



CODE TILL YOU DROP...

# Daviz

Your Data's Best Ally: A cutting-edge multi-agent system that transforms raw data into actionable insights through seamless data ingestion, cleaning, analysis, visualization, and reporting—delivering unparalleled efficiency and precision.

Problem Statement Code: 02

Team Name: German Liberation Army

Team Leader Name: Samarth Vasisht

Institution Name: BMS Institute of Technology & Management



# IDEA/APPROACH DETAILS

USP: Scenario Simulation & Immediate Action

- **Dynamic “What-If” Modeling**: Automatically simulate future outcomes when users adjust budgets, launch new products, or change supplier terms—recalculating KPIs in real time.
- **Adaptive Strategy Recommendations**: Go beyond predictions; get actionable strategies based on historical ROI patterns, seasonality, or other data insights.
- **Narrative Comparisons**: Instead of generic charts, receive side-by-side “storylines” highlighting the pros, cons, and potential impact of each scenario.
- **Validation & Sanity Checks**: A specialized agent ensures forecasts remain realistic, checking assumptions against known references and domain heuristics.
- **Immediate Action Execution**: Don’t just plan—act. From launching email campaigns to updating salaries, seamlessly implement recommended steps within the platform itself, integrated with relevant tools.





# BENEFITS

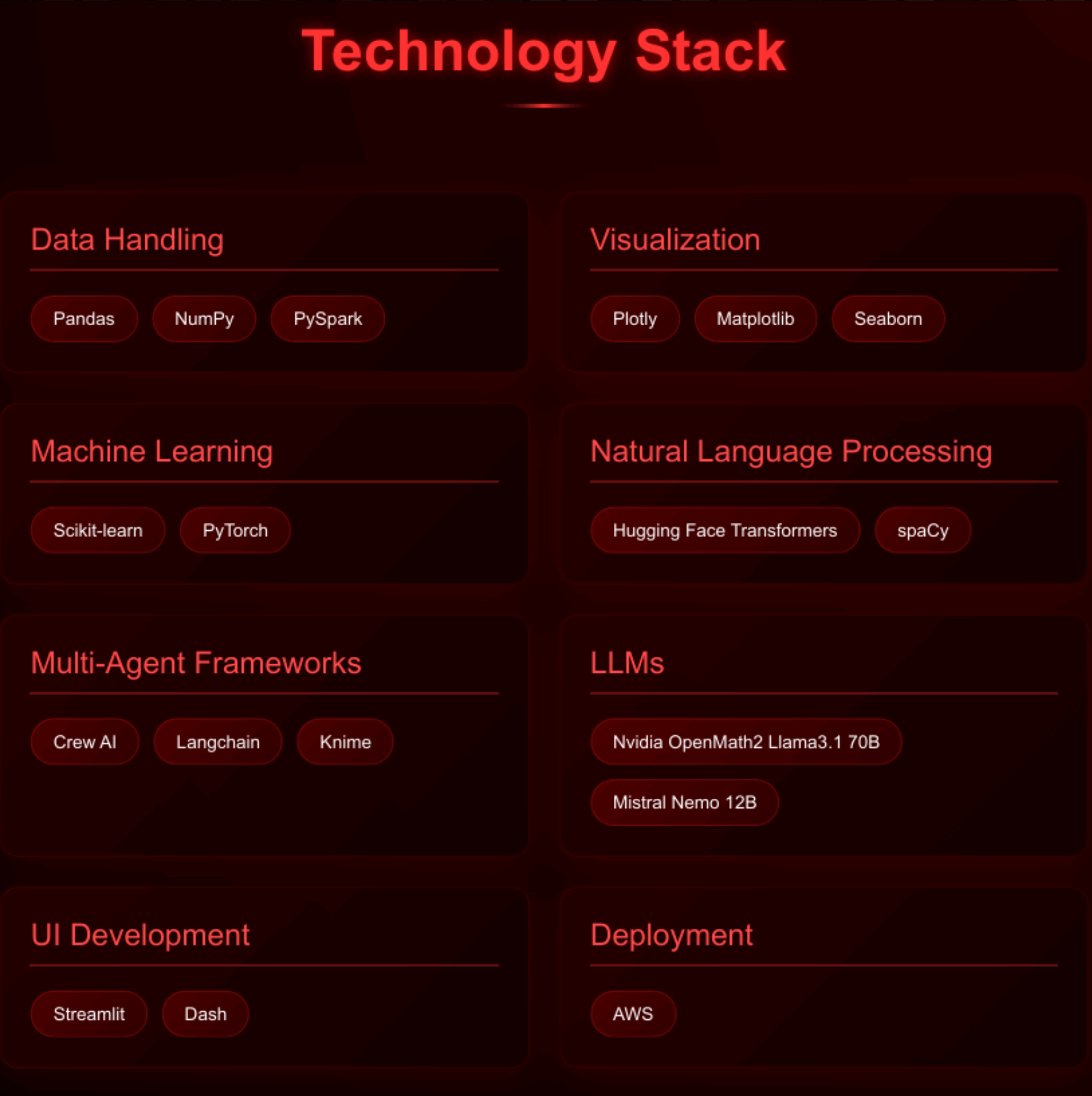
- Accelerated Decision-Making: Rapidly move from insights to action with scenario-based analysis and one-click implementation.
- Reduced Risk & Cost: “What-if” simulations expose pitfalls before major investments, minimizing expensive missteps.
- Personalized Recommendations: Tailored strategies across marketing, operations, or HR—backed by real-time data.
- Enhanced Collaboration: Non-technical stakeholders easily grasp complex findings through intuitive visualizations and summaries.
- Continuous Optimization: Quick iteration and real-time feedback loops keep decisions in sync with evolving business landscapes.

