Fit for Growth
in medtech
### Contacts

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<th>Berlin</th>
<th>DC</th>
<th>Düsseldorf</th>
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<tr>
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<td>Greg Rotz</td>
<td>Dr. Sven Uwe Vallerien</td>
<td>Dr. Marcus Ehrhardt</td>
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<td><em>Partner</em></td>
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<td>+49-30-88705-841</td>
<td>+1-703-682-5888</td>
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**About the authors**

**Peter Behner** is a partner with Strategy& based in Berlin. He focuses on growth strategies, distribution channel management, and logistics optimization in the life sciences industry.

**Dr. Marcus Ehrhardt** is a partner with Strategy& based in New York and Frankfurt. He specializes in strategy-based transformations, cost reduction, and value creation programs — specifically, supply chain management — with a strong focus on the life sciences industry.

**Greg Rotz** is a partner with Strategy& based in DC. He is focused on working with senior business leaders in the life sciences industry to grow the value of their companies by addressing major strategy, organization, and execution issues.

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Executive summary

Since the early 2000s, growth in the medical technology sector — driven by innovation and geographic expansion into emerging markets — has been impressive, providing leading medical devices and diagnostics companies with healthy margins. Even through the recent recession, the industry grew and maintained high profits. Though several industry executives are optimistic about the future for the medtech sector, we take a much more cautious perspective, expecting that sizable challenges ahead will cause lower revenue growth and significantly higher price and margin pressure. The accelerating effects of global cost containment initiatives and healthcare reforms are just beginning to affect this sector of the medical industry. Though strong growth in emerging markets is seen as a counter balance, the size of these markets compared with mature markets — as well as the vastly different business, quality, regulatory, and competitive requirements in these regions — means that they are not a certain path to maintaining profitability.

Instead, medtech companies must take the right strategic approach to managing costs while investing in capabilities and growth initiatives, via a Fit for Growth* transformation. This entails three specific priorities: (1) investing in differentiating capabilities and growth initiatives; (2) transforming the cost structure; and (3) reorganizing for sustainability. By adopting a proactive approach, medtech companies can strengthen their competitive position now, and prepare for the next round of expansion.

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Medtech weathers economic crisis

For the last decade, the medical devices and diagnostics (MD&D) industry — a highly diversified market, with offerings that range from clinical equipment, implants, and devices to in vivo and in vitro diagnostics and disposable supplies — has been extremely profitable. Driven primarily by a culture of continuous innovation, operating margins have been very high compared to those of other industries, hovering around 25 percent for large-cap companies, and even higher in some cases. Between 2005 and 2008, revenues grew consistently by a compound annual growth rate (CAGR) of 8 to 11 percent, in line with the growth of the then-healthy pharmaceutical sector. Even during the recent recession, as market activity across the world slowed dramatically and many cyclical sectors were hit especially hard, MD&D companies continued to experience positive growth (see Exhibit 1, next page, and Exhibit 2, page 7). This success was also reflected in stock prices, as the industry routinely outperformed the broader market by double digits.

In light of this historical financial strength, industry professionals remain confident in the future of the medtech sector, primarily due to two important trends. First, after more than four years of financial crisis, the global economy is beginning to stabilize. Though the growth outlook for the near term is relatively anemic compared to past rates in the medtech sector, no major setbacks appear imminent, and many industry stakeholders are confident about their prospects. Second, rapid growth in emerging markets presents an attractive addition to the strained business environments in developed regions, fueling expectation of near-term growth.
Exhibit 1
Global medtech vs. prescription drug sales, 2005–2013E

US$ in billions

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<tr>
<th>Year</th>
<th>Prescription Pharma</th>
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<td>215</td>
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<tr>
<td>2006</td>
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<tr>
<td>2011</td>
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<tr>
<td>2012</td>
<td>708</td>
<td>333</td>
</tr>
<tr>
<td>2013E</td>
<td>726</td>
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Note: Prescription drug sales based on top 500 pharmaceutical and biotech companies from EvaluatePharma. Sales to 2011 based on company reported sales data. Sales forecasts based on a consensus of leading equity analysts’ estimates for company product sales and segmental sales.

