

MAKE YOUR ENTERPRISE, AN AI ENTERPRISE.

STRATEGIES THAT CONVERT YOUR DATA FROM
INFORMATION TO INSIGHTS.

The 7 Key Considerations to become an AI Enterprise

Introduction

AI is unlocking new possibilities and opportunities for every enterprise. Organizations are using Artificial Intelligence and Machine Learning for informed decisions, predicting outcomes, and providing personalized customer experiences. This enables a competitive edge for the business by innovating and responding faster to market and customer needs.

**“..AI has helped us
strategize on our
customer base
leading to a 40%
growth.**

AI & ML also empowers your teams, be it Product, Strategy, or Technology & data teams to scale and deliver scalable and explainable production-ready models in an easier, faster, and more effective way than traditional machine learning approaches.

In this eBook, we'll explore seven key factors that you should keep top of mind as you transform your enterprise into an AI Enterprise.

Key 1: Starting with the Why?

Simon's WHY is to inspire people to do what inspires them so that, together, each of us can change our world for the better.

A successful AI strategy begins with asking the “Why”? Why do you want your Enterprise to be an AI Enterprise? Is it that you are trying to innovate faster, achieve efficiency or be the North Star? Define your needs, and the areas such as understanding customer dynamics, streamlining your supply chain, operational excellence, or streamlining manufacturing processes. As inspiration, here are some real life examples of how AI & ML are being used to address common business challenges:

- Financial institutions are using AI to evaluate credit risk and fraud scoring more personally, providing the right applicants with the right level of credit.
- Manufacturing and Industrial Units are using AI for operational efficiency, quality management, or supply chain operations
- Health and Commercial Insurance companies are using AI&ML to personalize policy, underwrite, or accelerate claim settlements including preventing fraudulent claims
- Retailers are using AI to offer personalized customer experience and the next best offer & recommendations
- Healthcare and life sciences organizations are using AI&ML for genetic engineering, personalized medicine, and accelerated clinical trials.
- Environment, Chemical, and Utility companies are leveraging AI towards reduction in GHG, reducing and managing Carbon Footprint, and leading towards the Net Zero journey and commitments.



Key 2: Apply AI&ML to business-specific scenarios, processes, and use cases

Once you have defined the 'Why', the next logical question is 'What'. In this step, you should be able to drill into specific and clearly defined business scenarios to which you can apply AI and ML. Start your journey with something that is simple but has measurable outcomes and a tangible impact. The best place to search is something in your core business operations.

1. **Review** your existing processes, and the improvement opportunities, and define what success will look like.
2. Jumpstart the quest by **answering simple questions** like:
 - What use case and/or business problem are you trying to solve?
 - Is this problem associated with the process or is it associated with execution?
 - How could the insights and predictions of AI&ML help improve the problem statement/scenario?
 - Can you define what success will look like and the expected outcomes and impact of the initiative?

Note: Most of the AI&ML projects fail to deliver as the strategy and approach are defined in executive rooms. For AI&ML to succeed, you must take a 360 degree, rather than focusing on the solution, focusing on the problem and expected outcomes, engage the front-line people. Quite often, people underestimate the impact of the Design Thinking Approach when it comes to AI & ML.



Key 3: It's all about Data, Data and Data

Enterprise data is the most essential element for successful machine learning. AI&ML is of no value or relevance without Data. Just having data is not enough, the quality, availability, and relevancy of the data are the key. The velocity and volume at which Data is getting generated is mind-blowing. Enterprises are generating data sets from a variety of sources, Enterprise Systems, Partner Networks, Social Channels, and agencies. Even to address a simple use case, one will need data from multiple data sources (internal and external).

“Do you know that **50%** of the data that exist today was **generated in the last nine months?**”

Enterprises often underestimate the need for Data and Feature Engineering, which are key to successful AI and ML Models.

Let's evaluate a real-life scenario: Consider a Food Industry that is in the business of manufacturing both perishable and non-perishable products. From the raw products to shipping them to the last mile, the company has to track various parameters at every step of the supply chain.

