# The rise of AI and automation in promoting sustainability across industries



In a climate of progressive technological evolution, businesses from various sectors are consistently seeking to harness the advantages of artificial intelligence (AI) and automation to enhance their processes and promote sustainable practices. Recent developments in both asset lifecycle management (ALM) strategies and innovative platforms like Yabbra highlight the growing trend of AI adoption across diverse industries, fostering an environment of efficiency and growth.

Kendra DeKeyrel, vice president at IBM’s sustainability software division, spoke to the importance of sustainability in manufacturing, stating, “Some level of inefficiency is inevitable in manufacturing. And while no production plant is perfect, improvement is possible by continuously looking to reduce waste.” This reflects a broader industry acknowledgement that sustainability is increasingly intertwined with operational efficiency. Manufacturers are incentivised to re-evaluate resource use and waste management, with ongoing investment not always necessary. Instead, a proactive approach combined with asset lifecycle management can yield significant sustainability gains without extensive capital expenditure.

Asset lifecycle management evolves through the integration of advanced technologies, including AI, which is enabling manufacturers to adopt data-driven insights to manage their machinery effectively. In manufacturing contexts, AI applications such as computer vision improve inspection processes by allowing machines to detect defects autonomously. This enhances the accuracy of monitoring operations and helps in the transition from reactive to predictive maintenance, significantly reducing operational waste. IBM has successfully employed these technologies in partnership with firms like Spendrups Bryggeri, resulting in a 15% waste reduction and a 30% improvement in product quality.

Generative AI is also transforming the work order management aspect of ALM. Maintenance managers frequently face challenges in accurately categorising failures and addressing root causes. Systems infused with generative AI can generate actionable suggestions for failure codes and provide predictive confidence scores. This capability not only streamlines the troubleshooting process but also maximises the potential of existing human resources. Manufacturers report leveraging generative AI to enhance various dimensions of operational efficiency, ranging from quicker document summarisation to the design of prototypes.

Beyond manufacturing, the emergence of platforms such as Yabbra is altering the digital landscape significantly. Yabbra aims to amalgamate cutting-edge technologies like AI, data analytics, and blockchain to tackle pressing challenges faced by businesses today. It reiterates a commitment to fostering innovation and sustainability, presenting a platform flexible enough for diverse sectors.

The platform’s core values focus on innovation, scalability, adaptability, sustainability, and data-driven insights. Its user-centric design facilitates customisation according to specific business needs across varied industries. In healthcare, for example, Yabbra drives advancements in patient care through AIening administrative processes, overall enhancing operational efficiency while ensuring compliance with stringent data protection regulations.

Moreover, the financial sector is embracing Yabbra’s data analytics capabilities to improve security and gain insights into emerging market trends, thereby reducing risks associated with fraud. Retailers benefit from enhanced customer understanding, allowing for personalised shopping experiences and optimised supply chain management.

In the educational field, Yabbra is deploying machine learning to support personalised learning environments, fostering closer communications between educators, students, and parents. This adaptability illustrates the platform’s commitment to enhancing productivity across verticals.

The broader narrative in both AI advancements in manufacturing and the emergence of platforms like Yabbra reveals an inherent drive towards sustainability and operational efficiencies across industries. As companies increasingly recognise the potential impacts of AI and automation, the successful integration of these technologies is poised to elevate productivity and support sustainable practices.

In summary, the confluence of AI, automation, and innovative digital platforms represents a significant shift in how industries operate, with a clear direction towards reducing inefficiencies and promoting sustainability. The ongoing transformation driven by these technologies will likely persist, catalysing further advancements across various sectors.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

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