Case Study Assignment
SAP Customer Analysis: Royal Greenland

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Part 1: Review Royal Greenland customer story materials

[In this part of the assignment task you'll prepare to join the Royal Greenland project. You'll research the customer's organization and technology landscape, using the customer story materials and other collateral provided to uncover the customer's digital transformation goals. There are four activities to complete:

- Activity 1: Identify the key stakeholders and parties collaborating to deliver the Royal Greenland project and explain the role played by each.
- Activity 2: Identify the digital transformation goals that Royal Greenland wants to achieve by doing the project.
- Activity 3: Explain which digital transformation component (business model, business process, or organizational and cultural transformation) is most impacted in the Royal Greenland case. Give examples.
- Activity 4: Identify key metrics that could help demonstrate the value or success of the SAP implementation at Royal Greenland (for example, saving time, saving cost, reducing errors etc.)]

Activity 1: Identify key stakeholders and explain their roles

[Identify the key stakeholders and parties collaborating to deliver the Royal Greenland project and explain the role played by each. Starting point examples are given below. Use the example to help you determine and complete your response.]

Key Stakeholders:

Royal Greenland: Royal Greenland is the primary stakeholder and project sponsor. The company is a seafood processing and marketing company that specializes in the production, processing, and distribution of cold-water shrimp, Greenland halibut, and other seafood products. The company is responsible for funding and overseeing the project's implementation.

Local Communities: The local communities where the project is taking place are also important stakeholders. The project's success will have an impact on the economic development of the area, and the local communities will benefit from employment opportunities and increased economic activity.

Government Authorities: Government authorities, including the national and local governments, are stakeholders in the project. They are responsible for providing regulatory oversight and ensuring that the project complies with all relevant laws and regulations. They are also responsible for providing necessary permits and licenses.

Contractors: Contractors are parties collaborating with Royal Greenland to implement the project. These contractors may include architects, construction companies, and other service providers responsible for building and equipping the facilities required for the project's success.
Suppliers: Suppliers are responsible for providing the necessary raw materials for the project, including seafood and other ingredients.

Investors: Investors are also stakeholders in the project. They provide the funding necessary to finance the project's implementation and expect a return on their investment.

Activity 2: Identify digital transformation goals

[In this activity you will identify the digital transformation goals or business outcomes that Royal Greenland wants to achieve by doing the project. A starting point example is given below. Use the example to help you determine and complete your response.]

Royal Greenland's digital transformation goals are:

- Increased efficiency and productivity: Digital technologies can help optimize and automate processes, leading to increased efficiency and productivity. This could involve using data analytics to identify areas for improvement in the production process or adopting automation technologies to streamline certain tasks.

- Improved quality control: The use of digital technologies such as sensors and IoT devices can help monitor and control various aspects of the production process, leading to higher quality products and reduced waste.

- Enhanced traceability and transparency: Digital technologies such as blockchain can help improve traceability and transparency in the supply chain, allowing for greater accountability and improved communication with stakeholders.

- Improved customer experience: By leveraging digital technologies such as e-commerce platforms and mobile apps, Royal Greenland could improve the customer experience and make it easier for customers to place orders and access information about their products.

- Increased innovation: Digital transformation can help drive innovation and new product development, allowing Royal Greenland to stay competitive in a rapidly changing market.

Activity 3: Explain which digital transformation component is impacted

[In this activity you will explain which digital transformation component is most impacted in the Royal Greenland case: business model transformation, business process transformation, or organizational and cultural transformation. Once you have identified the component, give an example of this impact in the Royal Greenland case. A starting point example is given below. Use the example to help you determine and complete your response.]

The following digital transformation component is impacted:

Business model transformation involves rethinking the organization's overall business model to adapt to changing market conditions and customer needs. If Royal Greenland is implementing a new digital business model, such as a direct-to-consumer e-commerce platform or a new product line leveraging digital technology, this would be a significant business model transformation.

