

medTech's New frontier

The \$6.8 Trillion
Question: How
will the MedTech
Industry Thrive
Amid a Disruptive
Future?

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The global medtech industry is standing on the edge of significant transformation, driven by powerful disruptive forces and new critical success factors that will define the next five years. With annual healthcare spending in the U.S. alone projected to hit \$6.8 trillion by 2030, medtech companies have a unique opportunity to seize a share of the \$300 billion to \$400 billion expected to be spent on medical devices. However, navigating this fast-evolving landscape requires more than incremental innovations; it demands a complete rethinking of strategies and capabilities.

Several key disruptors will reshape the industry: the AI-powered digital health revolution, where smarter, connected devices will drive personalized care; the shift to consumer-centric healthcare, placing patients at the center of care delivery through remote monitoring and digital therapeutics; the expanding regulatory frontier, requiring companies to balance cutting-edge innovation with complex compliance; converging sectors and partnerships, where medtech must collaborate with tech giants to create integrated health ecosystems; and the ongoing challenges of supply chain disruptions and inflation, which demand new strategies for resilience and cost management.

To thrive in this environment, companies must strengthen core capabilities, expand offerings, explore new markets, integrate hardware and software, and reinvent their commercial models. However, the biggest question for senior leaders: Are you up for the challenge?

Based on industry research and insights from global executives across the medtech industry, the top five disruptive forces are:

1 An AI-Powered Digital Health Revolution
AI integrations are fundamentally reshaping the medtech and medical device industries, driving innovations that are changing how care is delivered and managed. AI-enabled devices are transforming diagnostics, treatment personalization, and patient monitoring by leveraging real-time data analytics. In 2023 alone, AI-driven technologies hit record numbers of FDA approvals, showcasing the rapid acceleration of this trend.

AI algorithms are enhancing the accuracy of imaging, predicting patient outcomes, and providing personalized therapeutic recommendations, which enables more precise interventions and better patient outcomes.

Beyond diagnostics, AI's ability to integrate vast amounts of patient data from wearable devices, electronic health records, and other sources is empowering providers to offer more targeted care. This data-driven approach not only helps in managing chronic diseases but also pushes preventive healthcare by identifying risks before they escalate. However, as this transformation unfolds, medtech companies face significant challenges. Navigating the evolving regulatory landscape is crucial, especially as many AI applications fall outside traditional approval frameworks.

Data privacy and security concerns also loom large, as companies must safeguard sensitive patient information while adopting AI-driven solutions.

2 Consumers are in the Driver's Seat
The shift to consumer-centric healthcare is rapidly emerging as one of the most significant disruptors in the medtech and medical device industries over the next

"By 2030, AI is projected to be integrated into 90% of medical devices, enhancing diagnostics and patient care."

—Gartner
Top 10 Strategic Technology Trends for 2025

five years. Patients increasingly demand "anywhere, everywhere" care, moving healthcare delivery away from hospitals and into homes, ambulatory care settings, and virtual platforms.

This trend is forcing medtech companies to rethink their business models and focus on developing connected products and services that continuously engage patients throughout their healthcare journey.

At the heart of this disruption is the rise of digital therapeutics and remote monitoring technologies. Devices that track vital signs, manage chronic conditions, or provide personalized feedback in real-time are now essential tools, enabling patients to take control of their health from anywhere. For medtech companies, success will hinge on creating seamless, intuitive experiences that integrate into patients' daily lives.

This consumer-driven shift also forces medtech firms to adopt new business models that prioritize long-term patient engagement over episodic care. The focus will move from selling individual devices to delivering ongoing services and support, often enabled by digital ecosystems and partnerships with consumer tech companies.

Companies that fail to embrace this shift risk losing relevance in an increasingly patient-empowered landscape, as healthcare moves beyond traditional settings into the hands of the consumers themselves.

3 The Regulatory Frontier is Expanding
Emerging regulatory pathways are becoming one of the most critical disruptors in the medtech and medical device industries. As AI-powered technologies and digital health solutions rapidly evolve, regulatory bodies are scrambling to keep pace with the innovations. Technologies such as machine

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Ultra-Modern Medtech
According to Gartner, by 2030, robotic-assisted surgeries are expected to constitute 20% of all surgical procedures globally. Additionally, investments in digital health technologies are projected to reach \$100 billion annually that same year.

learning, AI-driven diagnostics, and wearable devices blur the lines between traditional medical devices and new digital health ecosystems. As a result, medtech companies face a growing challenge: how to balance cutting-edge innovation with evolving regulatory requirements.

