



DOI: <https://doi.org/10.69648/IFRG6162>

International Journal of Natural and Technical  
Sciences (IJTNS), 2026; 6(1): 19-48.

[ijtns.ibupress.com](http://ijtns.ibupress.com)

Online ISSN: 2671-3519



Application: 18.04.2026

Revision: 23.05.2026

Acceptance: 25.06.2026

Publication: 26.06.2026



Singh, N. P. (2026). Database-as-a-Service (DaaS) Sector Expansion: MongoDB's acquisition of Voyage AI tech startup to moderate Hallucination. International Journal of Technical and Natural Sciences, 6(1), 19-48. <https://doi.org/10.69648/IFRG6162>



#### Netra Pal Singh

School of Business Management & Commerce, MVN  
University, Palwal-121105, Haryana, India  
<https://orcid.org/0000-0002-3006-9522>

Correspondence concerning this article should be  
addressed to Netra Pal Singh  
Email: [dr.npsingh@mvn.edu.in](mailto:dr.npsingh@mvn.edu.in)

# Database-as-a-Service (DaaS) Sector Expansion: MongoDB's Acquisition of Voyage AI Tech Startup to Moderate Hallucination

Netra Pal Singh

## Abstract

Invention is the crucial source of development and competitive gains in tech segment of the industry specifically artificial intelligence domain. In the context of aggressive hi-tech rivalry, augmenting innovation competencies is strategic factor to accomplish even for mature big tech firms. To enhance innovation capabilities the big tech companies are following the path of mergers and acquisitions to get hold of external technologies. In this context, this deal in Database-as-a-Service (DBaaS) domain is a landmark deal. The research contents of this article present the motivation (acquiring external technologies in short time) of MongoDB which has grown organically in the past, acquiring a high-tech startup Voyage AI at a very high exit evaluation cost. The research article concluded that the acquisition strategy of MongoDB is more similar to horizontal acquisition. Post-merger integration model of MongoDB is in sync with theories such as Resource Based View, Knowledge Based View, Open Innovation Theory, and Absorption Capacity Theory. This is because of technological, financial capabilities, and market reach of MongoDB (Colombo et al., 2021). The integration of technologies of two firms will reduce hallucination in AI applications and provide a platform for future innovations in AI domain. It will fill the technological gaps for MongoDB and may create technological disruption in future if MongoDB able to innovate with acquired new skills.

*Keywords:* Absorptive capacity, text embeddings, multi-model embeddings, rerankers, RAG.

## Introduction

Voyage AI is based in Palo Alto, California, USA. It was founded in 2023 with a backing of venture capital investors. Its valuation was \$ 11.64 million per employee during 2025. Its exit valuation was \$ 220 million during the same period. It is developing Retrieval-Augmented Generation (RAG) tools to reduce AI hallucination. RAG tools and fine tuning will come over the limitations such as lack of updated knowledge and outdated public knowledge of Large Language models (LLM) such as ChatGPT-3 (Sourabhkv, 2024). Its application domain of activities is AI and data management. It has developed algorithms for exploration and retrieval of data/information from unstructured big or small databases of text, images, audio, video etc. Its models are used by tech companies such as Anthropic PBC, Lang Chain Inc., Harvey.AI, and Replit Inc. Its core competency is in building embedding models, customized for specific domains of application and specific firms, for enhancing retrieval correctness and RAG applications that enhancing accuracy and reliability of governance AI models with information from specific and relevant data sources (Merritt, 2025). Voyage AI offers high-precision data vectorization, production-ready models tailored for domains such as finance, healthcare, and legal. It had also developed capabilities of integration with existing information systems. With the help of Voyage AI tools businesses can improve their AI-driven processes while developing framework for intelligent data retrieval and analysis as per their needs (PitchBook, 2025). Voyage AI had developed API endpoints for embedding and reranking algorithms that take users' data (such as documents, queries, or query-document pairs) as an input and gives their embeddings or relevance scores as an output. Further, embedding models and rerankers can be integrated with other parts of a RAG (a general purpose fine-tuning recipe that can be used nearly any LLM to connect with external resource) stack as a module, together with vector stores and generative Large Language Models with the help of Voyage AI models/tools for LLMs (Merritt, 2025).

Voyage AI offers high precision data vectorization, production ready models for finance, healthcare, and legal as mentioned earlier. In addition, it also provides integration capabilities with existing systems that enable business to improve their AI driven processes by providing a framework for intelligent data retrieval and analysis. Basically, Voyage AI has major three capabilities. These are (i) text embeddings, (ii) multi-model embeddings, and (iii) rerankers that can boost the relevance and quality of retrieved result of RAG pipelines by deploying two stage retrieval processes that is initial retrieval and reranking (Ism, 2024).

MongoDB basically has grown organically but had acquired companies of smaller valuation as evident from the data given in table 1. To fill gaps of internal innovation in technology MongoDB acquired WiredTiger an open-source, NoSQL data management platform known for its high-performance storage engine in 2014. It has acquired Objectlabs Corporation later on known as MongoLab for \$68 million in 2018. It is a cloud based database service. It is hosted with fully-managed MongoDB databases, operating on platforms like AWS, Google Cloud, and Microsoft Azure (Marketscreener, 2018), MongoDB acquired Realm, a mobile-focused database company to strengthen MongoDB's mobile database solutions in 2019 for \$ 39 million (Chan, 2019). Very recently on February 24, 2025 MongoDB acquired Voyage AI for harvesting benefit of its core technology and brilliant team of developers in AI & data management segment.

