**Business Case-Healthify**

**Introduction**

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| **Business Case Conceptual Structure** | **Definitions** |
|  | **Customer:**  A customer is an individual or business that purchases another company's goods or services.  Customers are important because they drive revenues; without them, businesses cannot continue to exist.  **Supplier**:  A supplier is a person, business, or entity that provides products, data or services to another entity.  **Stakeholder**:  A person with an interest or concern in something, especially a business.  Stakeholders encompass all individuals or groups who have a vested interest in the performance of the business.  **Business Model:**  The term *business model* refers to a company's plan for making a profit. *Examples: Freemium, Subscription, Advertising, etc.*  **Distribution Channel:**  A distribution channel is a path that a product or service could take on its way to market. What's a direct distribution channel? A direct distribution channel is one where a company sells directly to the consumer, usually through their website or retail store. |

**Team No:4**

**Application Name:** **Healthify**

*Business case should be documented by completing the table below (Answers column).*

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| **Category** | **BC Section** | **Questions** | **Answers** |
| WHAT? | **Value Propositions** | What Customer business needs are we satisfying? | The website we're planning to develop addresses several critical customer business needs in the healthcare sector:  **1.Convenience and Accessibility:** By offering a platform accessible through both web and mobile devices, we're catering to the modern lifestyle where individuals seek convenience and accessibility in managing their healthcare needs anytime, anywhere.  **2.24/7 Accessibility:** Our platform will be available round-the-clock, ensuring that customers can access healthcare services and information whenever they need it, without being constrained by traditional office hours or geographical limitations.  **3.Comprehensive Healthcare Services:** Our platform provides a one-stop solution for various medical needs by featuring different types of doctors and specialists, ensuring that customers can find the right healthcare professional for their specific requirements without the hassle of searching multiple sources.  **4.Efficient Appointment Management:** The ability for patients to schedule appointments through the website streamlines the process, reducing administrative burdens for both patients and healthcare providers, thus meeting the need for efficient appointment management.  **5.Transparent Billing and Reporting:** By allowing patients to access billing information and view test results securely, we're addressing the need for transparency and empowerment in managing healthcare finances and understanding medical outcomes.  **6.Premium Service Offering:** Introducing a premium account option with features like free video sessions fulfills the demand for personalized and enhanced healthcare experiences, catering to individuals seeking additional benefits and value-added services.  Overall, our website aims to satisfy customer business needs by offering a modern, convenient, and comprehensive healthcare management solution that prioritizes transparency, efficiency, personalized care, and 24/7 accessibility. |
| What value do we add to the Customers? | Our website adds considerable value to customers by saving them valuable time and enhancing convenience in several ways:  **1.Reduced Waiting Time:** Through our efficient appointment scheduling system, customers can book appointments with doctors and specialists without the need for long wait times typically associated with traditional healthcare settings. This means they spend less time waiting for appointments and more time receiving the care they need.  **2.Online Consultations:** Our platform offers the option for online consultations with healthcare professionals, eliminating the need for customers to travel to a physical location for minor consultations or follow-ups. This saves them the time and hassle of commuting, making healthcare more accessible and convenient.  **3.Time Saved on Travel:** By providing access to healthcare services remotely, we help customers save time on travel to and from healthcare facilities. This is particularly beneficial for individuals with mobility issues, busy schedules, or those living in remote areas, as they can receive quality care without the need for extensive travel.  **4.Efficient Information Access:** Customers can access their medical records, test results, and billing information online, avoiding the need to visit healthcare facilities in person to obtain this information. This saves them time and effort while ensuring they have easy access to important healthcare data whenever they need it.  **5.Premium Convenience Features:** Our premium account option offers additional convenience features such as free video sessions with healthcare professionals. This allows customers to receive personalized care from the comfort of their own homes, saving them time and providing a more comfortable healthcare experience.  Overall, our website significantly enhances the healthcare experience for customers by saving them time, reducing the need for unnecessary travel, and offering convenient access to essential healthcare services and information. |
