

Strategic Consultancy Report
Consultancy Analysis and Strategic Direction

Prepared for: Siemens Healthineers

Module: BAA1019 Business Strategy

Lecturers: Dr. Lu Xu and Dr. John Loonam

Teaching Assistant: Natalia Koesnyk

Group 21:

Seán Coghlan

Jacob Dean

Robert Downey

Martinas Jucys Brady

Jack Madden

Cian O'Connor

Evie Whittaker



TABLE OF CONTENTS

0. Executive Summary	3
1. Overview and Orientation	4
2. Literature Review.....	5
3. Diagnostic Stage.....	6
3.1 PESTEL Analysis	6
3.2 Porter's Five Forces	7
3.3 VRIO Analysis	9
3.4 Porter's Value Chain Model.....	10
4. Strategic Intervention	11
5. Evaluation Stage	14
5.1 Expansion of products and services.....	14
5.2 Integration of sustainable practices	15
5.3 Strengthen business ethics	16
5.4 Build partnerships	16
6. Consulting Process Reflection	17
7. Bibliography.....	18
8. Appendices	21
8.1 Appendix A: GenAI Statement	21
8.2 Appendix B: Group Contract	22

0. Executive Summary

This report analyses Siemens Healthineers' strategic position in the global medical technology industry and proposes actions Siemens can take to strengthen its long term competitiveness. First, the diagnostics examines the external environment using PESTEL, Porter's Five Forces, Porter's Value Chain and a VRIO framework. This analysis highlights ageing populations, rising chronic disease, labour shortages and cost pressures as key demand drivers, while strict EU regulations raise compliance and complexity but also create high barriers to entry. Environmental and social pressures, which encompass circular designs and carbon footprints, further exemplify expectations around sustainability and ethical business practices. The internal environment of Siemens benefits from advanced AI enabled technology and platforms, which allow Siemens to possess valuable and hard-to-recreate capabilities. Porter's Value Chain specifically shows that heavy investment in developing the business drives high costs but underpins differentiation and recurring revenue.

Building on diagnostics, the intervention stage evaluates Siemens' current focus on digital transformation as well aligned with sector trends, but exposes the vulnerabilities associated with this, such as over commitment to only slightly improving existing products and the demanding complexity of coordination on a global level. A Blue Ocean inspired strategy to the shift allows for the dominance in the less contested markets of modular diagnostics. Turning regulations into an advantage by embedding an "ethical-by-design" framework that goes beyond solely compliance, but builds trust, transparency and ethically will by a key differentiator. The intervention also calls for deeper integration of sustainability targets by using digital tools such as predictive analytics to enhance supply chain visibility to align with these decarbonisation goals.

The evaluation section assesses these recommendations across four themes: the expansion of products and services, the integration of sustainable practices, the strengthening of business ethics, and building partnerships. Siemens is well equipped to produce scalable modular diagnostic tools, and adapt these across different markets, which improves worldwide healthcare access and financial growth. Embedding sustainability into all aspects of the supply chain is feasible, likely to yield operational resilience and improve reputation. Strengthening ethical governance of AI, by using ethical-by-design principles, is key to maintaining regulatory compliance and securing the trust of long term patients, providers and regulators. The evaluation concludes that leveraging existing partnerships, with hospitals and governments alike, is essential executing these strategies, opening new markets and solidifying its role as a leader in sustainable and digitalised healthcare.

1. Overview & Orientation

Siemens Healthineers is a leading global medical-technology company specialising in diagnostic imaging and advanced therapy systems. The company enables hospitals and laboratories to diagnose and treat disease more efficiently, generating value through the sale of high-end equipment, software platforms, and long-term maintenance and upgrade contracts. Strategically, Siemens Healthineers competes through technological leadership, systems integration, and partnership-based business models, underpinned by heavy R&D investment and advanced in-house manufacturing.

Its operating environment is shaped by rapid technological change, regulatory pressure, shifting healthcare delivery models. To remain competitive, the company has had to develop capabilities that differentiate it in terms of clinical performance, reliability and integrated solutions.

This report addresses the following key strategic issues:

1. Leveraging AI and digital capabilities while managing regulatory and ethical risks
2. Aligning sustainability and decarbonisation goals with cost structures and growth in emerging markets
3. Improving multinational coordination across R&D, manufacturing and services
4. Positioning current strategies to capture long-term value from workforce shortages and the shift to value-based healthcare.

The remainder of this report addresses these issues through three stages. The diagnostic stage develops a detailed external and internal analysis using PESTEL, Five Forces, VRIO, and value-chain perspectives. The intervention stage investigates Siemens Healthineers' current strategy and explores options such as Blue Ocean moves, ethical-by-design AI governance and sustainability driven innovation. Finally, the evaluation stage assesses how effectively these strategic directions support sustainable growth, ethical leadership and expanded global healthcare access, while also providing recommendations for Siemens Healthineers' future strategic positioning.

2. Literature Review

Contemporary healthcare literature highlights numerous demographic, technological, regulatory and strategic forces reshaping the global med-tech market. Ageing populations across OECD and EU economies are significantly increasing demand for diagnostics, imaging and chronic disease management (OECD, 2024; Eurostat, 2025). At the same time, persistent healthcare workforce shortages are accelerating the shift towards digital and AI-enabled diagnostic solutions (Eurofound, 2024; Deloitte, 2024). Economically, while global healthcare spending continues to increase, manufacturers are facing sustained cost pressures and value-based procurement requirements that prioritise efficiency and measurable outcomes (KPMG, 2024).

