# Agile Software Development: It's Implication for AI products and Developers

Software developments is advancing the technological world today. This changes have far more reaching implications in I.T industries such as Big data, Artificial intelligence and Agile Software development methodologies. Competition in the software development ecosystem has made developers to build software that are quick and reliable and often referred to as Agile development. Agile transformation is real and requires rethinking the business management, recruitment process and data strategy in a bid to stimulate disruptive solutions from within in-house development and deployment. AI product development would require rapid transformational changes within any organization. This can be accomplished by establishing specific operating models that permit development teams with the freedom of technology choice. This publication highlights some operating models that can be adopted to improve the success of AI products using Agile software development methodologies.

By analyzing the process of agile software development, we may refer to a common term called "Sprint" and "iteration" which describes the time required for a new software development stack to be fully designed, coded and tested.

## Creating Models for building AI products

1. Customized lean operating models

Lean operating models remains very pivotal for development teams as they customize the basic from agile software development and business management. When we customize into lean operating models, it allows teams with the flexibility to push for changes as they build AI products. This mean such operating models could bring the right folks together and establish a digital work environment which is designed to suit their work style while building AI products.

2. Product-Driven Team

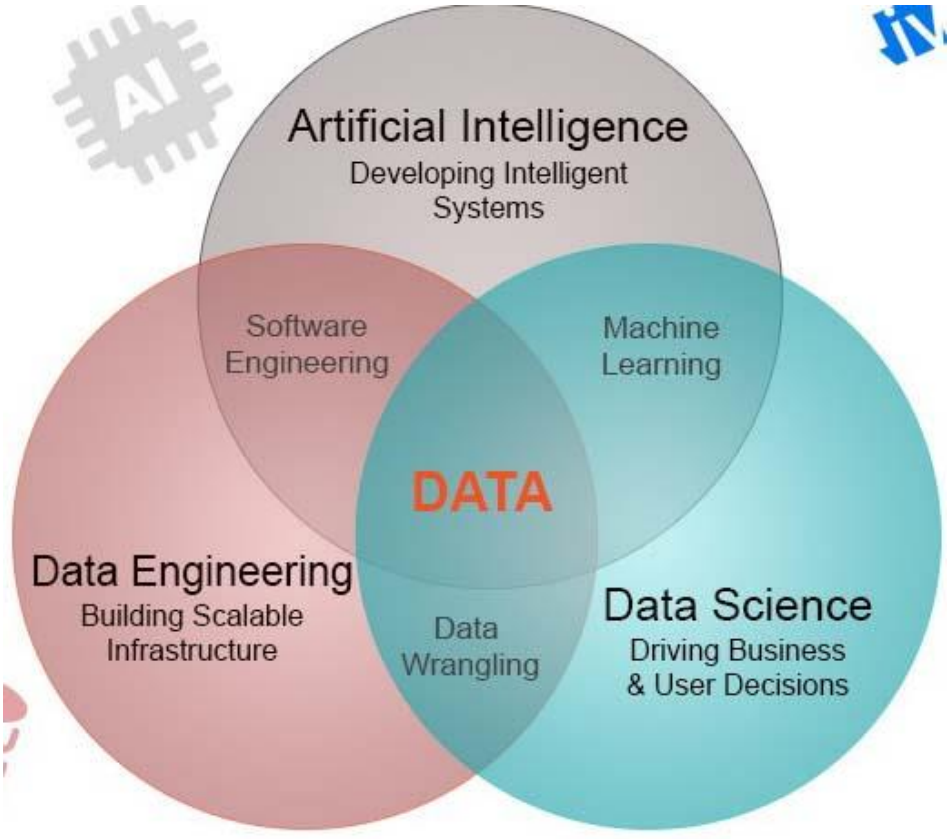
An agile style of organizing AI projects will use focused components that are directed to giving meaning to every task. Every member of a team has specific contributing task in an agile culture including appreciating value contribution in line with their career paths and work happiness. The essence of lightweight project model is very useful to bring the best in a project team. In this case, the project model stands as a guide for product-driven team on how to collectively implement expectations in an AI project. Essentially core parts of the deliverables will entail the project description, team, environment and the AI product itself. It is essential that the model is lightweight as possible to enable every team member to be part of the storytelling which describes their individual work effort as part of the big story. Some of the components to consider while establishing a project model will consist of

1) Work description: User story description using narratives to explain any kind of work will be very essential to guide each product driven team on expectations.
2) Technology: Ensuring that the technology stack required for specific product development is enriched and supported.

