barco	January	ClickShare Bar
Barco	April	HDR by Barco

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Company	Month of Announcement	Type of Product Launched
Baxter	April	Pharmaceuticals Portfolio Expansion
Baxter	December	Pharmaceuticals Portfolio Expansion
B. Braun	June	ACCEL® Drainage Catheters
B. Braun	May	Levetiracetam in Sodium Chloride Injection
B. Braun	March	Introcan Safety® 2 IV Catheter
B. Braun	September	Introcan Safety® 2 Deep Access IV Catheter
BD	September	BD Neopak™ XtraFlow™ Glass Prefillable Syringe
BD	October	Robotics Solution for Single-Cell Research
BD	October	BD® Intraosseous Vascular Access System
Bio-Rad	April	Transplant Assay (with Oncocyte)
Biotage	September	Biotage® PeptiPEC-96
Biotage	June	ISOLUTE® PLD+ for PFAS
Biotage	June	Biotage® Selekt ELSD
Boston Scientific	March	AGENT™ Drug-Coated Balloon
Bruker	December	Dimension Nexus™ Atomic Force Microscope

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Company	Month of Announcement	Type of Product Launched
Canon Medical	November	Vantage Galan 3T / Supreme Edition
Carl Zeiss Meditec	September	ZEISS KINEVO 900 S
Cochlear	April	Cochlear Osia System (lowered age requirement)
Coloplast	May	SenSura® Mio Convex Soft with Flex coupling
Coloplast	May	Luja™ Catheter for Women
Coloplast	July	Heylo™
ConvaTec	February	Esteem Body™ with Leak Defense™
Cook Medical	October	PillSense™ GI Bleed Detection System
Cook Medical	October	NestVT™ Vitrification Device
Cooper Companies	November	FlexiCore™ Thermoplastic Body Seal
Cooper Companies	August	ONETRAC™ Surgical Retractors and Suction Devices
Cooper Companies	July	clariti® 1 day multifocal contact lenses
Demant	May	Oticon Intent™

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Company	Month of Announcement	Type of Product Launched
Demant	May	Sentio™
Demant	May	Bernafon Encanta
Dentsply Sirona	September	Primescan® 2
Dentsply Sirona	July	Lucitone Digital Print Denture™ System
Dexcom	June	Stelo
Dexcom	February	Dexcom ONE+
DJO	November	DonJoy® Roam OA Knee Brace
DJO	July	DonJoy® Defiance PRO Custom Knee Brace
DJO	July	DonJoy® X-ACT Fit Shoulder™
Edwards Lifesciences	May	SAPIEN 3 Ultra RESILIA valve
Elekta	May	Elekta Evo
Enovis	July	AltiVate Reverse® Glenoid System
Fisher & Paykel Healthcare	November	F&P Nova Micro™
Fisher & Paykel Healthcare	August	F&P my820 System

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Company	Month of Announcement	Type of Product Launched
Fisher & Paykel Healthcare	April	F&P Solo™ Nasal Mask
Fresenius Medical Care	February	5008X Hemodialysis System
Fresenius Medical Care	September	NxStage Versi HD with GuideMe software
Fresenius Medical Care	December	Epinephrine Injection, USP
Fujifilm	October	FUJIFILM X-M5
GE Healthcare	December	Sonic DL for 3D
GE Healthcare	September	Venue Sprint
Inari Medical	December	ClotTriever Thrombectomy System (Japan)
iRhythm Technologies	September	Zio® monitor and enhanced Zio® service
Johnson & Johnson MedTech	October	VOLT™ Plating System
Masimo	February	MightySat® Medical
Medacta	August	Robotic Total Knee Arthroplasty Solution (with THINK Surgical)

02 / Key Highlights of 2024 / continued

OPERATIONAL EFFICIENCY

Commercial excellence and supply chain optimisation were instrumental in enhancing operational efficiency in 2024. BD successfully implemented predictive analytics in its inventory systems, leading to a 20% improvement in forecast accuracy and a substantial reduction in excess stock levels. Additionally, Johnson & Johnson optimised its tendering processes for large hospital networks, leveraging data-driven insights to secure multi-year contracts in North America and Europe, further streamlining supply chain operations. In emerging markets, Medtronic focused on value-based contracting for its diabetes care portfolio, securing significant tenders in India and Brazil by offering bundled solutions tailored to local healthcare systems. These examples illustrate how companies strategically aligned commercial and operational capabilities to achieve efficiency and cost savings.

03/ Market Dynamics in 2024

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Market Dynamics in 2024

Economic Environment

In 2024, the MedTech industry grappled with significant economic challenges that impacted its operational costs and financial stability. Inflationary pressures led to substantial increases in raw material expenses, with costs rising by 15–20%. This surge was primarily due to heightened prices for essential inputs such as plastics, resins, and metals, which are crucial for medical device manufacturing.

Labour costs also escalated, with a 10–15% increase observed across key manufacturing hubs in the Asia-Pacific region and Europe. This rise was attributed to wage inflation and a competitive labour market, compelling companies to offer higher salaries to attract and retain skilled workers.

Additionally, currency volatility posed further financial strains. The depreciation of emerging market currencies against the US dollar increased the cost of importing raw materials and components priced in dollars, thereby squeezing profit margins. This currency fluctuation also complicated financial planning and budgeting for MedTech firms operating in these regions.

Collectively, these factors necessitated strategic adjustments within the industry, including supply chain restructuring, cost management initiatives, and pricing strategy revisions, to mitigate the financial impact and maintain operational efficiency.