Strategically, digital transformation is widely recognised as a core driver of competitive advantage in healthcare organisations (Teece et al., 2025). Sustainability research further emphasises the growing relevance of circular-economy principles in medical-device design and supply chains (Hoveling et al., 2024). Altogether, this literature establishes the external pressures and strategic imperatives shaping value creation in Siemens Healthineers' operating environment.

3. Diagnostic

3.1 PESTEL Analysis

The environment in which Siemens Healthineers operates is shaped by international policy priorities focused on digital transformation, patient safety, and ethical innovation. The EU's ageing population continues to grow, increasing demand for chronic-disease management and long-term investment in preventive and diagnostic technologies (OECD, 2024). At a regulatory level, the EU Medical Device Regulation and In Vitro Diagnostic Regulation impose strict safety, certification, and traceability standards, raising compliance complexity and barriers to entry (European Medicines Agency, 2025). In addition, the EU Artificial Intelligence Act classifies medical AI as "high risk," requiring transparency and human oversight in diagnostic applications (European Parliament, 2024). Overall, this political environment both supports digital-health expansion and constrains firms through heightened regulation, making policy navigation a key source of competitive advantage.

Rising healthcare demand, cost pressures, and shifting investment conditions are shaping the economic environment surrounding Siemens Healthineers. Global healthcare spending accounted for 9.9% of world GDP in 2022 (WHO, 2024), though fiscal tightening and higher debt-servicing costs may limit future growth. Inflationary pressures, particularly in energy and semiconductor manufacturing, have increased production and logistics costs (Deloitte, 2024). Despite this, the med-tech sector remains attractive, with KPMG forecasting around 5% annual global growth in medical-device demand to 2030, driven by ageing populations and chronic-disease prevalence.

Demographic and social trends are significantly reshaping healthcare demand. Across OECD countries, 18.51% of the population was aged 65 or over in 2024, a figure projected to rise to 27% by 2050 (OECD, 2023). The EU's median age reached 44.7 years in 2024 (Eurostat, 2025). Ageing populations are closely linked to rising chronic and degenerative disease, increasing demand for diagnostic and imaging solutions. At the same time, healthcare and long-term care face severe labour shortages (Eurofound, 2023), accelerating the adoption of AI-driven and digitally enabled diagnostic technologies (Deloitte, 2024).

Technological innovation is a core driver of Siemens Healthineers' competitiveness. The healthcare sector is undergoing rapid digital transformation, with AI playing a central role in improving efficiency and diagnostic precision (Deloitte, 2024). Siemens' platforms, including

AI-Rad Companion and Syngo Carbon, are designed to reduce clinician workload and enhance clinical accuracy (Siemens Healthineers, 2024). Established firms such as Siemens Healthineers hold a strong advantage over startups due to their deep integration within healthcare systems and superior access to large-scale datasets (KPMG, 2024). In the context of global healthcare-worker shortages, labour-saving technologies are increasingly essential, presenting a significant growth opportunity for the company.

Environmental sustainability has become a major priority within the med-tech sector. Healthcare organisations are increasingly recognised as significant contributors to global emissions, prompting pressure to decarbonise both operations and supply chains (Deloitte, 2024). Circular-design strategies, including reuse, remanufacturing, and recycling, are becoming central to reducing environmental impact (Hoveling et al., 2024). With the EU Circular Economy Act expected in 2026, sustainability considerations will become even more important in medical-device manufacturing.

Within a complex and evolving legal landscape, Siemens Healthineers must comply with strict frameworks governing both data protection and the ethical use of artificial intelligence. The EU MDR 2017/745 and IVDR 2017/746 require rigorous conformity assessments and certification for all medical devices. Data governance is equally critical, with the European Data Act (2023/2854) and the EU Artificial Intelligence Act (2024) introducing harmonised rules to protect patient privacy, ensure fair data usage, and support trustworthy AI deployment in healthcare.

3.2 Porter's Five Forces

Threat of new entrants

Barriers to entry in the European medical-technology sector are high due to heavy regulation, major capital requirements, and extensive R&D needs (MMSL, 2014). Siemens' advanced imaging, diagnostics, and therapy systems require complex manufacturing, regulatory approvals, and established distribution, making entry difficult. Strong brand recognition and long-standing hospital relationships further raise barriers. However, software- and AI-focused start-ups in digital health may gradually lower entry barriers (EIT, 2025).

Supplier bargaining power

Suppliers in the healthcare-technology industry include component manufacturers, software providers, consumables producers, and contract manufacturers. Siemens' global scale and diversified operations give it strong purchasing power, which weakens overall supplier power. While medical-device components can be specialised, firms can often switch suppliers and consolidate purchases to limit supplier influence (MMSL, 2014).

For Siemens, proprietary components such as MRI magnets and PET/CT detectors give some specialised suppliers modest power due to limited alternatives. However, Siemens' size, global sourcing network, and vertical integration significantly reduce this risk. The growing role of AI may increase reliance on software and data suppliers, potentially raising supplier power over time.