3) Project lifecycle: this feature explains the track record of progress made. Agile boards can be used to display product development life cycle which can be assessable to every member of the team at any point using agile project management tools of choice.
4) Work accessibility: the project content should be made available for every member of the team throughout the project lifecycle using software repositories such as Github, Bitbucket etc.
5) Project framework: This involves combining customized feature which suite the project agile methods. Scrum is a example of a good project framework for large project and extreme Programming (XP) for smaller projects such as solution prototyping.

**The Impact of Artificial Intelligence on Software development.**

Artificial intelligence is greatly influencing how software development is progressing. Today AI has recorded more success with the integration of other technologies such as big data and cloud computing. I will highlight some two areas in software development cycle which has been affected most by artificial intelligence.



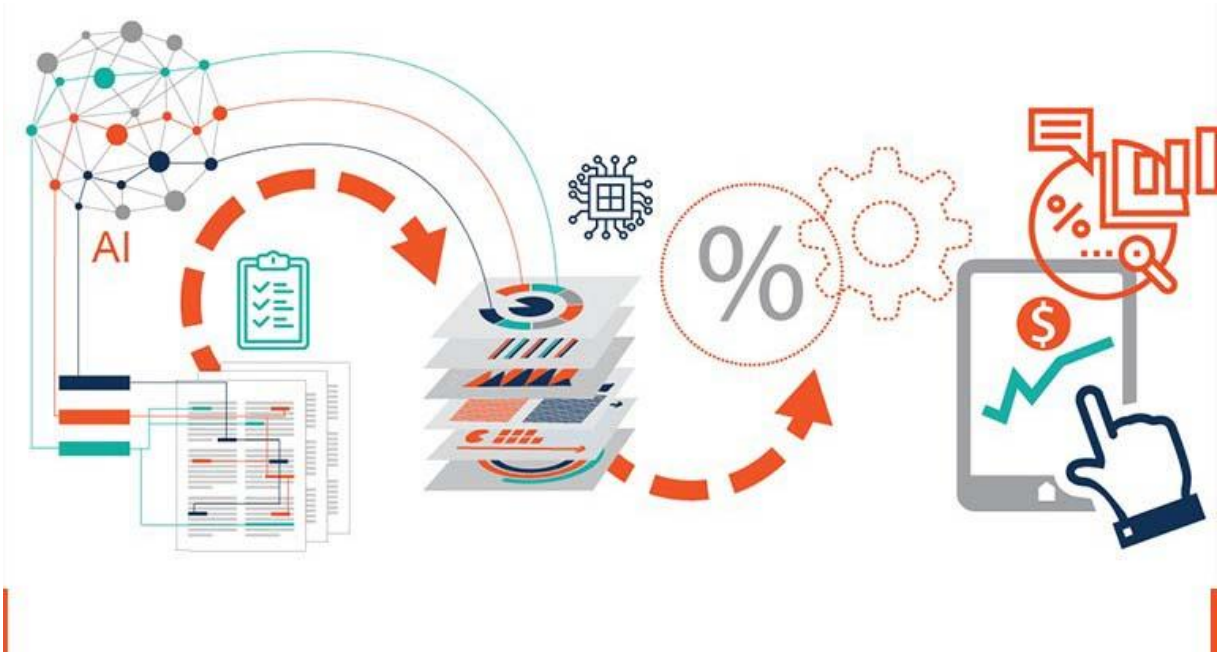

1. Building effective applications.

Ai has brought in so much power to functions such as predictions, Chabot etc. has made software applications more effective in delivering greater human functions than it delivers in the past.

