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Rethink Reshape Restructure...for better patient outcomes

The MedTech Disconnect: Realigning Innovation to Succeed

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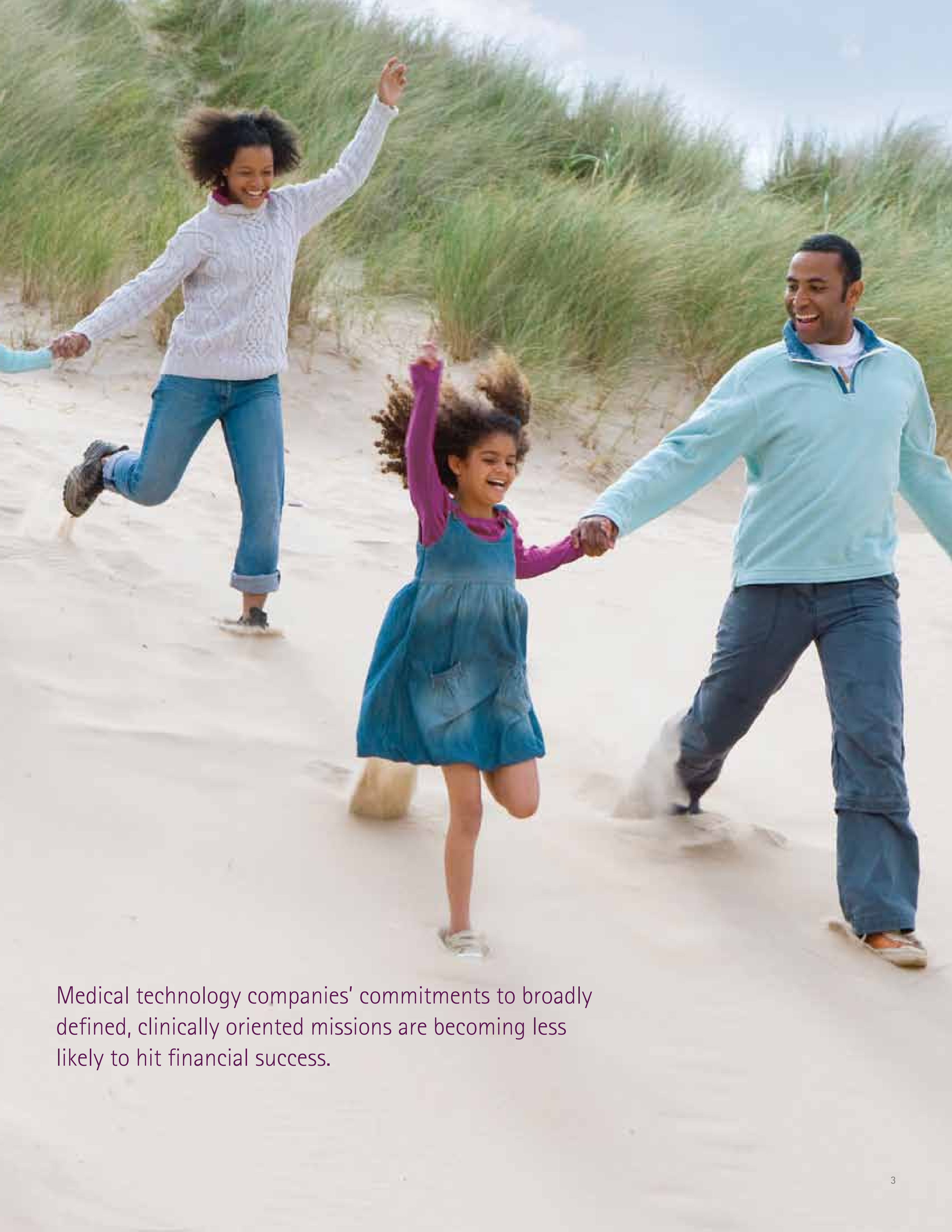
The medical technology industry has a rich heritage of creating life-enhancing, life-extending products, while rewarding investors in the process. In fact, this connection between innovation and profitability has become a foundational driver in the C-suites and boardrooms of many medical device, diagnostics and equipment companies for a long time.

However, change is afoot. Accenture research has noted an increasingly frequent disconnect: Medical technology companies' commitments to broadly defined, clinically oriented missions are becoming less likely to hit financial success.

