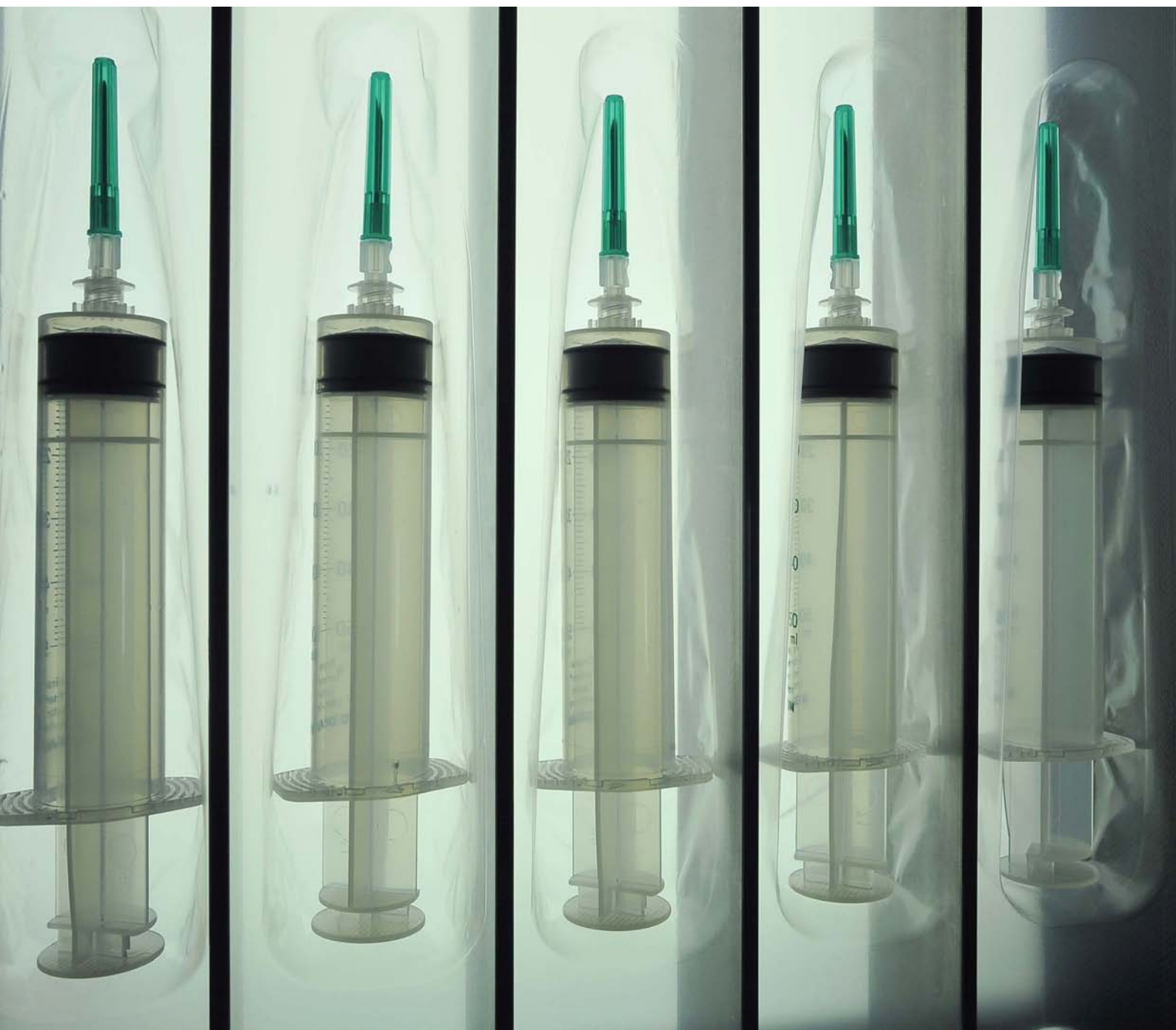




Dr. Patrick Dümmler, Beatus Hofrichter, Aleksandar Ruzicic

The Global Medtech Industry: Visions in Times of Change

Published on June 25th 2013 by Medtech Switzerland



Publisher:

Medtech Switzerland
Wankdorffeldstr. 102
P.O. Box 261
3000 Bern 22
+41 31 335 62 41
contact@medtech-switzerland.com
www.medtech-switzerland.com

Authors:

Dr. Patrick Dümmler
Beatus Hofrichter
Aleksandar Ruzicic

Project Management:

Sarah Moyle (Medtech Switzerland)

While this report is intended to provide an overview of the medtech sector and its opportunities at the time of print, each individual manufacturer or company may have to conduct their own analysis to get a better understanding of the possibilities and opportunities available to them. You are encouraged to explore and develop your opportunities based on research and in-depth analysis.

Readers should take note that Medtech Switzerland does not guarantee the accuracy of any of the information contained in this report, nor does it necessarily endorse the organizations, associations, companies and individuals listed herein. Readers of this report should verify the accuracy and reliability of the information contained herein before making a business decision.

© All rights relating to this publication are the exclusive property of the authors (Dr. Patrick Dümmler, Beatus Hofrichter, Aleksandar Ruzicic).

Table of Contents

Introduction letter from the authors	4
1. A changing environment	5
2. Strategic decisions	8
3. Towards new business models	11
4. Emerging market strategies	14
5. Commercial / Operational excellence	16
6. Conclusions	19
Appendix: Methodology & acknowledgements	22
Appendix: Authors	23

Introduction letter from the authors

The healthcare environment has been transforming faster during the last couple of years. New approaches for managing, financing and competing in healthcare are pushing all players in the sector to constantly question the relevance of their formula for past success. As a result, all suppliers of healthcare products, including those in the medtech industry, experience more pressure on their top and bottom line.

In response, the medtech experts who participated in the first World Medtech Forum Lucerne from September 25–27, 2012 predicted a transformation of the sector in the coming 5 years and assessed the strategic decisions ahead of us related to “where to play” and “how to win”. In particular, they highlighted the opportunity to shape their corporation’s future by evolving towards new business models and shifting gears towards emerging markets.

This report builds on the thought provoking contributions and highly interactive discussions during the 2012 WMTF. The numerous medtech experts on stage were challenged by the experienced audience who contributed their opinions through electronic voting on 15 questions at the Executive Day and the European Day using PowerVote. The quantitative PowerVote survey and qualitative insights were summarized into a set of hypotheses and discussed with more than 20 medtech executives and experts resulting in a rich glimpse of the future in the medtech sector, demonstrated by the three quotes below:

- *“Rising cross-national providers transform the healthcare market”*
- *“Medtech’s need for change is higher than our pace of innovation”*
- *“Owning the disease/procedures is already today’s battle field”*

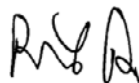
We want to thank all speakers and attendees who participated in the PowerVote survey at the WMTF 2012 as well as the medtech experts who took the time to provide us with their visions of the future during a personal discussion. We hope that this report builds on your collective wisdom and provides you with further food for thought, enabling both you and your medtech colleagues to identify and capture the many opportunities healthcare change will provide while minimizing the increasing risks.