This will include internal data from Production Line, Order and Fulfillment, Shipping, and Handling along with factors like Temperature, Weather, and Product Exposure. It doesn't end there, the sales data, as well as the customer feedback, is also key. A holistic approach toward data is required for an effective AI and ML strategy.

Your team should be asking key questions.

- For a given use case, identify integral and supplemental data sets.
- Identify the data sources, and consider the ingestion and accessibility of data.
- Identify gaps, anomalies, and skewness in the data.
- Perform functions like Data Wrangling and Skewness Analysis before applying AI & ML Models.

Key 4: Explore and Execute various AI and ML Models

Move from Information to Insights, and look for explanations, not just answers.

Using AI will provide insights, and these insights will depend directly on the efficacy and effectiveness of your AI and ML Models.

Most Enterprises end up pausing their AI and ML efforts because of the availability of talent or the cost to build and operate models. You need someone to help you with Data but that someone doesn't always have to be a Data Scientist. Someone who has a curious mindset, analytical thinking, and good understating of your data can help you in Data.

“80 percent of AI&ML projects fail to add value.”

Another challenge that companies face is the time it takes to experiment and build ML models. For the right reasons, they can do limited investment in testing and validating various Models. To overcome this challenge, you can explore AutoML (Automated Machine Learning).

AutoML allows your team to test and validate data across hundreds of unique ML Models, without a need to understand the underlying algorithms used by ML Models. AutoML accelerates your model development by 15X, enabling Data Scientists, ML Engineers, and many others to focus on building highly accurate and easily deployable models.

Key 5: Implementing AI with the responsibility to verify and provide explanations

The rate of AI adoption is increasing and the world is getting engulfed by autonomous systems that are shaping the world into something that no one has ever seen. AI systems, although are solving the world's problems in every shape and form, the risks that come with them are also tremendous.

AI models run on the data and they perform as the data teaches them. Hence, many times biases present within the data are also learned by the model and are amplified to such an extent that they can start harming the users in various ways. If the bias-related issues are not identified and eliminated beforehand they can lead to the creation of a bad model, which can create customer and stakeholder dissatisfaction, and inquiries against the creators of the model for discriminating against particular sections of the population.