This is not to say that innovation is out. In fact, some companies continue to generate strong profits from breakthrough products, even in the face of financial concerns, such as earnings levels that lag R&D spending. To ensure profitability and remain competitive, Accenture has three recommendations for medical technology companies of all types. These include:

1. Innovate Your Business Model
2. Connect With the New Customer
3. Excel at Operational Excellence



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An Evolving Industry

For much of the past two decades, medical device companies developed innovative, clinically-oriented technologies and they generally enjoyed above average returns in exchange for their efforts. Common "profitability pillars" included strong development engines, broad technology expertise, smart merger and acquisition decisions and a clear focus on clinical outcomes.

Many manufacturers also made big bets on companies and technologies that they hoped would produce market breakthroughs. A good example is Medtronic's billion-dollar-plus play for renal denervation pioneer Ardian[1]. Another is Johnson & Johnson's similarly large bet on Acclarent's novel approach to sinusitis[2].

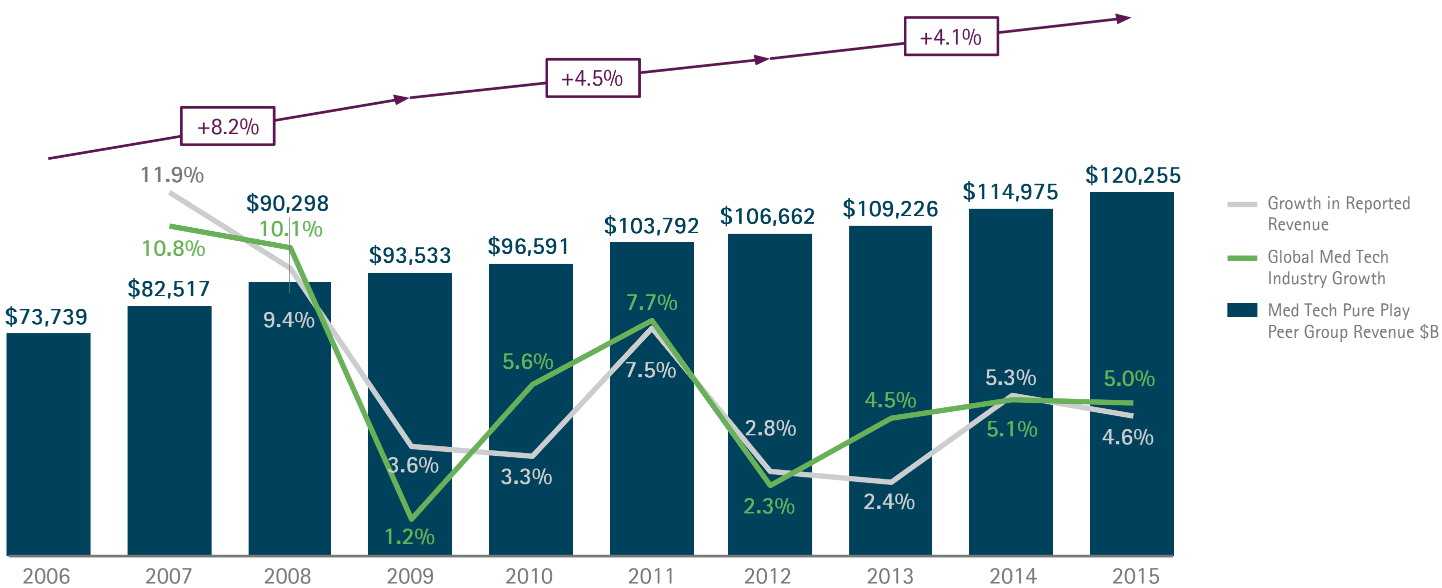
At the same time, the impressive reputations of medical technology companies (and the industry as a whole) created a halo effect with clinicians—the manufacturers' traditional customer base. Members of this core market appreciated the value that MedTech organizations and their sales reps created; they also welcomed a steady output of new technologies that helped their patients. This symbiotic relationship further accelerated companies' growth and financial success.

Accenture's High Performance Business analysis shows that this paradigm is changing. Although Enterprise Value[3] is finally recovering from pre-recessionary levels, overall industry growth is decelerating (see Figures 1 and 2).