| **Type of Business Model** | What type of a business model do we adopt? | **1. Subscription and Licensing Model:**  • Description: Healthcare institutions subscribe to our system, paying a recurring subscription fee based on factors like the size of the institution, number of users, and features included. Licensing options are also available for third-party developers, software vendors, or entities integrating our system into their products.  • Benefits: Ensures a steady and recurring revenue stream from primary users and expands reach through licensing partnerships.  **2. Customization and Integration Services:**  • Description: Offer customization and integration services to healthcare organizations, tailoring the system to meet their unique requirements. Charge fees for initial setup, integration with existing systems, and customization based on specific needs.  • Benefits: Provides a personalized solution, meeting the specific needs of each client, and generates revenue through service offerings.  **3. Training and Support Services:**  • Description: Provide training sessions and ongoing support services for healthcare professionals and staff using our system. Charge fees for training programs, documentation, and premium support packages.  • Benefits: Enhances user proficiency, ensures smooth system implementation, and creates an additional revenue stream through support services.  **4. Data Analytics and Reporting Services:**  • Description: Offer advanced data analytics and reporting services as an add-on to the basic subscription. Healthcare organizations may pay for in-depth insights, including performance metrics, trend analysis, and actionable data.  • Benefits: Adds value through data-driven insights and creates an additional revenue stream.  **5. Partnerships and Integration Fees:**  • Description: Collaborate with healthcare technology partners, medical device manufacturers, and other service providers. Charge integration fees for seamless connectivity, creating a more comprehensive ecosystem.  • Benefits: Expands the system's functionality, fosters partnerships, and generates revenue through integration services.  **6. Telemedicine Integration:**  • Description: Charge additional fees for telemedicine features, including telehealth consultations, virtual appointments, or remote monitoring services. Can be a separate revenue stream or bundled into subscription packages.  • Benefits: Addresses the growing demand for telemedicine services and creates an additional revenue stream.  **7. Compliance and Regulatory Services:**  • Description: Provide services to ensure healthcare organizations using our system comply with industry regulations. Charge fees for regulatory compliance assessments, updates, and ongoing support.  • Benefits: Enhances system reliability, ensures regulatory compliance, and generates revenue through compliance services.  **8. Upgrades and Add-Ons:**  • Description: Offer premium features, modules, or add-ons for healthcare organizations looking to enhance their system capabilities. Charge additional fees for these upgrades.  • Benefits: Encourages continuous system improvement and generates revenue through premium feature offerings.  **9. Referral Fees for Ancillary Services:**  • Description: Collaborate with ancillary service providers, earning referral fees for directing healthcare organizations to services like diagnostic labs or medical equipment suppliers.  • Benefits: Creates a referral network, adds value to the ecosystem, and generates revenue through referral fees.  **10. Advertising Revenue:**  • Description: Incorporate advertising within the system, offering ad space to health insurance providers, pharmacies, and other relevant entities. Generate revenue through targeted advertisements.  • Benefits: Diversifies revenue streams, leveraging the platform's user base for advertising income. |
| **Key Resources** | What Key Resources do our value propositions require? | The key resources required to support the value propositions of our Health Care Management System can be broadly categorized into technological, human, and data resources:  **1.Development Team:** The development team is crucial to create, maintain, and update web applications and ensure compatibility with hosting platforms and databases that form the Health Care Management system.   * **Development Team:**   Software Developers  Frontend and backend developers   * **Project Management:**   Project Manager  Scrum Master  QA Quality Assurance and Testing team  **2.Technology Infrastructure:** Technology infrastructure is essential to ensure the Health Care Management system runs smoothly. This includes servers, hosting platforms, cloud services, and the necessary hardware and software components.   * **Software and Technologies:**   Programming Language - Java  Database management systems – MySQL or Google Database  Front-end technologies – HTML, CSS, JavaScript  Integrated Development Environment (IDE)  Version control systems – GIT  Platforms - Aws and Jenkins  Project management tools - JIRA |
| What are our Distribution Channels? | Our distribution channels focus on digital platforms and partnerships to reach a broad audience within the health ecosystem.   1. **College Presentation:**   Presenting the healthcare management system project within the college to faculty members, fellow students, and relevant departments.   1. **Online Platforms:**   Creating a dedicated webpage or blog to showcase a project, including its features, functionalities, and benefits. Sharing on social media and relevant online forums   1. **Internal College Network:**   Leveraging the college’s internal network to share information about the project with other departments   1. **Open-Source Platforms:**   Publishing the project on open-source platforms like GitHub, making it accessible to a wider audience of developers, researchers, and potential collaborators.   1. **Survey and Feedback Forms:**   Distributing surveys and feedback forms to gather input from potential users, incorporating their suggestions into the final project   1. **LinkedIn and Professional Networks:**   Sharing information about the project on professional networking platforms like LinkedIn to reach professionals and potential collaborators in the healthcare IT field   1. **College Newsletter or Bulletin:**   Submitting information about the project to college newsletter or bulletin or portal to reach a broader audience within the institution |
