|  |  | *Designed for:* | | | | | *Designed by:* | | *Date:* | | *Version:* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Business Model Canvas** | |  | | |  | |  |  |  |  |  |
|  |  |  | | | | |  | |  | | |
| **Key Partners** | **Key Activities** | | **Value Propositions** | | | **Customer Relationships** | | | **Customer Segments** | | |
| * The following are our key partners:  1. University of Malawi. 2. Paul Stone Brown Macheso.  * Our key suppliers is the University of Malawi: Computing Department. * Key Resources we are acquiring from partners are:  1. Sensors(vibration sensor, crack sensor, water level sensor, strain sensor, accelerometer) 2. Microcontrollers(Arduino, esp 8266) 3. Others(eg. servo motor, batteries, breadboard, resistors, alphanumeric LCD and connecting wires ). 4. Direction on how we carry out the project.  * Activities that our partners are doing:  1. Monitoring the progress of our project. 2. Procurement of the resources.   **MOTIVATIONS FOR PARTNERSHIPS**   * Partnership will help to reduce the cost of acquiring resources of our project hence making it a success. * Our partners will be giving us direction on how we go about the project to be on track in a competitive environment hence reducing risks and uncertainty. * Acquisition of particular resources needed in the project is from our partners who bring finished products making our work easier to be completed in time. | What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?  CATEGORIES:  Production, Problem Solving, Platform/Network | | * Our product aims to ensure safety of passenger and vehicle owners by minimising accidents due to collapsed bridges. * This system is trying to reduce casualties due to unhealthy bridges. * Our product will be capable of giving warnings and maintenance updates to Malawians. * The system will ensure safety of passengers and drivers and boost their trust in road networks.   **CHARACTERISTICS**   1. Currently there is no system that monitors the health of bridges in Malawi hence we believe our system is new. 2. The system will be easy to maintain, fault tolerant and secure hence reliable and assuring 100% safety to both pedestrians and vehicle owners. 3. The system is flexible to be installed on any bridge. 4. “Getting the job done” :Our Product will be operating 24/7 hence ensuring diligent supervision of bridges, therefore making their work easier. 5. The product will be of low cost, as a result customers can afford to implement it in a number of bridge locations. 6. Cost will be reduced through warning and maintenance updates which will enable customers to intervene before any serious damages. 7. Our system will help to reduce rates of accidents/loss of properties since the health status of bridges will be known before use hence minimising risks. 8. currently there is no system that monitors the health of bridges so once our system is completed it will be made available to our customer(Roads authority) and make their work easier 9. Customers will be getting updates on the health status of bridges in different locations without physically visiting them. | | | | What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they? | | * Our IoT project (bridge health monitoring system) is focused on creating value for Pedestrians, vehicle owners, government, Roads authority and business owners. * However, our project will target Government Roads authority as our most target customers. * Our customer base is a niche market(our product is tailored to specific requirements ) | | |
| **Key Resources** | | **Channels** | |
| * The key resources we require are:  1. Sensors(vibration sensor, crack sensor, water level sensor, strain sensor, accelerometer) 2. Microcontrollers(Arduino, esp 8266)3 3. Others(eg. servo motor, batteries, breadboard, resistors, alphanumeric LCD and connecting wires )  * Our distribution channels will be local and international retailers * customer relationship revenue streams : we will be making asset sales with the customer in the long term.   **TYPES OF RESOURCES:** Physical:sensors.microcontrollers,  Intellectual : Databases.  Human:Teresa Mfuse,Tinashe Dzauya,Andrinah kaunda,Stephano Patrick Mabzinesss. | | * Communication with customers will be done through emails and phone calls. * No connection has been initiated yet with our customers. * No channels integrated. * Phone calls are the ones which work best when communicating with the customer. * However, emails are the cost effective channel for communication. | |
| **Cost Structure** | | | | **Revenue Streams** | | | | | | | |
| What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?  IS YOUR BUSINESS MORE: Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing), Value Driven (focused on value creation, premium value proposition).  SAMPLE CHARACTERISTICS: Fixed Costs (salaries, rents, utilities), Variable costs, Economies of scale, Economies of scope | | | | For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?  TYPES: Asset sale, Usage fee, Subscription Fees, Lending/Renting/Leasing, Licensing, Brokerage fees, Advertising FIXED PRICING: List Price, Product feature dependent, Customer segment dependent, Volume dependent DYNAMIC PRICING: Negotiation (bargaining), Yield Management, Real-time-Market | | | | | | | |
| Designed by: The Business Model Foundry ([www.businessmodelgeneration.com/canvas](http://www.businessmodelgeneration.com/canvas)). Word implementation by: Neos Chronos Limited (<https://neoschronos.com>). License: [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/) | | | | | | | | | | | |

|  |  | *Designed for:* | | | | | *Designed by:* | | *Date:* | | *Version:* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Business Model Canvas** | |  | | |  | |  |  |  |  |  |
|  |  |  | | | | |  | |  | | |
| **Key Partners** | **Key Activities** | | **Value Propositions** | | | **Customer Relationships** | | | **Customer Segments** | | |
|  |  | |  | | | |  | |  | | |
| **Key Resources** | | **Channels** | |
|  | |  | |
| **Cost Structure** | | | | **Revenue Streams** | | | | | | | |
|  | | | |  | | | | | | | |
| Designed by: The Business Model Foundry ([www.businessmodelgeneration.com/canvas](http://www.businessmodelgeneration.com/canvas)). Word implementation by: Neos Chronos Limited (<https://neoschronos.com>). License: [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/) | | | | | | | | | | | |