Checklist to assess your infrastructure's readiness for ML implementation



A 2023 Global Trends Al report (based on a survey of 1516 Al and ML decision-makers) reveals that insufficient IT infrastructure (mentioned by 41 percent of respondents) and unwieldy data volumes (mentioned by 50 percent of respondents) are major complications on the path of Al and ML adoption.

QUESTIONS TO ANSWER TO EVALUATE YOUR ML READINESS:

1. Is your company's decision-making data-driven?

Transitioning to a data-driven business environment involves leveraging data analytics, machine learning, and artificial intelligence to derive actionable insights, make informed decisions, and drive strategic initiatives. A data-driven culture fosters collaboration among teams, promotes data-based decision-making, and cultivates a forward-thinking mindset that aligns with evolving market dynamics and customer preferences.

2. What types of data does your company generate?

This is another aspect of data infrastructure that's crucial to know. You should have a clear tracking system for all your data assets and a clear list of sources that you take data from and can potentially use for training ML models.

3. Do you have a well-established data team?

Data is extremely important for successful ML implementation. It's what you feed your algorithms and what eventually will impact your decision-making. Thus, having a data team comprising at least five skilled specialists is an absolute necessity for modern businesses if executives want to stay afloat and not drown in petabytes of useless and unmanageable datasets.

4. What data storage systems do you use? Are they cloud or on-premises?

Storing data only on-premises can complicate ML model training, as your on-premises hardware components may have limitations in terms of the type and volume of data they can store. In some cases, it would be wise to consider transferring data to the cloud to ensure scalability and high availability of diverse types of data assets, but only if you don't have any regulatory or compliance limitations regarding cloud migration.

5. What extract, transform, load (ETL) processes do you use?

ML implementation also requires properly established data ingestion and transformation processes to ensure that all data necessary for training is accumulated in a single storage location and is in a unified format that is understandable for ML algorithms.

QUESTIONS TO ANSWER TO EVALUATE YOUR ML READINESS:

6. Do data challenges hinder your workflow?

You should be able to identify data challenges that your company struggles with in order to prioritize issues and tackle them one by one to achieve a higher level of data intelligence. If it's difficult to evaluate your data infrastructure with your in-house resources, you can request a data infrastructure audit from a third-party software partner such as Yalantis.

7. What data analytics or BI tools do you use?

If data analytics of some form is already an integral part of your workflow, implementing ML should be a much easier endeavor. However, you should also evaluate the outcomes of your BI tools and define what quantitative and qualitative value they add to your business to compare their outcomes with the results of ML solutions and see to what extent ML can transform your business.

8. What data technologies are of strategic interest to your business?

This question is important for learning whether data management is a priority at your organization. Implementing and updating data solutions should be an ongoing process and have a solid place in your business agenda when setting short- and long-term goals.

9. Do you have the time and resources to develop an ML solution from scratch if necessary?

The all-time debate about whether it's better to <u>develop software from scratch or purchase ready-made solutions</u> is still relevant and applies to ML solutions.



MAXIMIZE YOUR BUSINESS VALUE THROUGH CUSTOMIZED MACHINE LEARNING SOLUTIONS.

CONTACT US