Regulatory Landscape

EUROPEAN UNION

In 2024, compliance costs associated with the Medical Device Regulation (MDR) continued to impact company portfolios. Siemens Healthineers adapted by streamlining its product offerings to align with MDR requirements, focusing on high-margin devices while phasing out older, non-compliant products. Additionally, Medtronic invested in digital documentation systems to expedite MDR compliance and minimise disruption to its European operations.

UNITED STATES

The FDA intensified its scrutiny of digital and AI-powered devices, resulting in expedited pathways for breakthrough innovations. For example, Abbott Laboratories secured FDA approval for its AI-integrated glucose monitoring system, Lingo™, under the Breakthrough Devices Programme, reflecting the growing focus on supporting transformative technologies.

EMERGING MARKETS

Harmonisation with global regulatory standards progressed, with countries like India and Brazil aligning more closely with ISO certifications to attract international investments. Baxter International leveraged these regulatory improvements to introduce a value-segment line of medical devices in India, streamlining market entry while addressing local healthcare needs.

Investment Climate

The MedTech industry experienced a dynamic year in 2024, with mergers, acquisitions, divestitures, and listings reshaping the sector. Deal activity surged to pre-pandemic levels, driven by technological advancements, strategic repositioning, and favourable financing conditions. Key acquisitions included Johnson & Johnson's $13.1 billion purchase of Shockwave Medical, bolstering its cardiovascular portfolio, and Boston Scientific's $3.7 billion acquisition of Axonics, expanding its presence in sacral neuromodulation. These strategic moves highlight a focus on high-growth markets and innovation to meet evolving patient needs.

In parallel, several companies streamlined their operations through divestitures. Edward Lifesciences' divested its Critical Care business to BD for $4.2 billion while Baxter International divested its Kidney Care business to the Carlyle Group for $3.8 billion. These transactions allowed companies to concentrate on core strengths and reduce debt. The industry also saw innovative listings and financing activities, such as Tandem Diabetes Care's private placement of convertible notes and Cytosorbents Corporation's rights offering. These moves underscore a strategic focus on securing capital and retaining top talent.

Looking ahead, the MedTech landscape is poised for further evolution as companies leverage acquisitions to strengthen positions in high-growth areas such as cardiovascular and neurology while addressing challenges like regulatory scrutiny and integration complexities. With an ageing population and a shift toward value-based care, the industry remains well-positioned for growth and innovation. Key Industry Trends.

Top Deals in MedTech in 2024

Company	Target Company	Deal Type	Deal Value	Month Announced
Edwards Lifesciences	Critical Care business	Divestiture	$4.2B	September
Baxter International	Vantive Kidney Care	Divestiture	$3.8B	August
Boston Scientific	Axonics	M&A	$3.7B	November
Johnson & Johnson	V-Wave	M&A	$1.7B	May
Owens & Minor	Rotech Healthcare	M&A	$1.4B	July
Boston Scientific	Silk Road Medical	M&A	$1.18B	September
Carl Zeiss Meditec	D.O.R.C.	M&A	$1.07B	April
Benco Dental	M&S Dental Supply and A-Dent Dental Equipment	M&A	Not disclosed	August
Accuray Incorporated		Listing	Not disclosed	November
Agilent Technologies	BIOVECTRA	M&A	$925M	July
Avanos Medical	Diros Technology	M&A	Not disclosed	November

03 / Market Dynamics in 2024 / continued

Company	Target Company	Deal Type	Deal Value	Month Announced
BD (Becton, Dickinson and Co.)	Critical Care product group (Edwards Lifesciences)	M&A	$4.2B	September
Cordis	MedAlliance	M&A	Not disclosed	November
Cytosorbents Corporation		Other	Not disclosed	December
Stryker Corporation	Nico Corporation	M&A	Not disclosed	September
Tandem Diabetes Care		Other	$250M	March
Vapotherm		M&A	Not disclosed	September
Varian Medical Systems		Other	Not disclosed	May

Digital Transformation

AI AND MACHINE LEARNING

AI adoption in 2024 significantly improved diagnostic accuracy, operational efficiency, and clinical decision support. Siemens Healthineers launched its AI-powered Luminos Q.namix platform, streamlining radiology workflows and enhancing diagnostic precision. Similarly, Medtronic integrated machine learning algorithms into its remote monitoring systems, enabling early detection of critical health issues, which improved patient outcomes and operational workflows.

CONNECTED DEVICES

IoT-powered connected devices gained traction, enhancing patient engagement and real-time health monitoring. Abbott Laboratories expanded its Freestyle Libre line with IoT-enabled features, allowing seamless data integration into digital health platforms. Boston Scientific introduced connected pacemakers that provided remote diagnostics and reduced patient visits, showcasing the power of real-time device connectivity.

DIGITAL HEALTH PLATFORMS

The expansion of telehealth and cybersecurity investments was a standout trend in 2024. Teladoc Health, in collaboration with Philips, launched a secure digital ecosystem for virtual healthcare, addressing patient privacy concerns while enhancing interoperability. Additionally, Baxter International's cloud-based health platform gained widespread adoption in emerging markets, offering cost-effective telehealth solutions for underserved populations.

Supply Chain Evolution

REGIONAL DIVERSIFICATION

Regional diversification efforts in 2024 included the establishment of local manufacturing hubs and supplier networks to mitigate risks and enhance supply chain resilience. Medtronic expanded its regional manufacturing facilities in Asia-Pacific to reduce dependency on global transportation and ensure faster delivery times, particularly in markets like India and China. Similarly, Siemens Healthineers strengthened its European supplier network by incorporating local partners to streamline procurement processes and improve supply chain agility amidst geopolitical tensions.