Dr. Patrick Dümmler



Beatus Hofrichter



Aleksandar Ruzicic

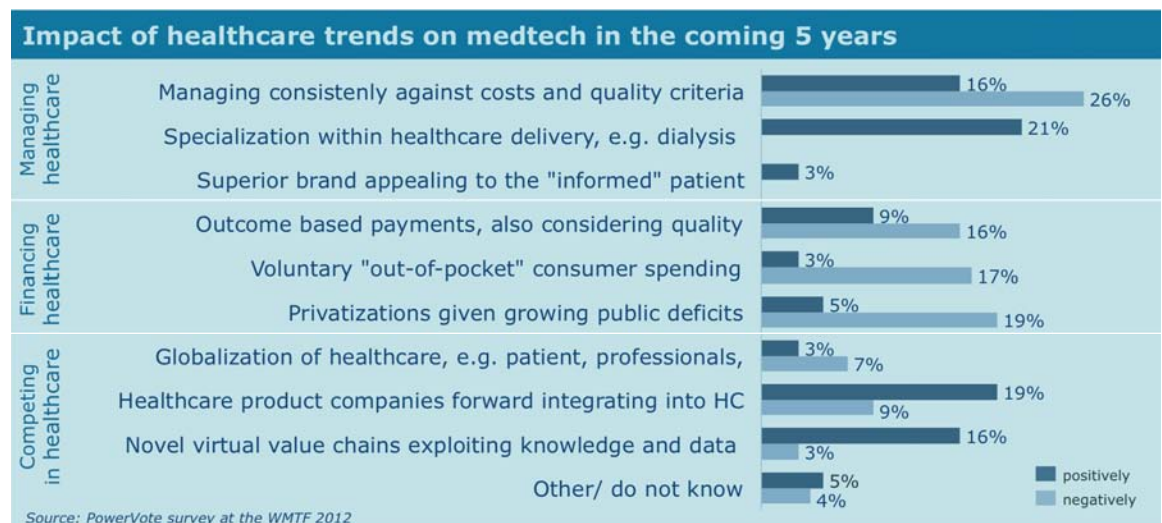
1. A changing environment

New **trends in healthcare** regarding management, financing and competition are broadly transforming the medtech sector in the near future. Public cost containment is a major driver behind these developments, enforced by the financial crisis. In the last ten years, relative healthcare expenditures (in % of GDP) have constantly risen. Local healthcare systems struggle to finance the rising cost burden with the patient playing an increasingly important role in **healthcare financing**.

Competing in healthcare has already been impacted by a new world order where countries like China and Brazil are presenting larger opportunities than traditional markets. By 2016, for instance, all BRIC countries will belong to the top 10 largest life sciences markets. In this world, established Western companies need to adapt to different competitive and economic environments as well as changing customer needs. It also means that traditional home markets are becoming threatened by new competitors originating from emerging countries.

Finally, how objectives are being reached in healthcare is changing. While quality and innovation were the key success factors in the past, **managing healthcare** is more and more about balancing cost and quality. According to an INSEAD healthcare alumni survey in 2012, 69% of healthcare industry experts believe that new technologies, reorganization and other measures would lead to productivity gains of at least 20% in the healthcare system.

Figure 1.1



According to industry executives, these trends can impact medtech in both positive and negative ways. Medtech executives universally see **opportunities** resulting from trends such as **specialization within healthcare delivery** in combination with consistent **costs and quality** criteria, raising the bar on a scalable basis. The Dutch holding Euromedic International, for example, operates a network of more than 150 wholly owned medical centers for radiological diagnostic, clinical laboratory and cancer treatment services. In January 2011, Euromedic divested its dialysis care business to Fresenius Medical Care in order to focus on its diagnostics business.

Positive impact on the sector is also expected from novel competition in healthcare resulting from **forward integration** of healthcare product companies and the development of **virtual value chains**. Increasing cost pressure forced hospitals to focus on their core health provision activities by outsourcing non-core activities like lab services, catering, rehabilitation, etc., to specialized external providers. The resulting verticalization and dissemination of the traditional healthcare value chain is enforced by innovative use of information technology. New providers such as Teleradiology Solutions (TRS) founded in 2002 in India, are competing or cooperating with traditional healthcare providers offering, for example, prescriptions, self-diagnosis tools or imaging solutions to professionals or patients. TRS is able to provide hospitals around the globe with teleradiology services in only 30 minutes.

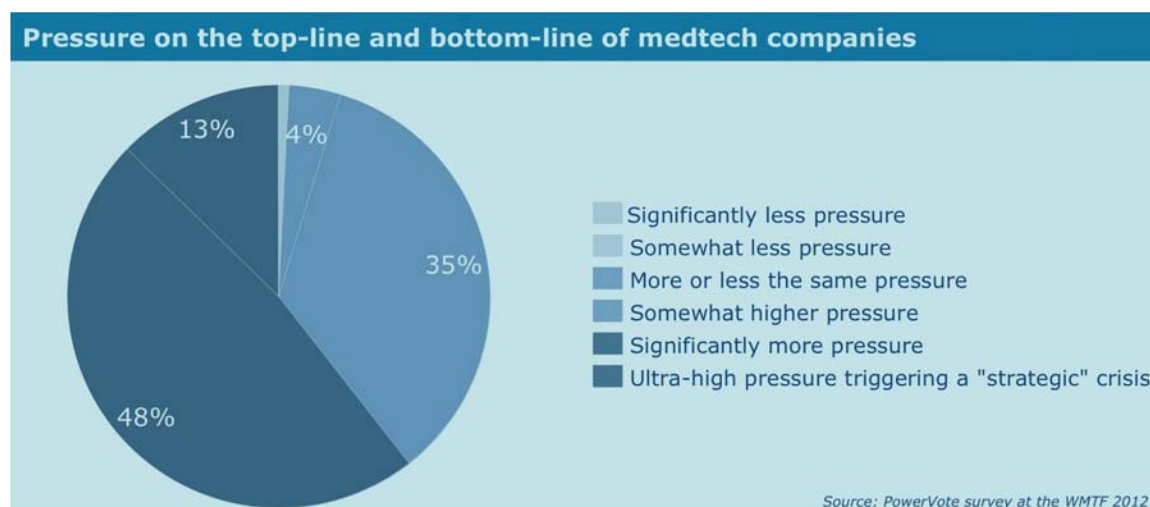
In 2005 in the Netherlands, Philips conducted a study of its remote patient management technology in cooperation with the insurance company Achmea Health. The technology enables chronic care teams to monitor patients' progress outside the hospital, promoting patient self-management as well as facilitating two-way communication between patients and their care providers. Following this study Philips introduced Motiva, a TV-based telemedicine platform, designed to engage patients with daily, personalized healthcare content and lower healthcare costs. Furthermore, niche companies like Global Telemed Systems are enabling remote diagnostics and second opinions on mammography, dialysis, trauma cases and more to patients on other continents within only 20 minutes.

On the other hand, more than 50% of respondents expect a **negative impact** resulting from trends mainly in the area of healthcare financing – particularly from **privatization** of healthcare delivery and the trend towards increased private funding of healthcare. Exemplifying this trend is the share of **out-of-pocket spending** which has been steadily increasing in established markets, especially in areas like hearing aids, dental and blood glucose monitoring for type II diabetes patients.

Another healthcare trend predominantly seen as negatively impacting the medtech industry is the increasing **focus on outcomes** due to the increasing restrictions imposed on healthcare professionals with regards to supplier/product sourcing decisions, as indicated by the global proliferation of Health Technology Assessments (HTA). Cost implications for the healthcare system become the decisive factor when existing product alternatives are not significantly different from one another. When proving outcomes is a condition to receiving payment, medtech players have to invest in building up capabilities and resources for long-term outcome assessments and management of new stakeholders such as HTA bodies and scientific societies which are influencing healthcare funding. These endeavors do not come cheap and easy: long-term studies (i.e. 10 years) often extend over multiple, incremental innovation cycles and need to reflect products at both study initiation and completion in order to be credible, increasingly requiring strategic collaborations between medtech companies and healthcare players.

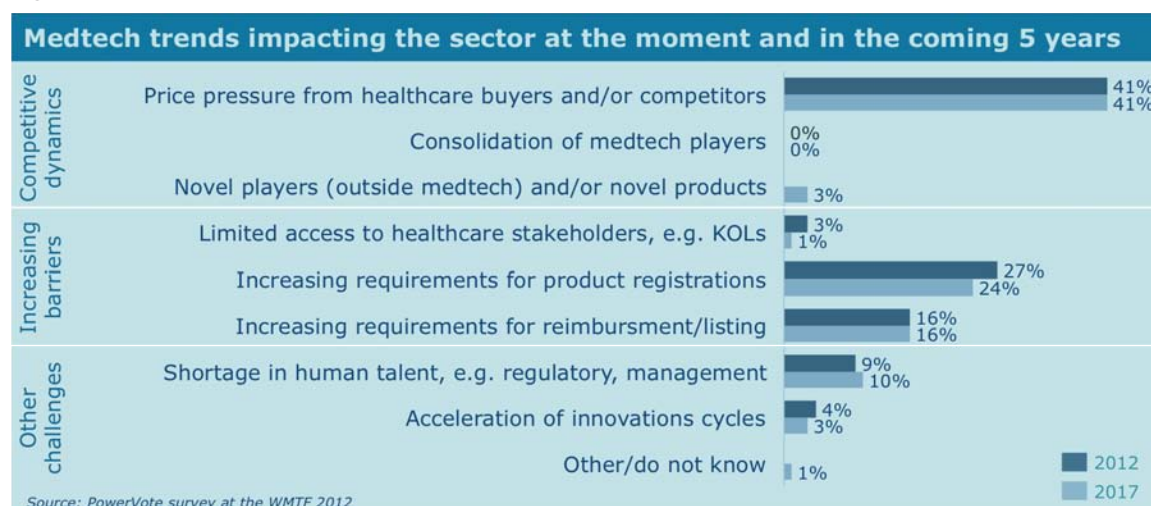
As a result, about 60% of medtech executives believe the sector will experience significantly more pressure or even ultra-high-pressure triggering a “strategic” crisis.

