

Case Study Assignment
HITACHI
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TASK 1: Selecting a case study for the Assignment

Customer Story: Explore Hitachi High-Tech's journey with SAP

SAP Customer Story URL: <https://www.sap.com/asset/dynamic/2023/07/d237f8b9-7e7e-0010-bca6-c68f7e60039b.html>

<p>Customer profile</p> <ul style="list-style-type: none"> - High-Tech Equipment Manufacturer and Trading Company. - Manufactures Analytical and scientific instruments (ex: Clinical Analyzers), medical and healthcare products (immunoassay analyzers), industrial systems (analysis equipment for quality control in manufacturing processes), electronic equipment (semi-conductor manufacturing equipment for manufacturing semi-conductors, CD-SEM *) - Operations in multiple countries, serving diverse industries including healthcare, electronics, automotive, and materials science 	<p>Digital transformation impacts</p> <ul style="list-style-type: none"> - Achieved a 94% reduction in customizations, streamlining operations and improving system stability - Faster handling of solution updates (18 times faster) and the ability to quickly scale resources to meet changing business demands - Leveraged SAP BTP for advanced automation and seamless integration across subsystems, enhancing overall efficiency and decision-making
<p>SAP solution technology areas</p> <ul style="list-style-type: none"> - SAP S/4HANA Cloud (Public and private Edition) - SAP Business Technology Platform (SAP BTP) - SAP BW/4HANA 	<p>Case study material includes</p> <ul style="list-style-type: none"> - Videos, text-based information from High-Tech industry websites and Case Study - Key customer stakeholders' insights

TASK 2: Understand the customer and industry context

Activity 1: Identify Business or Technology Trends in the Industry

High-Tech Manufacturing Industry – Macro Trends

1. Cloud-Based ERP Systems (Ex: access real-time data across Production, SCM and Sales, can quickly scale resources up and down, using edge computing to process data closer to the location)

2. Smart Manufacturing (Use AI and ML to predict equipment failures, deploy IoT sensors to check equipment performance)
3. Rapid Technological advancements (using digital twins to simulate and analyze performance of assets)
4. Cybersecurity and Data Protection (Ex: Attacks targeting third-party vendors or suppliers to gain access to Hitachi's systems)
5. Sustainable Technologies (Ex: eco-friendly manufacturing practices, energy-efficient devices, and contributions to the circular economy)

Additional Source:

<https://www.intellistride.com/blog/the-future-of-tech-emerging-trends-challenges-in-the-high-tech-industry/#:~:text=Amid%20these%20trends%2C%20the%20industry,and%20the%20refinement%20of%20strategies.>

<https://www.hitachi-hightech.com/global/en/company/corp-archives/corp-ref/profile-en.html>

Activity 2: Identify Customer Motivations

In the Hitachi High-Tech customer story, their motivations to do the SAP project are:

- To simplify its customer's high-tech processes (by manufacturing advanced equipment) and resolving various social issues using the three core technologies of measurement, analysis, and reasoning.
- To fit their business processes to standard as much as possible, reducing the need for customizations.

Activity 3: Identify the Customer's Business Goals

In the Hitachi High-Tech customer story, the customer's business goals are:

- Reduce the customization and maintenance complexity (in the existing business architecture, to fit the business processes to standard as much as possible).
- Be flexible and Agile (by scaling the resources up and down and minimizing the downtime, enhancing operational efficiency).
- Support innovation and be future-ready (foster continuous innovation and ensure the company is prepared for future technological advancements).

Activity 4: Identify Analysis Frameworks

To understand more about the customer's business goals in the Hitachi high-tech's customer story, I have selected the Strengths Weaknesses Opportunities Threats (SWOT) analysis framework and a Systems-thinking analysis approach.

A key business goal for the Hitachi High-Tech is to help resolve various social issues with their core observation, measurement and analysis technologies. I chose SWOT analysis because this framework will help Hitachi High-Tech Corporation build on its strengths, such as leveraging advanced technologies like Cloud-ERP and address its weaknesses, such as the previous extensive customization footprint. It will also uncover opportunities for market expansion and innovation while assessing potential threats like market competition and cybersecurity risks.

By using SWOT, we will gain a comprehensive understanding of Hitachi High-Tech's internal capabilities and external environment. This will provide insights into strategic areas for improvement and growth. One limitation of the SWOT analysis is that it doesn't prioritize the identified factors. It will be essential to work with Hitachi High-Tech to determine which issues are most critical. I will have to work with the customer to understand which of the issues identified in the SWOT are the most important for them.

I chose a Systems-thinking analysis approach as it helps looking at the organization holistically, understanding the interdependencies and interactions between different business processes say from manufacturing to data management considering Hitachi as a high-tech manufacturing global.

This will provide insights into how different processes and systems within Hitachi High-Tech are connected and how changes in one area can affect the entire organization. It will uncover opportunities for process optimization and to aim for cutting-edge manufacturing and R&D.

However, systems thinking can be complex and may require a deep understanding of the organization's processes and interactions. It may also need significant collaboration with the customer to accurately map out and understand that leverage points.

