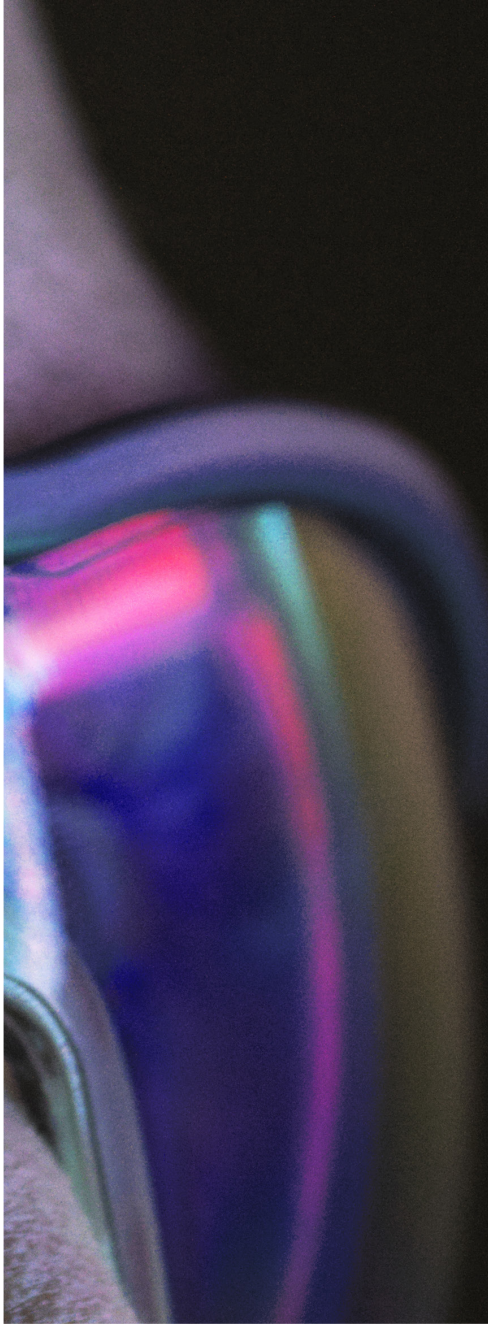
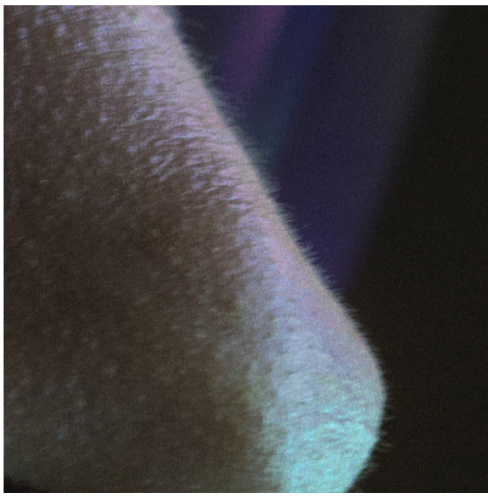
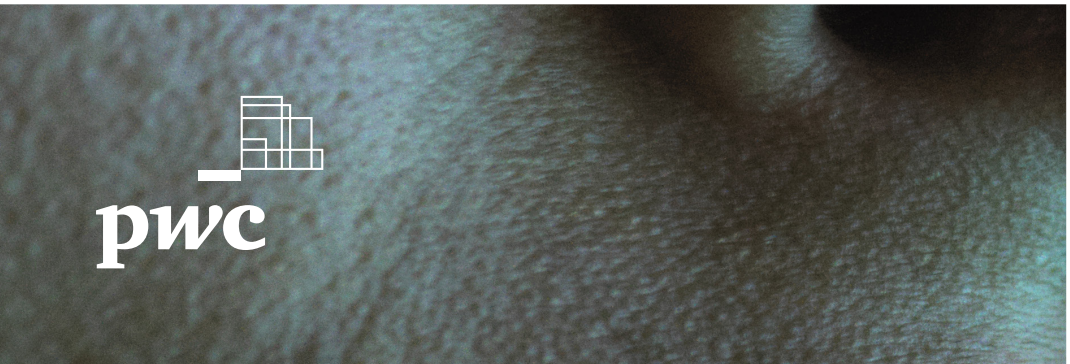


Adaptive AI: Why businesses should adopt it





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Overview

In the era of artificial intelligence, having an intelligent system is not enough. The system should also have the ability to learn and improve itself, because adaptability is one of the natural laws of intelligence.