Buyer Power

Buyers in this industry are large organisations such as hospitals and laboratories, giving them strong bargaining power. They purchase high-value equipment like imaging systems and negotiate aggressively on pricing, servicing, maintenance, leasing, and upgrades (Lethbridge, 2011). As a result, buyer power is significant for Siemens.

However, Siemens' strong brand reputation and reliability help preserve some negotiating power. Trust is critical for high-cost medical equipment, and long-standing positive relationships allow Siemens to maintain pricing within reasonable limits, as many buyers prioritise proven performance and service continuity.

Threat of substitutes

In the healthcare-technology sector, substitutes include alternative diagnostic methods, outsourced lab services, and digital diagnostics that may reduce reliance on traditional imaging and laboratory systems. Although regulation and clinical requirements limit rapid substitution, the threat remains as technology and competition continue to evolve (MMSL, 2014).

For Siemens, portable imaging and ultrasound can substitute for some CT/MRI use cases, while outsourcing and AI-based diagnostics may reduce hardware demand. However, the high capital cost and technical complexity of Siemens' advanced systems limit large-scale substitution. Siemens is also investing in AI through partnerships and acquisitions to turn this threat into a strategic opportunity (ARC, 2025).

Competitive Rivalry

Competition in the medical-technology sector is intense, with major rivals such as General Electric and Philips Healthcare, alongside over 25,000 medical-device firms in Europe, many of which are SMEs (MMSL, 2014). These firms compete with powerful incumbents holding large market shares, making rivalry strong despite Siemens' leading position.

Rivalry is further intensified by moderate market growth and significant price pressure, with customers demanding both value and advanced service. Differentiation is increasingly based on technology and innovation rather than price alone. Siemens' acquisition of Varian Medical Systems highlights the ongoing competition for scale and market share (Subiris, 2024).

VRIO

Siemens Healthineers possesses technological and organisational resources that give it a strong competitive advantage in the global med-tech industry. Its advanced AI-enabled diagnostic and imaging platforms, including the Syngo Carbon IT system, deliver significant value by improving efficiency and supporting value-based healthcare models, a trend accelerated by pandemic-era digitalisation (Siemens Healthineers, 2020). As one of the world's largest medical-technology companies, Siemens Healthineers has capabilities and scale that most competitors cannot easily replicate.

These strengths, combined with its embedded relationships with hospitals and health authorities worldwide, contribute to a high level of inimitability. Partnerships such as those with the Ministry of Health in Murcia, Spain, and other major health systems globally, are difficult for smaller firms to access or reproduce (Siemens Healthineers, 2024a).

Siemens Healthineers is structured to fully capture this value. Its Value Partnerships framework formalises co-creation with providers and uses clearly defined KPIs and performance-based incentives to drive innovation (Siemens Healthineers, 2024). Additional strengths, including Operational Excellence programmes, diagnostic-laboratory automation, and a strong presence in public–private partnerships, reinforce a culture focused on long-term efficiency and transformation.

Overall, the combination of AI innovation, strategic partnerships, and operational capability underpins Siemens Healthineers' sustained competitive advantage over most other med-tech firms.

3.4 Porter's Value Chain Model

Porter's Value Chain Model is a model that analyses a company's internal operations by looking into its activities to see where value is created and where costs occur.

The model divides activities into two categories of basic activities and auxiliary activities. Cost control and the determination of competitive advantages can be carried out at every level of the process (Ruan, 2020). In the context of Siemens Healthineers, applying this value chain model allows for the analysis of 5 aspects of the business that are inbound logistics, operations, outbound logistics, marketing and sales and service. All these aspects play a key role in value creation and must be considered also in relation to cost structure. Auxiliary activities such as the development of technologies used to aid the business, HR and infrastructure development must also be evaluated in order to identify internal strengths and possible areas for improvement.

Insights gained from Value Chain Model

Applying Porter's Value Chain to Siemens Healthineers allows for a clear insight into the creation of value and the occurrence of costs within the business. Inbound logistics are a key aspect of Siemens business as they rely on expensive and high tech components to be shipped in to produce their products and operate their machinery. High costs arise here from global shipping of materials inwards however their high quality and differentiated products allow them to create value in a competitive industry. Siemens invests heavily in their operations

every year specifically in R&D. 900 million dollars annually is spent in the US by Siemens on R&D which shows their commitment to manufacturing new and advanced products (Siemens Healthineers AG, 2024). This bears a significant cost but in order to gain a competitive edge in the pharmaceutical industry it is necessary.

Outbound logistics and installation of machinery is a complex aspect of Siemens business as it is a global process which incurs significant costs but also is a key strength of Siemens as they are recognised as a global brand with customers worldwide. Recurring sales and contracts are a common theme in the Pharmaceutical industry which is a major part of Siemens revenue. They place significant emphasis on marketing and partnerships to increase customer loyalty and create value for their client base. Their service activity is a major value creator for their business by maintaining and upgrading their products consistently. This not only is cost heavy but also requires significant infrastructure to carry out their service activity. Auxiliary activities such as HR, technological development and procurement cement their competitive advantage but also add significant overheads. This pattern throughout the various aspects of their business shows the strategic trade-off between investing heavily versus lean cost-oriented operations. The nature of Siemens Healthineers business requires heavy investment but draws significant gains.