Historically, regulatory approval processes were built around hardware-based medical devices, but with the rise of AI and data-driven technologies, those frameworks are increasingly outdated. The challenge is exacerbated by the fact that AI technologies continuously learn and evolve, which conflicts with static approval systems designed for non-dynamic devices. Companies must now navigate new pathways to ensure compliance while ensuring their AI algorithms and digital health products remain flexible and effective.

Regulatory bodies are working to address these gaps, but the evolving nature of regulations means medtech companies will need to be agile, investing heavily in compliance teams that can stay ahead of shifting rules. In parallel, they must continue innovating to meet patient and provider

demands. Companies that fail to navigate these emerging pathways risk falling behind competitors in a highly disruptive landscape, where compliance and innovation must coexist.

4 Converging Sectors and Partnerships

Converging sectors and partnerships are reshaping the medtech industry, and this trend will become one of the greatest disruptors over the next five years. As the lines between medtech, healthcare, and consumer technology blur, medtech companies must adapt by forging strategic partnerships to remain competitive. Collaborations with consumer tech firms, digital health companies, and data analytics providers are essential for delivering integrated, patient-centric care solutions.

This convergence demands that medtech companies move beyond traditional device manufacturing and incorporate software, data analytics, and connectivity into their products. The result is a shift from standalone devices to connected health ecosystems that offer real-time patient monitoring, personalized care, and improved outcomes.

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Efforts to harmonize global medtech regulations are expected to reduce approval times by 50% by 2030, says Markets Insider.

Partnerships with tech giants are crucial for accessing the expertise in AI, machine learning, and user-friendly software that MedTech companies may lack. These collaborations enable firms to innovate faster, deliver more comprehensive solutions, and meet the rising demand for consumer-centric healthcare.

However, these partnerships come with challenges. Medtech companies must navigate data security, regulatory compliance, and protect their intellectual property while sharing resources with tech partners.

Companies that master these collaborations will thrive, while those that fail to adapt risk being left behind as new entrants capture market share by delivering holistic, tech-enabled healthcare solutions.

5 Turbulent Supply Chains and Inflation

Supply chain disruptions and inflation are proving to be among the greatest disruptors medtech companies will face over the next five years. Global supply chains, still reeling from pandemic-driven shocks, continue to experience bottlenecks and rising costs, while inflation exacerbates the problem by driving up the price of raw materials, labor, and transportation.

For medtech manufacturers, this poses a two-fold challenge: maintaining the affordability of their products while ensuring consistent delivery in an increasingly volatile supply chain environment.

Executives will need to rethink their supply chain strategies to build resilience. This might involve relocating production, diversifying suppliers, and deepening partnerships with logistics providers.

Strengthening local production capabilities can reduce reliance on global supply chains, offering medtech firms more control over the manufacturing process and better protection against external shocks. Additionally, companies may need to adopt more flexible inventory management systems to manage fluctuating material costs.

The pressure to remain cost-effective while managing higher production costs will force companies to innovate. Medtech firms might explore advanced manufacturing technologies or adopt digital supply chain solutions to boost efficiency and lower costs.

Navigating this landscape will require

agility, as only companies that can adapt to the evolving dynamics of inflation and supply chain disruptions will maintain competitive advantage and profitability in the long term.

Critical Success Factors

In a 1984 Sloan Management Review article titled, “An Assessment of Critical Success Factors,” A.C. Boynton and R.W. Zmud wrote:

“Critical success factors [CSFs] are those few things that must go well to ensure success for a manager in an organization, and therefore, they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance. CSFs include issues vital to an organization’s current operating activities and to its future success.”

For medtech executives and enterprises to survive—and thrive—over the next five years, capitalizing on the following critical success factors will be key:

A Strong Core is Key To Longevity

To survive and thrive over the next five years, medtech companies must begin by identifying their core strengths. This requires a comprehensive evaluation of existing capabilities, from AI-driven technologies to digital health offerings. By understanding where their products and expertise already excel, companies can focus on amplifying these strengths as part of their differentiation strategy, ensuring they stand out in a crowded market.