Source: EvaluatePharma; EvaluateMedTech; Strategy& analysis
Exhibit 2
Large-cap medtech operating margins, FY05–FY12 (in % of sales)

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<tr>
<td>Becton, Dickinson</td>
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<td>Boston Scientific</td>
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<td>Covidien</td>
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<td>Johnson &amp; Johnson</td>
<td>25%</td>
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<td>16%</td>
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<tr>
<td>Medtronic</td>
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Large-cap average    25.4%  23.4%  23.3%  23.6%  24.7%  24.6%  24.0%  24.6%

Source: Strategy& analysis
Concerns over rougher waters ahead

Despite the optimism of some industry experts, the momentum for a global economic recovery, and the steady return of broader market confidence, we see clouds appearing on the horizon for medtech companies. Just as in 2009 when we took a cautious position on the pharmaceutical industry and correctly predicted significant price pressure due to cost containment measures (see “Pharmaceutical Companies in the Economic Storm: Navigating from a Position of Strength”), we anticipate a significantly more challenging environment ahead for the medtech sector.

From public payors to private providers, the global recession has led to greater budget scrutiny across the spectrum of healthcare delivery. Spiraling healthcare costs have been compounded by widespread austerity initiatives and a reduced ability (and willingness) among governments to pay for healthcare. With a global expenditure of approximately US$700 billion on prescription drugs, the pharmaceutical sector (which is more than twice as large as the medtech sector) has begun to contract due to cost-cutting efforts.

Optimists may point to stable operating margins and argue that the medtech sector has been less affected by the implementation of cost containment measures taken in 2009 and 2010. However, this interpretation is treacherous: Many medtech products are procured through longer-term contracts (such as equipment leases), so effects are more likely to be revealed over time. In addition, to further drive down healthcare costs, governments have intensified budgetary scrutiny via additional cost containment measures (see Exhibit 3, next page). For example, France reduced spending on medical devices and pharmaceuticals by almost €1 billion, Austria has plans to cut €1.7 billion from its healthcare budget by 2016, and the United States faces across-the-board cuts of 9 percent by the end of fiscal year 2013. In January, a 2.3 percent excise tax on medical device sales took effect in the U.S.; more
Exhibit 3  
Government pressures from developed markets

Healthcare reform: lower reimbursements, broader payment reform

More rigorous FDA device approval process

2.3% excise tax on medical device sales as of January 1, 2013

Federal budget sequester: 9% cuts across the board by the end of fiscal year 2013

Physician Payment Sunshine Act scrutinizes physician–MD&D relationships

Austria: €1.7B cut from healthcare budget by 2016

Italy: 5% reimbursement reduction on all medical devices

Spain: 7.5% price cut on all medical devices

France: Social insurance financing (LFSS) reform to cut almost €1B from medical device and pharmaceutical spending

Rise of health technology assessment (HTA) agencies provides independent cost-effectiveness reports to federal authorities

Source: Strategy& analysis
than 70 percent of MD&D executives believe that this will have a negative impact on their business.

Continued implementation of healthcare reforms reduce payor reimbursement for core services and push manufacturers to focus on clinical efficiency and economic attractiveness. In Europe, these changes have increased pressure on payors and providers, driving down equipment pricing and further complicating medical device procurement. Group purchasing organizations and centralized procurement departments are increasingly replacing physicians as the primary procurement decision makers. Furthermore, the trend of hospitals consolidating to form larger systems of care has been accelerating in recent years. As a result, purchasing is further professionalized on the demand side, increasing negotiation power among MD&D customers.

We are already seeing the negative impact that these trends are having on the industry. In 2012, sales growth rates slowed to a new low in established markets — which still make up more than two-thirds of the global industry revenues — falling to the low single digits. Going forward, we expect cost containment measures to increasingly affect the medical devices and diagnostics industry in established markets. A recent IMS Research report shares our concern, saying that “the worst may be ahead for European medical device markets.”

Growth in emerging markets may allow medtech companies to compensate for some of the increased pressure in developed regions. However, these opportunities come with their own set of challenges. Although emerging markets are growing twice as fast as developed markets, healthcare budgets are significantly lower in these regions, and price sensitivity among consumers is high. Therefore, MD&D companies will be forced to offer products at a much lower price point. Furthermore, emerging markets are expected to remain less than a third the size of developed markets through 2016 (see Exhibit 4, next page), which will limit the extent to which they can compensate for cost containment pressure in mature markets.