Adaptive AI is regularly fed with new data to provide more accurate and improved insights as output. It can change its own code in real time to incorporate what it has learned from its experiences with new data.

The advent of adaptive AI enables organisations to improve accuracy and efficiency in the face of complex business challenges. Be it fraud detection in financial systems, managing complex processes of supply chain or analysing data related to millions of patient symptoms in healthcare – adaptive AI can prove to be revolutionary.

Features of adaptive AI

Accuracy

Becomes more accurate over time

Effectiveness

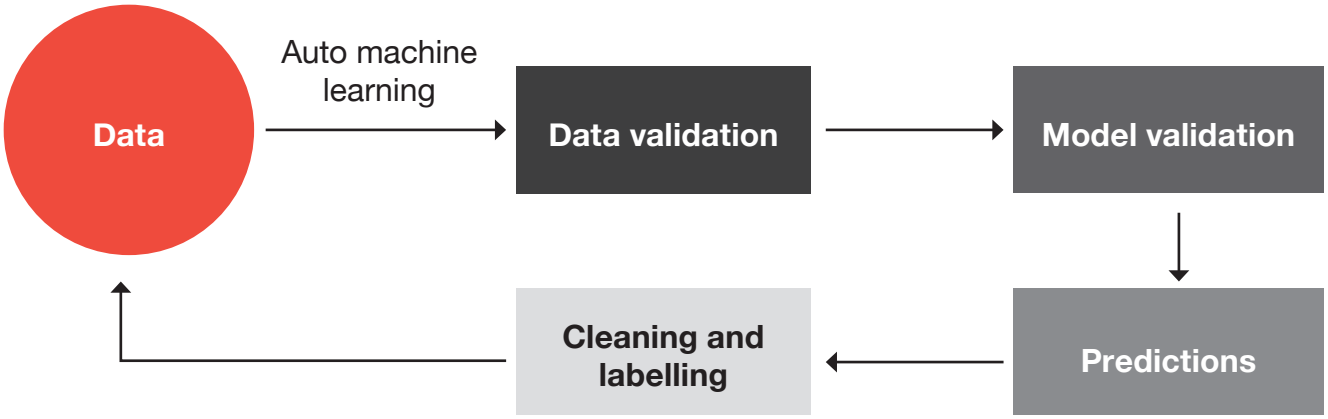
Generates more effective insights

Speed

Adapts to perform even faster over time

How adaptive AI works

Adaptive AI systems follow changes in environments and learn from new runtime data by updating their own codes. They consist of a decision-making framework which makes faster decisions while remaining flexible in terms of learning from newer issues. Over time, this framework becomes more accurate and efficient while making decisions and/or solving problems.



How adaptive AI works

ML algorithms	**Neural networks and deep learning**	**Transfer learning and meta learning**	**Evolutionary algorithms**

Traditional AI vs adaptive AI

While traditional AI makes use of raw data from the real world that is fed into it, the learning process of the system gets completed over time and the knowledge base of the system becomes static. But since the world is ever-changing, an intelligent system needs to continuously learn, adapt and improve.

Adaptive AI	Traditional AI
Suitable for dynamic and rapidly changing environments where the system must evolve and continuously provide value	Suitable for environments with stable and well-defined conditions, where the system's performance does not need to change over time
High scalability	Low scalability
Performance improves over time	Performance may degrade over time

Why businesses should adopt adaptive AI

Due to its flexibility and ability to continuously self-improve, adaptive AI can be implemented in almost every major aspect of business in multiple ways. Some of the use cases include:

Monitoring and securing digital financial transactions

Financial services are becoming increasingly digital. Hence, it is a need of the hour to monitor all transactions faster and more accurately. Due to the huge volumes of such transactions, AI is the perfect alternative to legacy systems, and it should be capable of adapting in order to become more efficient and accurate over time.

Detecting fraud and analysing risks in financial transactions and deals

In business and financial deals, adaptive AI can help in proper risk analysis and fraud detection. It is resilient and flexible enough to provide deeper insights and highlight red flags, if any. Additionally, for any potential risk of errors by AI, the number of errors would be reduced significantly over time thanks to the ever-learning nature of adaptive AI.