| **Technology** | What technology will we use to build the product? | * Front-end technology: * HTML, CSS, JAVASCRIPT, Reactjs * Back-end technology: * JAVA, PHP, MYSQL, (Google database optional) |
| Is it a mobile or desktop application? | It is a Desktop application |
| **Known Prototypes** | What are the know prototypes of your product?  *Reference some known portals on the Internet that are similar to your product. You will use these prototypes for developing business, user requirements.* | List of Prototypes:  i)https://www.athenahealth.com/landing/athenaclinicals/DLG?utm\_salesforce=7016f000001910VAAQ  ii) https://openmrs.org/  iii) https://www.practicefusion.com/  iv) https://east.optum.com/helpful-resources/patient-portal-new-york-caremount-medical/  v) https://mychart.pascackmedicalcenter.com/PVC/Authentication/Login?error=IDMISSING  vi) https://www.mckesson.com/Specialty/  vii) https://www.therapynotes.com/?utm\_campaign=Capterra&utm\_source=CapterraEMR |
| WHO? | **External Customers** | Who are our Customers? | The customers for a healthcare management system portal can be categorized into two main groups:  **1.HealthCare Providers-**   * Hospital Administrators including Billing Staff, Receptionists and Front Desk Staff * Doctors * Clinic Managers   **2. Registered Users** - Healthcare management systems often include features that allow patients to interact with their health records, schedule appointments, and communicate with healthcare providers.  3. **Guest Users** – As guest users they don’t have ability to schedule appointments, virtual consultation, email notification, lab results, billing and insurance query, medical information. |
| **External Suppliers** | Who are our Suppliers?  *Does the system exchange data with external systems? For example, banks, delivery contractors, restaurants, etc.* | The suppliers for a Healthcare Management System encompass a diverse range of partners crucial for its seamless operation and continuous enhancement. These suppliers play a vital role in providing essential components, services, and expertise to ensure the efficiency and effectiveness of the system.  **1. IT Service Providers:**  • Role: Suppliers provide essential technology infrastructure, contribute to system development and enhancement, offer cybersecurity solutions, manage data storage, and provide IT services for Healthcare Management Systems, ensuring reliability, compliance, and continuous functionality.  **2. Banks and Credit Card Vendors:**  • Role: Vital partners involved in processing billing and financial transactions. Their integration allows for seamless fee charging and payment processing within the Healthcare Management System.  **3. Clinical Labs:**  • Role: Suppliers involved in processing patient tests. The Healthcare Management System interacts with clinical labs, sending test requests, and receiving results, streamlining the diagnostic process.  **4. Pharmacies:**  • Role: Essential partners in the medication management process. The Healthcare Management System interacts with pharmacies, facilitating the electronic transmission of prescriptions and supporting efficient prescription processing.  **5. Insurance Providers:**  • Role: Integration with insurance systems for claims processing, eligibility verification, and billing, streamlining financial interactions and ensuring accurate and efficient reimbursement processes. |
| **Internal Stakeholders** | Who are our internal Stakeholders?  *Do we need a product development group?*  *Do we need a sales group?*  *Do we need a finance group (accounts payable, receivable)?*  *Do we need a customer support team?*  *Do we need an advertising management group?* | **Health Administrators:**  **Role:** Health administrators oversee the configuration, user access, compliance, training, performance monitoring, and vendor management of healthcare apps to ensure efficient operations and quality patient care.  **Finance Group (Accounts Payable, Receivable):**  **Role:** Manages financial transactions, including invoicing clients, processing payments, managing accounts payable, and ensuring financial compliance.  **Customer Support Team:**  **Role:** Provides assistance to healthcare administrators, doctors, clinic managers, and other users of the Healthcare Management System. Handles inquiries, troubleshoots issues, and ensures customer satisfaction.  **Registered User Data and User Data Management Group:**  **Role:** The user data management group in a healthcare app oversees user authentication, profile management, consent handling, and data security. It ensures encryption, compliance with regulations like HIPAA, regular backups, and audit logging for accountability. This group is pivotal in safeguarding user data integrity and privacy.  **Advertising Management Group**:  **Role**: The advertising management group in a healthcare app handles the planning, execution, and optimization of advertising campaigns to promote relevant healthcare products and services while maintaining compliance and user privacy.  **Sales Group:** No, we do not have an immediate need for a sale team, as our distribution channels are primarily digital through our website and social media. Leveraging these digital platforms can effectively promote and distribute our patient portal services to the target audience and advertisers.  Product Development Group: No |
