Case Study Assignment  
SAP Customer Analysis: Royal Greenland

Part 1: Review Royal Greenland customer story materials

**Activity 1: Identify the key stakeholders and their roles**

**Key stakeholders and collaborators:**

1. **Royal Greenland Internal Teams:**
   * **Procurement and Supply Chain Team:** Ensures sustainable and efficient seafood procurement and manages traceability from catch to consumer.
   * **IT Department:** Supports system integration and works closely with SAP to implement digital solutions.
   * **Operations and Logistics Teams:** Coordinate the implementation of technology into daily fishing, processing, and logistics workflows.
2. **SAP:**
   * Provides the SAP Business Technology Platform (BTP) as the backbone of the digital transformation.
   * Collaborates to design and implement applications tailored to Royal Greenland’s needs.
3. **Trifork (SAP Ecosystem Partner):**
   * Assists in app development and customization on SAP BTP.
   * Brings additional expertise in digital solutions and agile methodologies.
4. **Local Fishing Communities:**
   * Collaborate by providing real-time data on catches, which supports sustainability and traceability efforts.
5. **Customers and End-Consumers:**
   * Drive demand for sustainable and traceable seafood products, indirectly influencing project requirements.

**Activity 2: Identify the digital transformation goals**

**Digital transformation goals for Royal Greenland:**

1. **Enhance sustainability:**
   * Ensure seafood is sustainably sourced and meets environmental regulations.
2. **Improve product traceability:**
   * Register seafood from each catch to comply with quality and traceability requirements.
3. **Optimize procurement and supply chain processes:**
   * Digitize and streamline procurement to reduce inefficiencies and errors.
4. **Support local fishing communities:**
   * Empower local fishermen through easier-to-use digital tools, ensuring compliance and operational ease.
5. **Increase operational efficiency:**
   * Automate manual processes to save time and reduce labor-intensive activities.
6. **Ensure customer satisfaction:**
   * Deliver high-quality, traceable products to global customers.

**Activity 3: Most impacted digital transformation component**

**Key impacted component:**  
**Business Process Transformation**

**Examples:**

* **Digital seafood registration process:** Transition from manual to automated, app-based data entry.
* **Integrated supply chain management:** Using SAP BTP apps for real-time tracking of seafood from catch to delivery.
* **Streamlined procurement workflows:** Improved accuracy and efficiency in supplier and contract management.

While cultural shifts and some aspects of the business model may also evolve, the core transformation focuses on how Royal Greenland operates its procurement, logistics, and traceability processes.

**Activity 4: Key metrics for measuring value and success**

1. **Operational Efficiency Metrics:**
   * Time saved in data entry and reporting through app-based seafood registration.
   * Reduction in procurement cycle time.
2. **Accuracy and Error Reduction:**
   * Number of manual errors reduced in seafood traceability and procurement workflows.
3. **Sustainability and Compliance:**
   * Percentage of seafood with verified traceability to local fishing communities.
   * Number of sustainability certifications achieved or maintained.
4. **Financial Performance Metrics:**
   * Cost savings in operations due to process automation.
   * Increase in revenue or profitability through better supply chain optimization.
5. **Customer Satisfaction:**
   * Positive feedback scores from customers regarding product traceability and quality.

Part 2: Understand SAP BTP capabilities

**Activity 1: Four main technology capabilities or components of SAP BTP**

1. **Database and Data Management:**
   * Provides centralized data storage and management to ensure consistency, availability, and reliability.
2. **Analytics:**
   * Enables real-time reporting and data visualization to support decision-making.
3. **Application Development and Integration:**
   * Offers tools and platforms for developing custom applications and integrating various systems seamlessly.
4. **Intelligent Technologies:**
   * Includes AI, machine learning, and IoT capabilities for automating processes and enhancing operations.

**Activity 2: SAP BTP capabilities used by Royal Greenland**

**1. Database and Data Management:**

* **How used:**  
  Royal Greenland leverages SAP BTP’s centralized database to register and trace seafood catches. The platform ensures data is securely stored and easily accessible for traceability and compliance reporting.

**2. Application Development and Integration:**

* **How used:**  
  Custom applications were developed on SAP BTP to digitize seafood registration and procurement processes. These apps integrate with existing systems, creating a seamless flow of data across operations, logistics, and sales.

**3. Analytics:**

* **How used:**  
  SAP BTP’s analytics tools provide insights into catch data, procurement efficiency, and supply chain performance. This supports decision-making and helps track sustainability goals.