2. Enabling Developers and Testers.

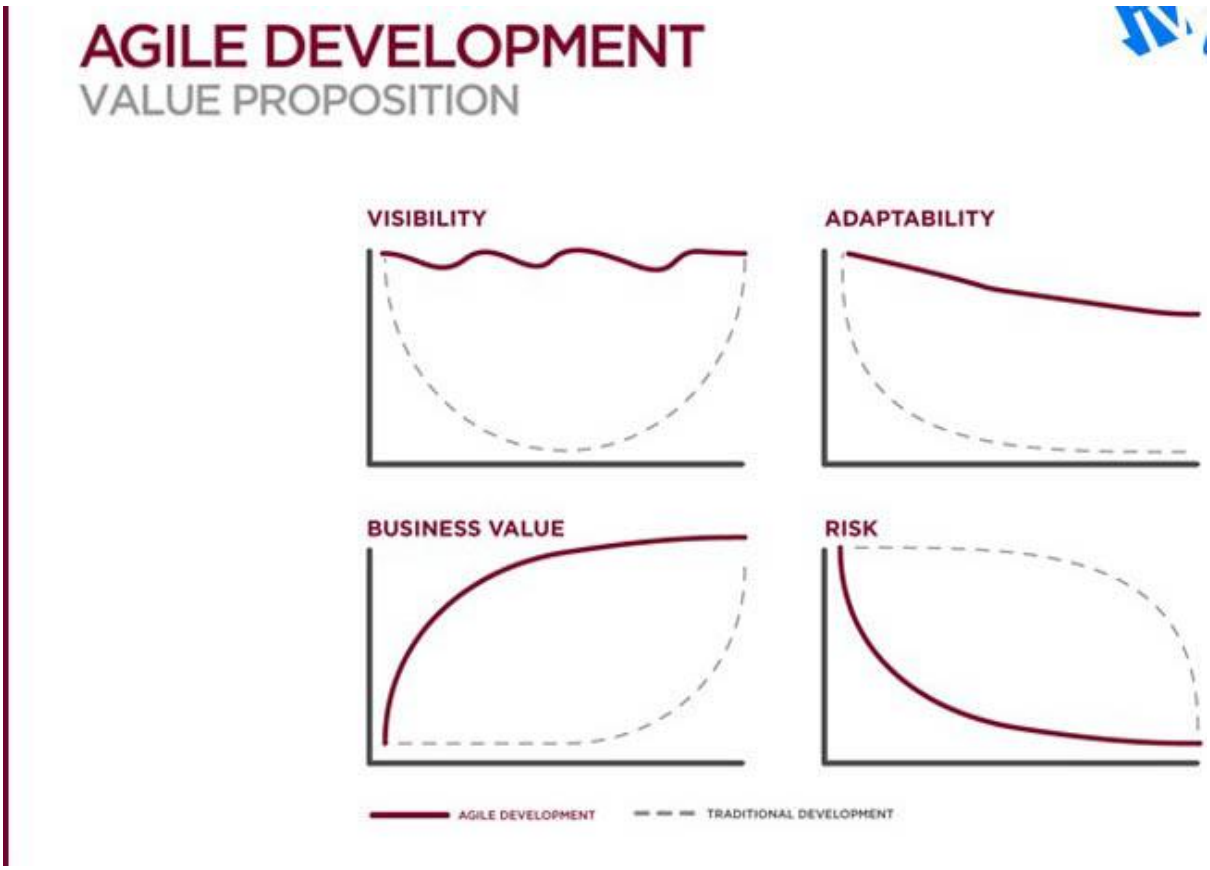
Artificial intelligence has helped developers using machine learning to test the quality of a codes. Testing companies are using AI bots to find flaws and bugs in software. AI can now also make predictions about actual time estimation for developing a software using the Agile methodology.

**Agile software development and Big Data**




Many organizations design their software in a way that integrate all its data and process it. . Big data analysis can interpret the performance of data across multiple areas of codes in a software. This effectively provides the developer with to pay more attention to areas that consume more time and prone to a high failure rate. With this in mind, the result from this analysis helps to improve the development process with respect to time and cost of developing the project. The Agile methodology helps to deliver software projects on time.

**The role of Agile development methodology in software development.**




Agile software development methodology is designed to build lightweight framework that is simple and addresses the need of the client. The software is further tested iteratively and published in rapid manner. This process of continues changes or iteration is often referred to as the continuous process in agile development. Through user story and stakeholders continues participation, the client is involved in the development process and the process ensures that the requirement phase is fully adapted in the product development cycle.

Curated by

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