TECHNOLOGY INTEGRATION

The integration of advanced technologies such as blockchain and predictive analytics became a cornerstone for improving supply chain transparency and forecasting accuracy in 2024. BD implemented blockchain-based solutions to track product authenticity and enhance real-time visibility into supply chains, ensuring compliance with stringent regulatory requirements in Europe. Baxter International adopted advanced analytics tools, achieving a 25% improvement in inventory management efficiency and reducing costs associated with stockouts and overstocking. These examples underline the industry's commitment to leveraging technology for operational excellence and supply chain optimisation.

ESG and Sustainability Initiatives

ENVIRONMENTAL IMPACT

In 2024, companies intensified efforts to achieve carbon neutrality, adopt renewable energy, and implement waste reduction programs. For instance, Siemens Healthineers transitioned to 100% renewable energy in its European facilities, significantly reducing its carbon footprint. Medtronic piloted a zero-waste initiative in its manufacturing plants in North America, achieving a 30% reduction in operational waste within the year. Additionally, Baxter International launched a new product packaging strategy that incorporated biodegradable materials, aligning with its sustainability goals while meeting regulatory requirements.

SOCIAL RESPONSIBILITY

Social responsibility efforts in 2024 focused on diversity, healthcare access, and ethical sourcing practices. Several companies integrated AI-driven platforms to identify tenders and contracts that emphasised ESG criteria, enabling the company to align its offerings with sustainability-focused procurement programs in Europe. These initiatives underscore the industry's commitment to driving positive environmental and social impacts while navigating complex market demands.

04/ Financial Performance and Metrics

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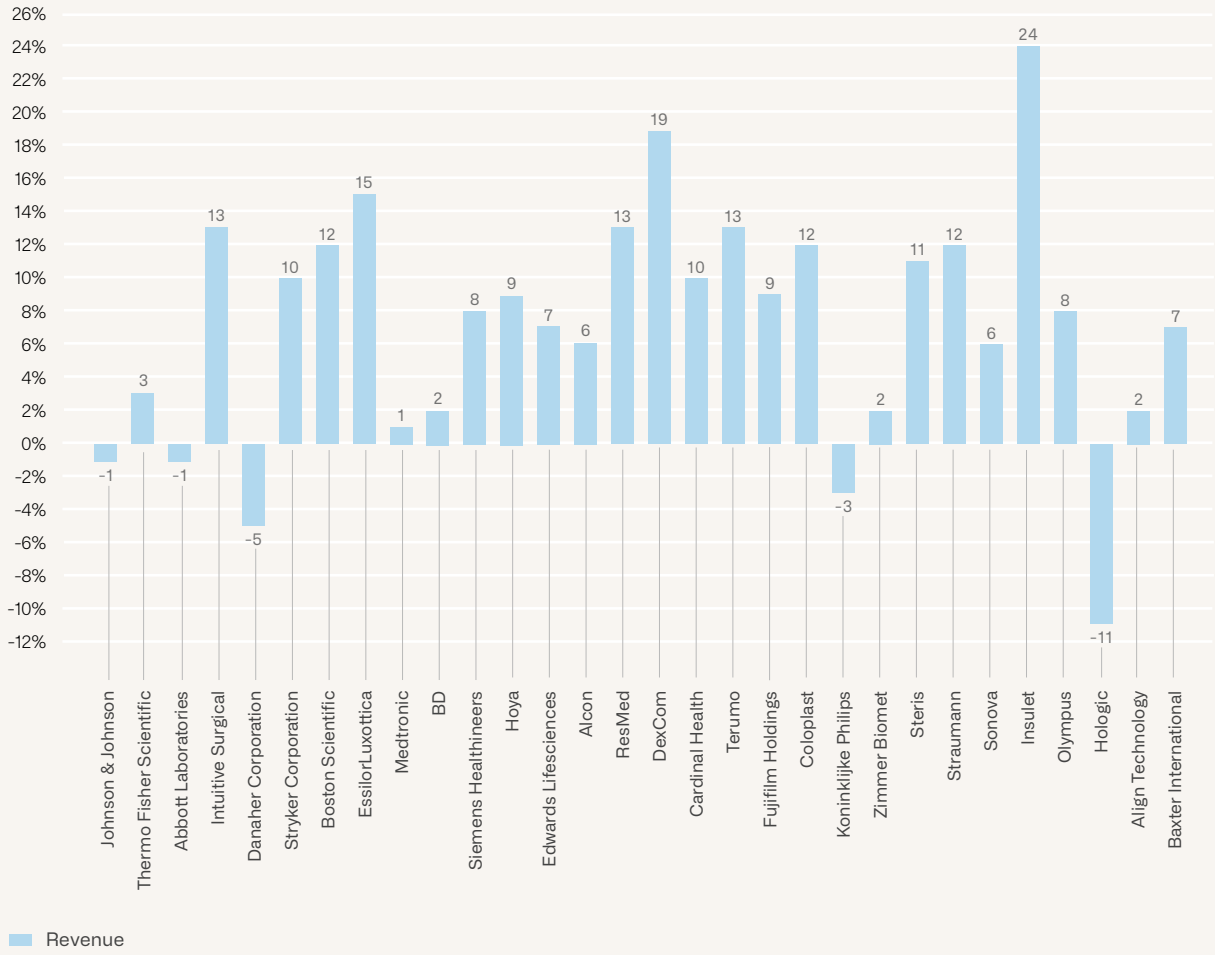
Financial Performance and Metrics

Revenue Analysis

3-Year Growth Rate (CAGR)



High-Growth Segments

The MedTech industry witnessed notable expansion in high-growth segments during 2024, driven by advancements in technology and increasing global adoption:

WEARABLE DEVICES

Achieving growth of 15–20%, the wearable segment benefited significantly from technological innovation. Abbott Laboratories' Freestyle Libre 3 and Dexcom's G7, which integrates continuous glucose monitoring with smartphone applications, exemplified this trend. The device's ease of use and real-time data integration spurred demand, particularly among diabetic populations seeking improved disease management.

