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Beyond the device: Medtech's expansion into Everything-as-a-Service

The impact of new business models in medtech

Rapid shifts in health care are triggering new customer demands and expectations. For medical technology (medtech) companies seeking to remain competitive and continue to deliver value to patients and care providers, [Everything-as-a-Service \(XaaS\) models](#) offer a compelling way to “go beyond the device” to reach profitability.

Medtech is poised to empower health care providers to advance their clinical capabilities and improve patient care and services by leveraging next-generation solutions such as robotics, artificial intelligence (AI), and 3D printing. However, this traditionally hardware-centric industry is ripe for disruption.

To thrive in today’s increasingly dynamic market, medtech companies need to explore new solution and services-based approaches to deliver greater value to customers—value that goes “beyond the device.”

Disruptive trends trigger the need to go beyond the device

The convergence of macro trends—including digitization, cost pressures, regulations, and patient-centric care (figure 1)—is shaping the case for change in medtech.



Digitization

With the rise of consumer tech, patients and providers expect a seamless, data-driven, site-agnostic health care experience integrating medical devices with software and services.



Cost pressures

Ongoing inflation, labor shortages, and supply chain disruptions are increasing margin pressures—forcing health care organizations to prioritize cost reduction and pass price hikes onto patients.



Regulations

New global regulations are driving stringent requirements for data protection and medical approvals—pushing companies to incorporate data access and utilization, device lifecycle management, and digital product offerings.



Patient-centricity

Value-based care and outcome-based decisions are gaining traction, incentivizing medtech companies to explore product portfolios that cater specifically to patient needs such as virtual and home care options.

Figure 1. Medtech industry macro trends

New patient and provider needs are emerging

In response to these macro trends, patients and providers have evolved their health care expectations and desired experiences. In fact, **84% of patients believe that preventive care and wellness should be the primary focus of their provider.**¹ The new “engaged patient” takes a more active role in their health care journey and, as such, is increasingly willing to pay for premium health solutions and services tailored to their prevention and wellness preferences over treatment. Patients are also demanding customized and convenient care adapted to personal behaviors and routines, with greater ownership of their secure health data. This engaged patient persona creates a new market segment of active consumers with distinct health demands and a willingness to pay for solutions that meet their specific needs.

Meanwhile, health care providers are thinking beyond the device as they seek margin improvement and budget optimization. In the face of mounting margin and cost management pressures, **providers are seeking to shift from capital expenses (CapEx) to operating expenses (OpEx) for increased flexibility.** Moving from a product-centric to a service-centric model helps providers create data-enabled, end-to-end care experiences for patients—driving superior economic and health outcomes. As a result, providers look to offer data-rich health care services and software on top of next-gen medical devices to deliver tailored, value-based solutions to patients. Seventy-five percent of providers state that access to patient data and analytic tools is critical to delivering quality, value-based care.²

The new engaged patient is willing to pay for premium health solutions tailored to their preferences; while care providers are thinking beyond the device.

Amid the rise of more engaged consumers and shifting provider priorities, the time for medtech companies to change is now. To capitalize on these changes, medtech players need to embrace a more holistic view of the patient care journey beyond the physical device.

What shifts should medtech make to remain relevant and thrive?

We propose six decisive shifts medtech leaders should consider as they seek to address evolving patient and provider needs:

- Expand offerings.** Provide integrated, end-to-end medtech services and software to augment feature-oriented hardware, equipment, and consumables that boost provider efficiency and improve patient quality of care. Service-centric offerings may also help medtech players build lasting relationships with providers through increased customer stickiness.
- Adapt monetization models.** Instead of one-time, upfront CapEx sales and leasing contracts, medtech companies should consider transitioning to recurring payments via cost-effective OpEx subscription, consumption, and outcome-based solutions that enable providers to manage rising infrastructure and equipment costs.
- Capture new profit pools.** Tailor offerings to the needs of consumers willing to pay for higher-end solutions that meet their specific health needs—expanding beyond traditional business-to-business (B2B) customers (that is, hospitals, clinics, physicians, and insurance providers). This new business-to-consumer (B2C) segment provides an opportunity to diversify revenue streams and tap into a broader consumer ecosystem of high-margin premium software solutions and consumer technology.
- Diversify routes to market.** Increase points of customer interaction by deploying a consistent omnichannel care delivery approach, and leverage brand strengths by partnering with vendors with complementary offerings. Augment traditional B2B markets by expanding to self-service e-commerce for B2C customers to enhance buying experiences and streamline sales.
- Modernize delivery models.** Leverage cloud services to enhance scalability, automation, and real-time integration. Use a private-public cloud hybrid model to host personally identifiable information (PII) and operational data, depending on specific business requirements around costs, capacity, and data security.
- Develop an ecosystem.** Foster [partnerships with disrupters](#) to proactively shape an ecosystem that connects “beyond the walls” care solutions across the patient health journey versus ad-hoc, point of intervention offerings within traditional sites of care. As patients become active consumers, such partnerships can enable medtech companies to incorporate behavioral science insights into their services to effectively address the needs of the emerging B2C market segment.