4. Strategic Intervention

The current strategy deployed by Siemens Healthineers is centred on technological leadership, with significant investment in digital transformation and AI. This aligns with global healthcare trends, as multinational firms increasingly view digitalisation as the future of healthcare delivery (Imperial Executive Education, 2025). Siemens Healthineers aims to lead the digital transformation of the industry while advancing remote healthcare solutions (Siemens Healthineers, 2025). With ageing populations and chronic illness representing major global health challenges, this strategy remains well aligned with the contemporary healthcare environment. As one of Europe's leading healthcare companies, Siemens Healthineers benefits from substantial global trust and recognition, supporting its proactive strategic direction.

A resource-based view defines competitive advantage through a firm's internal resources and capabilities (Mazzei, 2024). Siemens Healthineers possesses advanced digital technologies, strong R&D infrastructure and highly specialised machinery, all of which contribute to a sustainable competitive advantage. These technological resources enable the firm to meet the evolving needs of the healthcare industry while strengthening customer goodwill and trust (IP Business Academy, 2025). From a VRIO perspective, these assets are valuable, rare and difficult to imitate, reinforcing Siemens Healthineers' long-term market strength.

A Blue Ocean strategy offers a suitable response by enabling Siemens Healthineers to diversify, reduce risk and establish leadership in uncontested market spaces. A Blue Ocean strategy is defined as one that expands industry boundaries and operates beyond existing competition, rendering rivals irrelevant (MyPOS, 2025). One viable direction would be to shift from post-diagnosis treatment towards pre-diagnosis monitoring. By utilising existing AI-monitoring capabilities to detect early signs of disease, Siemens could move upstream in the healthcare value chain. While companies such as Huma and AliveCor operate in this space, they lack the scale, R&D capacity and financial resources of Siemens Healthineers, positioning the firm well for market dominance.

A second Blue Ocean opportunity lies within global emerging markets. Siemens Healthineers already supports diagnostic access in regions such as Africa through initiatives like the Africa Medical Equipment Facility, which provides affordable cancer care (IFC, 2023). As more economies emerge globally, Siemens Healthineers has the opportunity to collaborate with governments and become a foundational healthcare partner in fast-growing regions, strengthening both market reach and social impact.

The firm's expanding reliance on medical AI introduces both opportunity and accountability. Under the EU Artificial Intelligence Act, medical AI systems are classified as "high-risk", subjecting Siemens Healthineers to heightened regulatory scrutiny regarding transparency, data protection and algorithmic bias (European Parliament, 2024). While the company's strong governance infrastructure provides a solid base, genuine competitive differentiation will depend on its ability to move beyond compliance towards proactive ethical leadership.

Ethical AI leadership itself can function as a form of value innovation. By embedding ethical-by-design principles throughout AI development, Siemens Healthineers can integrate

fairness, explainability and data protection from conception to deployment (Teece et al., 2025). This approach would transform regulation into a strategic advantage and foster trust-based markets in which safety, integrity and accountability become key differentiators. In an increasingly data-driven healthcare ecosystem, ethical legitimacy is likely to attract partnerships with governments, hospitals and organisations prioritising responsible innovation.

The diagnostic analysis further highlights that Siemens Healthineers operates within a highly resource-intensive and cost-sensitive environment (Deloitte, 2024). Although its 2024 sustainability report outlines ambitious targets, including a 90 per cent reduction in Scope 1 and 2 emissions by 2030 and Scope 3 emissions by 2050, progress remains uneven across geographical regions (Siemens Healthineers, 2024). While sustainability performance is strongest in Europe, underdeveloped supply chains in emerging markets present operational and reputational challenges.

To close this gap, Siemens Healthineers could apply its digital and AI-driven capabilities to develop transparent, adaptive supply-chain systems. Blockchain technology and predictive analytics could enable real-time monitoring of emissions, waste and regulatory compliance across global suppliers. By aligning sustainability standards with local regulatory contexts, environmental responsibility could be transformed from a reactive cost centre into a proactive source of long-term resilience and value creation.

Despite recognising ageing populations and rising chronic disease as key demand drivers, Siemens Healthineers' sustainability strategy remains only partially integrated with healthcare access objectives. The current focus is largely on emissions and product efficiency rather than affordability and accessibility in lower-income markets. This represents a strategic opportunity gap. The firm's VRIO position confirms that it possesses the digital infrastructure, AI expertise and partnership networks required to address global healthcare accessibility, yet these resources remain underutilised (Teece et al., 2025). By integrating sustainability with inclusive innovation, Siemens Healthineers could develop modular, energy-efficient diagnostic technologies tailored to infrastructure-limited healthcare systems.

5. Evaluation

Based on the diagnostic and intervention stages, the evaluation stage assesses how effectively Siemens Healthineers' strategies support sustainable growth, ethical leadership and global healthcare expansion. It examines the impact of the company's strategy across product innovation, sustainability integration, ethical governance and partnerships, highlighting the extent of how these align with Siemens' broader goal of advancing the accessible and sustainable healthcare world.