Only four of the 19 "pure play" medical technology companies (those with more than 75 percent of their revenue derived from medical technology products) we analyzed were deemed High Performers: Edwards Lifesciences, Intuitive Surgical, Coloplast and Varian Medical Systems. In fact, some companies traditionally thought of as top innovators and aggressive acquirers of new technologies fared poorly on our consolidated scale of financial performance. Even more surprising, our analysis concluded that the disconnect between technology and product innovation and financial performance seems to be widening (see Figure 3).

FIGURE 1. Slowing growth in the medical technology industry

Revenues and estimated growth of 19 pure play medical technology companies, representing 32 percent of the global market.

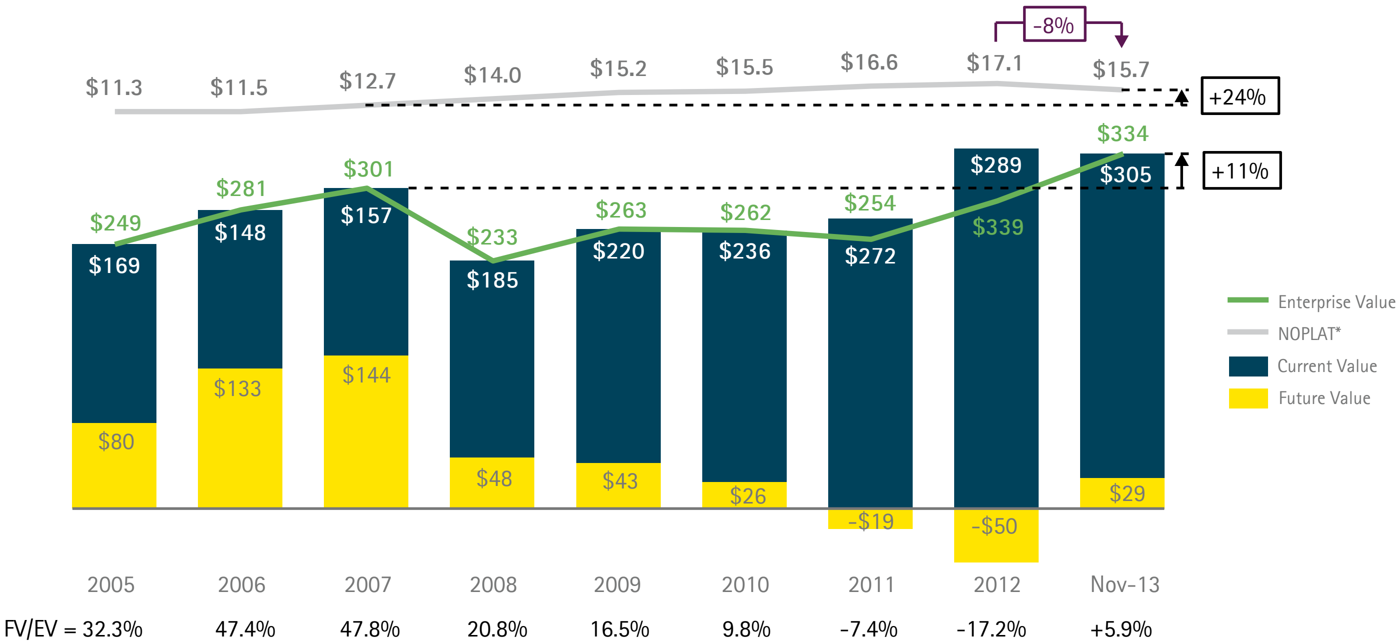


Notes: Pure play peer set contains 19 companies focused primarily on medical technology products. Reported growth is based on local currency reported growth and is adjusted for any major M&A or FOREX shifts that have taken place.

Source: Accenture Research Nov 2013, based on Capital IQ Forecasts.

FIGURE 2. Medical technology industry Enterprise Value

"Enterprise Value" of the 19-member pure play peer set rose strongly in 2013, increasing 11 percent over pre-recession levels. This was driven by a 24 percent increase in earnings over the same period. "Future Value"[4] also shifted to positive territory in 2013, even as earnings decreased by eight percent.