At the same time, competition from local medtech companies in developing markets should also be taken seriously, as their lower-cost positions provide a natural advantage. Over time, in fact, we expect to see an increased presence of emerging
Exhibit 4
Size and growth of developed vs. emerging markets, 2011–2016E (in US$ billion)

- **Emerging markets**: +9.3% CAGR
  - 2011: 325, 59
  - 2016: 403, 92

- **Developed markets**: +3.2% CAGR
  - 2011: 266
  - 2016: 311

Note: Developed markets include the Americas, Japan, and Western Europe. Emerging markets include Asia/Pacific w/o Japan, Middle East/Africa, and Central and Eastern Europe.

Source: J.P. Morgan; Strategy& analysis
market MD&D manufacturers in developed markets, as these companies appear eager to introduce their products to Europe and North America.

In this environment, MD&D executives must make proactive decisions to ensure that their companies are well prepared for the challenges that lie ahead.
To successfully navigate the rougher waters ahead, medical devices and diagnostics companies have to devise a clear, actionable strategy. To that end, Strategy& has developed the *Fit for Growth* framework, which consists of three fundamental pillars:

- Invest in differentiating capabilities and growth initiatives
- Transform the cost structure
- Reorganize for sustainability.

**Pillar 1: Invest in differentiating capabilities and growth initiatives**

The significant changes in the business environment call for medtech companies to determine how they truly add value — i.e., how they can differentiate themselves from the competition — and then build the capabilities systems to support that strategy. We define a capability as the combination of processes, tools, knowledge, and organization that allows a company to consistently deliver results. Apple’s product design and innovation engine, Walmart’s virtuous supply chain management, and Toyota’s lean and total quality management models are all well-known examples of distinctive capabilities. These capabilities are critical because they are differentiating — they set Apple, Walmart, and Toyota apart from their competitors, thus giving them a sustainable advantage.

Just as these companies have differentiated themselves, so too can medtech companies that aspire to become leaders in the industry. A company’s most distinctive capabilities are cross-functional and ideally are applied to most products and services. Hence, they require a lot of attention and investment; even the largest companies have only three to six distinctive capabilities in their capabilities system.

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Companies need to set clear priorities and make choices, funding those capabilities that are compatible with the overall strategy and fit together so they reinforce one another as a coherent system. The priorities most worthy of high levels of investment are those that align with the growth priorities of the business, helping to build the capabilities that distinguish the company and contribute substantially to its success.

For example, to capitalize on the strong growth in emerging markets, companies need to invest in capabilities and product/service solutions that are specifically designed for the vastly different business, quality, regulatory, and competitive requirements in these regions. Companies that have strong capabilities in “design for affordability,” “best-cost-country sourcing,” and “local market tailoring” (such as designing products that have fewer features and less complex specifications, are locally sourced, and carry low production costs that match emerging market requirements) will separate themselves from their competitors and establish a right to win.

Differentiating capabilities should be resourced fully. These capabilities will drive growth, so outperforming in these areas is imperative even if it means overinvesting compared to the competition. Of course, this raises a question: How do we fund the investment into these areas of strength, even as investment dollars become harder to secure?

**Pillar 2: Transform the cost structure**

With rising price and margin pressure from cost containment measures in developed markets, as well as competition from low-cost players and lower affordability in emerging markets, making step changes regarding costs is a top priority for medtech companies. The change needs to be transformational — companies need to fundamentally adjust their cost structures and operating models. For example, many medtech companies today have SG&A levels that are several times higher than those of other technology or industrial companies. Such cost structures will be unsustainable in the “new normal.”

Cost cutting across the board in a shared-sacrifice model (for example, cutting all departments by 10 percent) or following an asset-based approach (determining which projects to fund or not to fund) is unlikely to be successful. Instead, companies will be able to create a strong, sustainable position only when they approach cost reduction strategically, by looking at costs from a capabilities-driven standpoint and investing in the key capabilities that are most essential for driving future growth.

A full suite of levers can and needs to be strategically evaluated in order to get to the right answer for a specific MD&D company (**see Exhibit 5, next page**).
Exhibit 5
Fit for Growth cost levers

What do we do?

Product and service portfolio
Capabilities system

Where do we do it?

Footprint strategy
Shared services
Outsourcing and offshoring
Process and technology harmonization

How (and how well) do we do it?