# USE CASES

- Retail & E-commerce: Test pricing, promotional campaigns, and inventory adjustments—then implement instantly.
- Financial & Insurance: Model risk, detect fraud, rebalance portfolios, or refine claim investigation policies.
- Manufacturing & Supply Chain: Optimize production schedules, supplier terms, and overall logistics.
- HR & Organizational Planning: Forecast how salary changes or hiring plans affect retention, then execute policy updates.
- Healthcare & Pharma: Allocate staff or medical resources, compare drug trial outcomes, and simulate dosage impacts.



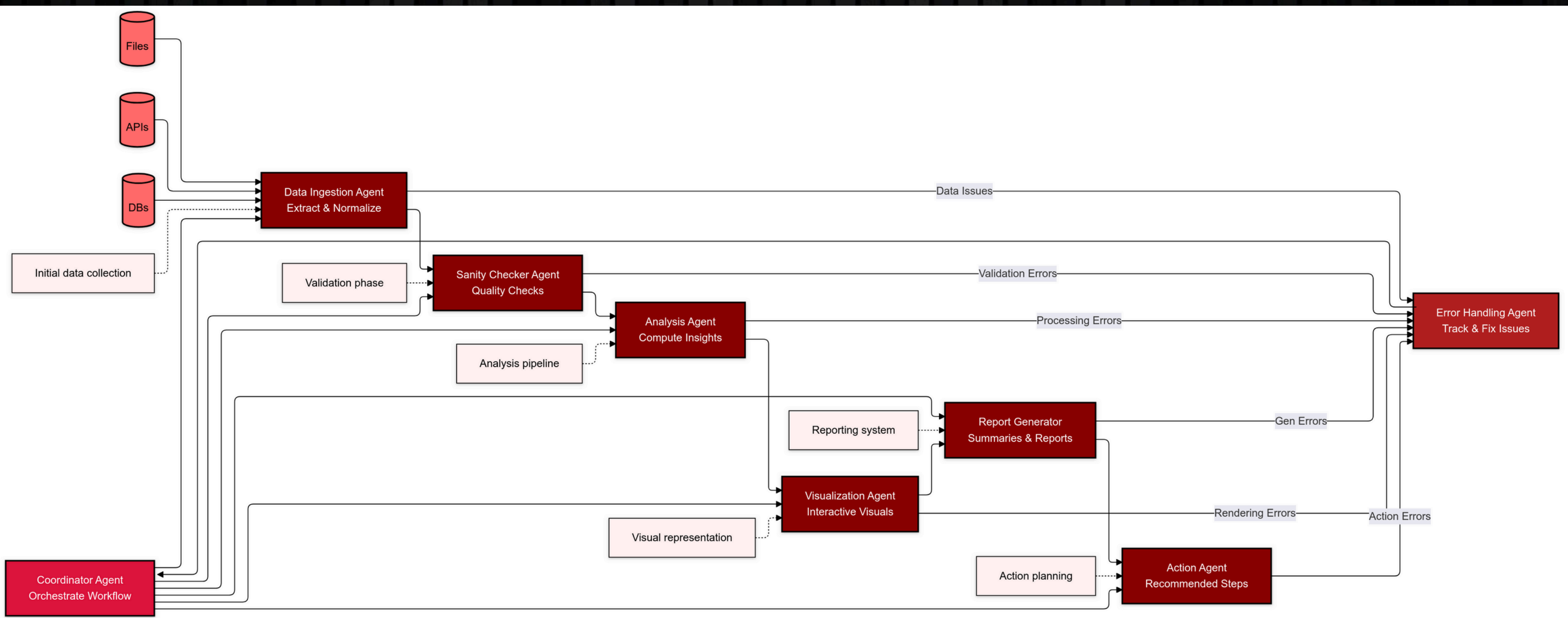
# Tech stack and showstoppers



## Challenges & Showstoppers

- **Cascading Agent Failures:** If one agent’s assumptions or data pre-processing goes awry, it can mislead all subsequent agents—a systemic risk not always spotted immediately.
- **Reality Mismatch in Simulations:** Scenario modeling can overfit to historical data, producing futuristic “what-if” insights that don’t hold up in real-world volatility or black swan events.
- **Cross-Domain Expertise Gaps:** While the tool is domain-agnostic, deep industry nuances (e.g., healthcare regulations or finance compliance) might be overlooked, producing incomplete or misleading insights.
- **Over-Automation Risks:** Enabling automated actions can trigger unintentional chain reactions (e.g., sudden price changes or resource reallocations) without sufficient human oversight.
- **Adaptive Malpractice:** Sophisticated adversaries (e.g., fraudsters) could study the system’s outputs and adapt, making defense strategies obsolete or even counterproductive if not continuously updated.

# Implementation flowchart





# TEAM DETAILS

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