| WHY? | **Expected Benefits to the Customer** | Why do we believe our new product will be better than those already existing on the market? | **Differentiation in Healthcare Services:**  1.Our Health Care Management System offers a comprehensive range of services, including patient record management, appointment scheduling, billing, and education resources, creating a one-stop solution for healthcare needs.  2.The integration of premium features like complimentary video sessions with healthcare professionals sets us apart, providing an enhanced level of accessibility and convenience.  User-Centric Design:  3.Our platform prioritizes user experience, offering a fluid and intuitive interface for patients and healthcare providers.  4.The individualized patient profiles including case history and thorough doctor profiles help to create a user-friendly experience that fosters trust and satisfaction.  Continuous Improvement:  5.Our Agile development strategy enables us to react quickly to user input, adapt to changing healthcare environments, and continually improve our product to meet increasing demands and technological advancements. |
| Why the Customers would want to use our system? | **Personalized and Accessible Healthcare:**  1.Personalized patient profiles allow users to book appointments, access billing information, and check test results from any location, increasing ease and accessibility.  Premium Features for Specialized Care:  2.The introduction of premium accounts with complimentary video sessions offers an exclusive advantage. This feature is particularly appealing to users seeking specialized care, providing a more personalized and convenient healthcare experience.  Engagement and Education:  3.The inclusion of educational resources keeps users engaged and informed about their health, promoting a proactive approach to well-being.  Our Health Care Management System stands out by providing a comprehensive, user-centered, and technologically sophisticated solution. Consumers not only see value in our system but also pick it for a superior healthcare management experience. |
| HOW? | **System Use** | How will the External Customers use the system?  What is the main system use scenario for the External Customers? | External customers, such as patients, will use the healthcare management system in several ways:  **1.Appointment Scheduling:** Patients can log in to the system to schedule appointments with doctors and specialists. They can view the availability of healthcare providers, choose a convenient time slot, and book appointments without needing to call or visit the healthcare facility.  **2.Accessing Medical Records:** Patients can securely access their electronic health records (EHR) through the system. This includes information such as medical history, diagnoses, medications, and test results. They can review their records, track their health progress, and share relevant information with healthcare providers as needed.  **3.Managing Personal Information:** Patients can update their personal information, such as contact details, insurance information, and emergency contacts, through the system. This ensures that healthcare providers have accurate and up-to-date information for effective communication and care coordination.  **4.Viewing Test Results:** Patients can view the results of medical tests and procedures conducted at the healthcare facility. This allows them to stay informed about their health status, understand any diagnoses or treatment plans, and take proactive steps to manage their health.  **5.Communicating with Healthcare Providers:** Patients can communicate with their healthcare providers through secure messaging features within the system. They can ask questions, request prescription refills, or seek clarification on medical advice, enhancing communication and continuity of care.  **6.Making Payments:** Patients can view and pay their medical bills online through the system. They can review itemized billing statements, understand healthcare costs, and make payments securely using various payment methods supported by the platform.  Overall, external customers, particularly patients, will use the healthcare management system to access healthcare services conveniently, manage their health information effectively, communicate with healthcare providers, and engage in their own healthcare journey with greater autonomy and transparency. |
| What is the main system use scenario for the Internal Users? | The main system use scenario for internal users, such as healthcare providers and administrators, revolves around efficiently managing patient care and administrative tasks within the healthcare facility. Here's a typical scenario:  **1.Patient Check-in and Registration:**   * A patient arrives at the healthcare facility and checks in at the reception desk. * An administrative staff member accesses the system to register the patient, verifying their identity, insurance information, and reason for visit. The patient's information is entered or updated in the system.   **2.Appointment Management:**   * Healthcare providers log in to the system to view their schedules for the day and upcoming appointments. * They access patient records and review appointment details, including medical history, reason for visit, and any special instructions.   **3.Patient Consultation:**   * When it's time for a patient's appointment, the healthcare provider retrieves the patient's electronic health record (EHR) from the system. * They document the visit, record symptoms, perform examinations, and enter diagnosis and treatment plans directly into the patient's EHR.   **4.Prescription and Referral Management:**   * If necessary, the healthcare provider prescribes medications or refers the patient to other specialists or healthcare facilities. * They enter prescription details into the system, including dosage instructions and any special considerations.   **5.Billing and Coding:**   * After the consultation, administrative staff members use the system to generate billing statements based on the services provided. * They assign appropriate medical codes for diagnosis and procedures, ensuring accurate billing and reimbursement.   **6.Follow-up and Communication:**   * Healthcare providers may schedule follow-up appointments or order additional tests or procedures for patients. * They use the system to send secure messages to patients, providing instructions, sharing test results, or answering questions.   **7.Reporting and Analytics:**   * Administrators use the system to generate reports and analyze data related to patient demographics, appointment scheduling, billing, and clinical outcomes. * This information helps in monitoring performance, identifying trends, and making data-driven decisions to improve healthcare delivery.   Overall, the main system use scenario for internal users involves seamlessly managing patient care, administrative tasks, communication, and data analysis within the healthcare facility, ultimately enhancing efficiency, accuracy, and quality of care. |
| **Revenue Generation, Revenue Streams** | How will we make money?  *Such as Subscription fees, renting, leasing, licensing, brokerage fees, advertising sales, etc.* | Our Healthcare Management System employs a diverse set of revenue generation strategies to ensure financial sustainability while offering valuable services to the healthcare industry.  **1. Subscription and Licensing Model:**  • Description: Healthcare institutions subscribe to our system, paying a recurring subscription fee based on factors such as the size of the institution, number of users, and included features. Licensing options are available for third-party developers, software vendors, or entities integrating our system into their products.  • Benefits: Ensures a steady and recurring revenue stream from primary users while expanding reach through licensing partnerships.  **2. Customization and Integration Services:**  • Description: Offer customization and integration services to healthcare organizations, tailoring the system to meet their unique requirements. Fees are charged for initial setup, integration with existing systems, and customization based on specific needs.  • Benefits: Provides a personalized solution, meeting the specific needs of each client, and generates revenue through service offerings.  **3. Training and Support Services:**  • Description: Provide training sessions and ongoing support services for healthcare professionals and staff using our system. Fees are charged for training programs, documentation, and premium support packages.  • Benefits: Enhances user proficiency, ensures smooth system implementation, and creates an additional revenue stream through support services.  **4. Data Analytics and Reporting Services:**  • Description: Offer advanced data analytics and reporting services as an add-on to the basic subscription. Healthcare organizations may pay for in-depth insights, including performance metrics, trend analysis, and actionable data.  • Benefits: Adds value through data-driven insights and creates an additional revenue stream.  **5. Partnerships and Integration Fees:**  • Description: Collaborate with healthcare technology partners, medical device manufacturers, and other service providers. Charge integration fees for seamless connectivity, creating a more comprehensive ecosystem.  • Benefits: Expands the system's functionality, fosters partnerships, and generates revenue through integration services.  **6. Telemedicine Integration:**  • Description: Charge additional fees for telemedicine features, including telehealth consultations, virtual appointments, or remote monitoring services. Can be a separate revenue stream or bundled into subscription packages.  • Benefits: Addresses the growing demand for telemedicine services and creates an additional revenue stream.  **7. Compliance and Regulatory Services:**  • Description: Provide services to ensure healthcare organizations using our system comply with industry regulations. Fees are charged for regulatory compliance assessments, updates, and ongoing support.  • Benefits: Enhances system reliability, ensures regulatory compliance, and generates revenue through compliance services.  **8. Upgrades and Add-Ons:**  • Description: Offer premium features, modules, or add-ons for healthcare organizations looking to enhance their system capabilities. Charge additional fees for these upgrades.  • Benefits: Encourages continuous system improvement and generates revenue through premium feature offerings.  **9. Referral Fees for Ancillary Services:**  • Description: Collaborate with ancillary service providers, earning referral fees for directing healthcare organizations to services like diagnostic labs or medical equipment suppliers.  • Benefits: Creates a referral network, adds value to the ecosystem, and generates revenue through referral fees.  **10. Advertising Revenue:**  • Description: Incorporate advertising within the system, offering ad space to health insurance providers, pharmacies, and other relevant entities. Generate revenue through targeted advertisements.  • Benefits: Diversifies revenue streams, leveraging the platform's user base for advertising income. |