5.1 Expansion of products and services

From the diagnostics stage it can be identified that Siemens already holds a competitive advantage that stems from its use of AI-enabled diagnostic and imaging platforms (such as Syngo Carbon and AI-Rad Companion, which are both deeply integrated into the international healthcare system). In the current healthcare industry, a trend of healthcare professional shortages and a growing demand for scalable, cost-effective technologies can be identified, which presents Siemens with a clear opportunity to expand its offerings and respond to global needs (Deloitte, 2024). In line with these findings, the intervention stage highlights Siemens' efforts to broaden diagnostic access in foreign and emerging markets. Partnerships such as the Africa Medical Equipment Facility demonstrate successful expansion, enabling affordable, modular healthcare solutions for infrastructure-limited settings (IFC, 2023). This highlights that there is significant potential for Siemens to further deploy the Blue Ocean strategy, by collaborating with emerging governments and entering uncontested markets and deliver impactful, sustainable solutions.

Siemens is well positioned to move beyond the use of AI just for post diagnosis treatment and develop tools with the capabilities of early detection. By developing modular and cost-efficient diagnostic products, with a focus on environmental and sustainable leadership into their core business strategy, Siemens can create a product that serves markets of developed and emerging regions. By taking inspiration from companies like Huma and AliveCor, who are pursuing such business strategies, Siemens can use their huge resource pool and leadership to provide a competitive advantage.

Giving underserved individuals access to healthcare and sustainability will allow Siemens to speed up their development of scalable products that address global health problems and also support decarbonisation. This approach reinforces Siemens' commitment to healthcare innovation and also encapsulates their target of long term business growth through the creation of new market opportunities and a greater social purpose.

5.2 Integration of sustainable practises

From the diagnostic stage, it is evident that the healthcare industry remains a major contributor to the global climate crisis, driving urgent calls for decarbonisation and circular economy adoption. Siemens Healthineers' 2024 Sustainability Report sets ambitious goals, including a 90% reduction in Scope 1 and 2 emissions by 2030 and a 90% reduction in Scope 3 emissions by 2050 (Siemens Healthineers, 2024). However, while these targets demonstrate global leadership in sustainability, they are not yet fully synchronised across all operational regions, pointing to an opportunity for deeper integration of sustainability frameworks into the company's diagnostic and intervention strategies.

In response to growing regulatory requirements such as the EU Circular Economy Act, Siemens can embed environmental and social considerations into every product and market strategy. Developing modular, energy-efficient diagnostic tools and transforming supply chains through blockchain and predictive analytics will allow Siemens to track emissions and waste across product lifecycles, aligning sustainability with transparency and compliance. This approach would not only enhance operational resilience but also generate long-term value through sustained innovation and trust.

By positioning itself as a pioneer in sustainable healthcare, Siemens can enter new eco-conscious markets where sustainability itself becomes a differentiating factor. Integrating sustainability as a core business driver reinforces Siemens' social purpose, strengthens brand reputation and delivers a competitive advantage by aligning business performance with global health and environmental goals.

5.3 Strengthen business ethics

From the diagnostic analysis, Siemens Healthineers operates under an increasingly complex regulatory environment, particularly concerning data protection, patient safety, and the ethical deployment of artificial intelligence. Frameworks such as the EU Medical Devices Regulation (MDR) 2017/745 and In Vitro Diagnostic Medical Devices Regulation (IVDR) 2017/746 mandate conformity assessments to ensure compliance and ethical use of technology (European Medicines Agency, 2025). As AI-driven medical solutions become more prominent, Siemens faces heightened scrutiny regarding transparency, privacy, and

algorithmic bias, which are challenges that position medical AI as a high-risk category under EU law.

The intervention phase highlights an opportunity to move beyond basic compliance towards proactive ethical innovation. By embedding an “ethical-by-design” framework in every stage of AI development (Teece et al., 2025), Siemens can transform regulatory demands into a catalyst for trust-based value creation. This forward-looking ethical governance can strengthen Siemens’ global reputation for safety, integrity, and accountability. In a data-driven healthcare landscape, such ethical leadership not only builds worldwide trust but also serves as a powerful source of competitive advantage.

5.4 Build partnerships

The diagnostic stage shows that Siemens Healthineers has already established a wide-reaching network of partnerships with hospitals and healthcare ministries across the globe. Through its Value Partnerships framework, Siemens collaborates with institutions such as the Ministry of Health in Murcia, Spain, and with emerging market governments under initiatives like the Africa Medical Equipment Facility (IFC, 2023). These embedded relationships form an inimitable part of Siemens’ operational advantage, enabling continuous innovation and effective value capture across markets.

At the intervention stage, Siemens has the opportunity to further expand this network through strategic collaborations that prioritise responsible innovation and align with the Blue Ocean strategy. By co-developing scalable healthcare infrastructure solutions and entering untapped regions, Siemens can strengthen its position as a transformative partner in global healthcare. These efforts would not only reinforce the company’s competitive edge but also accelerate long-term industry transformation by breaking barriers to healthcare access and driving sustainable growth across international markets.

6. Consulting Process Reflection

Becoming strategic consultants required us to really think critically. We had to act as if we were a real world consultancy firm approaching Siemens Healthineers. To achieve this, we made use of the knowledge we had gained from attending lectures and engaging with the course material by integrating frameworks such as PESTEL, VRIO, and Porter's Five Forces into our strategic narrative. Through extensive research and application of these frameworks we gained meaningful insights into Siemens Healthineers' strategy and the medical technology industry as a whole.

