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**Experiential Project Team Charter – Team Husky Trailblazers**

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**Executive Summary**

This reflection paper aims to explore my individual learning experience throughout the XN Project, focusing on the knowledge gained from lectures, discussions, independent research, and my role-based experience. The main objectives of my individual learning were to enhance my technical skills in data analysis, improve project management capabilities, and develop a strategic consulting mindset.

The key results of my learning journey include:

* Improved proficiency in Python for data cleaning and visualization
* Enhanced understanding of gender disparity issues in healthcare payments
* Developed skills in presenting complex data to non-technical stakeholders
* Gained experience in collaborative problem-solving within a diverse team

**Mapping Learning to Course Learning Outcomes**

**CLO1:** Transform ideas to results using appropriate cross-functional technical design and development solutions

Throughout the XN Project, I had the opportunity to transform our initial ideas about analyzing gender disparities in healthcare payments into tangible results. This process involved using cross-functional technical design and development solutions.

My learning experiences related to this outcome include:

**Data Processing and Cleaning:** I worked on processing and cleaning extensive general and research data for 2021, 2022, and 2023. This task required me to use Python to handle large datasets efficiently, ensuring data quality and consistency.

**Visualization Techniques:** I created detailed visualizations for various payment types using Python libraries such as Matplotlib and Seaborn. These visualizations helped uncover significant trends and patterns in the data, making our findings more accessible to stakeholders.

**Cross-functional Collaboration:** Working with team members from diverse backgrounds, I learned to integrate different perspectives and skills to develop comprehensive solutions. This experience highlighted the importance of cross-functional teamwork in tackling complex problems.

**CLO2:** Develop a "Strategic Consulting Mindset" to resolve business problems innovatively with design thinking

The XN Project provided an excellent opportunity to develop a strategic consulting mindset, which was crucial in addressing the complex issue of gender disparities in healthcare payments.

**Key learnings in this area include:**

**Problem Framing:** I learned to approach the issue of gender disparities from multiple angles, considering various stakeholders and potential root causes. This holistic approach helped in framing the problem more effectively and identifying innovative solutions.

**Data-Driven Decision Making**: Through the project, I developed a stronger appreciation for using data to drive decision-making. I learned to balance quantitative analysis with qualitative insights to provide more comprehensive recommendations.

**Stakeholder Communication**: Presenting our findings to sponsors and other stakeholders helped me develop skills in translating complex technical information into actionable insights for non-technical audiences. This experience was crucial in developing a consulting mindset.

**CLO3:** Integrate multidisciplinary teams, prioritize work, and deliver results using appropriate Project Management Frameworks

The XN Project provided valuable experience in working within a multidisciplinary team and managing project priorities to deliver results effectively.

**My learning in this area includes:**

**Team Collaboration:** Working with team members from diverse backgrounds taught me the importance of clear communication and leveraging individual strengths. I learned to adapt my communication style to ensure effective collaboration across the team.

**Task Prioritization:** Throughout the project, I gained experience in prioritizing tasks based on their importance and urgency. This skill was crucial in managing our workload and ensuring timely delivery of project milestones.

**Agile Methodology:** We implemented elements of Agile project management, which helped me understand the benefits of iterative development and frequent stakeholder feedback. This approach allowed us to adapt our analysis and recommendations based on evolving project needs.

**CLO4:** Demonstrate successful delivery of continuous value by incorporating lean value management

Throughout the XN Project, I gained valuable experience in delivering continuous value to our stakeholders while incorporating principles of lean value management.

**Key learnings in this area include:**

**Iterative Value Delivery:** We adopted an approach of providing regular updates and interim findings to our sponsor. This method allowed us to gather feedback early and often, ensuring our final deliverables aligned closely with stakeholder expectations.

**Waste Reduction:** By focusing on the most impactful analyses and visualizations, we minimized time spent on less valuable tasks. This lean approach helped us maximize our productivity and deliver high-quality results within the project timeline.

**Continuous Improvement**: Throughout the project, we regularly reflected on our processes and outcomes, identifying areas for improvement. This ongoing evaluation helped us refine our approach and increase our efficiency as the project progressed.

**Role of Project Management/Organization Communications in Organizations**

Working on the XN Project has significantly expanded my understanding of the crucial role that project management and organizational communication play in successful project execution.

**How the project challenged or supported previous views:**

The XN Project reinforced my belief in the importance of clear communication channels within a team and with external stakeholders. However, it also challenged my previous notion that project management was primarily about task allocation and timeline management. I learned that effective project management involves a delicate balance of technical expertise, people skills, and strategic thinking.

**Key learning:**

One of my key learnings was the importance of adaptability in project management. As we encountered challenges with data quality and interpretation, we needed to adjust our approach and timeline. This experience taught me that successful project management requires flexibility and the ability to guide a team through uncertainties.

**Skills practiced and developed:**

Throughout this project, I honed several critical skills:

Data Analysis: I improved my ability to clean, process, and visualize large datasets using Python.

Stakeholder Management: I learned to effectively communicate with sponsors, balancing their expectations with project realities.

**Team Collaboration:** Working in a diverse team enhanced my skills in collaborative problem-solving and conflict resolution.