Figure 1.2



In contrast to these trends in the healthcare sector, **trends in medtech seem to not change much** during the coming 5 years. More than 40% of medtech experts believe that **price pressure** from healthcare buyers and competitors impacts the sector most negatively both today and in 5 years. Payer cost containment and budget management tools are becoming more sophisticated and aligned across markets as cross-national providers (accounts) are emerging. In the hospital segment for example, the introduction of DRG systems in many countries has put pressure on prices and raised the barrier for product placement as a result of standardization and concentration of purchasing power through group purchasing organizations.

Figure 1.3



Around a quarter of medtech executives believe that **increasing requirements for product registrations** will remain a market access barrier in the medtech sector in the coming five years. In line with this idea, the European Parliament's Committee on the Environment, Public Health and Food Safety is currently working on a change in Regulation on Medical Devices and In Vitro Diagnostic Medical Devices. Triggered by the PIP breast implant scandal, the main objective is to establish a more rigid regulatory framework for medical devices in the EU. Key elements that are being discussed in the European Parliament include the possibility of a shift to a pre-market authorization system for certain medical devices. Although the process is ongoing, medtech players should expect the following in the future as presented at the 2012 WMTF:

- ***Demands for product registration procedures** such as clinical evidence and documentation **will rise for most medical devices and In vitro diagnostics (IVDs)***
- *There will be **regulation of companion diagnostics** in the future*
- *Regulation procedures for **drug/device combinations** will become **more complex** and require **more time***
- *There will be **more interactions with notified bodies and authorities required***

Similarly, a sixth of medtech experts believe that **increasing requirements for reimbursement/listing** will continue to have a negative impact on the sector in the coming 5 years. In order to justify premium prices, medtech companies not only need to demonstrate the medical advantages of their products to hospital physicians but will also have to convince hospital purchasing departments of the total cost-benefit ratio, for example, by proving cost advantages resulting from reduced hospital stays or lower complication rates.

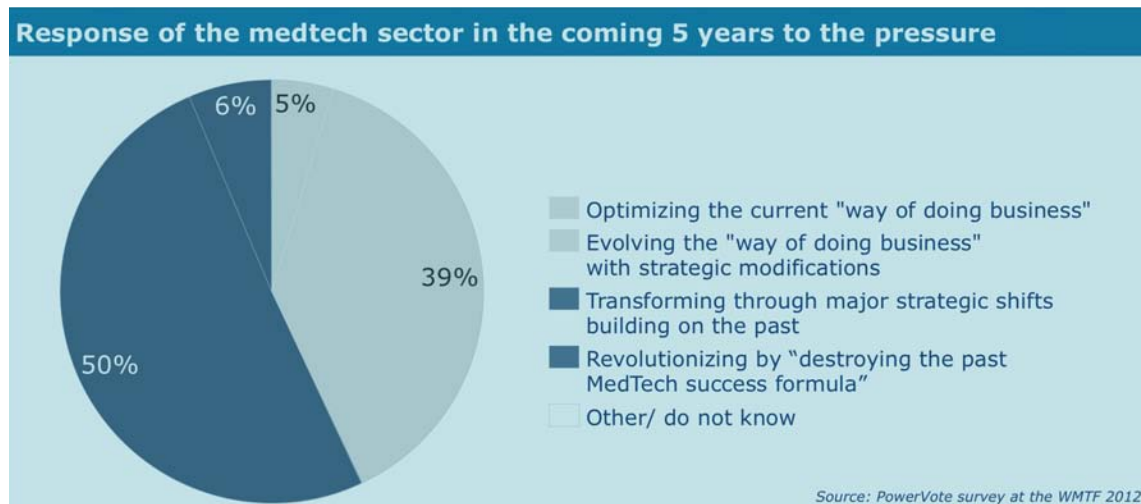
Most authorities assessing healthcare benefits and costs are focusing on pharmaceuticals; however, they have started looking towards medtech products as well. The UK National Institute for Health and Clinical Excellence (NICE) for example, has established a Medical Technologies Evaluation Programme (MTEP) focusing specifically on the selection and evaluation of new or innovative medical technologies, including devices and diagnostics. In January 2013, two of the 11 guidance publications referred to medtech.

Interestingly, none of the PowerVote survey responders voted for consolidation as a trend impacting the medtech sector either today or in the future. This reflects both the already high concentration of M&A which have occurred within the top players in each medtech segment and a strong skepticism on potential benefits of large-scale M&A to address challenges. However, the interviewed medtech experts pointed to a continuous organic and "share-of-wallet" consolidation, aiming to lockout competition by either owning the disease/procedure or owning a provider center/department through partial or holistic forward integration. These medtech players focus on superior outcomes, process optimizations and cost efficiencies within their (partially) proprietary value chains. By doing so, they generate the necessary evidence today for transforming tomorrow's healthcare markets.

2. Strategic decisions

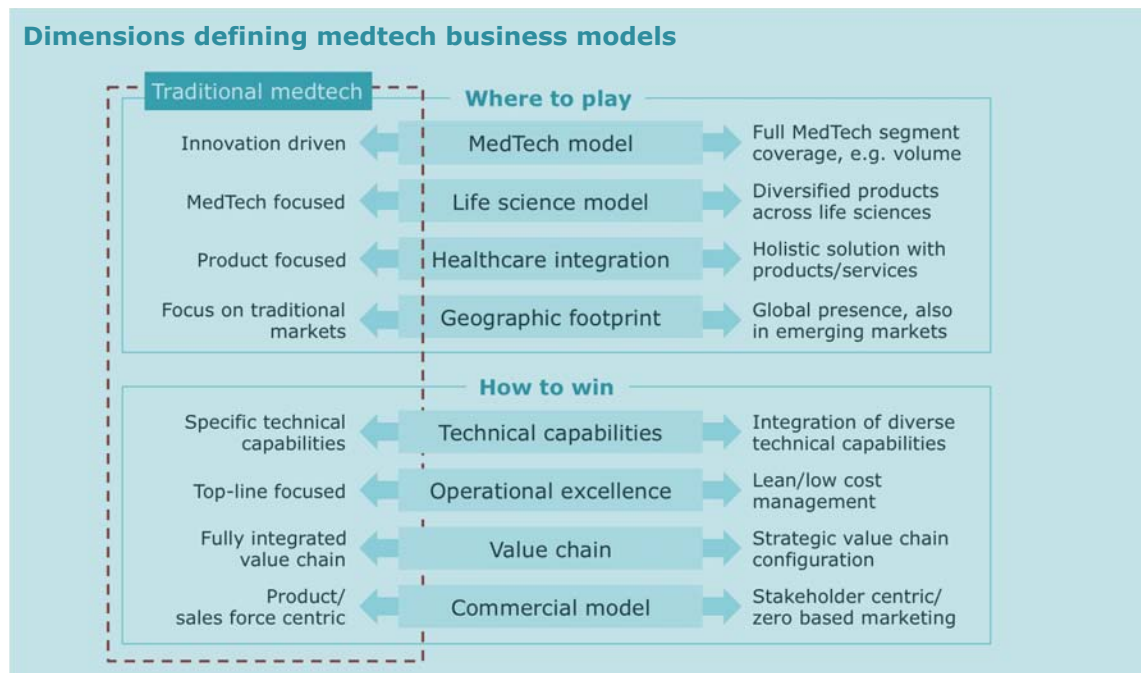
While the medtech success formula of the past was focused on delivering high quality products, there is now a move towards integration of healthcare delivery with a focus on overall treatment solutions. More than 50% of medtech experts believe that the medtech sector will transform itself through strategic shifts building on the past.