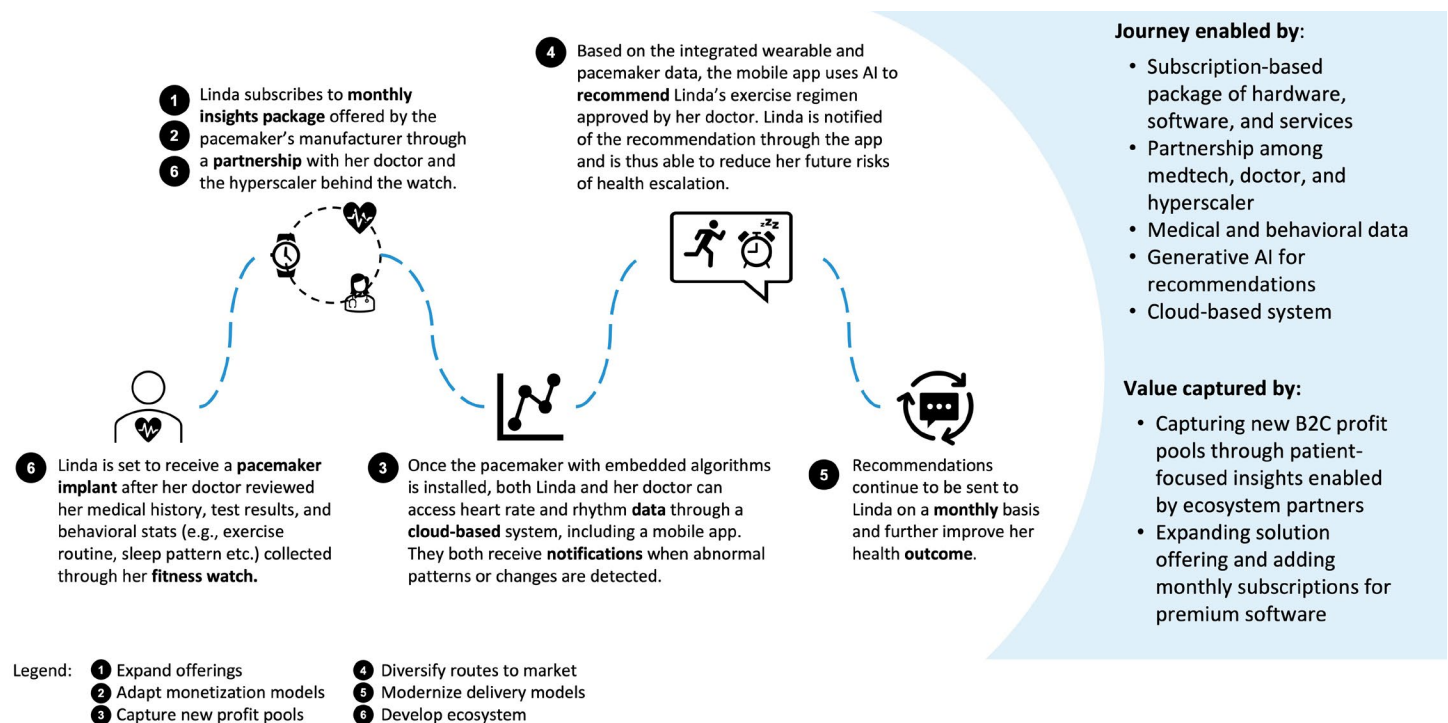


Figure 2. Patient journey enabled by the 6 shifts: Linda’s pacemaker implant

These shifts enable a **reimagined patient journey** (figure 2) that empowers medtech organizations to deliver superior health and economic outcomes. This is also fueled by digitalization and patient-centricity macro trends that unlock new patient data, ecosystem partner opportunities, etc.—which can be monetized and delivered through innovative models to capture new B2C profit pools.

Furthermore, these shifts extend beyond the patient journey and inspire a reimagined **provider journey** as well (figure 3). With increasing digitization and cloud-based systems, medtech companies can harness the potential of their data and advanced algorithm software solutions through integrated offerings while providing the flexibility that providers need.