During the diagnostic stage we applied the aforementioned frameworks to collect and analyse key information and data relating to Siemens Healthineers. We investigated and took insights from industry reports and literature. This allowed us to get a sense of the market environment and where our client is positioned within it. Focusing on what gives Siemens a strategic advantage and where it is falling behind in relation to its competitors. These insights that we gained here directly informed the direction of our strategic recommendations which followed the diagnostic stage.

The intervention stage represented clear progression from our diagnostic analysis, as we moved from identifying strategic issues to proposing realistic, evidence-based solutions for Siemens Healthineers. Building on insights gained from the frameworks above, we were able to justify our recommendations with greater confidence and strategic coherence. This transition highlighted the importance of ensuring interventions were firmly rooted in prior analysis rather than basing off assumption. We also became more aware of the need to balance creativity with feasibility when proposing strategic change. Presenting these interventions in an accessible way through the presentation and report was particularly valuable, as it required us to communicate complex strategic ideas clearly for an audience. Overall, this stage strengthened our understanding of how effective consultancy moves systematically from diagnosis of both opportunities and threats to action.

7. Bibliography

1. Deloitte (2024) *2024 Global Healthcare Outlook*. Available at: <https://www.deloitte.com/za/en/Industries/life-sciences-health-care/analysis/global-health-care-outlook.html> (Accessed: 30 October 2025).
2. Eurofound (2024) *Company practices to tackle labour shortages*. Available at: <https://www.eurofound.europa.eu/en/publications/all/company-practices-tackle-labour-shortages> (Accessed: 31 October 2025).
3. European Commission, Eurostat (2025) *Population structure and ageing*. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing#:~:text=On%201%20January%202024%2C%20the,EU's%20population%20reached%2044.7%20years. (Accessed: 31 October 2025).
4. European Parliament & Council (2017) Regulation (EU) 2017/745 on medical devices. *Official Journal of the European Union*. Available at: <https://eur-lex.europa.eu/eli/reg/2017/745/2025-01-10> (Accessed: 31 October 2025).
5. European Parliament & Council (2017) Regulation (EU) 2017/746 on in vitro diagnostic medical devices. *Official Journal of the European Union*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0746> (Accessed: 31 October 2025).
6. European Parliament & Council (2023) Regulation (EU) 2023/2854 on harmonised rules on fair access to and use of data ("Data Act"). *Official Journal of the European Union*. Available at: <https://eur-lex.europa.eu/eli/reg/2023/2854/oj/eng> (Accessed: 1 November 2025).
7. European Parliament & Council (2024) Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending certain Union legislative acts. *Official Journal of the European Union*. Available at: <https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng> (Accessed: 31 October 2025).
8. Hoveling, T., Nijdam, A.S., Monincx, M., Faludi, J. and Bakker, C. (2024) Circular economy for medical devices: Barriers, opportunities and best practices from a design perspective. *Resources, Conservation and Recycling*. Available at: <https://www.sciencedirect.com/science/article/pii/S0921344924003136> (Accessed: 1 November 2025).
9. IP Business Academy (2025) 'Lean IP: How Siemens AG Uses Strategic and Value-Oriented IP Management to Drive Growth', *IP Business Academy*, 10 July. Available at: <https://ipbusinessacademy.org/lean-ip-how-siemens-uses-strategic-and-value-oriented-ip-management-to-drive-growth>
10. IFC (2023) 'Siemens Healthineers joins IFC facility to boost access to affordable medical equipment in Africa', *IFC Pressroom*, 15 August. Available at: <https://www.ifc.org/en/pressroom/2023/siemens-healthineers-joins-ifc-facility-to-boost-access-to-affordable-medical-equipment-in-africa>