**4. Intelligent Technologies:**

* **How used:**  
  IoT and machine learning are employed to automate data collection from fishing activities and optimize supply chain operations. This reduces manual intervention and improves accuracy.

**Linking SAP BTP to Digital Transformation Goals:**

* **Sustainability and Traceability:**  
  SAP BTP ensures all seafood is registered and traceable through a central system, enhancing compliance and meeting consumer demands for sustainable products.
* **Operational Efficiency:**  
  Custom apps and integrated systems reduce the time and errors associated with manual processes, streamlining procurement and logistics workflows.
* **Customer Satisfaction:**  
  Real-time data and analytics help Royal Greenland consistently deliver high-quality, traceable products, reinforcing trust with customers.

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

**Activity 1: End-to-end solution chosen by Royal Greenland**

**Front-End Components (User-Facing):**

1. **Mobile Apps for Fishermen:**
   * Used to register seafood catches directly at sea.
   * Simplifies data entry and ensures compliance with sustainability regulations.
2. **Web Interface for Managers:**
   * Provides tools for monitoring catch data and procurement workflows in real-time.

**Back-End Components (Systems and Data Management):**

1. **SAP Business Technology Platform (BTP):**
   * Acts as the central backbone, connecting front-end apps with back-end systems.
   * Handles data integration, storage, and system management.
2. **Data Storage and Processing:**
   * Centralized databases ensure all catch and procurement data is stored securely and is accessible for analysis.

**Integration via SAP BTP:**

* **Data Integration:** Seamlessly connects mobile and web applications with the back-end SAP systems.
* **Real-Time Synchronization:** Ensures data flows continuously between all components.

**Architecture Type:**

* **Hybrid Cloud:** Combines private and public cloud resources for flexibility and security.

**Activity 2: Key system and design considerations**

**1. Computing Models:**

* **Choice:** Hybrid cloud with a mix of on-premises systems and SAP Cloud services.
* **Consideration:** Ensuring seamless integration between local infrastructure and cloud services for real-time data flow.

**2. Architecture:**

* **Type:** Hybrid Cloud Architecture.
* **Consideration:** Balancing scalability, security, and latency for global operations.

**3. Operating Systems and Platforms:**

* **Platform:** SAP BTP.
* **Consideration:** Leveraging BTP’s scalability, data management, and integration capabilities while ensuring compatibility with existing systems.

**4. Application Development:**

* **Type:** Mobile (for fishermen) and web-based (for managers and logistics).
* **Consideration:** User-friendly design for mobile apps, ensuring offline functionality when at sea.

**5. Programming Languages:**

* **Examples:**
  + **Mobile Apps:** Swift (iOS), Kotlin (Android), or cross-platform tools like Flutter.
  + **Back-End Integration:** Java, JavaScript, or Python for app logic and APIs.
  + **Front-End Web Apps:** JavaScript frameworks like Angular or React.

**6. Data Analytics:**

* **Data Needs:** Catch data, procurement trends, compliance reporting, sustainability metrics.
* **Consideration:** Implementing real-time dashboards and predictive analytics for decision-making.

**7. Security:**

* **User Security:** Role-based access controls to protect sensitive data.
* **Data Security:** Encrypting data in transit and at rest; ensuring compliance with GDPR and other regulations.

**Activity 3: Data Flow Diagram**

**Data Flow Overview:**

1. **Data Capture:**
   * Fishermen use mobile apps to record seafood catches, including species, quantity, and location.
2. **Data Transmission:**
   * Data is transmitted via secure APIs to SAP BTP.
3. **Data Processing and Analysis:**
   * SAP BTP processes and stores the data. Analytics modules generate insights for compliance and operations.
4. **Data Distribution:**
   * Processed data is made available to:
     + Procurement teams for supply chain decisions.
     + Logistics teams for shipment planning.
     + Managers via dashboards for monitoring KPIs.
5. **Data Augmentation:**
   * AI and machine learning algorithms enhance data with predictions and optimization insights.
6. **Data Storage:**
   * Centralized cloud storage for all catch and procurement data.

**Diagram Development:**

* Create a high-level diagram showing these flows. Include components like mobile apps, APIs, SAP BTP, analytics modules, and end-users.

