

Translational AI Center

LLM-based Insights into how market orientation and brand storytelling affect investors' evaluation of startup pitches

Market Orientation and Brand Storytelling



Startups that fail to combine market understanding with compelling brand storytelling risk weakening investor confidence, often leading to missed funding opportunities and slower growth.

Market orientation is the extent to which an organization behaves in response to a given market.

- Market orientation mediates 57.7% of entrepreneurial impact on performance ([Cheng, Wu & Xiao, 2025, Scientific Reports](#)).

Brand storytelling is a strategy where a company uses narratives to communicate its brand identity, values, and message to customers.

- 35.2% boost in funding for startups showing passion and warmth in pitches. ([Hu & Ma, 2021](#)).

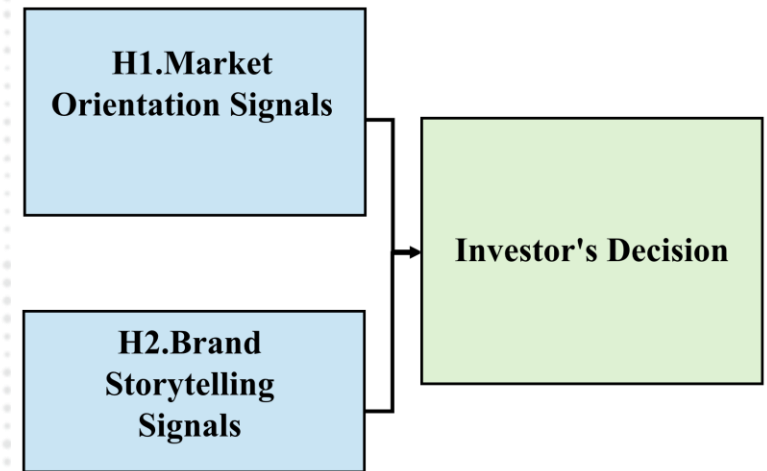


Figure 1: Conceptual model



Overview of Shark Tank USA Data Set

Data Acquisition:

1. Videos scraped from Shark Tank YouTube
2. Transcribed using Assembly AI
3. Aggregated with Shark Tank US Kaggle data.

Description:

Dataset includes sales pitch, investment decision, and sectoral industry composition.

Relevance:

Provides foundational transcript-based data to evaluate **Market orientation** and **Brand Storytelling**.

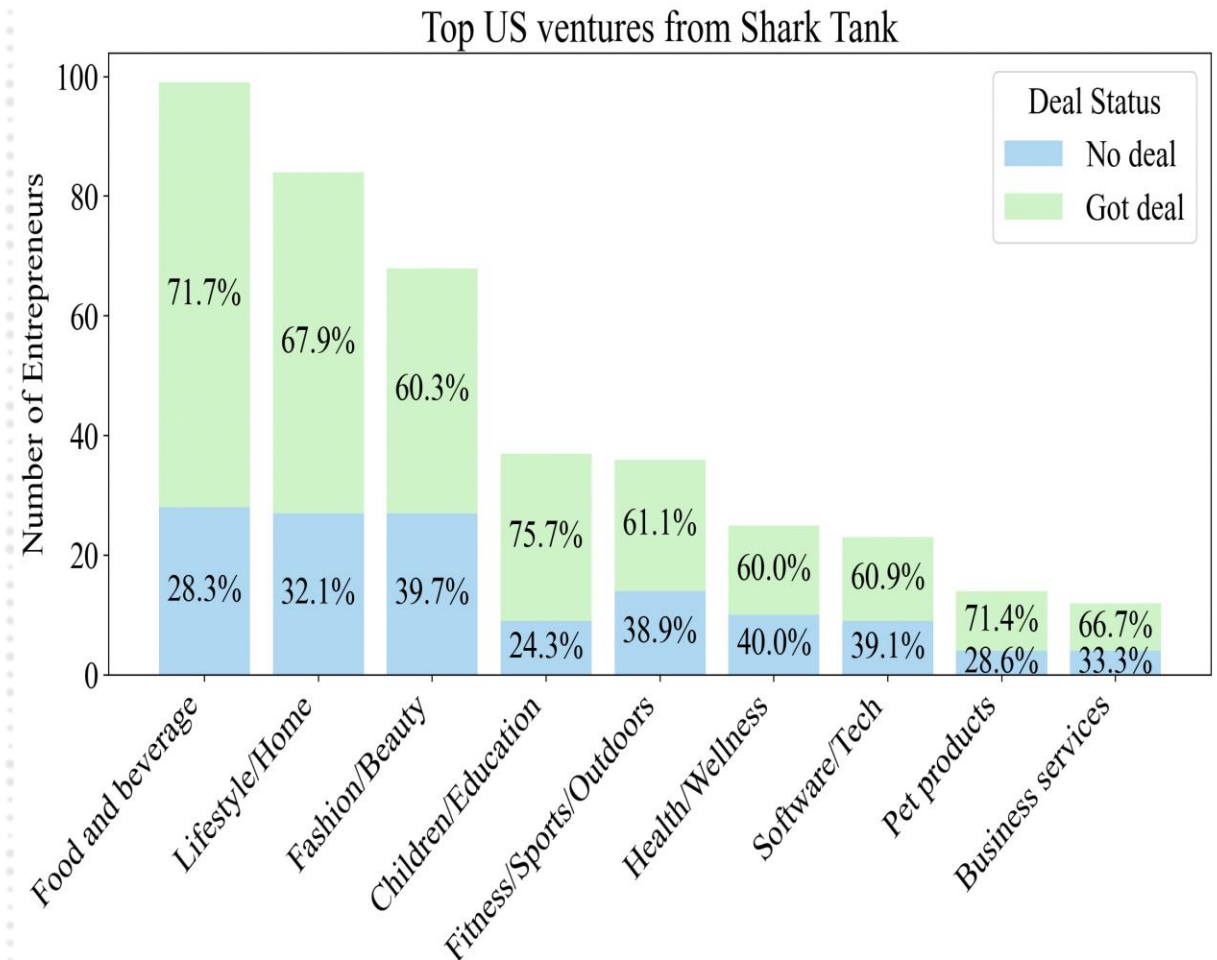
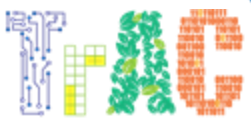