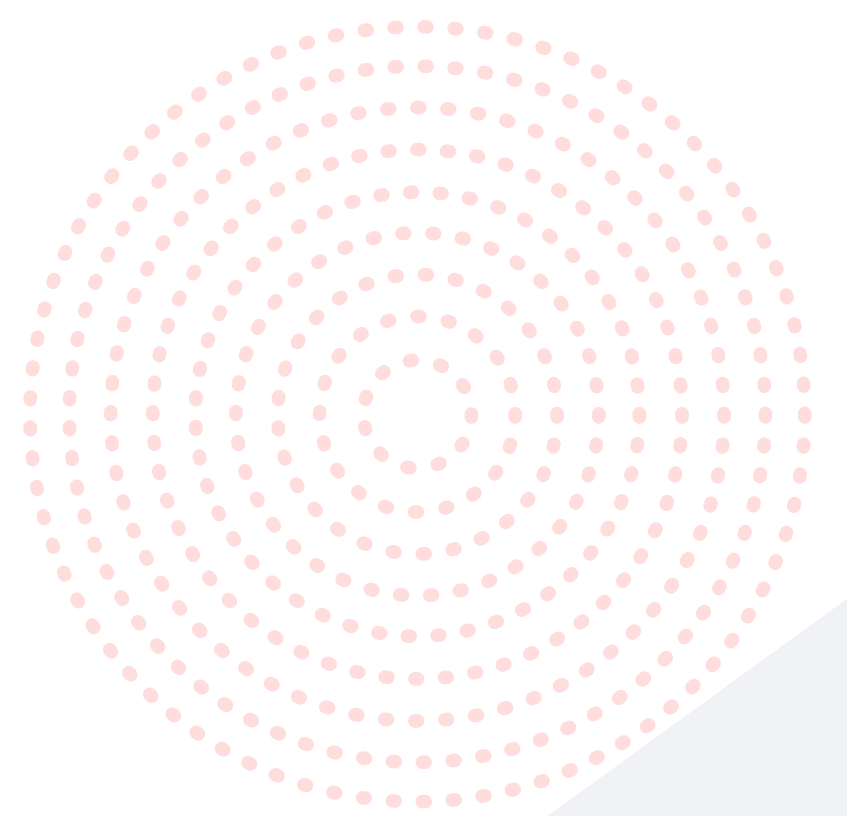
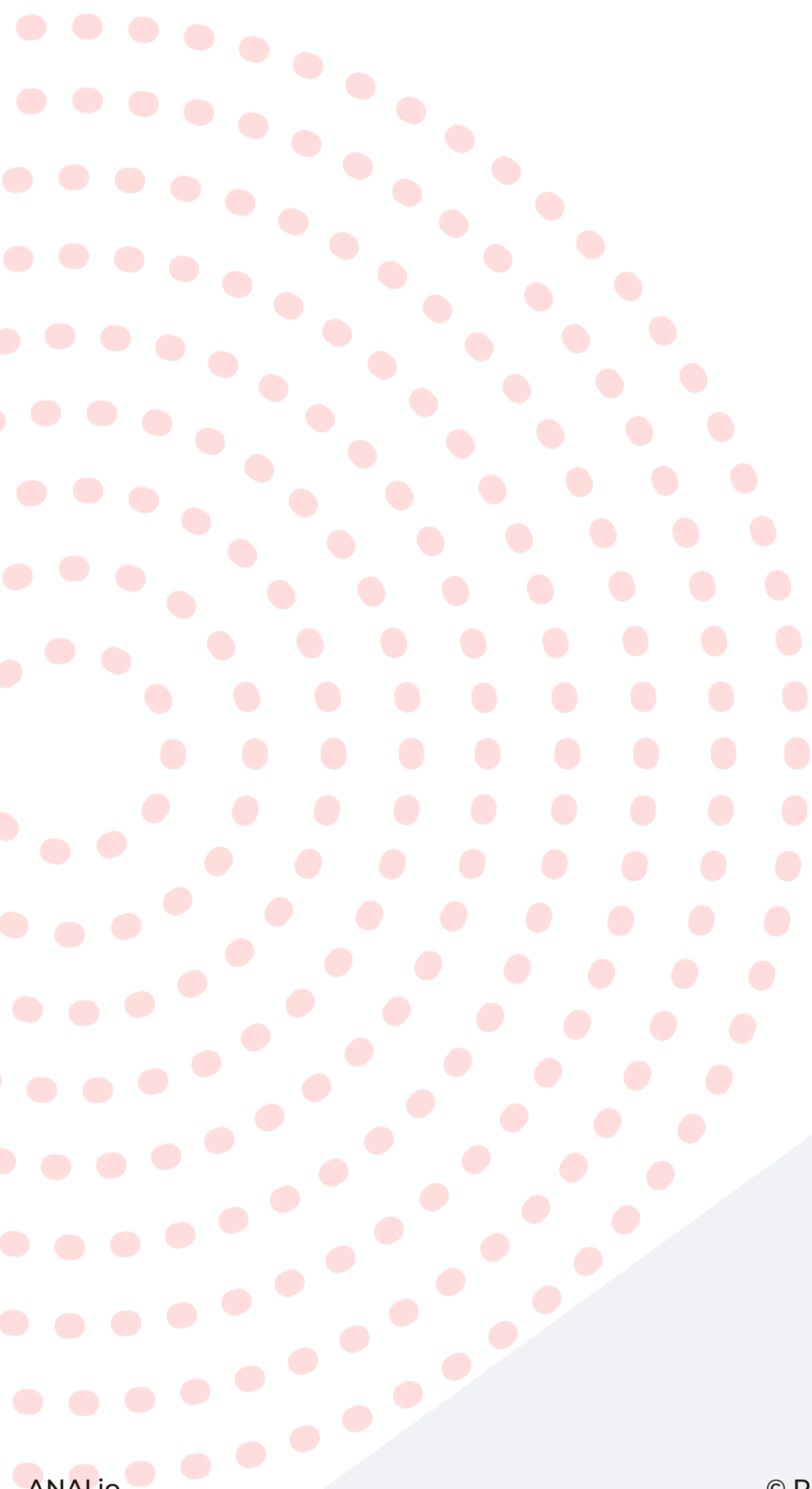
To solve this, approaches such as Explainable AI (XAI) and Responsible AI (RAI) can be deployed. XAI deals with generating explanations on how the black box models work to look into the biases within the data and the model. RAI helps businesses build AI systems that are bias-free, tested, and regulated. Both of these methods can help you deploy systems that are accountable, responsible, robust, and most importantly fair.