AI DIAGNOSTICS

The segment recorded an impressive 18–22% growth. Siemens Healthineers led the way with AI-powered platforms like Luminos Q.namix, which enhanced diagnostic precision and workflow efficiency. European hospitals rapidly adopted these systems, underscoring the growing reliance on artificial intelligence to optimise healthcare delivery.

MINIMALLY INVASIVE DEVICES

With a 12–15% growth rate, demand for minimally invasive solutions continued to rise. Boston Scientific's AGENT™ Drug-Coated Balloon became a standout product, capturing substantial global market share in coronary procedures due to its efficacy in improving patient outcomes with reduced recovery times.

Traditional Segments

While growth in traditional categories was modest, these segments showed resilience:

- **IMAGING EQUIPMENT**
  This category grew by 3–5%, supported by continued investment in cutting-edge technologies. GE Healthcare's advancements in MRI systems, which offered enhanced imaging capabilities and operational efficiency, driving sustained demand across healthcare providers.

- **SURGICAL INSTRUMENTS**
  With a growth rate of 4–6%, surgical instruments benefitted from the resurgence of elective procedures in North America and Europe. The gradual normalisation of healthcare operations post-pandemic contributed to steady sales, particularly for high-precision instruments used in orthopaedics and general surgery.

This dual-speed growth pattern highlights how innovation continues to fuel high-growth segments, while traditional categories remain vital to the industry's overall stability and resilience.

Margin Pressure

In 2024, the MedTech industry faced significant margin pressures, particularly in sectors like orthopaedics. Leading companies such as Zimmer Biomet and Stryker encountered challenges due to pricing constraints in tender-driven markets and escalating costs associated with product customisation and digital integration. Zimmer Biomet, for instance, reported a decline in profitability within its joint replacement portfolio, as healthcare providers increasingly demanded value-based pricing models. Similarly, Stryker experienced pressures on its robotics-assisted surgery platforms, where substantial initial capital investment requirements impeded widespread adoption, despite strong clinical interest.

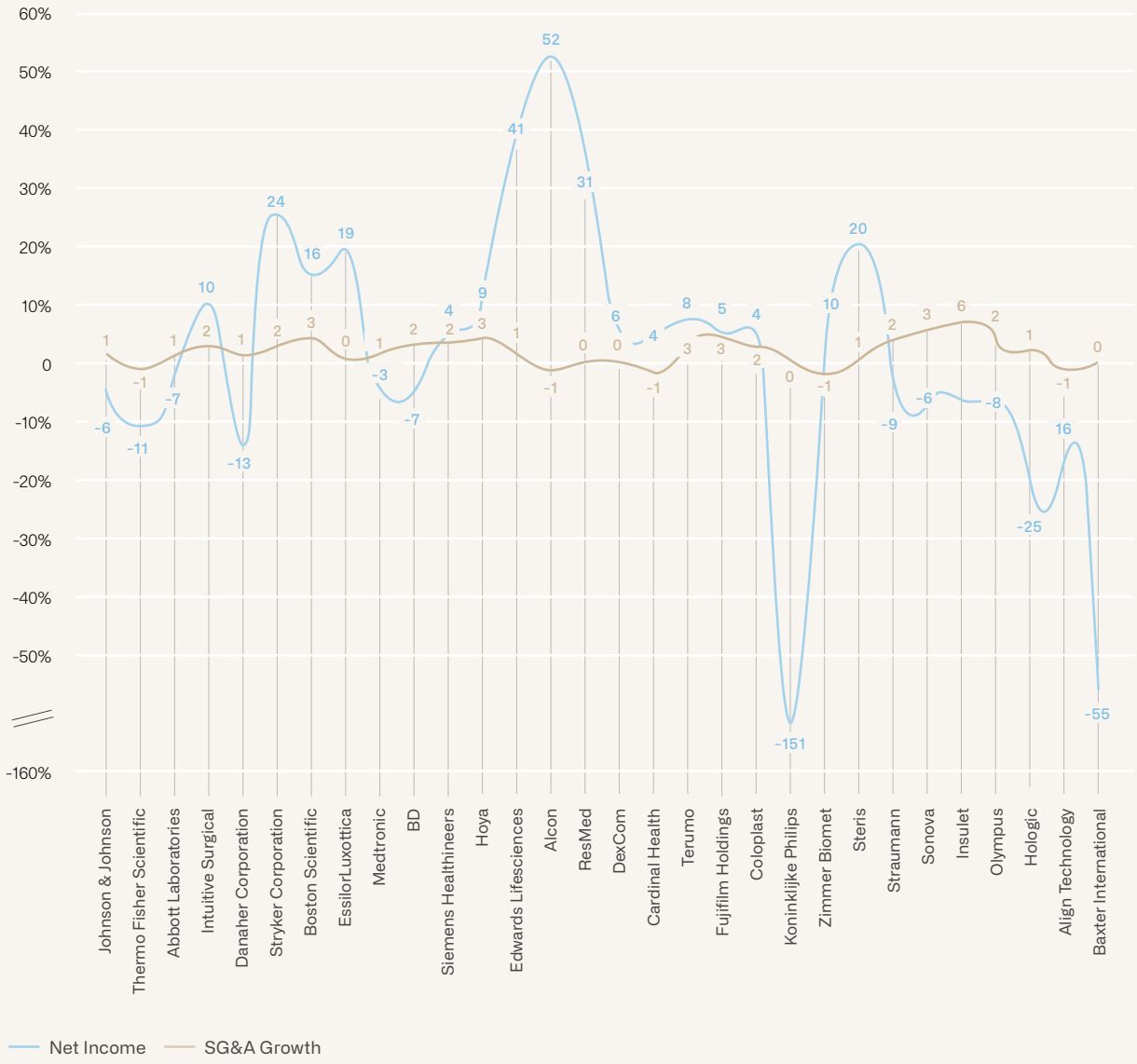
04 / Financial Performance and Metrics / continued