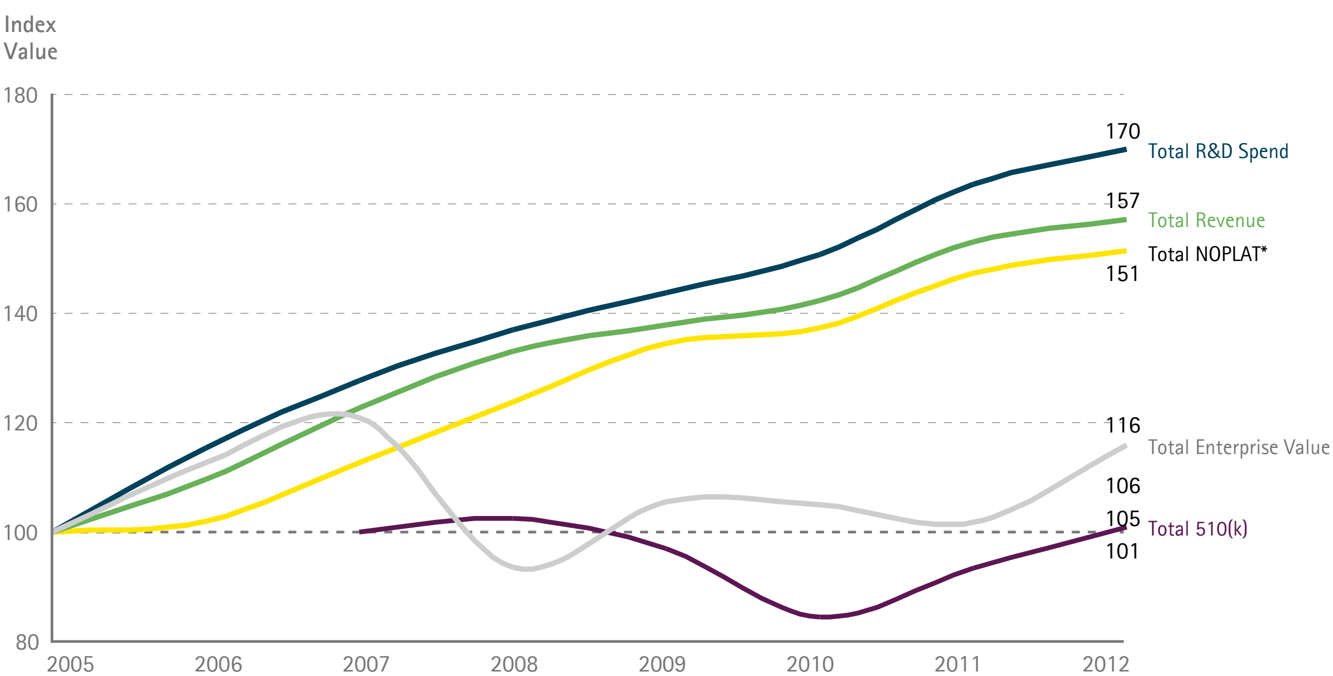
Notes: Pure play peer set contains 19 companies focused primarily on medical technology products. Reported growth is based on local currency reported growth and is adjusted for any major M&A or FOREX shifts that have taken place.

*NOPLAT = Net Operating Profit Less Adjusted Tax

Source: Accenture Research Nov 2013, based on Capital IQ Forecasts.

FIGURE 3. The widening gap between innovation and financial performance

MedTech's R&D spending has been increasing faster than revenue which, in turn, has been increasing faster than earnings. All the while, innovation output—measured by number of 510(k) approvals—has been flat to declining. "Enterprise Value" has also been flat since the recession, but has recently begun to increase, albeit much more modestly than increases in R&D investment.



*NOPLAT = Net Operating Profit Less Adjusted Tax

Source: EvaluateMedTech™ 2013

Multiple marketplace shifts are impacting MedTech's growth and profits (see Figure 4). These include a changing buyer/customer with different priorities, ongoing cost pressures, increasing regulatory scrutiny and changing patient populations. All of these factors are requiring MedTech companies to revise their strategies and operations. These shifts are also creating new opportunities for first-mover MedTechs to redefine and elevate their relationships with their customers.