Business process transformation involves rethinking and optimizing existing business processes to improve efficiency and productivity. If Royal Greenland is implementing new digital technologies and tools to streamline their seafood processing operations, this would represent business process transformation.

Organizational and cultural transformation involves changing the way the organization operates and its culture to better support digital transformation initiatives. This could involve new leadership structures, changes to employee training and skillsets, and a new focus on innovation and agility. If Royal Greenland is restructuring its organization or making changes to its culture and values to support digital transformation, this would represent organizational and cultural transformation.

Activity 4: Identify key metrics to demonstrate SAP solution value

[In this activity you will identify key metrics that could help demonstrate the value or success of the SAP implementation at Royal Greenland (for example, saving time, saving cost, reducing errors, etc.). A starting point example is given below. Use the example to help you determine your response]

Key metrics that could demonstrate the value or success of the SAP implementation are:

- Time savings: Measuring the time it takes to complete tasks before and after the SAP implementation can help quantify any time savings achieved. This could include time savings in production planning, procurement, and logistics.

- Cost savings: Implementing SAP could result in cost savings by reducing manual effort, improving efficiency, and optimizing processes. Measuring the costs associated with these processes before and after the implementation can help quantify any cost savings achieved.

- Reduction in errors: The SAP implementation could help reduce errors in processes such as inventory management, production planning, and order fulfillment. Measuring the frequency and severity of errors before and after the implementation can help demonstrate the impact of the SAP system on error reduction.

- Improved inventory management: SAP can help improve inventory management by providing real-time data on inventory levels and demand, reducing the risk of stock outs and excess inventory. Measuring inventory turnover and accuracy before and after the SAP implementation can help demonstrate the impact on inventory management.

- Increased data visibility: SAP can help improve data visibility across the organization, enabling better decision-making and more accurate forecasting. Measuring the availability and accuracy of data before and after the SAP implementation can help demonstrate the impact on data visibility.

- Customer satisfaction: SAP can help improve customer satisfaction by providing better order tracking, faster order fulfillment, and improved communication. Measuring customer satisfaction before and after the SAP implementation can help demonstrate the impact on customer experience.

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Part 2: Understand SAP BTP capabilities

[During the course, we introduced the SAP Business Technology Platform (SAP BTP) as an example of a Platform as a Solution or 'PaaS' product. We explained that BTP is designed to accelerate digital transformation by helping companies quickly, easily, and economically develop the exact application they need without investing in on-premises infrastructure (see Module 3 Lesson 2, Operating Systems and Platforms video). In this part of the assignment, you'll refresh your understanding of SAP BTP capabilities using the provided resources, then complete these activities:

- Activity 1: What are the four (4) main technology capabilities or components of SAP BTP?
- Activity 2: Identify the SAP BTP capabilities Royal Greenland needs to achieve their digital transformation goals. How they are used in the solution described in the customer story?]

Activity 1: Identify SAP BTP technology capabilities

[What are the four (4) main technology capabilities or components of SAP BTP? A starting point example is given below. Use the example to help you determine and complete your response:]

SAP BTP technology capabilities:

- Integration: SAP BTP provides integration capabilities that enable customers to connect and integrate their SAP and non-SAP systems and applications, both on-premises and in the cloud. This includes pre-built connectors and adapters, as well as an integration suite for building custom integrations.

- Extension: SAP BTP provides extension capabilities that enable customers to extend their SAP solutions with custom functionality, such as mobile apps, web applications, and workflow automation. This includes tools and frameworks for building and deploying custom extensions, as well as a marketplace for discovering and sharing extensions built by SAP and its partners.

- Analytics: SAP BTP provides analytics capabilities that enable customers to gain insights from their data, both in real-time and over time. This includes a range of analytics tools and services, such as SAP Analytics Cloud, SAP Data Warehouse Cloud, and SAP HANA, as well as machine learning and artificial intelligence services for predictive analytics and automation.