To mitigate these financial strains, several MedTech companies implemented cost-cutting measures, including workforce reductions. Between January 2023 and mid-2024, the industry saw over 14,000 layoffs, reflecting efforts to adapt to economic pressures and shifting market dynamics. Philips Healthcare, for example, exited underperforming business lines and reduced its workforce to reallocate resources towards high-growth areas such as connected care and imaging. Siemens Healthineers streamlined operations by discontinuing lower-margin programmes and leveraging artificial intelligence to enhance the efficiency of regulatory submissions, sales operations, and tender applications in Europe. These strategic adjustments highlight a broader industry trend towards portfolio optimisation and a focus on scalable, high-margin opportunities in an increasingly challenging economic environment.

Artificial intelligence (AI) has played a pivotal role in transforming sales, contracting, and operational processes within the MedTech sector. Companies like Abbott Laboratories and Medtronic have leveraged AI and advanced analytics to enhance margins. Abbott implemented AI-driven tools to optimise pricing strategies and predict tender outcomes, particularly in emerging markets, thereby improving their ability to secure high-value contracts. Medtronic integrated AI into its market access and pricing models, enabling the development of tailored solutions for value-based contracts in countries such as India and Brazil. These initiatives have contributed to revenue growth and cost efficiencies, demonstrating AI's critical role in helping MedTech companies navigate complex market dynamics and capitalise on new growth opportunities.

04 / Financial Performance and Metrics / continued

3-Year Net Income and SG&A CAGR



05/ Strategic Imperatives for 2025

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Strategic Imperatives for 2025

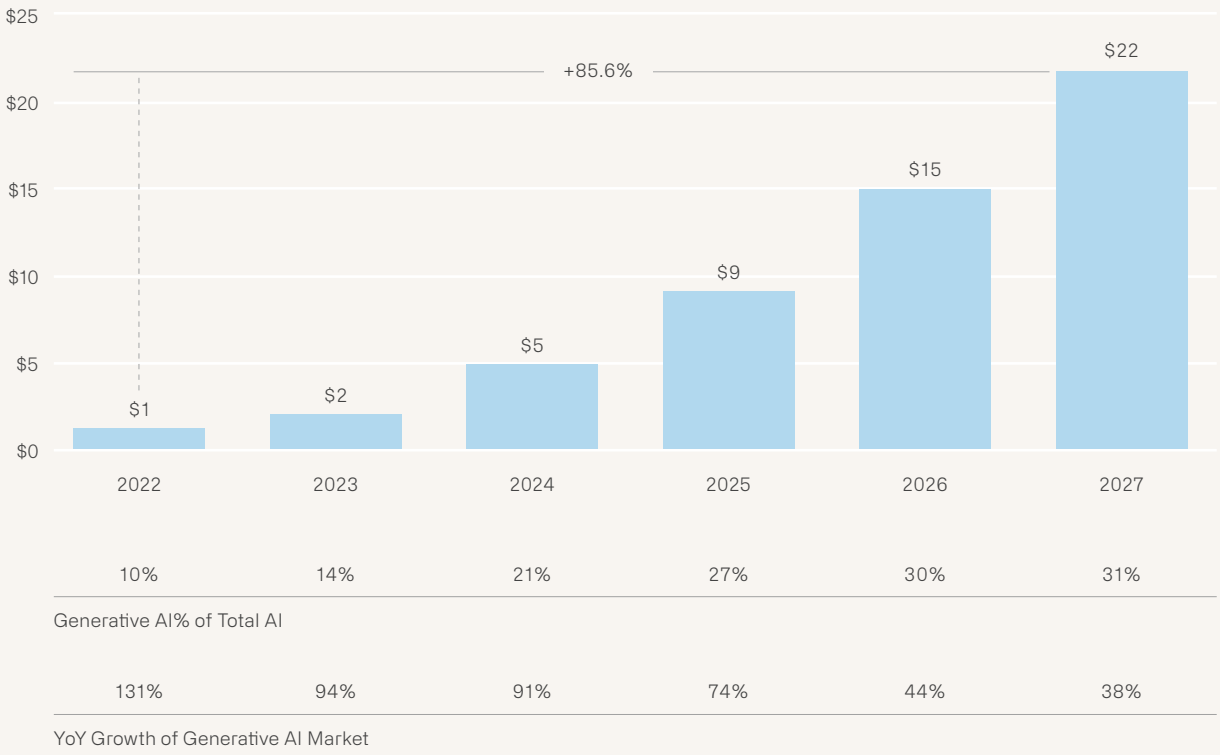
Digital Transformation

- *AI/ML implementation across operations will remain a cornerstone for MedTech innovation in 2025, building on the rapid advancements seen in 2024. According to McKinsey, the adoption of AI in healthcare operations is projected to grow at an annual rate of over 30%, driven by the need for precision in data analytics and streamlined processes. For example, Medtronic has expanded its use of AI to optimise sales forecasting and tender management, enabling faster and more accurate decision-making. Deloitte's insights indicate that companies leveraging AI for contract analytics have reduced administrative workloads by up to 40%, freeing resources for strategic initiatives.*