Figure 2.1



However, radical changes require time. There was consensus at the 2012 WMTF that 5 years will not be sufficient time for this anticipated transformation. Even in the most advanced areas like renal care, this process took about 15 years to complete. Baxter International for example, announced last December it would acquire the Swedish medical equipment manufacturer Gambro for USD 4 billion. Baxter, who has a legacy of innovation in peritoneal dialysis, will expand its portfolio in the hemodialysis segment to become a diversified, global leader in renal therapies.

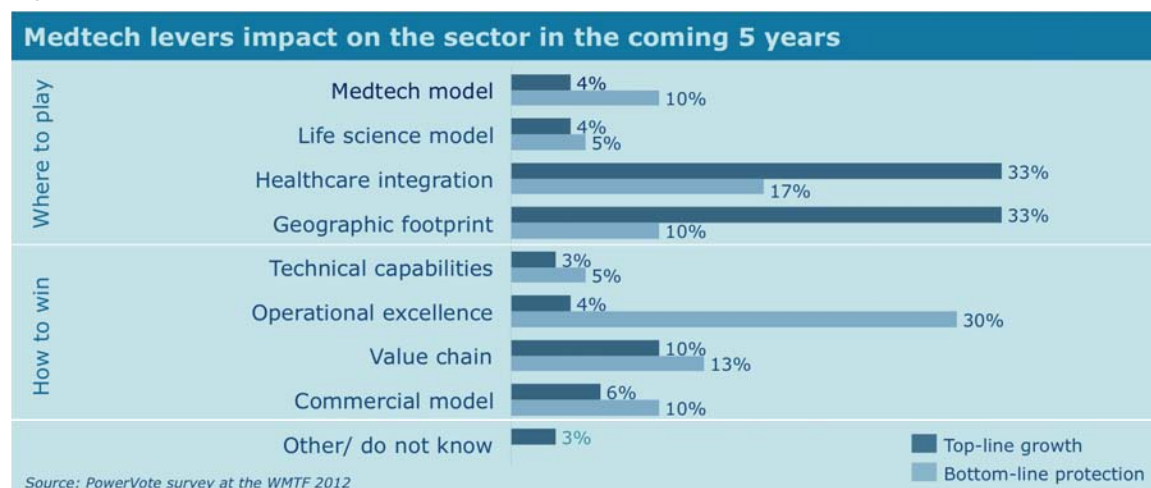
Figure 2.2



We propose **eight strategic levers** which need to be decided by each company. “**where to play**” levers determine the level of divergence from the traditional Western focused product markets to offering a broader portfolio of healthcare products and/or solutions globally. “**how to win**” strategic levers enable medtech companies to execute the selected “where to play” strategy effectively and efficiently. These levers refer to the companies’ value chain configuration, processes and capabilities.

Medtech executives believe different levers will achieve the most impact with regards to top-line growth and bottom-line protection over the next 5 years. A third of medtech executives believe that **forward integration** will be the most attractive with regards to top-line growth while also offering bottom-line protection in the coming 5 years.

Figure 2.3



The creation of Fresenius Medical Care (FMC) in 1996 marked a strategic move with the company shifting from a manufacturer of dialyses equipment to becoming the world’s leading provider of integrated dialyses services which now includes dialysis centers and renal clinics. Since then, the global dialysis market leader consequently developed its integrated business model through a series of acquisitions and alliances, including Euromedic’s dialyses business in 2011. In 2010, FMC set up a joint venture with Vifor Pharma, owner of the leading IV iron product Venofer, to develop iron deficiency anemia and bone mineral metabolism products for dialysis patients.

A third of medtech executives believe that decisions regarding the **geographic footprint** will be most attractive with regards to top-line growth in the coming 5 years while also offering bottom-line protection. Today, presence in emerging markets is regarded not as an option but rather as an obligation. However, future oriented players do not limit their engagements to commercialization.

Figure 2.4



The German healthcare group B. Braun in Vietnam is an example from the 2012 WMTF that demonstrates how long-term investments further up the value chain are being made in these countries. B. Braun became active in the late 1970s in Vietnam and developed its former export market into a USD 55 million revenue business with local product customization and more than one thousand employees in 2010. In 2008, EUR 22 million were invested to set up a new IV production facility in Hanoi.

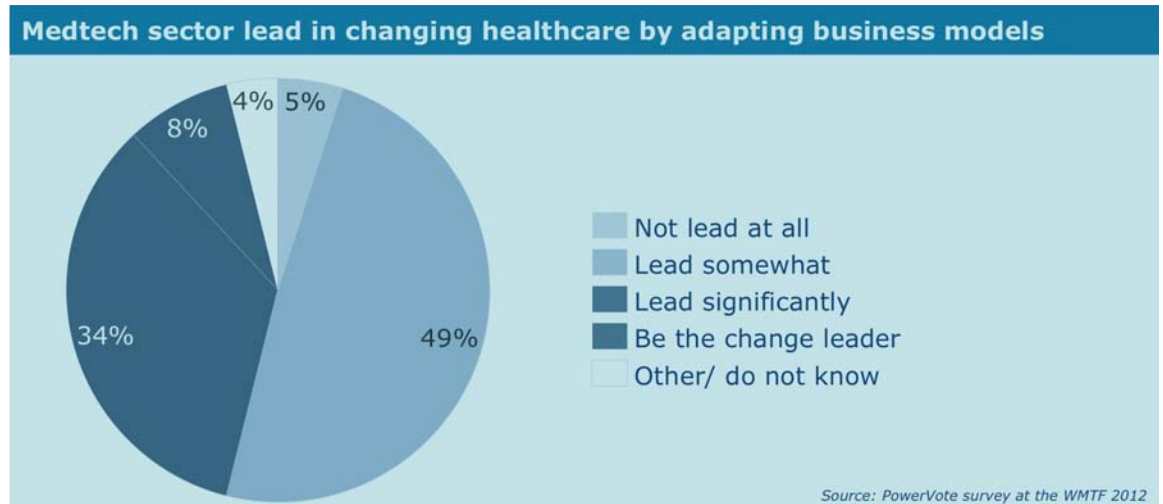
The 2012 WMTF speaker from Swissray Medical and our interviewed medtech experts point to the strategic opportunities emerging markets pose for establishing new world-class competitors. Future medtech corporations from these countries will focus initially on **re-engineered**, tailored products and **local production**, locking out Western medtech competition in high-growth/high-volume emerging markets, as already observed in the imaging/diagnostic and dental segments. It is now only a matter of time until these emerging market powerhouses become strong enough to successfully attack Western markets, challenging today's segment leaders.

Across many countries medtech companies will face challenging price negotiations with hospitals who themselves have to protect their margins in increasingly cost-focused healthcare systems. Almost a third of medtech experts questioned expect **operational excellence**, focusing on lean/low cost management to offer the best bottom line protection over the next 5 years thus buying time for strategic changes. Efforts to significantly improve operational expenses have been an ongoing theme for the last 5 years, potentially leading to a severe lack of vital resources to turn around the business through applying new business models.

3. Towards new business models

More than 40% of medtech executives believe that the sector will lead the way in changing healthcare by adapting its current business model. Regarding the role of medtech firms in the healthcare transition process, expert opinions are divided. While almost half of respondents think the medtech sector will play a minor role, more than 40% believe that the sector will actually lead the way in changing healthcare by adapting its current business models.