Improving performance of supply chains

Adaptive AI algorithms can analyse market trends and sales data to predict demand more accurately and give manufacturers more in-depth insights into production, inventory and distribution. Thus, companies can avoid any possible shortage or overstocking in their warehouses.

Minimising complexity of business processes

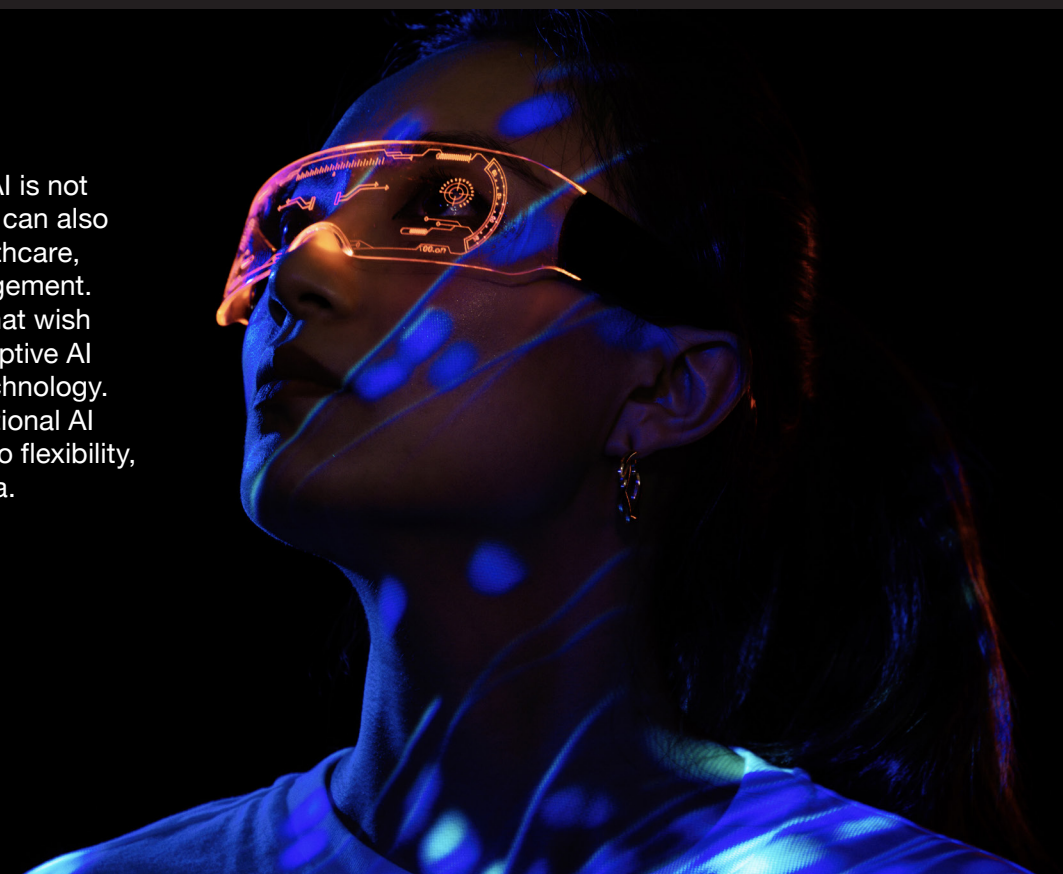
Enterprise business modules like inventory management and supply chain management can become more complex over time. To keep up, an industry would need to invest more resources and time. Adaptive AI, which learns continuously and improves its performance, can be a game changer in such cases.

Adopting other emerging technology trends

New technology trends such as the metaverse and Web 3.0 are ushering in a digital transformation. Most industries today are set to gradually move towards the adoption of these technologies. Adaptive AI can help in this transformation process by reducing effort and cost.

Conclusion

The implementation of adaptive AI is not limited to the above use cases. It can also be useful in sectors such as healthcare, environment and resource management. As a matter of fact, enterprises that wish to switch to AI should opt for adaptive AI to reap the full benefits of this technology. Adaptive AI can outperform traditional AI models significantly with regard to flexibility, performance and diversity of data.



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