Next, companies should embrace AI innovations and digital therapeutics as foundational elements. These technologies are rapidly transforming healthcare, providing more accurate diagnostics and personalized care. By investing in cutting-edge software development, machine learning, and data analytics, medtech firms can enhance their offerings and stay ahead of competitors.

At the same time, medtech companies need to enhance patient-centric solutions. Expanding into consumer-friendly healthcare options, such as remote monitoring devices and connected health systems, allows companies to improve patient engagement and provide long-term value. By making healthcare more accessible and intuitive, firms can build deeper connections with consumers.

Furthermore, medtech companies must streamline operations and supply chains. Strengthening local partnerships and investing in advanced manufacturing technologies will help manage supply chain disruptions and inflation, ensuring consistent product delivery.

Lastly, leveraging strategic partnerships with tech firms and healthcare providers is essential. Collaborations enable companies to create integrated health ecosystems, speeding up innovation and market penetration, solidifying their differentiated position.

Think Bigger and Expand Offerings

Expanding offerings is a critical strategy that will help medtech companies survive and thrive over the next five years. As healthcare rapidly evolves, companies that broaden their product and service portfolios will unlock new growth opportunities, adapt to changing consumer demands, and differentiate themselves from competitors.

The first step is to assess market needs and emerging trends. Companies must invest in market research and data analytics to identify gaps in the healthcare market. Whether it's remote monitoring, AI-driven diagnostics, or digital therapeutics, understanding consumer pain points and provider needs will reveal areas ripe for expansion.

Next, medtech firms should focus on developing complementary products and services. This may involve expanding beyond traditional medical devices into connected health ecosystems, creating a seamless integration of hardware, software, and digital platforms. By offering holistic solutions, companies can build stronger relationships with patients and providers.

Once new offerings are in development, strategic partnerships become essential. Collaborating with consumer tech companies, digital health firms, and healthcare systems will enable faster

innovation and market penetration. These alliances can enhance the value of expanded offerings and accelerate time-to-market.

Finally, companies must ensure regulatory compliance and operational agility. Adapting to new regulatory frameworks and streamlining supply chains will be key to maintaining cost-effectiveness.

Set Your Sights on New Markets

Exploring new markets will be a game-changer for medtech companies over the next five years, helping them survive and thrive in an evolving healthcare landscape. As traditional markets become saturated and competition intensifies, expanding into new geographic regions, therapeutic areas, or consumer segments offers fresh growth avenues.

The first step in this process is to conduct a thorough market analysis. Medtech executives must evaluate global healthcare trends, regulatory environments, and unmet needs in different regions. Emerging markets, particularly in Asia, Latin America, and Africa, present significant opportunities for growth due to expanding healthcare infrastructure and rising demand for affordable medical technologies. By understanding regional healthcare needs, companies can tailor their offerings to fit local demands and regulatory frameworks.

Next, adapt and localize product portfolios for new markets. This means not only complying with local regulations but also customizing products to address specific regional health challenges. For example, low-cost, high-impact devices could thrive in developing regions, where healthcare budgets are constrained.

Building strategic partnerships is essential to market entry. Collaborating with local distributors, healthcare providers, and government agencies will ease entry barriers and provide critical market insights.



These partnerships allow medtech companies to scale quickly and efficiently.

Finally, ensure operational agility by adjusting supply chains, manufacturing, and distribution networks to accommodate new markets. Expanding logistics capabilities to meet the demands of unfamiliar environments will be crucial for consistent delivery and long-term success.

Melding Hardware and Software

Bringing hardware and software together into digital health ecosystems will be a crucial driver for medtech companies to survive and thrive over the next five years. As medical devices become smarter, combining them with software to create connected ecosystems will allow companies to capture and leverage data, improve patient outcomes, and gain a competitive edge in the growing \$140 billion digital health market.

The first step is for companies to integrate hardware with software platforms that aggregate and analyze data from connected devices. This means leveraging medical devices to capture patient health metrics in real time, enabling clinicians to

make data-driven decisions faster and more accurately. This is particularly crucial in areas like chronic disease management, where continuous monitoring and data insights can drive early interventions and better outcomes.

Next, medtech firms must invest in interoperability. Ensuring that devices can communicate seamlessly with electronic health records (EHRs) and other healthcare IT systems is essential for creating a fully functioning ecosystem. This integration allows for smoother workflows and real-time data sharing between patients, providers, and healthcare systems.