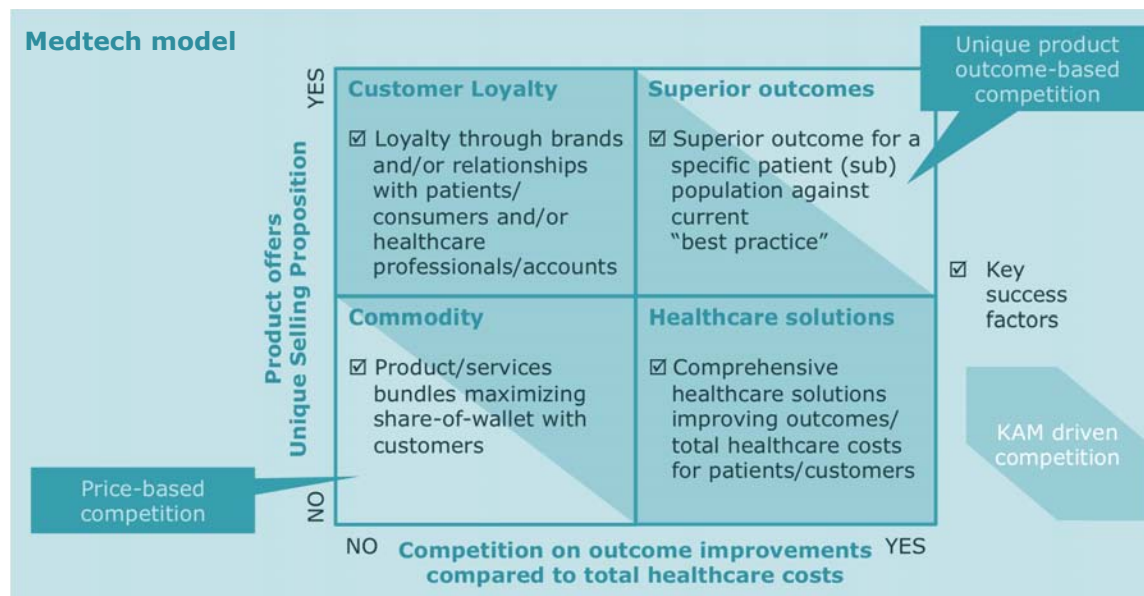
Figure 3.1



As always there is no “one size fits all” recipe to master this enormous challenge. Appropriate approaches depend on the specific situation determined by the market, healthcare segment and local healthcare funding. The most critical step is to first build a solid and strategic foundation by picking the right market and segment and start in geographies that offer a favorable environment. Western players in renal care for instance established public/private partnership models across Eastern European countries in order to build up the infrastructure for these markets first.

Essentially, medtech companies have to make decisions along **two major dimensions**. First, they need to select **offerings and business models** which focus on the product; ranging from specialized, innovative products to broad, generalized medtech and life sciences products. Secondly, they need to decide on their **commercial strategies**, which must embody both a pure product focus on one end and holistic healthcare treatment solutions on the other. In addition, strategies will focus on superior outcomes, process optimization and cost efficiency. As long as medtech companies focus on products, they can only compete with four major medtech models, differentiated by outcome/total healthcare costs improvement and unique product positioning.

Figure 3.2

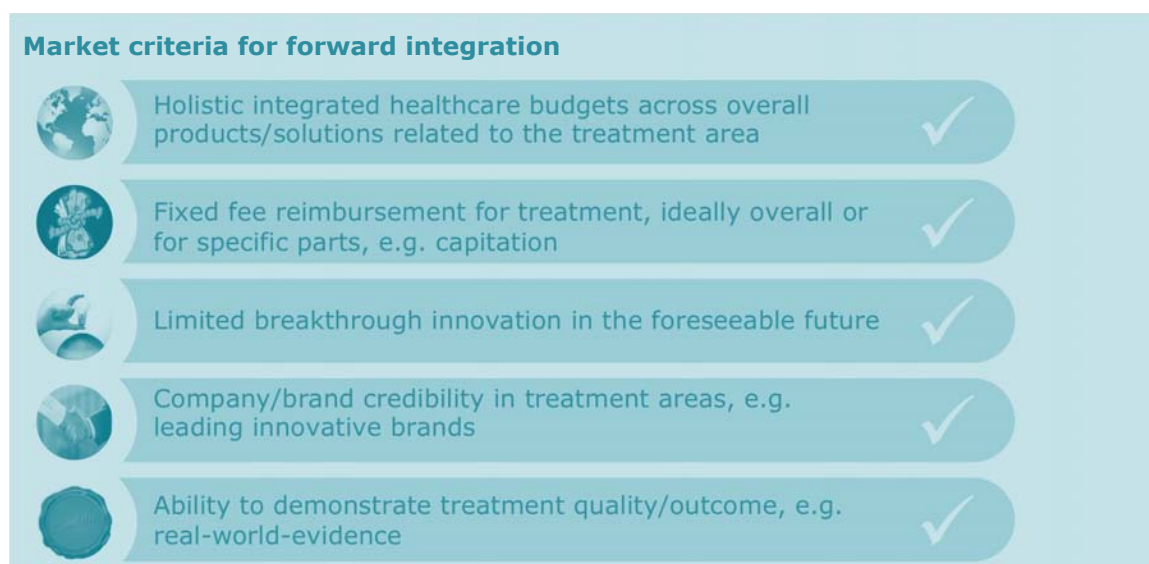


The traditional way of competing on **superior outcomes** has become tougher since evidence must be created and compared to the existing standard-of-care, such as, for example, in orthopedic patient registries. In many areas, outcomes depend more on the surgeon and healthcare professional's performance than on the medtech product itself. This emphasis offers the opportunity to increase reproducibility and quality of interventions, for example, by providing patient-specific templates for the surgeon.

Customer **loyalty strategies** can target patients, healthcare professionals and distributors. In an era of decreasing reimbursement, patient choice becomes ever more important, though legal restrictions in many countries relating to direct-to-consumer (DTC) marketing must be heeded. However, the emergence of new media has led to both dramatic improvements in patients' access to medical information and to new opportunities for healthcare companies to communicate with them. Social media in particular allows access to both mass audiences and targeted sub-populations. The Swiss hearing aid manufacturer Sonova operates a model built on long-term relationships with patients. For their premium hearing devices brand Lyric, Sonova started to apply a subscription model, similar to the Alcon AcuVue approach in eye care. Patients are paying an out-of-pocket fee for one year of Lyric hearing device use at a time. With this model, users are guaranteed to receive the most advanced Lyric technology available and are given new Lyric devices, including upgrades, three times a year.

When medtech companies want to integrate into the healthcare market they must decide on the degree of vertical integration; partial **healthcare treatment solutions** can offer entry options from an investment, revenues, profitability and risk perspective. Given the significant investments into healthcare infrastructure, medtech companies should consider **forward integration** only for markets meeting specific criteria, as outlined in figure 3.3.

Figure 3.3



For example, Sonova, the world's leading provider of hearing solutions, is distributing its products through both its targeted sales team to audiologists and through its own retail shops, such as David Ormerod Hearing Centres in the UK. In February 2013, Sonova formed a new alliance with Boots UK Limited, UK's leading pharmacy-led health and beauty retailer. Boots acquired a 49% minority stake in David Ormerod Hearing Centers. The move reflects a long-term commitment between the two companies to drive a shop-in-shop business model.