- Application development: SAP BTP provides application development capabilities that enable customers to build, deploy, and manage cloud-native applications on SAP's infrastructure. This includes a range of tools and services for application development, such as SAP Cloud Platform, SAP Build, and SAP Web IDE, as well as support for modern development languages and frameworks such as Node.js, Java, and Python.

Activity 2: Identify the SAP BTP capabilities needed to achieve customer goals

[In this activity you will name which of the SAP BTP capabilities you think Royal Greenland needs to achieve their digital transformation goals and how these capabilities will be used in the solution described in the customer story. Use the example to help you determine and complete your response]

Based on the customer story, it appears that Royal Greenland is primarily focused on business process transformation and organizational and cultural transformation as part of their digital transformation goals. To achieve these goals, Royal Greenland may need to leverage several SAP BTP capabilities, including:

- Integration: Royal Greenland may need to integrate their SAP and non-SAP systems and applications to streamline their business processes and improve data accuracy. For example, integrating their ERP system with their seafood processing and logistics systems could provide real-time visibility into inventory levels and production status, enabling better decision-making and resource allocation.

- Extension: Royal Greenland may need to extend their SAP solutions with custom functionality to better support their business processes and workflows. For example, developing a custom mobile app to track inventory levels and shipments could improve efficiency and reduce errors.

- Analytics: Royal Greenland may need to leverage analytics capabilities to gain insights from their data and optimize their operations. For example, using predictive analytics to forecast demand and production levels could help them optimize their supply chain and reduce waste.

- Application development: Royal Greenland may need to develop cloud-native applications to support their digital transformation goals. For example, building a new e-commerce platform on SAP Cloud Platform could enable them to expand their direct-to-consumer sales and improve customer experience.

Overall, Royal Greenland's digital transformation will likely require a holistic approach that leverages multiple SAP BTP capabilities to achieve their goals. By integrating their systems, extending their SAP solutions with custom functionality, leveraging analytics to gain insights from their data, and developing cloud-native applications, Royal Greenland can improve their business processes, optimize their operations, and achieve their digital transformation goals.

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Part 3: Review the end-to-end SAP Solution

[In this part of the assignment, you'll explore the SAP solution in more depth. Before you begin, refresh your understanding of the Royal Greenland landscape by reviewing the case study materials again. There are four activities to complete:

- Activity 1: Describe the end-to-end SAP solution
- Activity 2: Describe the key considerations for system design and development
- Activity 3: Draw a diagram to show how data flows through the solution
- Activity 4: Describe technology areas impacted by further development.]

Activity 1: Describe the end-to-end SAP solution

[Write a paragraph describing the key elements of the end-to-end SAP solution. Hint: Which parts of the solution are the 'front-end' or end-user facing? Which parts of the solution are the 'back-end' – the parts that manage systems, storage, and data? How does SAP BTP connect or integrate the front-end applications and the back-end systems to create the end-to-end solution? What kind of architecture is being used (for example, Private, Public, Hybrid, Multi-Cloud)? For a refresher on the elements of System Design and Development, see Course 2 Module 3. Use the example to help you determine and complete your response.]

The end-to-end SAP solution for Royal Greenland is a comprehensive suite of integrated software applications that spans their entire business, from seafood processing to sales and logistics. The solution consists of several key elements, including an SAP S/4HANA ERP system, which serves as the central repository for all transactional data and provides real-time visibility into inventory, production, and financials.

In addition to the ERP system, the solution includes several other SAP applications, such as SAP Transportation Management for logistics, SAP Extended Warehouse Management for inventory management, and SAP Sales and Distribution for sales order processing.

The solution also leverages several SAP BTP capabilities, such as integration, extension, analytics, and application development, to support Royal Greenland's digital transformation goals. The end-to-end SAP solution is designed to streamline Royal Greenland's business processes, improve operational efficiency, and provide a platform for continued growth and innovation.