- *Enhanced data analytics will further empower MedTech companies to meet complex regulatory and market access demands. Siemens Healthineers, for instance, deployed machine learning models to identify trends in tender specifications, integrating ESG criteria into bids to improve competitiveness. Accenture predicts that by the end of 2025, over 60% of MedTech firms will utilise AI-driven platforms for end-to-end contract lifecycle management, underscoring its transformative potential. Cybersecurity investments are also on the rise, with Bain & Company highlighting a surge in AI-powered threat detection systems to safeguard sensitive medical data, particularly as digital health platforms expand.*

05 / Strategic Imperatives for 2025 / continued

Generative AI Total Accessible Market in Healthcare ($billions)

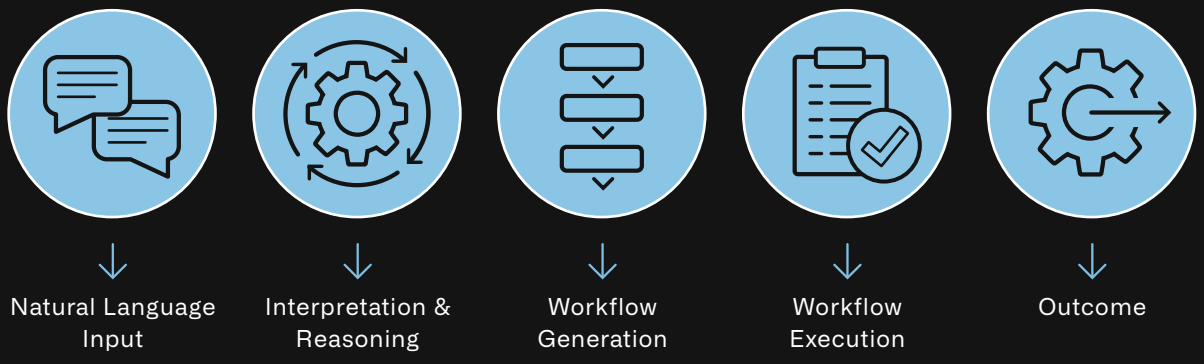


Source: BCG

Case study

Vamstar's Agentic AI Engine

MedTech Company Revamps Tender and RFPs with Agentic AI Engine



A global Medtech manufacturer, was wrestling with escalating costs and lost opportunities in its tendering and contracting process. Over 15% of relevant tenders were missed each quarter, while those identified often took 48–72 hours to reach the right teams. This delay resulted in critical deadlines slipping by, lowering the company's annual bid success rate to just 22%.

To combat these challenges, the company implemented Vamstar's tendering and mailbox agentic system, an Agentic AI platform offering autonomous, goal-driven intelligence. Unlike traditional rule-based systems, which require manual oversight and fail to adapt to new variables, Agentic AI dynamically learns from feedback, orchestrating complex workflows with minimal human intervention.

Case study / continued

From day one, Generative Information Retrieval Agents aggregated tenders from over 18,000 government portals, email inboxes, and procurement platforms—slashing manual tender searches by 93%. At the same time, Prescriptive Knowledge Agents analysed tender requirements in real time, mapping them to the company's extensively enriched product catalog. This automatic matching cut the average product matching time from eighteen hours to less than 30 minutes, shrinking error rates by 85%.

Where the company's sales teams previously scrambled to harmonise multiple data formats and inconsistent criteria, Agentic AI's Dynamic Workflow Agents ensured each step—from documentation review to quoting—was completed in a standardised, trackable manner. By integrating directly into the company's CRM and ERP, the system eliminated double data entry, reducing administrative overhead by nearly 73%.

Within three months, the company saw bid turnaround times plummet from an average of four days to under five hours. Employee morale soared, and focus shifted to higher-value tasks, like crafting compelling proposals and fine-tuning pricing strategies. The refined, faster tendering and contracting pipeline boosted the company's bid success rate by 15 percentage points, translating to an estimated $32 million increase in annual contract value.

Reinforcement learning fueled continuous improvement. Each time tender managers or sales managers flagged an issue—say, a tender incorrectly tagged or a missing certificate—the system refined its models. This iterative approach further minimised false positives and improved tender matching accuracy to over 90%.

In just six months, the company's agentic AI deployment became a core competitive differentiator, positioning the company to handle a projected 40% uptick in global tender and contracting volume without additional headcount. By transforming an error-prone, labor-intensive process into an agile, data-driven workflow, the company exemplifies how Agentic AI can swiftly deliver tangible results in the Medtech industry.

With faster responses, fewer mistakes, and automated product matching, the company's investment in Agentic AI yielded a 800% return in the first year alone, demonstrating that the right technology can redefine operational efficiency and unlock new growth opportunities.

05 / Strategic Imperatives for 2025 / continued

Supply Chain Resilience

- *Regional manufacturing expansion will take on greater urgency in 2025 as companies respond to shifting geopolitics and the potential threat of trade wars. In 2024, Medtronic set a precedent by scaling up regional facilities in India and China to reduce dependency on global supply chains and mitigate transportation delays. Siemens Healthineers followed a similar strategy, expanding its manufacturing base in Eastern Europe to maintain proximity to key markets and navigate geopolitical tensions.*

- *Supplier diversification and inventory optimisation were driven by advanced analytics and AI. For example, BD leveraged predictive algorithms to diversify its supplier base, achieving a 20% reduction in procurement costs while maintaining supply chain resilience. As trade tensions rise, companies are expected to further integrate AI into procurement and inventory systems, enabling real-time adjustments and risk mitigation strategies. Bain & Company projects that AI-driven supply chain solutions could enhance operational efficiency by up to 25% in 2025, underscoring their growing importance in a volatile global environment.*

Innovation Focus

- *Digital health solutions and patient-centric design will dominate innovation in 2025, building on rapid advancements in 2024. According to Bain & Company, the adoption of digital health platforms grew by 25% globally in 2024, driven by increasing demand for telehealth and remote monitoring capabilities.*