**Time Management**: Juggling multiple tasks and deadlines improved my ability to prioritize and manage time effectively.

**New questions and ideas about project management:**

This project has sparked several new questions and ideas about project management:

* How can we better integrate data ethics considerations into project management frameworks, especially when dealing with sensitive information like healthcare data?
* What strategies can be employed to maintain team motivation and cohesion in long-term data analysis projects?
* How can we effectively balance the need for thorough analysis with the pressure to deliver quick insights in data-driven projects?

Importance of Research/Course Work – Informed Action

**Relevant literature:**

In understanding the needs of our organization and choosing intervention strategies, several key pieces of literature were particularly relevant:

* Academic papers on gender disparities in healthcare, which provided context for our analysis.
* Industry reports on payment practices in the medical device sector, offering benchmarks for our findings.
* Data visualization best practices guides, which informed our approach to presenting complex information.

**Models used from assigned readings and independent research:**

We applied several models and frameworks from our coursework and independent research:

* The Data-Information-Knowledge-Wisdom (DIKW) hierarchy, which guided our approach to transforming raw data into actionable insights.
* The CRISP-DM (Cross-Industry Standard Process for Data Mining) methodology, which provided a structured approach to our data analysis process.
* Stakeholder analysis frameworks, which helped us tailor our communication and recommendations to different audience needs.

**Key master's program content critical for project success:**

Several elements from the master's program were crucial for the preparation and success of our project:

* Advanced data analysis techniques learned in courses like ALY6040 (Data Mining Applications).
* Project management principles from courses focusing on Agile methodologies.
* Data visualization techniques that enhanced our ability to communicate complex findings effectively.
* Ethical considerations in data analysis, which guided our approach to handling sensitive healthcare information.

**Additional areas for further knowledge:**

Looking back, there are several areas where additional knowledge would have been beneficial:

* More in-depth understanding of healthcare industry regulations and their impact on payment practices.
* Advanced statistical methods for analyzing time-series data, which could have enhanced our trend analysis.
* Techniques for automating data cleaning processes, which could have improved our efficiency in handling large datasets.

**Self-Reflection**

**Individual developments and successes:**

At the start of the XN Project, I aimed to enhance my data analysis skills and improve my ability to communicate technical findings to non-technical audiences. As the project progressed, I noticed significant improvements in these areas. I successfully developed Python scripts to clean and analyze large datasets, a skill I had limited experience with before. Additionally, my presentations to the sponsor became more focused and impactful, demonstrating my growth in translating complex data into actionable insights.

**XN Project's contribution to individual goals:**

The XN Project provided an excellent platform for achieving my individual goals. It allowed me to apply theoretical knowledge from coursework to a real-world problem, bridging the gap between academic learning and practical application. The project's focus on gender disparities in healthcare payments aligned well with my interest in using data for social impact, motivating me to dig deeper into the analysis.

**Key learning and noteworthy successes:**

A key learning from this project was the importance of iterative analysis and frequent stakeholder communication. Our team's approach of providing regular updates to the sponsor allowed us to refine our analysis based on feedback, leading to more relevant and impactful findings. A noteworthy success was our team's ability to identify subtle patterns in the data that highlighted previously unnoticed gender disparities in certain payment categories.

**Current developmental goals:**

**Moving forward, I aim to:**

* Deepen my knowledge of advanced statistical techniques for large-scale data analysis.
* Enhance my skills in data visualization, particularly in creating interactive dashboards.
* Develop a stronger understanding of healthcare industry regulations and their impact on data analysis.

**Personal SWOT Analysis:**

**Strengths:**

* Strong analytical skills and attention to detail
* Ability to work effectively in diverse teams
* Proficiency in Python for data analysis

**Weaknesses:**

* Limited experience with some advanced statistical methods
* Need to improve public speaking skills for larger audiences
* Time management in long-term projects

**Opportunities:**

* Growing demand for data analysts in healthcare sector
* Emerging technologies in big data and AI
* Networking opportunities through professional organizations

**Threats:**

* Rapidly evolving field requiring continuous learning
* Increasing competition in the job market
* Potential ethical challenges in handling sensitive data

**Immediate individual development plan:**

* Enroll in an online course on advanced statistical methods within the next three months.
* Join a local Toastmasters club to improve public speaking skills, attending at least two meetings per month.
* Contribute to an open-source data analysis project in the healthcare sector within the next six months.
* Attend a healthcare analytics conference in the coming year to expand industry knowledge and network.
* Obtain a relevant certification (e.g., Certified Analytics Professional) within the next 12 months.

**Actions for continued development:**

To continue my development throughout the master's program and beyond, I plan to:

* Seek internship opportunities that allow me to apply my skills in real-world healthcare settings.
* Regularly read industry publications and academic journals to stay updated on the latest trends and methodologies in data analysis.
* Participate in data science competitions to challenge myself and benchmark my skills against peers.
* Develop a personal project portfolio showcasing my data analysis and visualization skills.
* Engage with professional networks like the Healthcare Information and Management Systems Society (HIMSS) to stay connected with industry developments and opportunities.

By following this development plan and continuously seeking opportunities to apply and expand my skills, I aim to position myself as a valuable contributor in the field of healthcare data analytics, ready to tackle complex challenges and drive meaningful insights.