

# DE-RISK YOUR AI IMPLEMENTATIONS WITH INFOSYS AI ASSURANCE PLATFORM

Artificial Intelligence (AI) has tremendous potential to transform businesses. If applied right, AI can help organizations become agile, knowledgeable and data centric improving their customer experience, profitability, and market share. However, as AI implementations are scaling up and becoming mainstream, the concerns about the trustworthiness of these systems are also growing. Some of these concerns include:

Fitment of AI to the use case	<ul style="list-style-type: none"> <li>Is this an ethical use of AI?</li> <li>Is the system accuracy sufficient to meet business requirements? What is the impact of tradeoffs made?</li> <li>Does the AI system provide results within an acceptable timeframe?</li> <li>Is the AI model seamlessly integrated into the existing business process/application landscape?</li> </ul>
Fairness of the AI system to different groups of users	<ul style="list-style-type: none"> <li>Is the implementation fair to all user groups?</li> <li>Is the accuracy adequate for all types of users? Are the results biased towards any set of users?</li> </ul>
Blackbox nature of AI implementations	<ul style="list-style-type: none"> <li>Is it possible to understand what factors led to the AI providing a certain result?</li> </ul>
Drift in AI accuracy over time as the business and data evolves	<ul style="list-style-type: none"> <li>Is there a process in place to monitor the model accuracy over time and take corrective actions?</li> </ul>
Privacy concerns over the usage of data	<ul style="list-style-type: none"> <li>Are there adequate safeguards for customer data and privacy?</li> <li>Is it possible to glean customer data from the deployed model?</li> </ul>
Adherence to country and industry specific compliance rules	<ul style="list-style-type: none"> <li>Are industry specific compliance requirements met?</li> <li>Is this an acceptable use of AI based on country specific regulations?</li> </ul>
Vulnerability of the system to malicious attacks	<ul style="list-style-type: none"> <li>Is the AI system robust enough to defend against adversarial attacks?</li> </ul>

Addressing these concerns will ensure greater acceptability of AI systems and greater adoption for both customer and enterprise use cases.

## The Infosys Solution

Infosys AI Assurance Platform provides a comprehensive assurance framework for AI to de-risk every stage of your AI implementation from data acquisition to production monitoring. This solution supports validation of different types of ML models across various dimensions of quality like functional fitment, explainability, fairness, security, privacy, and performance. It covers validation of different AI tools from ML to deep learning assurance.

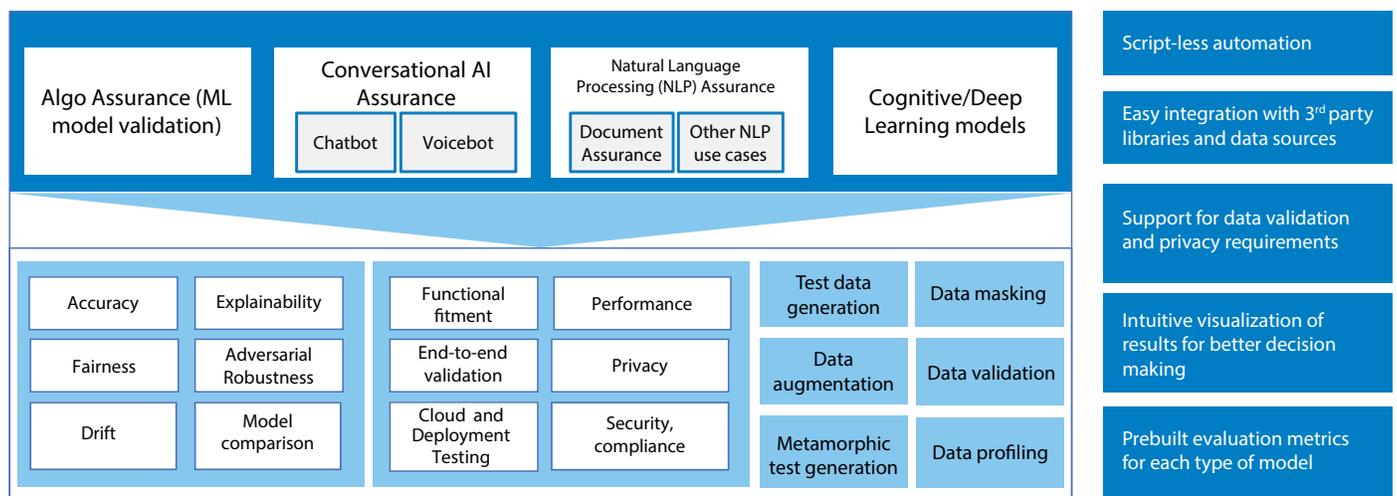


Figure 1 AI Assurance Platform Capabilities

## Key features:

Script-less automation	<ul style="list-style-type: none"><li>• Intuitive UI to help orchestrate end-to-end validation flow</li><li>• Suitable for users without any programming skills</li><li>• Support for multiple data science projects through the web interface</li><li>• CI-CD integration</li><li>• Prebuilt integrations with key Machine Learning (ML) libraries and different data sources</li><li>• Intuitive visualization of results for better decision making</li></ul>
Comprehensive validation capabilities	<ul style="list-style-type: none"><li>• Support for all types of ML models (ML, deep learning, Natural Language Processing (NLP), conversational AI) and validation needs</li><li>• Support for structured and unstructured data (text, audio, video, images, documents)</li><li>• R and Python Support</li><li>• Prebuilt metrics relevant to each type of model</li><li>• Comprehensive view of model quality across multiple parameters</li><li>• Support for comparison of different model versions</li></ul>

## Benefits:

Provides a comprehensive view of the inherent risks in implementing the AI model to production and helps in informed decision making	Ensures adherence to industry standard and country specific compliance rules and frameworks and improves stakeholder confidence	Helps to implement a fair, unbiased, and explainable AI application while meeting business goals	Reduces AI validation effort by 40%
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## Why choose Infosys?

Infosys has significant experience and expertise in assuring AI implementations, whether it be ML models, conversational AI, or NLP models. Infosys AI Assurance Platform draws on this experience to provide a holistic validation framework that can help enterprises scale up their AI validation efforts and deliver consistent quality.

## Success Story:

US based leading specialty retailer built a ML model to predict number of cartons delivered to a specific store 10 days prior, to optimize the workforce needed to handle the carton load. Infosys AI Assurance Platform was used to orchestrate and speed up all the data and model execution activities in a shorter cycle (2-week sprint). Prebuilt evaluation metrics and data visualization was used to evaluate accuracy of the model. This helped to achieve:



95% improvement in model accuracy of carton predictions for each store



60% reduction in cycle time for validation



Comprehensive evaluation of model with data generation including seasonality elements, weekend trends and client demography

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

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