To scale effectively, companies should form strategic partnerships with tech firms specializing in data analytics and cloud-based platforms. These collaborations will allow medtech firms to deliver more robust, scalable ecosystems that provide long-term patient engagement and loyalty.

Finally, companies need to focus on regulatory compliance and data security, ensuring that sensitive patient information is protected while navigating the evolving landscape of digital health regulations.

A Revolution in Motion
Gartner forecasts the market for wearable medical devices will grow at a CAGR of 20%, reaching \$150 billion by 2030. Additionally, the use of 3D printing in healthcare is projected to reach \$10 billion that year as well.

30%

According to *Market Insider*, the medtech sector is projected to create 2 million new jobs globally by 2030, reflecting a 30% increase from 2020 levels.

Reinvent Your Commercial Model

Reinventing the commercial model is critical for medtech companies to survive and thrive over the next five years as they face unprecedented changes in customer expectations, cost pressures, and digital transformation. Traditional commercial approaches are becoming outdated, especially in a post-pandemic world where healthcare professionals and procurement departments expect more from their engagements with medtech companies.

The first step is to rethink customer engagement by transitioning from transactional models to ones that build long-term relationships. This involves adopting customer-centric approaches, which require medtech companies to deeply understand their customers' evolving needs and preferences. Tools like digital engagement platforms and AI-driven insights can help companies offer personalized, value-driven solutions.

Next, companies should focus on streamlining operations and increasing efficiency by leveraging digital tools and automation. This reduces reliance on traditional sales approaches and allows sales teams to engage more strategically with customers. SG&A (selling, general, and administrative) costs must be optimized, but more importantly, companies should invest in transforming the salesforce with advanced training and tools that enable data-driven decision-making.

Finally, the alignment of incentives is crucial. Medtech executives must ensure that leadership teams are incentivized to prioritize customer engagement, adopt new technologies, and lead transformation across the organization. Incentive structures must be tied to the successful adoption of digital health ecosystems, value-based care, and innovative commercial models.

Take Five

As medtech companies prepare to face the next five years of disruption and transformation, the path forward is clear: adaptability and innovation are non-negotiable. Navigating the AI-powered digital health revolution, addressing the rising demands of consumer-centric healthcare, and mastering the expanding regulatory landscape will be crucial. Medtech leaders must also embrace strategic partnerships as sector convergence accelerates, and they must develop supply chain strategies that withstand the pressures of inflation and global disruption.

However, disruption also presents incredible opportunity. Companies that leverage their core strengths, expand into new markets, and evolve their commercial models to be more customer-focused will unlock not only financial growth but industry leadership. By embracing digital health ecosystems and forming partnerships across sectors, medtech companies can deliver more comprehensive care solutions and enhance patient outcomes. The question isn't if medtech will evolve—it's how prepared companies are to thrive in this environment. Are you ready to reinvent, adapt, and lead in the medtech revolution?

The future is promising, but it will reward only those companies that boldly embrace innovation and execute strategic shifts to stay ahead of the curve. **IQ**

Faster. Better. Stronger.

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EXECUTIVE PERSPECTIVE: MEDICAL DEVICES

Raj Thomas is the president of Medtronic's Endoscopy business, a role he assumed in February 2024. Mr. Thomas joined Medtronic in 2014 as an R&D Program Director for the Pelvic Health (PH) organization. He proceeded to become the VP of R&D for Pelvic Health and then the VP & General Manager of the Mechanical Circulatory Support (MCS) organization before taking on the role of President of the Endoscopy operating unit. Prior to his tenure at Medtronic, Mr. Thomas spent over 14 years at Boston Scientific, where he gained extensive experience in the medical device industry. In his current role, Mr. Thomas is committed to advancing patient outcomes and operational efficiency by empowering physicians worldwide through the integration of artificial intelligence other disruptive therapeutic technologies into endoscopic procedures.



RAJ THOMAS

President, Endoscopy
Medtronic

IQ: What are the top challenges executives and enterprises within the medtech industry must contend with over the next five years?