FIGURE 4. Medical technology trends and potential company responses

Trend	Maturity/Pace	Potential Medical Technology Company Response
US health care reform is increasing the size of the insured population, thus putting more pressure on providers	Early stage/ accelerating	• Take a leadership role in improving care delivery and driving out costs in therapeutic areas where there is existing expertise • Own utilization at the procedure level and work with customers to improve it • Provide a portfolio of solutions: Go beyond offering just expensive, increasingly unsustainable product options
Payers and providers are increasingly skeptical about the value of incremental product improvements	Early stage/rapidly accelerating	• Develop a solid health economics story and communicate it to customers • Consider rebranding certain products to increase differentiation based on economic benefits • Develop non-product offerings, such as patient service programs, adherence support and educational initiatives
The influence of economic buyers—groups and individuals seeking to balance system costs and patient care—is growing	Mid stage/ accelerating	• Position current offerings in ways that serve, and appeal to, economic buyers (not just clinicians) • Develop new offerings that help sourcing and value-analysis-focused customers do their jobs more effectively, e.g., by improving purchasing activities, managing inventory, standardizing products and improving utilization levels • Understand the issues that administrators care about (readmission reduction, patient satisfaction scores, health analytics, care management) and develop programs that support these priorities • Provide marketing support/expertise focused on helping customers generate incremental revenues
The importance of huge but highly cost-conscious markets like China and India is growing rapidly	Late stage/ accelerating	• Consider multi-tier product offerings to serve the needs of various strata of the marketplace • Offer health services that support local health care market structures (e.g., largely self-pay markets)
Concepts like reverse innovation—which explicitly trade off clinical outcomes for lower-cost devices in an effort to serve cost-conscious markets—are rapidly gaining stead	Early stage/ accelerating	• Evaluate opportunities to develop "de-featured" products that expand currently limited markets served by much more expensive (but only slightly better) therapies
Levels of regulatory scrutiny are rising rapidly, demands for evidence are tightening, and regulatory approval times are lengthening	Late stage/ accelerating	• Devote rigorous attention to improving R&D, supply chain and back office operations. Additional regulatory burdens must be offset by increased operational efficiency

Repairing the Disconnect

MedTech companies now have the opportunity to truly partner with their customers to deliver comprehensive solutions that increase quality of care and cost effectiveness.

1. Innovate Your Business Model

Both customers and investors are increasingly less likely to value product innovation. This is particularly true of technology enhancements and their contributions to incrementally better clinical outcomes. More and more, R&D investments and M&A strategies will be held to higher standards, with customers demanding more robust clinical data and moving more hesitantly to adopt new technologies. Investors, on the other hand, will demand more assurances and higher, more-rapid returns. For at least the foreseeable future, a low venture capital climate will force companies to do more internal development and/or corporate venture funding.

As **product innovation** becomes less valued, medical technology companies will need to hike their investments in **business model innovation**. Some companies may continue their focus on disruptive, breakthrough technologies that significantly alter the future of patient outcomes but their go-to-market strategies will need strong value propositions to present to economic buyers and payers. Truly novel, clinically driven innovations like TAVI and RDN will not have to justify their adoption to economic buyers as much, partly because so much economic benefit resides in changing paradigms of care. But for most companies—those whose offerings are often incremental enhancements—economic benefit will be an increasingly essential justification for adoption.

Business model innovation can also mean new ways to streamline the process of health care delivery and thus lower its cost (see "Are you a health solutions provider?"). For example, medical technology companies could help their customers develop standardization programs, rationalize inventories, improve utilization levels and procure more cost effectively. Another option is innovative pricing models that feature concepts such as risk-sharing and outcome-based pricing.

Electronic medical product companies could also seek opportunities to transform therapies using device connectivity. Advances in connectivity technology can enable more flexible care in alternative, lower-cost locations, such as acute-care facilities, nursing homes and patient residences. Such technologies can further opportunities for competitive differentiation in increasingly commoditized markets.

Depending on the spaces in which they play, companies that overspend on R&D and M&A could incur as much risk as those that do not spend enough. MedTech organizations will need to be sure that spend and activity levels are appropriately scaled to and aligned with targeted clinical opportunities, and that they match broader corporate goals and strategic missions (see Figure 5).

Are You a Health Solutions Provider?