(a) SWOT Analysis (Optional)

<p>Strengths</p> <ul style="list-style-type: none"> - Strong technological capabilities in measurement, analysis, and reasoning. - World class technicians in manufacturing - Open innovation with universities and research institutions - Strategic partnership with US life sciences companies 	<p>Weaknesses</p> <ul style="list-style-type: none"> - Reliance on extensive customizations to existing ERP architecture that hindered agility. - Potential challenges in fully integrating and optimizing new technologies.
<p>Opportunities</p> <ul style="list-style-type: none"> - Create new businesses based on core technologies – anticipate increasingly complex and varied social issues, and use back casting to focus on growth markets - Can realize personalized healthcare through high quality, highly efficient diagnosis, minimally invasive therapy. - Market expansion, leveraging new tech and enhancing customer engagement, satisfaction. 	<p>Threats</p> <ul style="list-style-type: none"> - Rapid technological changes that require constant adaptation and innovation can also be a threat. - Market competition from other healthcare, nanotechnology, value chain and high-tech companies.

Task 3. Build your project team

Activity 1: Identify your role on the project team and why you have chosen it

I will be a Functional Consultant on the Hitachi SAP project team. I have chosen this role because I want to leverage my expertise in business processes within specific domains like procurement, supply chain as well as the expertise I am gaining in other fields. I understand the intricacies of these processes and how they can be optimized using SAP Solutions. My analytical skills and strong understanding of business processes and goals will enable me to effectively bring awareness to Hitachi High-Tech about the latest Cloud-ERP models offered by SAP (SAP S/4 HANA Cloud and SAP BTP). By doing so, I aim to help optimize their business processes and achieve their strategic objectives.

Activity 2: Describe the skills and expertise you'll bring

- **Listening and Communication Skills:** The first essential skill is the ability to listen carefully to understand their needs and expectations say achieving high quality and high functionality in the fields of diagnosis. Effective communication skills are equally important to clearly explain the proposed solutions, ensuring the customer feels fully understood and confident in the implementation process.

- **Systems Thinking:** This skill helps in understanding the cyclical value chains that integrate manufacturing value chain (planning, R&D, design, manufacturing, maintenance etc.) from start to end in the case of Hitachi High-Tech, allowing identification of leverage points in the processes for overall improvement.
- **Strategic Thinking:** Strategic thinking is crucial to comprehend the challenges faced by Hitachi High-Tech and to fully understand their business operations and current processes, enabling the development of tailored solutions that align with their strategic objectives.
- **Collaboration Skills:** Building strong, effective relationships with customers and end-users is essential for a successful long-term partnership. This ensures smooth collaboration and better understanding of the customer's ongoing needs.
- **Functional Skills:** Expertise in SAP functionalities and business process optimization is fundamental. Additionally, the ability to convert business requirements into technical specifications is crucial for bridging the gap between business needs and technical implementation. Communicating the functional knowledge about the solution to the stakeholders.

Activity 3: Identify the skill and expertise mix needed for the project

Project Manager

- **Experience:** Extensive experience in managing ERP implementation projects.
- **Responsibilities:** Overseeing the entire project lifecycle, ensuring that timelines are met, and managing the budget. The Project Manager will coordinate between various teams and stakeholders, mitigate risks, and ensure clear communication across all parties.

Technical Consultant

- **Experience:** Deep technical knowledge of SAP S/4HANA Cloud, including integration and customization capabilities.
- **Responsibilities:** Implementing technical aspects of the SAP system, including configuring the software to meet Hitachi's specific needs. The Technical Consultant will handle system integrations, data migrations, and any technical troubleshooting required during the project.

Data Analyst

- **Experience:** Strong background in data analysis and database management.
- **Responsibilities:** Ensuring the accuracy and integrity of data during migration from legacy systems to SAP S/4HANA Cloud. The Data Analyst will also set up and manage data analytics tools to help Hitachi derive insights from their business data.

Business Process Consultant

- **Experience:** In-depth understanding of business process optimization and ERP systems.

- Responsibilities: Analyzing Hitachi's current business processes and recommending improvements. The Business Process Consultant will align the SAP implementation with Hitachi's business goals, ensuring that the new system supports efficient and effective business operations.

Change Management Specialist

- Experience: Expertise in change management and organizational development.
- Responsibilities: Managing the human side of the SAP implementation, including training and supporting Hitachi employees. The Change Management Specialist will develop strategies to ensure smooth adoption of the new system and minimize resistance.

Quality Assurance (QA) Tester

- Experience: Proficiency in software testing methodologies and ERP systems.
- Responsibilities: Testing the SAP S/4HANA Cloud system to ensure it meets all requirements and functions correctly. The QA Tester will identify any bugs or issues and work with the Technical Consultant to resolve them before go-live.

Each role brings a specific set of skills and expertise necessary for the successful implementation of the SAP S/4 HANA Cloud system at Hitachi. The Project Manager ensures the project stays on track, while the Technical Consultant handles the technical setup and integration. The Data Analyst manages data integrity, and the Business Process Consultant ensures the system aligns with Hitachi's business goals. The Change Management Specialist focuses on user adoption and minimizing resistance, the QA Tester ensures the system works correctly, and the End-User Trainer prepares employees to use the new system effectively. Together, this team covers all aspects of the latest SAP update implementations, from technical setup to user training and support.

Activity 4: How the team will collaborate

- Regular Team Meetings: Ensure alignment on goals, progress, and issues.
- Integrated Planning: Coordinate between functional and technical roles to map and implement business processes update.
- Collaborative Problem-Solving: Work together to identify and resolve technical challenges.
- Training Support: Develop and deliver training programs for smooth system adoption.
- Continuous Feedback Loop: Implement a feedback system to address emerging issues promptly.
- Documentation Sharing: Maintain and share documentation for transparency and unified understanding.