Figure 2: Sectoral composition of successful and unsuccessful pitches



Exploring LLM Based Framework

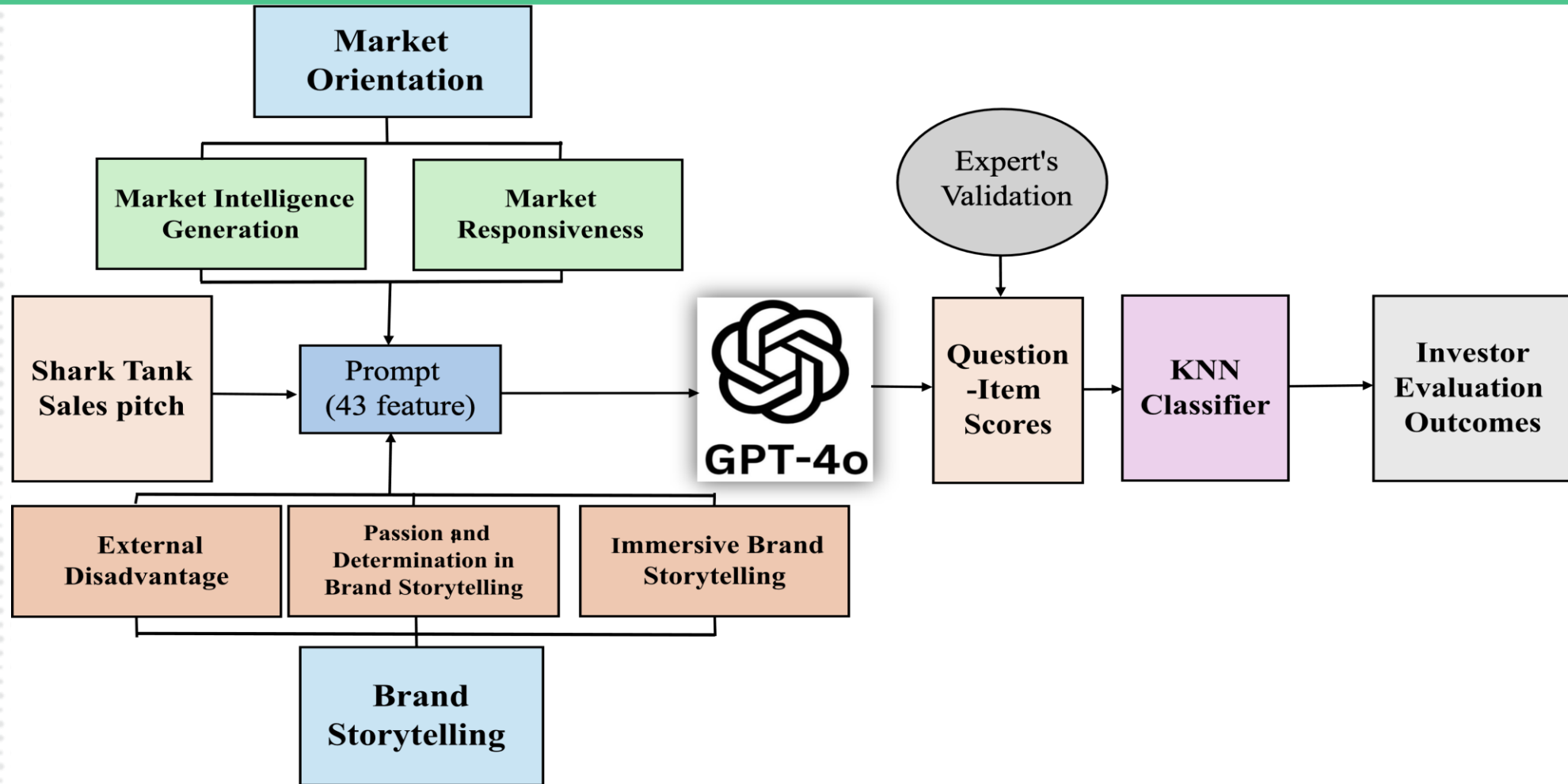


Figure 3: Pipeline for evaluating impact of market orientation and brand storytelling using large language models.