**Activity 4: Technology areas impacted by further solution development**

1. **E-Commerce Platform for Fishing Equipment:**
   * **Technology Impact:**
     + Web development tools for building an online marketplace.
     + Payment gateway integration for transactions.
     + Inventory management systems for tracking equipment availability.
2. **Apps for Locating Lost Boats:**
   * **Technology Impact:**
     + IoT devices for boat tracking and location sharing.
     + GPS and real-time data integration into mobile apps.
     + Advanced mapping and geofencing tools.
3. **Financial Literacy Tools for Fishers:**
   * **Technology Impact:**
     + Personal finance apps with budgeting and savings calculators.
     + Data analytics for tracking income and expenses.
     + Integration with local banking systems for real-time financial insights.

Part 4: Assess how the SAP solution supports digital transformation

**Activity 1: How SAP BTP supports Royal Greenland’s digital transformation goals**

SAP BTP is central to enabling Royal Greenland to achieve its digital transformation objectives and align with its vision of becoming an **intelligent and sustainable enterprise.** Here's how:

1. **Enhanced Sustainability:**
   * **Traceability:** SAP BTP enables real-time tracking of seafood from catch to consumer, ensuring compliance with environmental regulations and sustainability goals.
   * **Data-Driven Decisions:** The platform provides insights that support sustainable fishing practices and optimize resource usage.
2. **Operational Efficiency:**
   * **Process Automation:** Manual processes, such as catch registration and procurement workflows, are digitized through SAP BTP, reducing time and errors.
   * **Seamless Integration:** SAP BTP integrates data across operations, logistics, and sales, ensuring smooth workflows and better coordination.
3. **Customer and Stakeholder Satisfaction:**
   * **Quality Assurance:** Real-time monitoring ensures product quality and compliance, improving customer trust and satisfaction.
   * **Transparency:** Enhanced traceability and data visibility support ethical sourcing practices that resonate with modern consumers.
4. **Innovation Enablement:**
   * SAP BTP serves as a foundation for future innovations, such as e-commerce platforms for fishing equipment and financial tools for fishers, promoting adaptability and growth.
5. **Support for Local Communities:**
   * The mobile apps empower local fishermen by simplifying data entry and providing real-time insights, fostering better collaboration.

**Activity 2: Contribution to the Quadruple Bottom Line (People, Planet, Profit, and Purpose)**

**1. People:**

* **Empowerment of Fishers:** Mobile apps streamline their work, reduce administrative burdens, and provide financial literacy tools.
* **Improved Workflows:** Employees across procurement, logistics, and sales benefit from streamlined and efficient processes.

**2. Planet:**

* **Sustainable Practices:** Real-time tracking and data analytics promote responsible fishing and help prevent overfishing.
* **Reduced Waste:** Enhanced planning minimizes supply chain inefficiencies, reducing spoilage and waste.

**3. Profit:**

* **Cost Savings:** Automation and error reduction lower operational costs.
* **Increased Revenue:** Enhanced supply chain efficiency ensures timely delivery, improving market competitiveness.
* **Market Expansion:** Innovations like e-commerce platforms open new revenue streams.

**4. Purpose:**

* **Commitment to Sustainability:** SAP BTP supports Royal Greenland’s mission to balance economic growth with environmental stewardship.
* **Community Engagement:** By supporting local fishing communities, Royal Greenland aligns its business goals with societal impact.

**Executive Summary Deck: Suggested Outline**

**Slide 1: Title Slide**

* Project Title: *Royal Greenland Digital Transformation with SAP BTP*
* Subtitle: *Achieving Sustainability and Operational Excellence*
* Branding: Include logos of Royal Greenland and SAP.

**Slide 2: Introduction**

* Overview of Royal Greenland and its sustainability mission.
* Brief description of SAP BTP and its role in digital transformation.

**Slide 3: Digital Transformation Goals**

* Sustainability (traceability and compliance).
* Operational efficiency (automation and integration).
* Innovation and future-readiness.

**Slide 4: SAP BTP Solution Architecture**

* Highlight front-end and back-end components.
* Diagram of data flow and integration.

**Slide 5: Quadruple Bottom Line Impact**

* People: Empowering fishers and employees.
* Planet: Promoting sustainability.
* Profit: Driving efficiency and revenue.
* Purpose: Aligning business with societal values.

**Slide 6: Key Outcomes**

* Time and cost savings.
* Improved sustainability metrics.
* Enhanced customer satisfaction.

**Slide 7: Future Opportunities**

* E-commerce for fishing equipment.
* Financial literacy apps for fishers.
* Innovations in IoT for safety at sea.

**Slide 8: Conclusion and Next Steps**

* Summary of achievements.
* Roadmap for future developments.