Key 6: Perseverance and Focus

AI and ML are buzz words, a blue shiny object, most often overused across the industry. It is ironic that even simple automation is sold under the guise of AI and ML. Developing, an AI and ML model is like composing harmony, a cycle may be repeated several times before it is ready. Every run, every model (or a note in harmony) gives you insights on which features to be used, the models, and associated algorithms. Once a model is built, you have to train it, including building the feedback loops of reinforcement learning. Once the model is ready to go live, you have to deploy it (MaaS or FaaS) using an automated pipeline.

While the steps can't be ignored or short-changed, you can invest in platforms that allow all the way from Data & Feature Engineering, Automated ML pipelines along with MLOps and XAI/RAI. This significantly reduces the Model Readiness timelines along with significantly improving the success rate of your AI&ML initiatives.



Key 7: There is no magic wand, although if you discover one, please do let us know.

Transforming your Enterprise to AI Enterprise is a journey and not an activity. As with any Journey, it is continuous, has various milestones, and often requires an iterative approach.

For a successful AI Strategy, you must not only stay focused but have the means to define, measure and monitor outcomes.

Stakeholder engagement, esp awareness, and education about AI & ML are key. Don't short sell the effort, the time horizon, and the 'Never Over' journey nature of the initiative. As remember, AI&ML is to augment your team, make your team smarter, and not replace your team.

Here are some **more pragmatic insights**

1. Stay Nimble and Focused – ensure that you can proactively respond to changing conditions
2. Keep things simple and avoid the overuse of buzz words.
3. Use Business Language to explain your model and its outcomes.
4. Experimentation is required but ensures you have clear hypothesis and learn from experiments. Don't convert your stakeholders and customers to be guinea pigs.
5. Last but not least, AI&ML is about People and Culture, investing in Talent and Mindset that embrace and adopt the real and outcome-based AI&ML.



How ANAI can help in **transforming your Enterprise** into an AI Enterprise?

An Innovative and Integrated Approach towards AI-based Product, Platform, and Ecosystem.

“AI for Enterprise are **game changers** and provide you with a Competitive Edge.”

ANAI's **powerful Engine** can help you adapt, accelerate and transform your AI Journey, effortlessly. ANAI offers **A to Z of AI and ML**, from Data Ingestion to Explainable AI.

ANAI Platform Features

Automated Data Pipeline

Our Data Connectors and Automated Data Pipeline allow Data Scientists and Data Engineers to focus on what matters the most to them by automating Data Ingestion, Data Analysis including Anomaly detections, EDA and Data Wrangling.

Auto ML

Our 300 plus unique ML Models, allow your team to train, test, and validate hundreds of models with the click of a button, resulting in identification, deployment, and adoption of the 'Best Fit' model.

MLOps

We live in a world where things change rapidly, and this means your data, processes, needs, and expectations are constantly evolving and changing. To ensure that the models stay tuned, we leverage the concept of the Champion vs Challenger Model to ensure that the model keeps learning and is always challenged to ensure its relevancy and applicability to a given business scenario and use case.

Explainable AI / Responsible AI

We firmly believe that AI and ML models can be trusted but we should have the means to verify the outcomes and decisions. Our RAI and XAI features offer more than 30 Models that provide explanations of the Model Outcomes. We help in identifying the Data and Model Drift.



WANT TO GIVE **ANAI** A TRY?

Visit www.anai.io or contact us at
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