Introduction:

Imagine how powerful a software delivery process can turn out when both DevOps and AI are brought together in one place.

DevOps follows a set of pre-programmed rules that need to be manually defined first through workflows and validations at every step in the process. In other words, users will need to manually define the X that clears the automated system to perform the Y.

Artificial Intelligence, on the other hand, is a technology that has the ability to think, say, and do what a human can. Unlike DevOps that is just able to follow orders, AI is designed to constantly seek patterns (such as the pattern of data exchange between tools), learn from experience, and self-select appropriate responses in situations when needed.

This could be just the beginning of how software delivery could turn out to be and what opportunities await businesses adapting to AI driven DevOps.

Refrerence:

<https://www.pcloudy.com/the-role-of-artificial-intelligence-in-transforming-devops/>

Problem statement:

How to develop AI enabled SDLC?

1. Splunk etc are providing log parsing which can couple with APM to build AI patterns which is their 2020 goal , but that’s not it , everything is not APM+Log parsers => ML/AI
2. What’s available on CI/CD => ML/AI testing systems like mabl.com etc (RPA+AI, tools for unit testing , AI enabled regression test suite generators etc are evolving)
3. Infra (cloud has SAS services) , on-prem companies such as vmware and Microsoft tools has some modules (such as Powershell 6 )

Gap:

1. CI/CD systems :
   1. Have a look at <https://www.infoq.com/news/2016/03/hygieia/>, it’s a devops maturity Dashboard , whatever is collected here is Datapoints that can be thrown to a ML/AI system and you can get your SDLC AI implemented along with testing ML/AI systems and Infrastructure AI systems
   2. Infra layer:
      1. Cloud Migrations are a pain because the destination patterns are evolving such as AWS WAF etc , but the legacy systems need time to evolve to be cloud native, companies are aggressive and competitive, each company is different and thus WAF becomes a guideline which can be used and needs customisation , is there a pattern that can be formed here to generate tools that can help ? yes , data is too complex and thus ML/AI can be used on the design ? yes , we can