11. Imperial Executive Education *Digital Transformation in Healthcare: Innovation, Strategies & Processes*. Available at:
<https://execed-online.imperial.ac.uk/digital-transformation-in-healthcare>
12. KPMG (2024) *2024 Healthcare and Life Sciences Investment Outlook*. Available at:
<https://kpmg.com/us/en/articles/2024/healthcare-life-sciences-investment-outlook.html#:~:text=Innovations%20in%20cardiology%2C%20robotic%20surgery,deals%20focused%20in%20these%20areas>. (Accessed: 31 October 2025).
13. KPMG (2018) *Medical devices 2030*. Available at:
<https://kpmg.com/us/en/articles/2023/medical-devices-2030.html> (Accessed: 30 October 2025).
14. Lethbridge, J. (2011) *Understanding multinational companies in public health systems, using a competitive advantage framework*, *PubMed Central*. Available at:
<https://pmc.ncbi.nlm.nih.gov/articles/PMC3141382/>
15. Maresova, P. and Kuca, K. (2014) *PORTER'S FIVE FORCES ON MEDICAL DEVICE INDUSTRY IN EUROPE*, *MMSL*. Available at:
<https://www.mmsl.cz/pdfs/mms/2014/04/01.pdf>
16. Mazzei, M. (2024) 'Resource-Based View (RBV)', *EBSCO Research Starters – Business & Management*. Available at:
<https://www.ebsco.com/research-starters/business-and-management/resource-based-view-rbv>
17. MyPOS (2025) 'What is the Blue Ocean Strategy: meaning, steps and benefits', *MyPOS Blog – Business Guide*. Available at:
<https://www.mypos.com/en-gb/blog/business-guide/what-is-the-blue-ocean-strategy-meaning-steps-and-benefits>
18. OECD (2024) *Ageing*. Available at:
<https://www.oecd.org/en/topics/policy-issues/ageing.html> (Accessed: 30 October 2025).
19. Ruan, S. (2020). Research on Strategic Cost Management of Enterprises Based on Porter's Value Chain Model. *Journal of Physics: Conference Series*, 1533(2), p.022056. doi:<https://doi.org/10.1088/1742-6596/1533/2/022056>.
20. Siemens Healthineers (no date) 'Smart Remote Services', *Siemens Healthineers*. Available at:
<https://www.siemens-healthineers.com/en-ie/services/customer-services/connect-platforms-and-smart-enablers/smart-remote-services>
21. Siemens Healthineers AG, 2024. *Annual Report 2024*. Available at:
<https://assets.new.siemens.com/siemens/assets/api/uuid%3Aae46683e-14dd-4455-a882-09d4184457c7/Annual-Financial-Report-FY2024.pdf>
22. Structures in transition: Facing the challenge of change (2015) *Structures in Transition: Facing the Challenge of Change - Siemens Healthineers Slovakia*. Available at:
<https://www.siemens-healthineers.com/sk/magazine/mso-healthcare-business-strategies.html> (Accessed: 05 November 2025).
23. Subiris, C.R. (2024) *VARIAN MEDICAL SYSTEMS' ACQUISITION BY SIEMENS HEALTHINEERS - A PRELIMINARY ANALYSIS OF THE TARGET COMPANY*.

Available at:

https://run.unl.pt/bitstream/10362/172089/1/Group_Personal_WP_file.pdf

24. Sustainability Highlights 2024 (2024) *Our Sustainability Report*. Available at: <https://www.siemens-healthineers.com/company/sustainability/report> (Accessed: 05 November 2025).
25. Teece, D. *et al.* (2025) *Siemens Healthineers: A Digital journey*. doi:10.4135/9781071871348.
26. Wanke, F. (2025) *Ai with purpose summit 2025: Siemens' Vision for industrial-grade AI* | ARC Advisory Group, ARC Advisory Group. Available at: <https://www.arcweb.com/industry-best-practices/ai-purpose-summit-2025-siemens-vision-industrial-grade-ai>
27. World Health Organization (2024) Global Spending on health: Emerging from the pandemic. Available at: <https://www.who.int/publications/i/item/9789240104495> (Accessed: 31 October 2025).

8. Appendices

8.1 Appendix A: Declaration of Authorship and Statement on Use of Generative AI Tools

We, the undersigned, declare that this Strategic Review Report is our own original work. All analysis, argumentation, and conclusions have been produced by the signatories listed below. Any use of Generative AI tools was carried out only in a supportive capacity, and not for the creation of core content, critical analysis, or strategic evaluation. All such use has been acknowledged below.

We further confirm that all group members contributed equally to the workload in terms of research, responsibility, effort, and participation.

Use of Generative AI Tools

- **Tools used:** ChatGPT
- **Purpose of use:** Language refinement, grammar correction, clarity improvements, formatting assistance

Signatories

By signing below, each group member confirms that the above declaration is accurate and complete.

1 Jack Madden

2 R. Denny

3 Sean

4 Evie Whittaker

5 Martins Jr

6 Ciaran O'Connor

7 Jacob Dean

8.2 Appendix B: Group Contract

BAA BUSINESS STRATEGY

• TEAM CONTRACT

Chosen Client Company: Siemens Healthineers

Group Members: Group Number: INTB 21 (LAST NAME, First name)

1 COGHLAN, Seán

2 DEAN, Jacob

3 DOWNEY, Robert

4 JUCYS BRADY, Martin

5 MADDEN, Jack

6 O CONNOR, Cian

7 WHITTAKER, Evie

TEAM PROCEDURES

Group Leader:

Jack Madden will serve as the appointed group leader. His responsibilities

include: · Facilitating the uploading of documents to the designated

platform (e.g., Loop). · Handling all communications with lecturers or

teaching assistants.

· Overseeing the coordination of tasks and deadlines, ensuring that the group remains on track.

· The group leader will be responsible for submitting the final version of the project unless otherwise agreed.

· All members must review and approve the final draft before submission. No individual may upload or submit the project without group consensus.

Meetings:

- Meetings will be held in person when necessary and at the convenience of all group members.
- Attendance at all meetings is mandatory. If a group member is unable to attend, it is their responsibility to inform the group in advance and review the meeting minutes, which will be shared afterward.
- Any absence must be communicated with reasonable notice prior to the meeting. Failure to do so will be considered a breach of this contract.
- Meetings must have a minimum quorum of 3 participants. If fewer than 3 members show up, the meeting cannot proceed, and decisions cannot be made.
- Lateness to meetings without reasonable excuse and notice will be considered as an infraction to the contract.