Economic pressures and a changing buyer landscape are leading many providers to demand more from their medical technology suppliers. These providers need help that goes beyond buying "products in boxes" to participating in partnerships that deliver solutions to big problems in care economics, care quality and operational efficiency.

There are several levels of health solutions to consider. Some value-added components, such as physician training, product maintenance and technical support, are typically seen by providers as table stakes in the purchase decision of any product. Other services, such as standardization programs, inventory rationalization, utilization-level improvements and more cost-effective purchasing, may be seen as valuable additions to a medical technology company's offerings—potentially increasing share and enabling differentiation in a crowded marketplace.

Other solutions, such as patient service programs, adherence support, readmission reduction programs, precision health analytics, care management and marketing support, may entail completely new offerings and revenue streams for medical technology companies. An example in this category is Medtronic's $200-million acquisition of Cardiocom[5], a disease-management firm. This move has launched Medtronic into the business of partnering with providers and payers to drive more cost-effective care in chronic diseases, such as heart failure (a therapeutic area that Medtronic knows well).

Medical device companies are getting increasingly lower returns from focusing on new technologies and incremental product innovation. They now have the opportunity to truly partner with their customers to deliver comprehensive solutions, where their products may be just one of several components. By helping providers operate their own businesses more effectively and efficiently, medical device companies can position themselves as leaders in the drive to raise care quality and cost effectiveness.

FIGURE 5. Medical technology strategic options and success factors

Business Approach	Description	Stability vs. Disruption	Innovation Characteristics	Success Driven By...	Company Examples
Category Killers	Target narrow, focused clinical/market niches, offering technologies that represent the standard of care	Stable and sustainable	Lower R&D investment and M&A activity	Channel dominance, close relationships with customers	• Coloplast and Bard: focus on, and own, narrow clinical/technological plays
Market Disrupters	Target disruptive, game-changing technologies that introduce new clinical paradigms	Risky, volatile	Requires significant R&D, M&A and/or venture investment	Ability to successfully develop new technologies	• Edwards Lifesciences: pioneering work in transcatheter heart valves • Intuitive Surgical: technology that has changed the paradigm of care in prostate surgery
Mixed/Blended Strategy	Utilize both category killers and market disrupters in different parts of the business	Stability in some units can be used to hedge risk in other units	Can be more of a balanced innovation profile	A balanced approach to channel commitment versus technological innovation	• Johnson & Johnson • Boston Scientific • Stryker's acquisition of MAKO

2. Connect with the New Customer

As economic pressures reshape health care delivery and customer business models, medical technology suppliers will need to understand how those shifts alter buyer perceptions. Product features and benefits have become less significant, and MedTech value propositions will also have to change. Even truly innovative technologies may need stronger "economic value stories." More than that, companies will have to cater to new types of customers by crafting different kinds of offerings—including adjunct services and information-based packages that help customers deal with economic pressures. Companies will also need to articulate the value of those offerings to a wider variety of stakeholders: not just physicians and nurses, but economic buyers such as administrators, payers, providers and even patients. Those companies not able to articulate value to this wider audience could find their customers redefining it for them.

As the power of the economic buyer rises, medical technology companies may need new sales and marketing models. For the past several years, physician employment by hospitals has surged and many med tech firms are being given less access to physicians. The net effect is a tighter alignment between physician interests and the goals of hospital administrators. More product decisions are being made by in-hospital purchasing and value-analysis committees. The influence of these committees is likely to go on rising while rep access to physicians continues to fall.

Marketing professionals may be able to court economic buyers more effectively by strengthening differentiation levels. Some suppliers (especially those with novel technologies) might partner with hospitals and other channel partners on marketing campaigns. Marketing strategies will also have to consider the role of patients and consumers—both as customers in their own right and as key members of the overall hospital/physician customer base. Device benefits that appeal directly to hospitals and their patient customers (measured, for example, in patient satisfaction and QOL scores and with metrics such as fewer complications and readmissions) will become an important part of the med tech value proposition.

Finally, there will likely be a need for new approaches to hiring and training sales reps in order to more-fully understand hospitals' operational realities and how devices align with these entities' larger missions. Over time, sales rep effectiveness will be less and less about physician relationships and product knowledge, and more about the ability to partner with a broad set of economically-driven stakeholders to help ensure better care at a lower cost.

