**Assignment 1: Visualization Project Management**

**Project Development & Planning Template**

Follow the template and the questions to guide you through this assignment:

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| 1. **Project Development**   This is the phase where you shape the project, gather requirements, understand the current system (if any) and develop your KPIs | |
| **Right Perspective** | |
| **Q1**. How do you think this project adds value to Cables.com?(think in terms of direct and indirect benefits) | **Response:**  It should help spot that a problem exists more quickly than before. Should help prevent getting angry customers and bad reviews. By looking at complaints and returns as well, we might also catch a defect that is not currently being looked for in the Manufacturing defcts DB. |
| **Right People** | |
| **Q2.** Being your manager, Dr.Who, can guide you to many resources for this project. But, he is a busy man and will be available to meet you only twice in 30 days. List 3 most important piece of information that you may seek from him? | **Response:**   1. By when does he want the dashboards up and running? 2. Will there need to be translated versions of dashboards available for Canada and Mexico? 3. What existing metrics and charts are being used to monitor factory performance and who uses them? |
| **Q3.** After meeting with Dr.Who, you met with the Database Admin for the datasource just to introduce yourself and make a connection. At this point, having only a basic understanding of the task at hand, list at least 2 pieces of information you would seek from her/him? | **Response:**   1. What are the time ranges covered by each of the databases. 2. Who has access to the databases and how are they kept maintained, ie how does data get into them? 3. Sample queries for all DBs. |
| **Right Questions** | |
| **Q4.** List at least 1 question that you would ask Plant Managers, Product Managers and Executives. | **Response:**   1. What information do you have access to \*now\* that you already use to evaluate performance? 2. What are pain points in the current process? |
| **Right KPIs** | |
| Imagine you received the following requirements from the three levels of stakeholders. Formulate an appropriate KPI or Visualization for the requirements |  |
| **Q5. Plant Manager**  I would like to see the performance of my manufacturing operations every month for every product manufactured in the plant  And, I want to be able to see if the performance of my plant is getting better or worse with time | **Q5-1:** Suggest a KPI to measure “performance” of the plant:  **Response:** Total defects per month, per product.  **Q5-2:** Suggest a chart to present this KPI in a way that enables the Plant Manager to see improvement or decline in performance with time:  **Response: Line chart that shows 5 lines with Month on X-axis, Total Defects on Y-Axis** |
| **Q6. Product Manager**  The product manager would like to see how consumers are feeling about the product under his responsibility | Suggest a KPI, other than the manufacturing “performance” that could suggest “consumer perception”:  **Responses:**  Total returns, by product, per month. Also total customer complaints, by product, per month. |
| **Q7. Executives**  The executives would like to see very quick one or two chart visual that shows them the overall health of the company. | Suggest a KPI, other than the two above, that could point to the overall “performance” of the company and its products  **Responses:** 1. Total defects, per factory, per month. 2. Total returns per month by product type. |
| 1. **Project Planning**   This is the phase where you shape the deliverables and plan the “look and feel” of the dashboard | |
| **Versioning** | |
| **Q8.** Based on the information provided, and the KPIs that you have developed in Q5-Q7, plan how you will deliver your project. Assume that the start date of the project is Feb 1st 2018. *(think of what features can you quickly deliver and what may take longer)* | **Response:**  Phase one - Plant Manager KPI chart showing total defects per product.  Phase two - executive summary, which can use totals based on Plant Manager charts  Phase 3 - Product Manager returns chart  Phase 4 - Product Manager complaints chart |
| **Design** | |
| **Q9.** Based on the information you have gathered in this assignment, would it be appropriate to show in the Executive dashboard, the number of manufacturing defects per Product for each plant? | **Response:** No, that’s too much detail. Showing the total number of defects from any individual factory would be a better high level summary. |
| **Q10.** Based on what you have learned so far, what are some of things you could to do to “go the extra mile” and make your product work even better for all 3 levels of the audience? Provide at least 1 idea that is independent of your responses for Q1-Q9. | **Response:**  Provide a filter in the Executive dashboard that allows a factory’s defect stream to be filtered by product type. |