Activity 2: Describe considerations for system design and development

[Describe the key system and design considerations for the project team as they build the end-to-end solution represented in the App Architecture diagram. Use the example to help you determine and complete your response. Hint: What do you think the project team will have to consider with respect to:

- Computing Models – for example, Compute Network Storage, OnPrem, Cloud?
- Architecture – for example, Private, Public, Hybrid, Multi-Cloud?
- Operating Systems and Platforms – for example, SAP BTP?
- Application Development – for example, Mobile, Web)?
- Programming languages – for example, what languages might be used to develop the different apps?
- Data analytics – for example, what kind of data will need to be captured and analyzed?
- Security – for example, consider which of the five information security layers will be impacted most by the proposed solution (environment, system, application, process, and organization)?]

As the project team builds the end-to-end solution for Royal Greenland, there are several key system and design considerations they will need to take into account. These considerations include:

- Computing Models: The team will need to decide which computing model(s) to use for the various components of the solution. For example, they may choose to host the ERP system and other mission-critical applications on-premises for greater control and security, while leveraging cloud-based infrastructure for less critical applications and data storage.

- Architecture: The team will need to determine which architecture(s) to use for the solution. For example, they may opt for a hybrid architecture that combines on-premises and cloud-based resources to balance performance, scalability, and security.

- Operating Systems and Platforms: The team will need to select the appropriate operating systems and platforms to run the various components of the solution. For example, they may choose to run the ERP system on SAP S/4HANA, while using SAP Cloud Platform for application development and integration.

- Application Development: The team will need to decide which application development tools and methodologies to use to build the custom applications that will extend and enhance the SAP solutions. For example, they may use agile development methodologies and develop both mobile and web applications.

- Programming Languages: The team will need to select the appropriate programming languages for the various applications being developed. For example, they may use Java for developing custom applications on SAP Cloud Platform, while using other languages such as Swift for mobile application development.

- Data Analytics: The team will need to determine what types of data will be captured and analyzed to support Royal Greenland's business processes and goals. For example, they may capture data on production volumes, inventory levels, and sales trends to help optimize supply chain management and demand planning.

- Security: The team will need to consider the security implications of the proposed solution and take steps to secure the environment, systems, applications, processes, and organization. For example, they may implement access controls and encryption to protect sensitive data, and conduct regular security assessments to identify and mitigate potential vulnerabilities.

Activity 3: Draw a diagram to show how data flows through solution

[A simple flow diagram with descriptive labels is sufficient here; it does not need to be a full logical design. To develop your diagram, you can either:

- Use the Data Flow Diagram Template (follow the link provided on the course page to open a Google Slides document) as a starting point. In the template, you can match the data labels to the correct box and then identify the tool represented; or
- Draw the diagram free hand on paper; or
- Develop the diagram in a drawing app (e.g. MS Procreate).

Select, copy and paste your diagram slide, picture, or screenshot below so that it is included in your final Case Study Assignment document. In your diagram, show the linkages between how and where data is:

- Captured or Sourced (for example, through application(s)?)
- Analyzed (for example, analytics or business intelligence software?)
- Distributed (that is, where is data sent to – for example, other systems?)
- Augmented (that is, where more information or data is added to existing records)
- Stored (for example, database(s)?

Tip: to save time when completing Part 5, copy your diagram slide into your final Executive Summary deck to cover this activity in your findings summary.]

Data flow through the solution

The data flows through the end-to-end solution starting from the seafood processing plants, where it is captured and recorded in the SAP S/4HANA ERP system. From there, the data flows through various components of the solution, such as SAP Transportation Management and SAP Extended Warehouse Management, where it is used to optimize logistics and inventory management processes. The data is also used in SAP Sales and Distribution to manage sales orders and customer relationships.

To support Royal Greenland's digital transformation goals, data is also fed into various analytics and reporting tools, such as SAP Analytics Cloud and SAP Data Warehouse Cloud, where it is used to generate insights and support decision-making. The solution also includes custom applications developed on SAP Cloud Platform, which can interact with the various SAP systems and other data sources to provide additional functionality and value. Overall, the end-to-end solution for Royal Greenland is designed to provide real-time visibility into all aspects of the business and enable data-driven decision-making at all levels.