3. Excel at Operational Excellence

As cost pressures continue to reshape health care delivery systems, medical technology companies will no longer be able to reach desired profitability levels by relying primarily on innovation to ensure top-line revenue growth. In other words, suppliers whose sole focus is clinically meaningful technology could face scrutiny about their products' economic implications; they will literally be forced to make salient cost-benefit arguments for their novel technologies. For companies playing in lower-tech, slower-moving spaces, the pressure for economic justification will be even greater.

Medical technology companies will be increasingly unable to overcome the liabilities associated with inefficient back office functions: from R&D and supply management to HR, finance and IT. They must address what many other industries have already faced: the need to scrutinize every process for its value to customers and for ways to increase efficiency. In short, MedTech companies need to pursue operational excellence. We suggest that MedTech companies can learn from companies outside the industry that have already accomplished this objective and realized the enormous potential gains. One of those outcomes often is increased agility to respond to inevitable future marketplace changes.

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Conclusion

Powerful external forces are disrupting the traditional strategies of medical technology leaders. Companies face greater economic pressures, a reformed health care system, new hospital and physician alignments, and new technological challenges. Accenture's High Performance Business research indicates that—for these and many other reasons—the disconnect between product innovation and financial performance is widening. Medical technology companies need to act now to address this paradigm shift.

Accenture has identified three ways that medical technology companies might improve both their top and bottom lines. These steps—Innovate your Business Model, Connect with the New Customer, and Excel at Operational Excellence—could help medical device companies prove their economic value to drive positive financial outcomes while maintaining their commitments to improve patients' lives.

Research notes and sources

1 Medtronic Completes Acquisition of Ardian
http://newsroom.medtronic.com/phoenix.zhtml?c=251324&p=irol-newsArticle&ID=1770617

2 Commercialization Alternatives In The New Medtech World
http://www.wsgr.com/news/medicaldevice/pdf/medtech-world.pdf

3 Enterprise Value (EV) is the sum of Market Capitalization and Net Debt, totaled across a pure play peer set of 19 companies focused primarily on Medical Technology Products and measured at constant USD exchange rates from 2005-2013.

4 Future Value (FV) is the difference between Enterprise Value and Current Value—and represents the implied portion of Company Enterprise Value that may be ascribed to growth. Current Value is calculated (CV) as Net Operating Profit Less Adjusted Tax divided by Weighted Average Cost of Capital.

5 Medtronic Advances Healthcare Services and Solutions Strategy with Acquisition of Cardiocom
http://newsroom.medtronic.com/phoenix.zhtml?c=251324&p=irol-newsArticle&id=1846808

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About the Research

The Accenture High Performance Business Framework

Accenture's proprietary High Performance Business (HPB) research has, over the past decade, shown that high performance is definable, quantifiable and achievable. High-performance businesses consistently outperform peers in revenue growth, profitability (ROIC), Future Value generation and total return to shareholders. They sustain their superiority through market changes and over time—by applying a combination of three traits: clear market focus and position, mastery of distinctive capabilities, and a performance anatomy geared to supporting market focus and distinctive capabilities.

For the past several years, Accenture has applied the HPB framework to the medical technology industry to help understand what companies are performing well and why. In 2011, we published the full report, "Achieving High Performance: Reinventing Medical Technology for a Dramatically Different Future."

In 2014, we again applied the Accenture HPB framework to the medical technology industry and included 19 "pure play" global medical technology competitors in the analysis. We also added another 11 companies as an extended peer set of diversified companies. Our analysis spanned 2005-2013, and the results provide deep insight into the industry's performance and its challenges.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 281,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

About Accenture's Life Sciences Practice

Accenture's Life Sciences group is dedicated to helping companies rethink, reshape or restructure their businesses to deliver better patient outcomes and drive shareholder returns. We provide end-to-end business services as well as individual consulting, outsourcing and technology projects around the globe in all strategic and functional areas—with a strong focus on R&D, Sales & Marketing Supply Chain and core support functions.

We have decades of experiences working hand-in-hand with the world's most successful companies to improve their performance across the entire Life Sciences value chain. Accenture's Life Sciences group connects more than 10,000 skilled professionals in over 50 countries who are personally committed to helping our clients achieve their business objectives and deliver better health outcomes for people around the world.

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