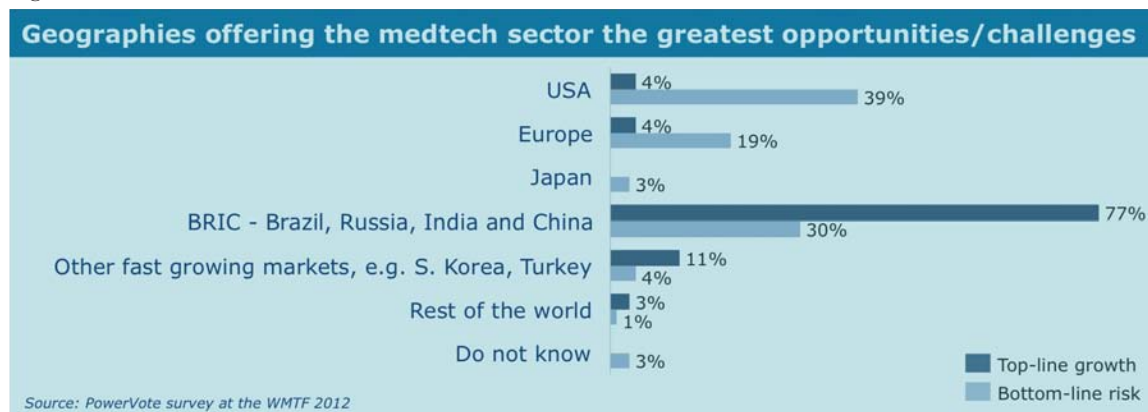
There are only a few examples of successful expansion into total healthcare treatment solutions on a global scale, the most prominent being in renal care with Fresenius Medical Care. Another is GE Healthcare with its imaging systems for medical diagnostics which claim to lift their client's organization "to a new level of performance with our complete portfolio of consulting and support services". Visionary leaders implementing the "own the disease/procedure" and "own the provider center/department" business models have silently erected significant entry barriers, locked out their medtech competitors and created lasting, first mover advantages in several sectors such as dental, ophthalmology, imaging systems and passive implants.

In the absence of competing successfully using one of the other three medtech models, companies will face **commoditization**, leading to significant price erosion accelerated by new low cost competition from emerging markets players, particularly, in Asia. On the other hand, following a second brand strategy in parallel with differentiated prices can be a viable option to maximize market share and revenue, particularly with "re-engineered" products and maximally reduced service offerings for the low-cost segment.

4. Emerging market strategies

Emerging markets offer multiple opportunities for medtech companies: new geographic markets which contribute the largest absolute volume of growth in most categories with low-cost locations for manufacturing, R&D/engineering and S&GA. Almost 90% of medtech executives believe that emerging markets represent the largest top-line growth opportunities in the coming 5 years, this is, however, not without bottom-line risks given the already significant move towards BRIC countries.

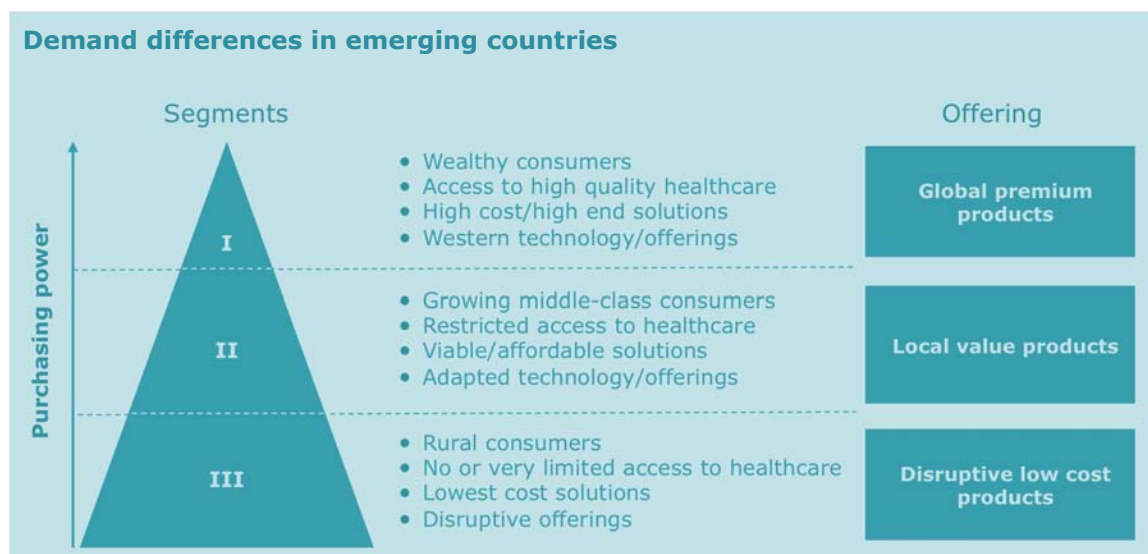
Figure 4.1



Successful medtech companies in emerging markets understand the demand differences across the population pyramid beyond the tier 1 “premium” segment, which is similar to that in the Western markets. Once medtech companies penetrate tier 2 and/or 3 segments, they must build up full operations for local R&D, local manufacturing and distribution, as done successfully by medtech players such as GE Healthcare and Medtronic.

GE Healthcare’s success story with their widely publicized portable electrocardiogram (ECG) GE MAC 400 proves that re-innovation is key to success: by redefining customer value in the mid- to low-level tier they have realized their vision of “making ECG available to every physician, every patient, everywhere” and are now able to address the needs of more than 70% of the population in rural India. When penetrating a tier 3 opportunity in an emerging market, Western companies must cut their prices by at least a factor of 10 or more. GE Healthcare has mastered this challenge by not just building a cheaper, simpler version of conventional ECGs (which generally cost 10 times as much), but genuinely innovating new customer value aligned with a low-cost solution which escapes the ubiquitous cost/value trade-off.

Figure 4.2



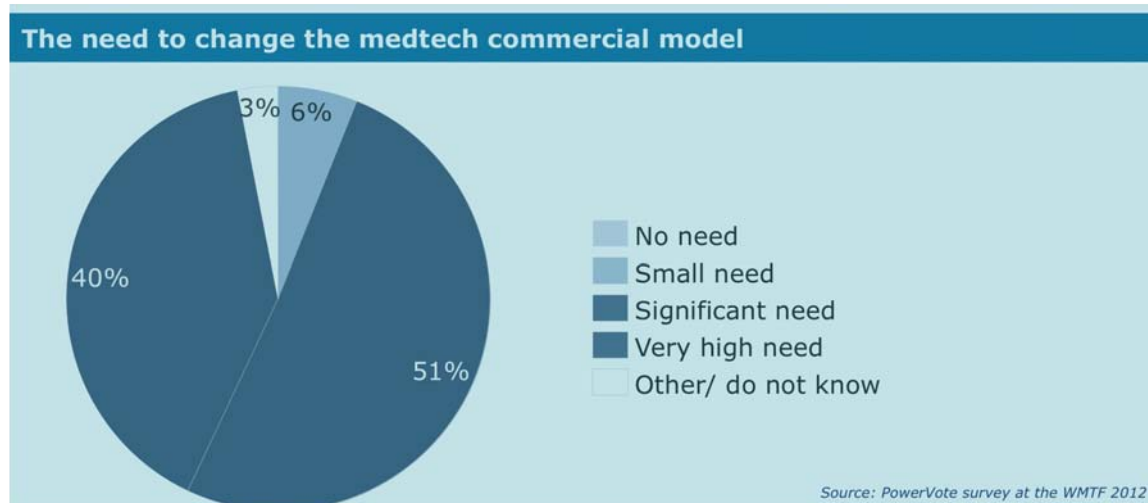
Investing in tier 1 premium segments will enable medtech companies to build high-value brands which are particularly relevant given the currently limited access to healthcare. In Asian countries like China, Western brands enjoy a generally excellent reputation. Growing economic wealth within the population provides more people financial access to higher cost products.

On the other hand, low-cost engineering and manufacturing in emerging markets offers a novel option for medtech companies with regards to flexibility and volume trade-offs, making high flexibility and low volume batches affordable due to low labor costs and significantly lower investment levels. Given the past investments into emerging markets, medtech companies must carefully select the next wave of countries they want to expand to if they hope to achieve a first-mover advantage. Our medtech interview partners held the view that Africa may be the next investment frontier to achieve set mid-term objectives. Until recently, Africa has been perceived as a “white spot” in the global market. Currently however, multiple large and mid-size players are energizing their market entry efforts beyond established 3rd party distribution networks.

5. Commercial / Operational excellence

In healthcare today, multiple stakeholders are directly or indirectly involved in purchasing decisions. Companies have started managing institutional payers and providers by operating key account models rather than engaging in the traditional model of focusing mainly on healthcare providers. More than 90% of medtech executives predict a **significant need for changing the medtech commercial model** in the coming 5 years.