Results and Key Takeaways

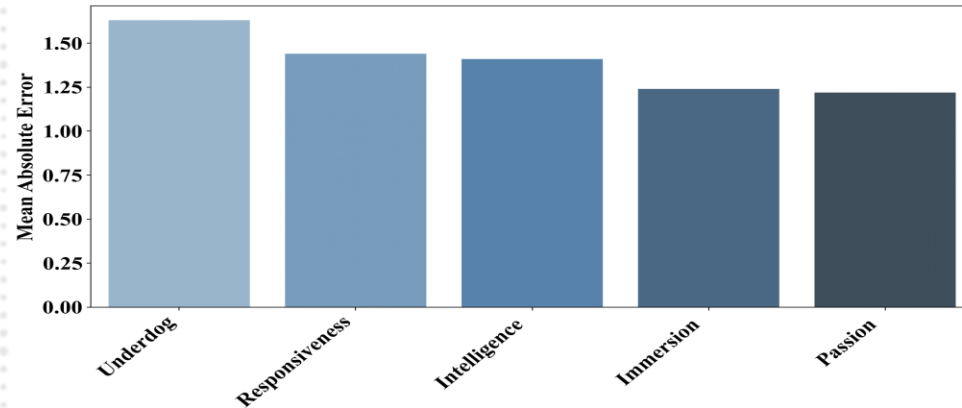


Figure 4: Mean Absolute Error Between Expert and LLM Scores (Scale of 5)

Performance metrics	Accuracy	Precision	Recall
Intelligence generation	0.55	0.67	0.7
Responsiveness	0.7	0.72	0.93
Underdog	0.67	0.7	0.93
Passion & determination	0.69	0.74	0.87
Immersion into the story	0.64	0.69	0.9

Table 1: Overall performance of our study

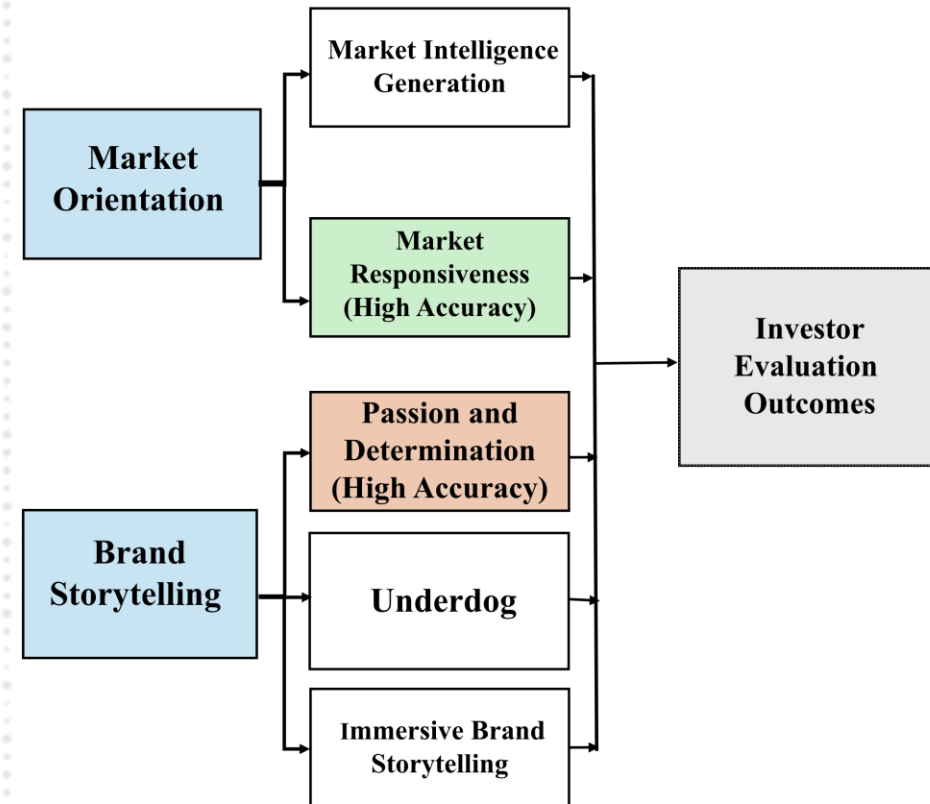


Figure 5: Key Takeaways from our study

Jayashankar, P., Roy, T., Chattopadhyay, S., Arshad, M.A. and Sarkar, S. (2025), "The impact of market orientation and brand storytelling on *Shark Tank* evaluations – a B2B and large language modeling perspective", *Journal of Business & Industrial Marketing*, Vol. 40 No. 1, pp. 265-280. <https://doi.org/10.1108/JBIM-10-2024-0811>

