

Left-Shift Data Platform: How to overcome early stage startup challenges to be Data-Driven

Data Platform is a fundamental necessity for any startup in 2024. Although, there are many early stage startups are struggling to being a Data Driven at Frist Place. This article discusses early-stage startups' current challenges and how I build cost-effective strategy to address these solution for a upcoming social media startup.

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The structure of the article is as follows:

- What is a Data Platform:
- Why do you need a data platform?
- Challenges startups are facing to be a data driven
- What strategies you can employ to be data-driven

What is a Data Platform

A Data Platform integrates and processes business and product data to provide valuable insights. These insights can include dashboards, KPI metrics, growth indicators, and machine learning models for forecasting and better decision-making. By using a Data Platform, startups can ensure they can adapt and thrive in competitive markets and make better business decisions. The data platform acts as the backbone for startups aiming to be data-driven that provide you better customer insights, competitive advantage. In today's era of AI, every new digital product

needs to be integrated with AI models and analytics to grow the audience and compete in the market with the innovative product.

Why Startups Need to be Data Driven at First Place?

Data refer to the new oil in our digital economy. It is considered to be the lifeblood of any business. As Peter Drucker once said, *'You can't manage what you can't measure.'* In today's world, measuring your business growth without the efficient use of data is impossible.

Over the past few years, I have worked with several startups and had the opportunity to meet with many high-ranking executives, including Chiefs, Heads, and Directors of Product. During one of my conversations with the head of a mid-stage startup, I was surprised to learn that there are still companies out there in their early stages who still don't want to consider investing the time and resources to build a data platform; instead, they only want to focus on building a product itself.

I am less shocked after reading the survey conducted by [IW Germany](#) in December 2022. More than 1,000 companies participated in this survey.

Only 30% of small companies manage and utilise their data efficiently. It means there are still 70% of businesses out there that are not promoting data-driven decisions, which is a big number.

To increase your chances of being successful in your Startup journey, you need to prioritise in building a Data Platform in the first place. One of the studies by [McKinsey Global Institute](#) clearly shows that.

Data-driven organisations are 23 times more likely to acquire customers, 6 times as likely to retain customers, and 19 times as likely to be profitable.

NewVantage has conducted surveys and reported in a recent study for eight consecutive years.

For 2023, 91.9% of businesses delivered values from their data, while the prediction for next year increased up to 98.2%. However they also concluded that 79.8% of companies are still struggling to overcome the challenge of becoming a data-driven

As we are entering the second decade of talking about data leadership and the importance of data-driven decisions, with ten years of experience in the data domain, I can't imagine there is another world outside that is still not considering or giving priority to being data-driven in the first place.

The Pain Points of Early Stage Startup

I want to dive deep and understand the pain points and current limitations of Startups. My findings are as follows:

1. Cost: They didn't have money to invest in data, resources, and infrastructure in their early time.
2. Mindset: They linked the data platform with the term *BIG DATA* Infrastructure, which is complex and requires a lot of resources, money and highly expert engineers along with the infrastructure.
3. No Time: They want to focus only on building their product and service to stand out because they don't have enough time.
4. Where to start? Some businesses understand that they need a data platform, but with limited knowledge, they cannot make architectural decisions because of complex Data Stacks.

Cost-Effective Strategy

If you or your business are experiencing any of the above-mentioned

challenges. In that case, I want to shift your focus to a cost and time-effective data strategy I advised for one of my startup's clients, and they are successfully building their pillars for data platform.

- Overcome your Cost & Budget Constraints:
 1. Initially, begin with a small, minimally viable data solution that addresses the most critical data needs, then scale as the business grows.
 2. Leverage Open Source Tools: Many open-source data tools and platforms like (Airflow, Airbyte, Mage.ai, Data Build Tools (DBT) and Python can significantly reduce costs.
 3. Consider Junior or mid-level engineers with some experience can be sufficient to set up your first initial data platform.
 4. You can attract engineers with equity-based compensation. Many talented individuals are willing to contribute to promising startup ideas in exchange for equity.
- Simplifying the Big Data Infrastructure:
 1. Don't go for Big Data Technologies to be data-driven in your early career unless you really need it. Simple scripting programming languages like Python cloud-based data platforms like Google Cloud Platform, AWS, or Azure could do a kick-start. These services provide a pay-as-you-go model that can scale with the company, eliminating the need for large upfront investments.
 2. Opt for Managed or Serverless Services. It simplifies the complexity of setting up and maintaining a data infrastructure and provides support and maintenance.
- Time Management:
 1. Integrate Data into Product Development: Data should be considered part of the product offering, not a separate entity. This integration can help you create more user-centric products and services.

2. Adopt Agile Methodologies: Implement agile methodologies that allow quick iterations and incorporate data analytics into the development process.

- Limited Data Knowledge and Complex Data Stacks:

Consult with Data Experts: Short-term consultations with data experts can guide you in setting up your data infrastructure and building a data platform team that aligns with business goals.

Conclusion

The data platform is the founding pillar of any company, allowing it to make decisions based on data, trends, and customer experience without only trusting your second sight. Initially, you don't need a complex Big Data architectural solution. Proper data and product strategy building requires efficient use of time and resources. Building a product is essential, but ignoring the data platform in the early stage could leave you behind in the competitive market and better customer engagement. In above mentioned survey it is clearly shows that it potentially increase the chances of being successful. That's why you have to Shift Left i.e. move the data platform priority to first place together with the product development.

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