05 / Strategic Imperatives for 2025 / continued

- *Cost-effective and minimally invasive technologies are also gaining momentum. McKinsey reports that the minimally invasive devices market is expected to grow at a compound annual growth rate (CAGR) of 12-15% through 2025, as providers prioritise solutions that reduce recovery times and healthcare costs. Furthermore, companies like Medtronic are focusing on regional manufacturing to make these technologies more accessible in emerging markets, reflecting a broader industry trend towards affordability and scalability.*

Operational Excellence

- *Process automation and workforce capability development remained pivotal in 2024 and are set to expand further in 2025. Companies such as Siemens Healthineers implemented robotic process automation (RPA) to streamline repetitive administrative tasks, resulting in a 30% reduction in processing times for regulatory submissions, according to a McKinsey analysis. Similarly, Medtronic adopted AI-driven training platforms to upskill its workforce in advanced manufacturing and digital tools, enhancing operational readiness and productivity. In addition, vertical agentic solutions, which focus on key industry processes such as regulatory compliance, tender management, and supply chain optimisation, are expected to play a transformative role.*

  For instance, BD deployed AI-driven tender analysis tools in 2024 to identify high-value opportunities and align bids with emerging ESG requirements, significantly improving tender success rates in Europe and North America. Bain & Company projects that by 2025, the integration of these targeted AI solutions will reduce operational workloads by up to 40%, allowing teams to concentrate on strategic initiatives. These advancements underline the growing importance of technology in streamlining operations and driving efficiency.

05 / Strategic Imperatives for 2025 / continued

QUALITY SYSTEM ENHANCEMENTS

Leading firms have also focused on integrating AI to monitor and predict quality assurance issues. Accenture projects that such initiatives will see a broader rollout in 2025 as companies prioritise efficiency and compliance amid increasingly stringent global regulations. These trends highlight the transformative potential of automation and workforce upskilling in driving operational excellence.

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Market Outlook 2025

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Market Outlook 2025

Growth Projections

- *For the core medical device product categories, the global market could pass $650 billion during 2025.*
- *Digital health solutions to grow 18-20%, minimally invasive devices by 12-15%, and traditional segments by 4-7%.*

Key Success Factors

- **DIGITAL TRANSFORMATION**
  Execution of digital transformation will hinge on continued investment in AI and data analytics platforms, enabling smarter decision-making across sales, marketing, and operations. For example, Deloitte estimates that over 60% of MedTech companies will integrate end-to-end AI solutions by 2025, enhancing efficiency in tender management and market access strategies.

- **SUPPLY CHAIN RESILIENCE**
  To achieve resilience, companies must expand regional manufacturing capabilities and leverage predictive analytics to mitigate risks associated with geopolitical tensions and trade disruptions. Bain & Company highlights that firms utilising AI-driven supply chain tools have already seen up to a 25% increase in operational efficiency, a trend expected to grow.

- **STRENGTH OF INNOVATION PIPELINE**
  Fostering innovation will require prioritising R&D investments in high-growth areas such as minimally invasive technologies and digital health solutions. McKinsey projects that focused R&D spending in these domains will accelerate product launches and expand market penetration, especially in emerging economies.

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TALENT DEVELOPMENT AND RETENTION

Retaining talent in 2025 will necessitate a strong focus on upskilling and reskilling initiatives, particularly in digital and AI capabilities. Siemens Healthineers' use of AI-based training programs in 2024 is a leading example, which helped improve workforce productivity by 15%.

Examples of generative AI use in medtech commercial activities (Vamstar Deployments Across the Industry)

Category	Definition	Typical Impact
Sales force tools and insights	**Rep Copilot:** Provides reps with timely insights and personalised recommendations through a conversational interface.	**Revenue enhancement:** 8–27% productivity gain by optimising the information that reps have to present to various stakeholders. **Cost avoidance:** Achieves a 2–5% increase in new patient share by enabling reps to identify and seize more opportunities.
	Next-Best Action: Provides account-level prioritisation and tailored recommendations to enhance interaction effectiveness and drive sales growth.	**Revenue enhancement:** ~5–13% sales uplift with reps following the recommendations
Sales ops/customer service	**Tender Excellence:** Analyses tenders, RFPs, and RFQs to provide transparency on the effectiveness of pre-tender engagement and the likelihood of winning. It helps in shaping winning themes and drafting relevant content.	**Revenue enhancement:** 6-10% improvement in overall revenue base **Cost avoidance:** Increased effectiveness of pre-tender engagement leading to increased win rate

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Category	Definition	Typical Impact
Sales ops/customer service (continued)	**Tender GPT and Tender Agent AI:** Empowers teams to efficiently navigate through complex tender and RFP documents, pinpointing relevant information. It matches the most suitable deals with the appropriate customer segments and streamlines the process of generating responses.	**Revenue enhancement:** 5-13% improvement in overall revenue base **Cost avoidance:** Enhanced efficiency in tender submission times and pre-tender research, along with strategic shaping, results in a higher win rate.
Marketing	**Content generator** Automate generation of personalised content for a variety of channels	**Cost reduction:** 20–60% reduction in creative-agency spend **Cost avoidance:** Up to ~20% reduction in content cycle time
	Medical, legal, and regulatory affairs, and market access assistant Streamline review tasks to increase content throughput	**Revenue enhancement:** 3.5X increase in healthcare provider satisfaction and response times of key critical questions **Cost avoidance:** 20–30% time savings for reviewers

Strategic Recommendations for CEOs and Boards of MedTech Organisations

IMMEDIATE PRIORITIES (0-6 MONTHS)