De-layering and resource reallocation
Lean processes
IT and automation
Strategic sourcing

Source: Strategy&
Unlike budget-based cost reduction, transformational cost reduction starts at the strategic level, and it necessitates explicit trade-offs about where to invest and where to cut. These trade-offs cascade throughout the cost model and often result in operational changes. Transformational cost reduction ensures that the root causes of the cost structure — the business decisions that predetermine a majority of costs — are sufficiently analyzed and addressed.

The first step in transformational cost reduction is to define/revise “what we do” (the top tier of the cost lever pyramid). Reviewing and rationalizing the product and service portfolio is a key lever to reduce complexity and trim costs throughout the organization. Management should shed everything that does not fit with the differentiated strategy, and leave only those elements that can leverage the company’s capabilities system. Product and service development should be focused on actions that enable up-front cost reduction, such as design for quality and “manufacturability,” leveraging platform components, and identifying low-cost-country suppliers.

After answering the question of what we do, the company has to determine “where we do it” — how to shift the sources of activities to streamline operations, the organization, and the management practices. This includes redesigning the supply chain network, rationalizing facilities, consolidating back-office functions, and reallocating work to low-cost locations. With deliberate attention to these types of organizational changes, costs can be effectively managed.

The foundation layer of the cost lever pyramid addresses the “how” — how to improve the processes and routines of the organization. This involves de-layering the business and reallocating resources. It also includes a focus on lean processes. Specific examples may include harmonizing the IT infrastructure, automating manual work, and prioritizing functional activity.

**Pillar 3: Reorganize for sustainability**

To grow the company and reduce costs concurrently, a well-designed organizational model is critical. The company’s leadership team must take a fresh look at the organizational structure — especially the complexity of layers (including overlapping local, regional, and global authority), the relationship between business units and shared functions, and the mix of organizational boundaries. The solution typically involves redesigning the organization to create more appropriate structures and spans of control. Roles and responsibilities, governance forums, and decision rights have to be designed to allow
for a clear understanding of accountability throughout the organizational hierarchy. This will empower managers to take ownership-type roles within the company.

Effective governance and business management practices, coupled with financial and operational key performance indicators (KPIs) aligned to the company’s long-term objectives, are required to reinforce clear priorities and support capabilities that are critical for growth. KPIs should match strategic objectives, be measurable, link to individuals who are clearly accountable, and be tied to key value drivers.

To ensure sustainability in cost reductions and ongoing improvements, structural changes need to be accompanied by a “lean” culture and a shift in which the organizational mind-set becomes more proactive about continuous improvement. Management must encourage, motivate, and incentivize workers to change their behavior and adopt lean “thinking” in all aspects of the business and its operations.

Successful execution of a Fit for Growth transformational change is challenging and therefore requires strong and diligent change management. Many managers are good at building the rational case for change, but they are less adept in appealing to people’s emotional core (fear of losing their jobs, concerns about new roles, and misunderstandings about the rationale for change, among other factors). The management team has to actively remove fear from the emotional equation by engaging in proactive and ongoing communication.
Conclusion

The medical devices and diagnostics sector has experienced healthy and resilient growth for more than a decade. However, the accelerating effects of global cost containment initiatives and healthcare reforms in developed countries, as well as the lower affordability and therefore lower profit potential in fast-growing emerging markets, will significantly increase the pressure on the medtech sector in the future.

Accordingly, medtech companies have to take action now to give themselves a stronger position and better prepare for the next round of expansion. Specifically, significant changes in the business environment call for medtech companies to differentiate themselves and identify the critical capabilities needed to execute their strategy. They need to start by defining their “way to play” and make corresponding choices to support it.

In addition, given the cost position of many leading companies today and the rising price and margin pressure in the changing market environment, medtech companies require a step change in cost, accompanied by a cultural change for continuous cost management. These changes need to be reflected in a redesigned organizational model. Successfully executing a Fit for Growth transformational change is challenging and requires strong and diligent change management. Medtech companies that aspire to stay (or become) leaders in the industry will proactively take on these transformational and strategic challenges, capitalize on growth, and thrive in whatever stormy weather may come their way.
“2012 Medical Device Industry Survey,” Emergo Group, January 2012: A snapshot of the medical device industry based on a survey of 2,600 professionals.


Peter Behner, Dr. Sven Vallerien, Dr. Marcus Ehrhardt, and Danielle Rollmann, “Pharmaceutical Companies in the Economic Storm: Navigating from a Position of Strength,” Strategy&, April 2009.


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