Activity 4: Describe technology areas impacted by further solution development

The Future Plans paragraph in the Royal Greenland customer story (web page article) describes the scenarios Royal Greenland has for future development, including “building an e-commerce platform for buying fishing equipment and using apps to help authorities find boats that are lost at sea” and “innovating in the area of financial literacy, providing fishers with an overview of their finances as well as tools to help them set budgets and build savings”. Imagine that these potential projects are moving forward. As a technology consultant, part of your role is to help advise Royal Greenland on the use of information technology to meet the business objectives described in these scenarios.

If Royal Greenland is planning to build an e-commerce platform for buying fishing equipment, there are several technology areas that will be impacted by this development. Firstly, the company will need to ensure that the platform is user-friendly and can handle a high volume of transactions. This may require the use of technologies such as cloud-based infrastructure, microservices architecture, and containerization to ensure scalability and reliability. Additionally, the platform will need to be integrated with Royal Greenland's existing systems, such as SAP S/4HANA, to ensure a seamless flow of data and enable real-time inventory management.

In the case of the scenario where Royal Greenland plans to use apps to help authorities find boats that are lost at sea, there are several technology areas that will be impacted as well. The app will require the use of GPS tracking technology to monitor the location of fishing boats in real-time. This may require the use of cloud-based infrastructure and edge computing to enable real-time data processing and analysis. Additionally, the app may require the use of machine learning algorithms to analyze patterns in boat movements and identify potential areas of risk.

Finally, if Royal Greenland is planning to innovate in the area of financial literacy, providing fishers with an overview of their finances as well as tools to help them set budgets and build savings, the company will need to leverage technologies such as mobile app development, data analytics, and artificial intelligence. The app will need to be user-friendly and provide personalized recommendations based on the fisher's financial data. Data analytics will play a critical role in identifying patterns and trends in the fishers' financial behavior, which can then be used to provide targeted advice and guidance. Additionally, artificial intelligence may be used to develop predictive models that can help fishers plan for future expenses and optimize their savings.

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Part 4: Assess how the SAP solution supports digital transformation

[In this part of the assignment, we'll look at the big picture – how does implementing the end-to-end SAP solution help Royal Greenland meet its digital transformation goals and become an intelligent and sustainable enterprise? Review the resources provided to refresh your understanding of what is meant by the term "intelligent, sustainable enterprise". Then complete the activities:

- Activity 1: Describe how SAP BTP supports Royal Greenland's digital transformation goals and its journey toward becoming an intelligent and sustainable enterprise.
- Activity 2: Identify the elements of the SAP project and solution that contribute to Royal Greenland's Quadruple bottom line (People, Planet, Profit, and Purpose)]

Activity 1: Describe how SAP BTP supports customer digital transformation goals

[Write a short paragraph describing how implementing SAP BTP supports Royal Greenland's digital transformation goals and its journey toward becoming an intelligent and sustainable enterprise. Use the example to help you determine and complete your response]

My work:

SAP BTP supports Royal Greenland's digital transformation goals by:

- [...]
- [...]
- [...]

Prompts to help you think through and develop a complete response [Delete this section before assignment submission]

SAP BTP supports Royal Greenland's digital transformation goals by:

- Providing a unified environment that simplifies app development….
- Hint: Go back to the digital transformation goals you identified in Part 1 and think about how SAP BTP enables each goal.

Activity 2: Identify how the SAP solution contributes to the Quadruple bottom line

[Identify the elements of the SAP project and solution that contribute to Royal Greenland's Quadruple bottom line (People, Planet, Profit, and Purpose). Use the example to help you determine and complete your response]

My work:

People	Planet	Profit	Purpose

Prompts to help you think through and develop a complete response [Delete this section before assignment submission]

People	**Planet**	**Profit**	**Purpose**
How are people impacted? What is easier or simpler for them?	Sustainable business model in sensitive marine environment What else?	Think about savings along with other profits?	Support and invest in local fishing communities What else?

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