Mr. Thomas: I think the most pressing challenges the industry will face will be navigating the seismic shifts brought on by digital transformation. Our field goes through cycles of incremental progress punctuated by periods of rapid, disruptive innovation—right now, we're living in one of those transformative times. The convergence of digital technologies with healthcare has revolutionized patient care, yet with that comes a set of entirely

new challenges we haven't had to grapple with before. For one, transitioning to these advanced technologies—whether it's implementing AI in diagnostics or fully integrating EMRs—requires not only infrastructure investments but also a cultural shift within organizations. And let's not overlook the fact that these technologies unveil new problems we haven't faced before, such as data security and patient privacy in an increasingly connected world. But the promise and potential of these innovations make those challenges worth tackling. At the end of the day, these are good problems to have because solving them means we're making meaningful

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progress. It's an exciting time to be part of medtech, as the solutions we develop will have a profound and lasting impact on healthcare.

Another major challenge is the presence of Big Tech in healthcare. Companies like Apple, Google, and Amazon are making remarkable strides in health technologies, which is great for innovation but brings with it an accelerated pace that sometimes clashes with the more measured, regulation-heavy nature of medtech. Regulatory pathways in our industry are necessarily rigorous, designed to ensure safety and efficacy, but they can't always keep up with the speed of technological advancements. That's where we as medtech leaders need to work closely with regulatory bodies to strike the right balance—mitigating risks without stifling innovation.

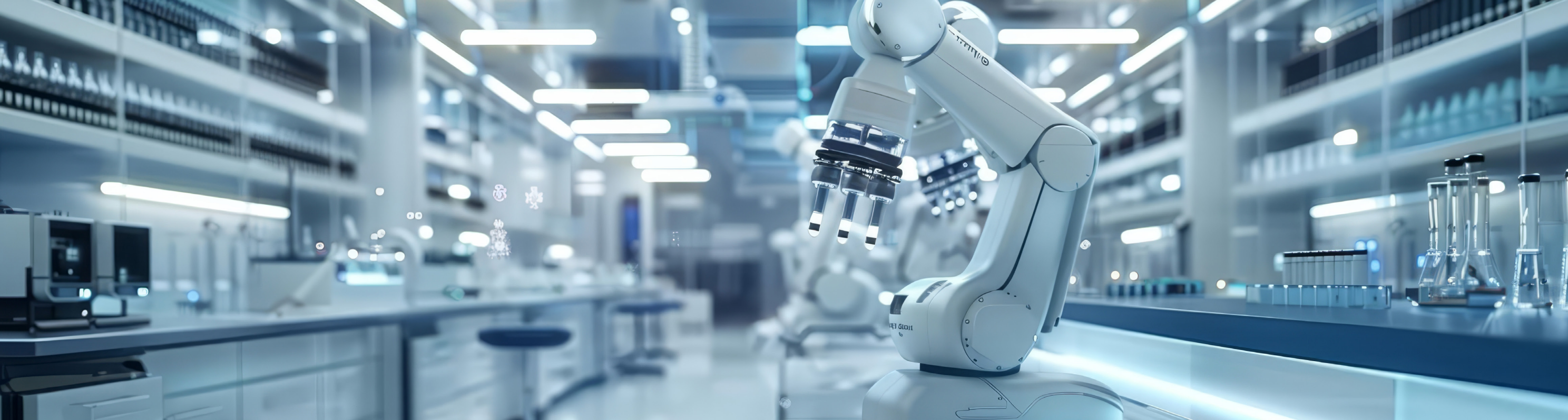
And lastly, regulation itself is a growing challenge. As technologies like AI and machine learning evolve at lightning speed, regulatory frameworks often lag behind. These frameworks need time to adapt, but at the same time, we have a responsibility to ensure that impactful, life-saving technologies reach the patients who need them as soon as possible. Achieving that balance will be crucial as we move forward.

IQ: How are companies and leaders currently adapting their strategies to manage and mitigate these risks?

Mr. Thomas: At Medtronic, we've come to realize that what worked in the past five years won't necessarily work in the next five. Larger organizations like ours can be like big ships—it takes more effort and time to pivot when market conditions change, but that's exactly what we need to do. The future of medtech won't wait for anyone, and as leaders, we can't afford to take a 'wait and see' approach. We need the confidence to lead the way and make bold moves, even if it means being the first mover in uncharted territories.