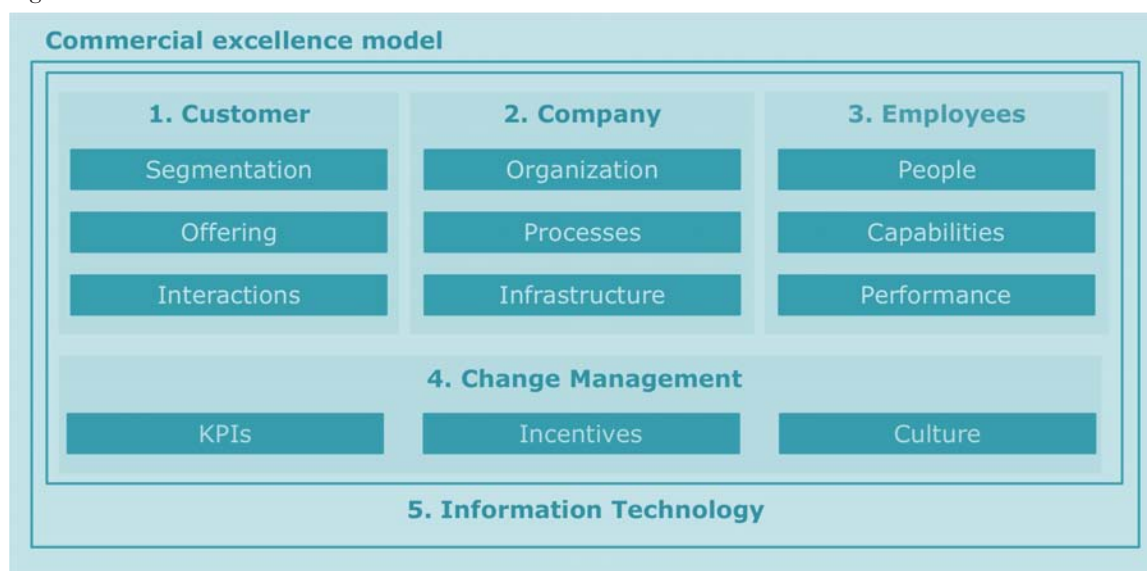
Figure 5.1



But unique positioning becomes more difficult to achieve in a world of institutional purchasers where product quality is a given and the real focus of decision makers is on **economic criteria**. Medtech companies need to **adapt their commercial models** to their product model, i.e., outcomes, solutions, loyalty or commodity. The choice of the applied model again depends on the specific country or regional situation and must take into account aspects such as the legal environment, reimbursement levels and the type of stakeholders.

Achieving **commercial excellence** is an aspirational target. To accomplish this, we propose a framework that can help medtech companies reduce the complexity of such an endeavor, which consists of five elements that build on each other. First, medtech companies need to understand who their **customers** are and which offerings can address their needs. Customers can include a variety of stakeholders which impact the purchasing decision such as: the purchasing department, provider executives, payer and access decision-makers, key opinion leaders and healthcare professionals, such as surgeons and nurses. A patient journey analysis can be a powerful tool to identify all relevant stakeholders and bring to the surface achievable and necessary targets for commercial activities. As a second and third element, organization needs to define the ideal **structure, processes** and **capabilities and resources** needed to deliver the defined offering. Given the rapid changes in healthcare, medtech companies need to adjust their commercial organization to ensure that they fit optimally to the evolving relevance of new stakeholders.

Figure 5.2



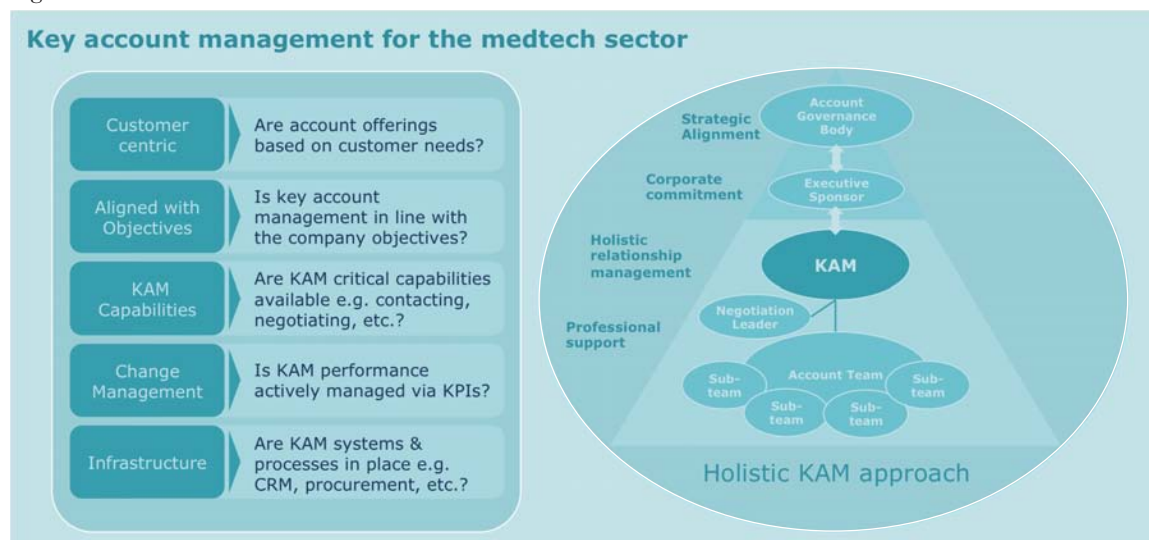
Making the often painful transition from the existing to the increasingly fluid “ideal” commercial model requires active **change management** which includes setting incentives and tracking change performance while following the still valid ideology of “what gets measured gets done”. Performance management will become even more difficult in the future given the different strategic decisions a company can make in products and countries. Future key performance indicators (KPIs) need to reflect the key success factors of the relevant business model for its products and countries, such as relevant KPIs for key accounts.

Finally, the transition can only work with an **IT infrastructure** in place which is able to mirror and facilitate processes, documents and generate relevant data and information for different internal stakeholders as well as enable efficient internal and external communication.

Since individual surgeons and healthcare professionals are increasingly limited in their decision power, institutional accounts have become more important, requiring integrated **key account management** (KAM); one of the surfacing hot topics in the medtech industry. Importantly, the definition of modern KAM is not limited to the sales function only. Instead, KAM reflects a stakeholder-centric holistic view on the organization as a whole, impacting all organizational levels.

Companies have to build new competencies, such as negotiation and contracting, when tenders are commanding an ever-increasing part of the product supply. Also, in an environment where prices are under pressure and offerings have less time on the market to generate return, it becomes increasingly important to get things right from the start. During our interviews, medtech executives with a pharma background have noted that launch management is lacking the efficiencies currently present in the biopharma sector.

Figure 5.3



Most medtech companies have invested significant time and energy into optimizing their commercial operations. Unfortunately, the rapidly changing healthcare environment jeopardizes the strategic fundamentals most medtech companies have followed for decades with great success. Hence, it is not only insufficient to focus on commercial and operational excellence but it may even be outright dangerous if medtech companies do not address the underlying strategic crisis in their specific segment. Successful medtech players of the future will have to master both challenges in parallel: “doing the right things” and “doing the things right”, which requires significant strategic and operational change.

6. Conclusions

Medtech executives and experts are all experiencing times of escalating change in healthcare which is affecting their medtech universe ever faster, as outlined in chapter 1. *A changing environment*. The accelerating transformation of the healthcare environment is opening up new opportunities and requiring a more fundamental approach to formulating the winning medtech visions of the future (see chapter 2. *Strategic decisions*). Medtech executives have already been pursuing their visions for some time, as outlined by the two specific strategic avenues in the chapters 3. *Towards new business models* and 4. *Emerging market strategies*. In parallel to reshaping their strategic visions, medtech companies are also investing significant time and energy in attaining commercial and operational excellence (see chapter 5), a somewhat elusive target given the changing environment and ongoing medtech transformation.

