**Exercise: DevOps Planning & Research (Vladimir Velkovski)**

**You are starting as a Junior DevOps in a IT Company. You get assigned to a new Project that develops software solutions for Banking systems. Currently, you are single devoted DevOps engineer on that project with mixed team members (Devs, QA, PM’s etc). Before the Kick-off of the Project, you are given the task to plan and research the best practices for the project.**

1. **Explain what steps you are taking for planning and research?**

* Identify the key requirements for the project, including the development, testing, and deployment process.
* Evaluate different DevOps tools and technologies, and determine which ones are best suited for this project.
* Develop a plan for implementing my DevOps infrastructure, including timelines and budgets.
* Collaborate closely with other stakeholders, such as developers, testers, and operations teams.

1. **How would you describe the process for DevOps best practices to your colleagues?**

The best DevOps practices include:

Continuous integration and continuous delivery - Automating the build, test, and deployment process to ensure rapid and reliable software releases.

Infrastructure as code - Automating the provisioning and configuration of infrastructure using code, which enables greater consistency and scalability.

Collaboration - Encouraging cross-functional teams to work together in a collaborative, transparent manner, sharing knowledge and best practices.

Automated testing - Conducting automated testing throughout the development cycle to identify and address issues as early as possible.

Monitoring and logging - Using automated monitoring and logging tools to identify and troubleshoot issues in real-time, before they impact users.

Security - Incorporating security into every stage of the development process to identify and address vulnerabilities and ensure that applications are secure by design.

1. **How would you organize your time for planning and research?**

I will identify the most important tasks that need to complete. Schedule dedicated time for research, and try to minimize distractions during this time. I will set realistic goals and deadlines and collaborate with my colleagues in order to be sure that my planning and research aligns with broader business goals.

1. **What methods and tools are you using during this process?**

**- Agile methodologies such as Scrum and Kanban**

**- SWOT analysis**

**- CI/CD tools**

**- Infrastructure as code**

1. **Describe the short (imagined) presentation of your research and planning, for your team briefly:**

I'm eager to present to you the findings of my most recent planning and study for our DevOps projects. I have discovered numerous crucial areas through this approach where we may promote increased effectiveness, quality, and creativity.

First, I did a SWOT analysis of our DevOps team, which helped us identify our advantages and disadvantages as well as the dangers and possibilities we must contend with. This has given us insightful information that we can utilize to guide our planning and choices.

Second, I've done a lot of market research to help us understand our target market, the competition, and market trends. With the use of this research, we were able to spot areas for innovation and improvement as well as better match our DevOps activities to the demands of our company and its clients.

Thirdly, I've included a number of essential tools and approaches that we might apply to advance our DevOps procedures.

Overall, I think that these conclusions and suggestions will help us operate more productively and effectively, enabling us to produce software more rapidly and consistently while enhancing quality and innovation.