That said, we're always keeping one principle at the center of everything we do—the patient. Adapting our strategies isn't just about mitigating risk or staying ahead of the competition. It's about making sure we're reaching more patients, meeting them where they are, and offering solutions that truly improve their lives. In an era where technology evolves so rapidly, there's a temptation to chase the next big thing or focus on monetizing new services.





Medtech Milestones

According to data from KPMG, the medical device industry is poised for steady growth, with global annual sales forecast to rise by over 5% a year, reaching nearly \$800 billion (USD) by 2030. The U.S. is expected to continue dominating the medical device industry in 2030, crossing \$300 billion in sales.

But for us, it's always about the impact on patients first and foremost. If a new technology or solution doesn't drive real value for them, it's simply not worth pursuing.

Ultimately, our goal is to navigate this fast-moving landscape with foresight, ensuring that while we're embracing change, we're also staying true to our mission: delivering solutions that make a real difference in the lives of patients. That's how we continue to lead the industry, not just follow trends.

IQ: Despite the challenges, what are the most promising opportunities for growth within medtech over the next five years? Is there a potential game-changer?

Mr. Thomas: The opportunities for growth in medtech over the next five years are immense, and there isn't just one game-changer; there are several. Technologies like AI, cloud computing, robotics, and the rise of Personalized Care are driving this transformation, and they're not just promising—they're disruptive in the best possible way.

Personalized care is where I see the most exciting potential. The ability to offer treatments and procedures tailored to each patient's unique biology and lifestyle is revolutionizing medicine. We're moving away from generalized care and into an era

where every patient receives what's right for them—better outcomes, faster recovery, and a more human-centered approach to healthcare. That's what makes this so powerful; it's not just about the technology, it's about improving lives in a deeply personal way.

And these advances don't stop at care personalization. AI is already reshaping diagnostics, helping us catch things earlier and more accurately, while robotics is making surgeries less invasive and more precise. Then, there's the miniaturization of devices—another game-changer that often gets overlooked. In our business, for example, the PillCam™ Genius SB Kit has streamlined an entire process by replacing multiple peripherals with one smaller, easier-to-use device. Not only does this make procedures more comfortable for the patient, but it simplifies the workflow for healthcare providers, enhancing efficiency.

When you combine all these technologies, the potential is mind-blowing. They're not just about faster or smarter care—they're about fundamentally changing the way we think about and deliver healthcare. That's the real opportunity here. The convergence of these advancements will enable us to create a future where care is more effective, more personalized, and more accessible for patients everywhere. That's the

kind of future we're working toward, and it's why we're so excited about the path ahead.

IQ: What attributes will be required of leaders and executives in medtech to ensure their organizations survive and thrive over the next five years?

Mr. Thomas: The most critical attribute for leaders in medtech remains adaptability. It's always been a key leadership skill, but the pace of change we're seeing now makes it essential for survival and success. Technology is evolving fast, regulations are shifting, and what worked yesterday won't necessarily work tomorrow. Leaders have to be ready to pivot, embrace new strategies, and adapt to the unexpected at every turn.

But adaptability alone isn't enough. It also takes courage. It's not just about reacting to change as it happens, it's about having the boldness to make decisions before others do. We can't afford to simply follow the trends once they're proven—we have to lead the way. That means taking calculated risks, pushing forward even when the outcome isn't guaranteed, and being unafraid to make the first move in uncharted territory.

And through it all, we must keep the patient at the center of every decision. As leaders, our responsibility is to ensure that whatever changes we make, whatever risks

we take, ultimately serve to improve the lives of patients. Adaptability and courage will be the defining qualities of the leaders who thrive in this era of transformation, but it's that unwavering focus on patient impact that will drive real success.

IQ: As you look toward the horizon, do you have any final recommendations for your colleagues in the medtech field?

Mr. Thomas: I believe collaboration is key—we're navigating some really complex work and some challenges are too big to tackle alone. Partnering with other innovators, healthcare professionals, and organizations, even outside our usual circles, is critical to staying ahead and driving real impact.

Ultimately, I think it's important to stay grounded in your mission, especially in times of rapid change. In medtech, it can be easy to get swept up in the excitement of new technologies or market opportunities. But at the end of the day, we're here to improve people's lives. Every decision we make, every innovation we pursue, has to tie back to that purpose. Our greatest responsibility is to the people who trust us with their health. If we keep that in mind, we'll continue to drive meaningful change in this industry. **IQ**

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