Communication:

- The primary mode of communication will be via WhatsApp.
- Should any member prefer a different form of communication, they must notify the group at the earliest.
- In the case of significant project-related decisions, all group members must be contacted and given ample opportunity to provide input.
 - Group members have the right to personal time outside of the project. As such, it is not mandatory for any member to respond to group messages during weekends, or outside of standard working hours (before 9:00 AM or after 7:00 PM). However, it is expected that all members remain reasonably responsive and actively participate in group communications during the hours of 9:00 AM to 7:00 PM on weekdays, unless prior notice of unavailability is given.
- In cases of urgent matters (such as unexpected changes to deadlines, submission issues, or time-sensitive decisions) messages may be sent outside stated hours. While immediate responses are not required, members are encouraged to check in when possible to ensure the project stays on track. If a deadline falls on or immediately after a weekend, all members are expected to plan accordingly and be responsive as needed.

Decision-Making Policy:

- In the event that consensus cannot be reached on a decision, voting will be carried out.
- Decisions will be made based on a majority vote, where each member has an equal vote.
- If a member is not present at an in-person meeting, they will forfeit their right to vote on matters discussed during that meeting.

Agendas and Targets:

- Targets for the project will be set during the first full meeting and agreed upon by all members.
- Any necessary adjustments to the schedule or work plan must be discussed and mutually agreed upon by all group members.
- Changes to the agreed timeline must be communicated in writing (email or WhatsApp) to all group members and will require the group's consensus.

Task Deadlines:

- For each task or milestone, internal deadlines will be set at least 72 hours before the final project deadline. This buffer allows time for group review, editing, and final compilation.
- All members are expected to submit their individual contributions by the internal deadline. Late submissions without prior notice will be treated as a breach of contract.

Record Keeping:

- Each meeting will have a designated minute keeper, chosen in rotation.
- Meeting minutes must be recorded clearly and accurately in a shared Google Doc, accessible to all members.
- Failure to properly record or share the minutes will be considered a breach of responsibility.

TEAM EXPECTATIONS

Participation:

- All members are expected to attend all meetings and contribute actively to the project.
- All assigned tasks must be completed on time and to a high standard.
- Failure to participate or submit work on time will be considered a violation of this agreement and subject to penalties.

Work:

- Work will be divided as evenly as possible, taking into account individual strengths and workloads.
- Each member is responsible for referencing their work correctly, using only credible academic sources.
- Any work should be written using British English.
- The use of AI tools (such as ChatGPT, machine-generated content, etc.) for generating work is strictly prohibited.
- All submitted work must meet an acceptable academic standard and adhere to the agreed-upon formatting and referencing guidelines.
- The group reserves the right to review and request revisions on any member's work. Refusal to revise substandard work may be considered non-participation.

Conduct and Manner:

- All group members are expected to maintain professionalism and respect towards one another.
- Members are encouraged to share their opinions and contribute to the decision-making process.
- Disrespectful or disruptive behaviour will not be tolerated and will be addressed immediately.

INFRACTIONS AND CONSEQUENCES

- Failure to adhere to any of the policies outlined in this contract will result in the following potential actions:

- Initial Discussion: The concerned parties are expected to raise the issue directly and respectfully with one another. If appropriate, this may be done informally through group discussion. The group leader or DCU staff may be invited to mediate meetings.
- Initial Warning: Verbal or written warning for minor infractions.
- Formal Notice: If the issue persists, a formal group meeting will be held to discuss the matter and a collective decision will be made regarding the member's involvement.
- Removal from the Project: In cases of severe or repeated infractions, a group member may be removed from the project.
- Module Coordinator Notification: In the event of non-participation or major issues affecting the project, the group leader will notify the module coordinator, and the member's actions may be reported to the lecturer.
- Impact on personal outcome of Module: Continuous non-compliance or failure to meet the requirements may impact individual grades in accordance with the outline of the module.

AMENDMENTS AND ACKNOWLEDGEMENT

- Any adjustments to this contract must be discussed and made before any group member signs it.
- After all members have signed the contract, it will be considered binding.
- Any future amendments to this contract can only be made by mutual consent of all group members and must be documented.
- Failure to sign the contract will indicate that the member does not intend to participate in the project and will not be credited for any work done.
- All group members will receive a PDF version of the signed contract through email.
- All members are expected to handle disputes with maturity, professionalism, and confidentiality. Gossip, exclusion, or passive-aggressive behaviour will not be tolerated.
- All members agree to uphold the university's policies on academic integrity. Plagiarism, fabrication of information, or unauthorised collaboration will not be tolerated and may result in disciplinary action by the university.
- If a member wishes to withdraw from the group, they must provide written notice and discuss their reasons with the group. Any work completed up to the point of withdrawal must still be submitted to the group. Withdrawal does not guarantee reassignment to another group or individual project unless approved by academic staff.

- a) I participated in formulating the standards, roles, and procedures as stated in this contract. b) I understand that I am obligated to abide by these terms and conditions. c) I understand that if I do not abide by these terms and conditions, I will suffer the consequences as stated in this contract.

Electronic Signature and Date of Signing

- 1) Maldinas Jr date 06/10/2025
- 2) R Downey date 06/10/2025
- 3) Eve W. Hottel date 06/10/2025
- 4) Jack Madden date 06/10/2025
- 5) Cian O'Connor date 07/10/2025
- 6) Jack Dean date 07/10/2025
- 7) Seán date 07/10/2025