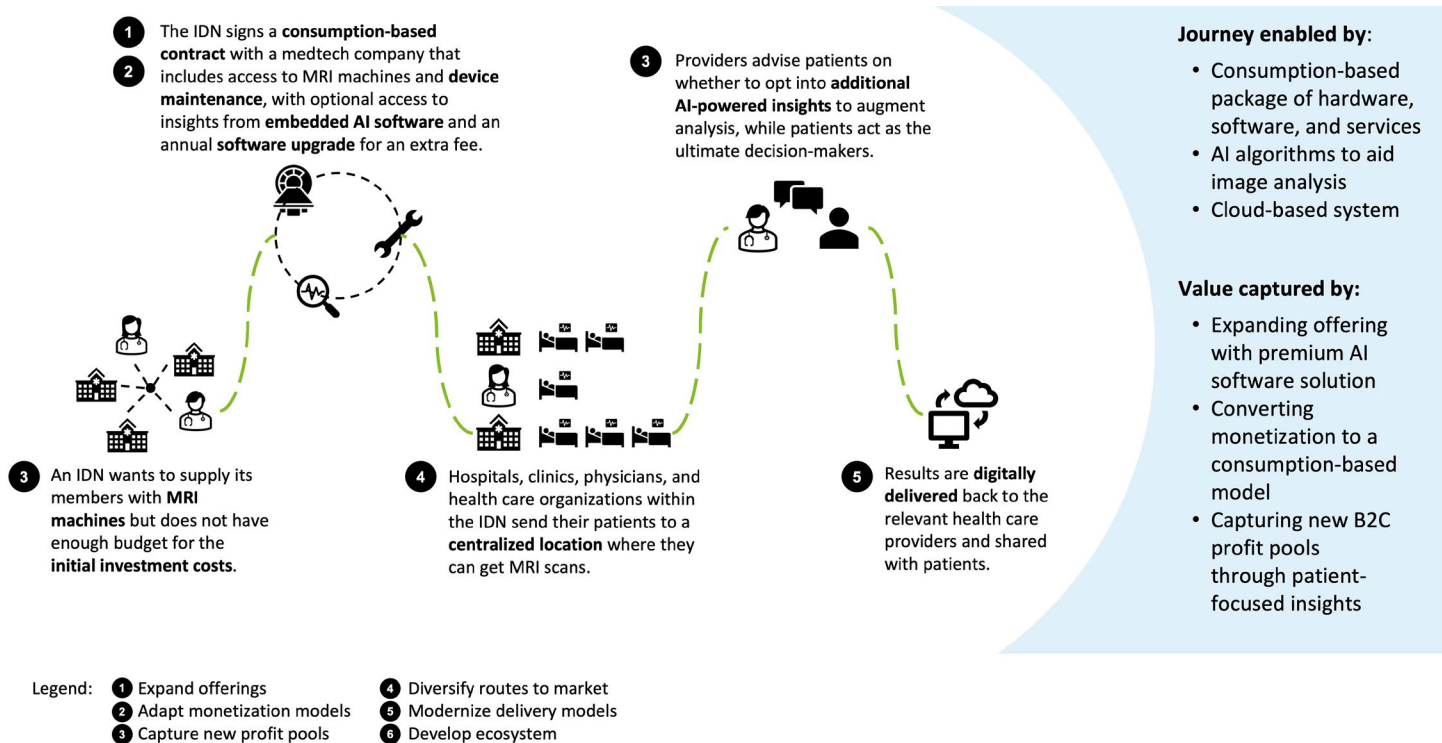


Figure 3. Provider journey enabled by the 6 shifts: MRI machines

Enter Everything-as-a-Service

Everything-as-a-Service (**XaaS**) refers to the bundling of products (such as hardware, devices, equipment, consumables) and/or software with value-added services. XaaS employs recurring payment structures with either a fixed subscription fee or a [flexible consumption model](#) where the fee is adjustable by usage level or outcome. This departs from legacy product-only offerings that have one-time, upfront capital expenditures as a hallmark. Through the adoption of XaaS, medtech organizations can effectively navigate dynamic industry shifts and evolving provider and patient needs. Further, these players can leverage the unique advantages of XaaS in the following ways:

- **New profit pools:** Value-added services and integrated solutions unlock new “beyond the device” profit pools and revenue streams targeted to both B2B and B2C customers, expanding market penetration.
 - **XaaS in action:** One medtech leader in orthopedic products and solutions offers patients a digital care management platform through a mobile application software subscription in addition to their B2C offerings.
- **Predictable revenue and improved margins:** By shifting from significant upfront investment outlays to recurring fee payments, medtech companies have a more financially predictable option with improved margins.
 - **XaaS in action:** One prominent medtech orthopedic specializing in sports medicine surgical products and services offers rent-to-own financing solutions to alleviate capital burden on customers and have more consistent revenue.
- **Enhanced offerings:** By partnering with innovative ecosystem players such as hyperscalers, medtech companies can create additional revenue streams from non-traditional services such as behavioral science analysis and insights.
 - **XaaS in action:** One prominent continuous glucose monitoring (CGM) leader has collaborated with consumer technology hyperscalers, enabling diabetes patients to monitor their glucose levels using the hyperscalers’ hardware and software prowess.
- **Maximized customer lifetime value:** Due to the recurring revenue nature of XaaS, medtech companies can extend their interactions with customers as they continuously use services and solutions, thereby maximizing customer lifetime value.
 - **XaaS in action:** One leading provider of laboratory instruments, software, services, and consumables offers a comprehensive monthly subscription package for selected instruments. This strategic shift away from isolated one-off purchases has increased customer engagement and opportunities for upsell/cross-sell for this medtech leader.
- **Data-enabled, value-based care:** As XaaS allows care providers to offload the burden of asset management and focus on delivering high-quality patient care, medtech providers can bridge the gap and capture service-based revenue streams for instrument monitoring and repair.
 - **XaaS in action:** One global provider of research services, instruments, consumables, and software solutions offers a connected asset performance software solution to detect instrument health issues before they occur by leveraging predictive analytics.

The time to transition and reap the benefits of XaaS has arrived—Deloitte’s analysis of 24 leading medtech companies’ products, value-added services, and monetization models found that several medtech leaders are already adopting XaaS business models to seize emerging market opportunities.³ Although much of the industry is still at an early stage in their XaaS journey, most leading companies have already introduced software offerings, with 80% of them monetizing their products through subscription-based models.⁴ Additionally, 16 of the 24 leading medtech players offer advanced value-added services.⁵

As many leading organizations have already adopted aspects of XaaS, it is essentially a race to the finish line: Companies that get their XaaS transformation right will position themselves as the enduring market leaders shaping the future of health care. Those that don’t embrace the shift risk falling behind.

