**Project Design Phase – 1**

**Proposed Solution**

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| **Date** | 24 September 2022 |
| **Team ID** | PNT2022TMID23028 |
| **Project Name** | Hospital’s Health Care Data Using Data Analytics |
| **Maximum Marks** | 2 marks |

**Proposed Solution:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The impact COVID-19 has had on the health care industry is evident to anyone and everyone. You don’t need to be plugged into the world of medicine to see what has been happening worldwide during this pandemic.  What most people don’t see, though, is the impact COVID-19 has had on health care data analytics. “Big data tools have played an increasingly significant role in health care decision-making” says health care analytics. It is not just providers, but lawmakers and researchers who are turning to big data analytics and predictive models to help allocate resources, predict surges, improve patient care and outcomes and employ preventive measures. |
|  | Idea / Solution description | Big data and health data analytics have played an integral role in the fight against COVID-19. The data is coming in at a near constant rate. Analyzing that health data has allowed for a better understanding of how to respond and treat patients. |
|  | Novelty / Uniqueness | Deploying a healthcare analytics suite can [help healthcare providers](https://www.sisense.com/blog/3-ways-bi-can-improve-efficiency-in-healthcare/) leverage data for insights in several areas of operations. One major area where using analytics can optimize efforts is the management of hospital and foundation donations and grants.  For many healthcare providers, donations are the basis of their yearly budgets, so organizing and tracking expenses and activity is vital for setting appropriate goals. Moreover, it can help track donor engagement, retention, and previous contributions. |
|  | Social Impact / Customer Satisfaction | Health care is expensive and those costs only continue to increase across the board. We are, however, seeing a shift from fee-for-service payment models to value-based care.  Through the use of predictive and prescriptive analytics, health care organizations and practitioners can get detailed models for lowering costs and patient risk. In addition to the patient-centric benefits mentioned above, health data analytics can reduce appointment no-shows, manage supply chain costs, prevent equipment breakdowns and decrease fraud. |
|  | Business Model (Revenue Model) | Your salary, much like your role responsibilities, will vary based on the industry or organization for which you choose to work. [Payscale](https://www.payscale.com/research/US/Job=Health_Data_Analyst/Salary" \t "_blank) lists the median salary for a health data analyst as $63,000 per year. The U.S. Bureau of Labour Statistics doesn’t have an entry specific to Health Data Analysts, however, the [Medical and Health Services Manager](https://www.bls.gov/ooh/management/medical-and-health-services-managers.htm#tab-1) page does list “health information manager.” The median pay listed here is closer to $100,000. |
|  | Scalability of the Solution | Big Data Analytics can provide insight into clinical data and thus facilitate informed decision-making about the diagnosis and treatment of patients, prevention of diseases or others. Big Data Analytics can also improve the efficiency of healthcare organizations by realizing the data potential |