Instead of summarizing the various chapters, the authors prefer to share a small part of the collective wisdom obtained through interviews from more than 20 medtech experts. These knowledgeable and experienced individuals have provided a rich set of supportive, controversial and insightful comments during their assessment of the PowerVote survey at the WMTF 2012. For each of the chapters, the authors have selected a few quotes, grouped these into the three categories below, and added a brief comment to present this rich “food for thought”:



Supportive quotes



Controversial quotes



Insightful quotes

The medtech experts confirmed the PowerVote survey trends for managing, financing and competing in healthcare. Some reflected on the anticipated impact controversially, such as voluntary out-of-pocket consumer spending and want to exploit it, particularly for chronic diseases and procedures for the elderly. Rising multinational providers are consolidating healthcare delivery and are expected to become super-accounts:



“We observe a freezing of capital intensive investments on a broad front, particularly with publicly owned providers”



“Patients/users will accept more out-of-pocket spending, particularly for chronic diseases and procedures for elderly”



“Rising cross-national providers transform healthcare through consolidation, leading to regional/global super-accounts”

The PowerVote survey results on medtech trends were acknowledged but seen as too simplistic. Some interview partners expect further consolidation, particularly in the me-too and commodity area. Many flagged the importance of information, particularly on outcomes in the future, expecting novel players from the information and communications technology (ICT) sector, particularly in telemedicine:



“In mature markets, reimbursement prices have been cut by at least 40% and up to more than 70% in the last years”



“We foresee a strong segment shake-out and massive consolidation, particularly in the me-too/commodity area”



“ICT firms will build up ‘own the patient data’ models, thus triggering healthcare process revolutions”

The medtech experts endorsed the eight “where to play” and “how to win” levers as the necessary strategic decisions to formulate a vision for the future. Many executives from different medtech segments pointed to “own the disease/procedure” and “own the provider center/department” strategies. However, most emphasized the significant challenges in medtech to exploit healthcare integration. Some segments seem to go through a strategic crisis due to (free) solutions/services strategies:



“Owning the disease/procedures is already today’s battle field, and in certain segments already a done deal”



“We foresee only a few medtech players capable of developing integrated healthcare models in the next years”



“The current extensive solution approach led to a significant strategic crisis, leading to unsustainable ROIs/procedure”

The interviews provided rich evidence for the medtech sector evolving towards new business models. Most medtech experts focused on a combination of superior outcomes, customer loyalty and healthcare solutions. Many are aware of the significant transformational challenges ahead of the medtech sector. Some point out the increasing importance of collaboration across the value chain, particularly with healthcare providers, to build up holistic healthcare solutions:



“We manifest our offerings around superior outcomes and customer loyalty, maximizing our customer share-of-wallet”



“Most medtech firms are paralyzed in their (product) portfolio environment, hindering them from developing new business models”



“We need to strengthen our collaboration capabilities to remain competitive, such as with hospitals and specialty clinics (chains)”

The results of the PowerVote survey with regards to the importance of emerging markets for top-line growth was broadly confirmed. Many medtech experts pointed to the rise of Asian medtech manufacturers in their segments that are now competing globally. Over time, this might increase the bottom-line risks significantly on a global scale, particularly once an Asian led consolidation wave starts. Interestingly, some medtech executives will attempt to leverage local value products re-engineered for emerging markets also in Western markets, particularly those with financially distressed healthcare systems:



“Up to 50% of our growth stems from emerging markets where there is still white space to be captured with the right products”



“There is a strong rise of Asian medtech manufacturers now competing globally, leading to an Asian led consolidation”



“Re-engineering investments into tier II or even tier III segments might yield products also relevant for Southern European countries”

Most interviewed medtech experts validated the need to change the commercial model. Many highlighted the importance of change management, particularly, the necessary cultural changes led by CEOs and their teams to be able to implement future medtech visions. While the importance of KAM was uncontroversial even for emerging markets, some medtech executives admit facing significant implementation challenges, particularly with regards to the necessary mindset. Given these times of change, future-oriented medtech employers focus on enabling their current employees to engage for their company's success:



"We foresee vast benefits from improving our culture towards a cross-functional and cross-divisional model"



"We have embedded a KAM structure, but lack the necessary mindset in sales, shared services and the back office"



"Employee engagement is the most valuable factor driving profitability, requiring continuous people development"

Clearly, medtech executives are doing their best to tackle the necessary fundamental changes successfully to secure long-term survival of their corporations. Most recognize the many opportunities changes in healthcare will provide and are making their strategic decisions as the future unfolds. While implementing their visions, some are not only transforming their own corporations but also the overall medtech and healthcare sectors. The ongoing identification and implementation of the success formula of the future poses risks, but it is certainly less risky than standing still and hanging onto the past for too long until it will be too late to change.

Appendix: Methodology & acknowledgements

‘The Global Medtech Industry: Visions in Times of Change’ report is published by Medtech Switzerland. The report builds on the presentations, panel discussions and electronic voting from September 25 to 27, 2012 at the WMTF Lucerne. It was written in close collaboration with medtech executives, and experts involved in interviews as well as Eucomed, the association representing medical technology industry in Europe.

The quantitative PowerVote survey was conducted through real-time electronic voting at the WMTF 2012, sponsored by IMS Consulting Group. Two sets of 15 questions were asked on September 25 and 26 using PowerVote, a user-friendly audience response system. The medtech experts and moderators participating in the WMTF 2012 panel debates, as well as the medtech experienced audience, answered each question which resulted in up to 76 answers per question on the Executive Day and up to 58 answers per question on the European Day. The authors want to thank all the 2012 WMTF Lucerne attendees and, particularly, the presenters and panel members for their thought provoking contributions.

The quantitative PowerVote survey and qualitative insights during the 2012 WMTF were summarized in a set of hypotheses and synthesized in a 20-page discussion document. 24 medtech executives and experts answered up to 15 pre-formulated questions in personal interviews lasting around one hour. The authors want to thank all the medtech executives and experts for taking the time from their busy schedules to participate in these interviews (medtech companies and associations listed in alphabetical order):

Baxter	B. Braun	Biodenta	Biomet
Bracco	Cochlear	DePuy Synthes/ J&J	Eucomed
Fresenius Medical Care	GE Healthcare	Haag-Streit Diagnostics	HBM Healthcare Investments
LifeScan/J&J	Linde Healthcare	Mathys	Medartis
Medela	Medtronic	Philips Healthcare	Roche Diagnostics
Smith & Nephew	Sonova	Straumann	Zimmer

Last but not least, the authors want to thank all those who contributed to the writing of ‘The Global Medtech Industry: Visions in Times of Change’ report, particularly Rüdiger Speitel and Sarah Moyle.

Appendix: Authors



Dr. Patrick Dümmler

Dr. Dümmler is Managing Director of Medtech Switzerland and Project Leader and host for the **WMTF Lucerne Conference** where he acted as a co-speaker on **New Medtech Business Models**. He has published over 100 articles and books, numerous reports on the medical devices industry, and since 2006, has co-authored the Swiss Medical Technology Industry (SMTI) survey. Dr. Patrick Dümmler studied Economics at the University of Zürich and completed his PhD at the ETH Zürich. His PhD thesis was entitled “Knowledge-based clusters in Switzerland: Reality or fiction? The example of the Medical Devices Industry” (2005).



Beatus Hofrichter

Mr. Hofrichter is Engagement Manager at IMS Consulting Group, Switzerland. He was a co-speaker at the **2012 WMTF Lucerne** on **New Medtech Business Models**. He has published numerous articles and has been a co-author of the SMTI survey since 2006. He has more than 13 years of consulting experience in the medical devices and pharmaceutical industries, focusing on strategy, business modeling, transformation and operational excellence. Mr. Hofrichter holds an MBA in Management and International Business.



Aleksandar Ruzicic

Mr. Ruzicic is Vice-President of the INSEAD Healthcare Alumni Network and President of the INSEAD Swiss Healthcare Industry Club (cHIC). He led the **real-time voting sessions** and **panel discussions** at the **2012 WMTF Lucerne**. He has published numerous articles and reports on the medical devices, biopharmaceutical and healthcare industry. Mr. Ruzicic has worked almost 20 years in consulting, starting at McKinsey & Company in 1994. Since 2000, he focused exclusively on the healthcare/life sciences sector at Elsevier MDL, Roland Berger Strategy Consultants and IMS Consulting Group. He holds an MBA from INSEAD and a Master of Science in chemistry from University of Zürich.