What does it take to transform?

As medtech companies begin their XaaS journey, they must first confirm compliance with regulations and policies for digitally enabled solutions beyond the device. For example, to comply with data privacy regulations, organizations must adhere to regulations such as the California Consumer Privacy Act (CCPA), General Data Protection Regulation (GDPR), and Health Insurance Portability and Accountability Act (HIPAA) when developing new offerings that leverage patient or customer data. Moreover, firms can better anticipate changes and bring XaaS offerings to market more effectively by understanding regulatory digital health solution frameworks such as the European Union’s Medical Device Regulation and Software as a Medical Device (SaMD)⁶—as well as emerging policies such as the Digital Health Innovation Action Plan.⁷

Medtech companies will also need to collaborate with the rest of the health care ecosystem to ensure successful rollout of XaaS offerings. For example, they need to align closely with insurance companies to ensure there is a reimbursement structure and policies suitable for supporting recurring transactions. In addition, insurers, health care providers, and medtech companies will all need adequate back-end capabilities such as billing and invoicing to enable XaaS models.

Once data compliance practices are established and health care ecosystem partners aligned, organizations can initiate the XaaS strategy planning process by addressing [five guiding questions](#) and focusing on a winning aspiration (figure 4):

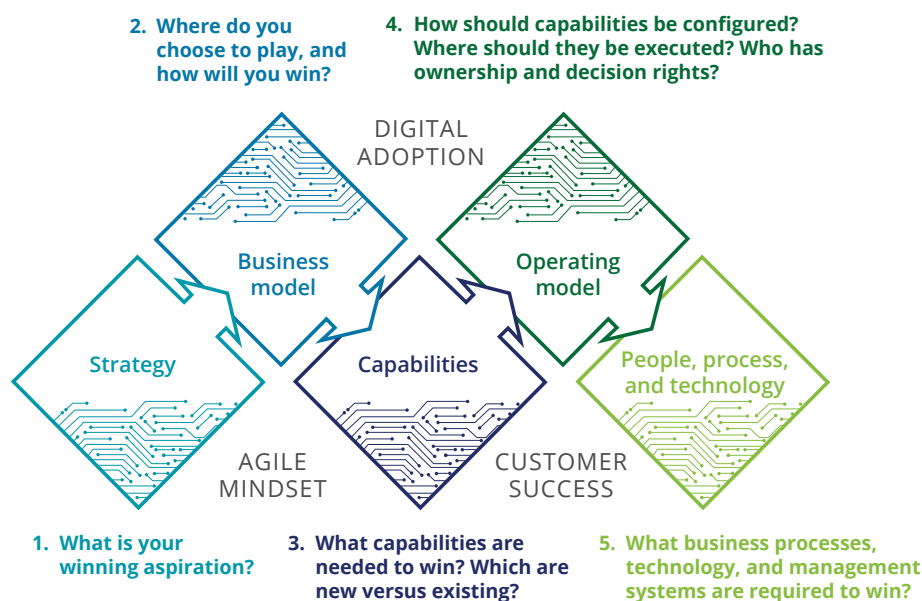


Figure 4. Strategy planning process

Macro trends are changing the market landscape and growth trajectory of medtech companies. To thrive and remain relevant amid these shifts, medtech companies will need to embrace a holistic view of the patient care journey beyond the device. By considering the five guiding questions, medtech players can confidently and effectively navigate the complexities of XaaS.

The XaaS transformation journey is ongoing and includes architecting for the future, launching pilots, refining, rapidly scaling, and optimizing offers and corresponding outcomes. Equipped with an XaaS model, medtech players can generate new value for patients, providers, and themselves while embracing a key driver of future growth.

Let's talk

Finding the right XaaS transformation partner requires in-depth research and assessment of industry standards, capability maturity, and vendor options. Deloitte has the industry expertise, breadth of XaaS transformations, and fit-for-purpose tools and accelerators to guide medtech companies on their transformation journey. Let's talk about what this emerging opportunity could mean for you.

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Endnotes

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