- *Enhance supply chain resilience*
- *Accelerate digital transformation initiatives*
- *Support AI adoption in the commercial organisation*
- *Optimise cost structures*
- *Ensure regulatory compliance*

MEDIUM-TERM FOCUS (6-12 MONTHS)

- *Develop innovation pipeline*
- *Expand market presence*
- *Implement operational excellence programs*
- *Build strategic partnerships*

LONG-TERM STRATEGY (12+ MONTHS)

- *Establish technology leadership*
- *Strengthen market position*
- *Drive sustainable growth*
- *Optimise value creation*

Strategic Recommendations for MedTech Commercial Teams in 2025

In 2025, commercial teams in the MedTech sector must navigate a landscape shaped by continued consolidation, stringent regulatory demands, and rapidly evolving digital technologies. Success will hinge on strategic agility, resilience, and the ability to deliver clear value in a price-sensitive market. Below are key recommendations:

1. Strengthen Digital Engagement and AI Adoption

→ *AI-Driven Workflow and Data Management: Deploy data platforms and commercial analytics tools to streamline workflows, accurately forecast tender/contracting/sales outcomes, streamline sales and commercial processes, and align bids with emerging ESG and value oriented criteria.*

→ *Virtual Engagement Models: Expand remote sales channels, virtual demos, and telehealth partnerships to reach underpenetrated markets and maintain high-quality engagement with key stakeholders.*

→ *Personalised Offerings: Use patient- and clinician-level data insights to tailor product messaging, emphasising unique clinical and economic benefits.*

2. Build Supply Chain Resilience and Efficiency

→ *Regional Manufacturing Networks: Prioritise local production and sourcing to reduce geopolitical risks, minimise transport delays, and meet regional compliance requirements.*

→ *Predictive Inventory Management: Integrate AI-driven forecasting to optimise stock levels, reduce costs, and swiftly respond to fluctuations in demand.*

→ *Risk Diversification: Diversify supplier bases to mitigate disruption risks, and invest in blockchain or other traceability solutions to ensure transparency and compliance across the chain.*

3. Align Commercial Strategy with Regulatory Demands

→ *MDR and Global Compliance: Develop cross-functional teams to streamline product documentation and accelerate regulatory submissions, ensuring minimal disruption to sales pipelines.*

→ *Value-Based Pricing: Demonstrate clear clinical and cost outcomes in markets with heightened tender scrutiny, using robust health-economic data for competitive advantage.*

→ *ESG-Focused Tendering: Highlight sustainable practices and social impact—such as reduced carbon footprints or local workforce development—to meet growing ESG-related requirements.*

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4. Invest in Innovation and High-Growth Segments

→ *AI- Embedded Solutions: Focus R&D spend on high-growth areas, leveraging real-world evidence to reinforce clinical efficacy.*

→ *Digital Health Platforms: Expand remote monitoring and telehealth capabilities to capture new revenue streams and address patient demand for personalised, accessible care.*

→ *Strategic Partnerships: Collaborate with technology firms, payers, and healthcare providers to co-develop solutions that integrate seamlessly across care pathways.*

5. Optimise Organisational Agility and Workforce Capabilities

→ *Upskilling for Digital Transformation: Provide targeted training in AI, data analytics, and digital sales tools to bolster commercial and sales teams' adaptability.*

→ *Operational Excellence: Streamline processes with agentic automation (Vertical AI) and advanced analytics to reduce overheads, accelerate go-to-market timelines, and maintain margin discipline.*

→ *Talent Retention: Implement flexible work models and clear career pathways, capitalising on technology-driven shifts to attract and retain skilled professionals.*

By proactively addressing these strategic areas, commercial teams will be well-positioned to meet heightened customer expectations, drive profitable growth, and secure leadership in an increasingly competitive MedTech landscape.

07/ Conclusion

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Conclusion

The MedTech industry enters 2025 at a pivotal juncture, where the convergence of digital transformation, regulatory evolution, and shifting market dynamics sets the stage for both challenges and opportunities. The success of companies will hinge on their ability to embrace emerging technologies, optimise operational resilience, and remain steadfast in their commitment to patient-centric solutions. For instance, the integration of AI and machine learning, as evidenced by the rapid deployment of predictive analytics in tender management by BD and Siemens Healthineers' AI-powered imaging solutions, highlights the transformative potential of technology. However, achieving this transformation will require substantial investments in digital infrastructure and workforce training.

Navigating regulatory landscapes will remain a priority, particularly in regions like Europe, where MDR compliance has strained operational resources. Companies like Medtronic and Philips Healthcare have shown early success in deploying digital tools to streamline regulatory submissions and align their offerings with ESG-focused tenders. However, broader adoption of such strategies will depend on continued innovation and collaboration with regulatory bodies to reduce compliance costs and accelerate approval timelines.

Market dynamics also present a mixed picture. While digital health and minimally invasive technologies are poised for double-digit growth, traditional segments like imaging equipment face pricing pressures and limited reimbursement rates in certain regions. The ability of companies to pivot towards high-growth segments while maintaining profitability in legacy markets will be critical.

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To achieve sustainable growth, companies must prioritise supply chain resilience amid geopolitical uncertainties and trade tensions. The regionalisation of manufacturing, as seen with Medtronic's facilities in India and China, and the use of blockchain for transparency, as implemented by BD, offer a roadmap for mitigating risks. These efforts must be complemented by AI-driven supply chain optimisation tools to handle real-time disruptions effectively.

Ultimately, success in 2025 will depend on strategic alignment across innovation, operations, and market positioning. Companies must adopt a holistic approach that includes robust R&D investment, talent development programs, and scalable digital solutions. By addressing these imperatives, MedTech organisations can secure their leadership in an increasingly competitive and dynamic global landscape.

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