The objective of these acquisitions are (i) WiredTiger was acquired to enhance the high quality manpower and capabilities of MongoDB 3.0 (Solarwinds, 2017), (ii) ObjectLabs was acquired to compete in global cloud database technology market (Genig, 2018), and (iii) Realm was acquired to strengthen mobile offerings (Dineshwori, 2019). Its objective to acquire Voyage AI was to improve accuracy of Generative AI models as stated by Aiello (2025).

**Table 1:**

*Market Cap at the end of years & Buyouts of MongoDB*

Year	Market Cap	Change	Buyouts	Value
2025	\$15.38 B	-19.43%	Voyage AI	\$220 Million
2024	\$19.09 B	-35.28%	Nil	Nil
2023	\$29.50 B	116.38%	Nil	Nil
2022	\$13.63 B	-61.40%	Nil	Nil
2021	\$35.33 B	63.30%	Nil	Nil
2020	\$21.63 B	189.74%	Nil	Nil
2019	\$07.46 B	66.37%	<u>Realm</u>	\$ 39 Million
2018	\$04.48 B	199.00%	<u>ObjectLabs</u>	\$ 68 Million (Marketscreener, 2018)
2017	\$01.50 B		Nil	Nil
2014	-	-	<u>WiredTiger</u>	<u>Undisclosed (MongoDB, 2014)</u>

Source: [https://companiesmarketcap.com/mongodb/marketcap/#google\\_vignette](https://companiesmarketcap.com/mongodb/marketcap/#google_vignette)

The main objective of present research is to analyse the key strategy of growth of MongoDB to enter in high-tech domain inorganically with small and gradual

investment to mitigate risk of failures of merger and acquisition approach (Singh & Singh, 2020; Folta, 1998; Vassolo et al., 2004). Second objective is to extend literature on integration of technologies and skills of startup high tech companies. It may not be easy, however, may be quick due to size of startup in terms of product range which are not monolithic and skilled manpower. This may be in line with existing absorptive capacity theory (Cohen & Levinthal, 1990; Hagedoorn & Duysters, 2002). A third objective is to analyse the acquisition of Voyage AI which is unique in many ways. The domain of technology of Voyage AI is full of disruption, innovations are core philosophy of startups, large tech companies acquire innovators to fill the unique skill and technological gaps provided objective is not to kill competition.

Based on the insight of data available just after acquisition news, this study is an effort to investigate MongoDB acquisition of Voyage AI in all-inclusive manner in relation to strategic and behavioral theories and the stated research objectives and propositions identified and narrowed down based on overall objectives as listed in earlier paragraph. The research paper consists of 7 segments starting introduction of the companies and also includes acquisition of small firms by MongoDB. This makes section 1 of introduction. The next section 2 presents the assessment of works of other researchers in the tech domain followed by section 3 which embodies the methods/ processes used in the study. The next section 4, presents the statistics of top 10 tech acquisitions of quarter 1 of 2025, mergers and acquisitions in technology segment during 2021 to 2024 and funding of Voyage AI. The section 5 embodies a brief of deal, and similar deals between other companies for the same objectives, business models of Voyage AI, and impacts of acquisition in the ecosystems of Technology. The reasons for acquiring Voyage AI by MongoDB, Voyage customers and competitors, analysis of seven propositions in the context Voyage AI acquisition are presented in section 6. The last section 7 offers the closing explanations on the purchase of Voyage AI.

## **Analysis of past literature on the subject**

This section presents a brief review of the tech acquisition in the segment of AI segment in the recent past with almost similar objectives. Researchers in the recent past highlighted the shift in technology innovation strategies of established corporations. The terms such as open innovation v/s traditional internal innovation of big corporation have created interest among academics and also encouraged start-

ups. Singh (2019) analyzed acquisition of DataFox by Oracle. He concluded that Oracle acquired DataFox to augment AI driven abilities, enlarge accessible data bases for its business intelligence tools. This deal was \$33 million approximately. Prado & Bauer (2022) considered a set of 32,367 venture capital deals between 2010 and 2020. They also included 392 tech start-up acquisitions in their study. These acquisitions were by Google, Facebook, Amazon, Apple, and Microsoft. They concluded that there is a statistically significant positive normal effect of Big Tech start-up acquisitions across world, on venture capital movements/ investments. Their outcomes were based on fixed effects panel data and statistical method, i.e., differences-in-differences (DiD) estimators of causal effect. They also concluded that positive effects of big tech start-up acquisitions are short lived in the context of more venture capital investments.

de Barys & Gautier (2024) investigated whether an acquisition of startup focused on innovation, by a big tech contributes to the development of technologies in the form patents. Similarly, Gugler et al. (2025) studied several hundred acquisition made by Google, Apple, Facebook, Microsoft and Amazon and discovered that about 14% of acquisitions negatively affected innovation and venture capital investment. There are large variations in innovation outcomes across the acquisition.

**Gap 1:** Venture capital investments are in directly related to merger and acquisition. Many authors have studied large number of mergers & acquisitions in relation to venture capital investment which indirectly drive innovation by startups. However, this results in to summarization of data from diverse tech domain which results in to findings of generic nature. Summarization also results in to loss of information. Generalization may be out of context for many mergers and acquisitions. The analysis of Voyage AI startup acquisition by a big tech company will fill gap of knowledge of high-tech domain specific merger and acquisition.

Kak et al. (2023) mentioned that there is no AI without big techies. Every startup, new entrant, and even AI research lab are non-existent without large technology companies. Their dependence is because they do not have computing infrastructure at par with Microsoft, Amazon, and Google to train their best models. AI startups depend on large technology companies to reach out to the consumers to deploy and sell their AI products. Therefore, it is good for these startups to be acquired as early as possible.

Singh (2011) studied the expansion strategies of the big tech companies in Business Intelligence domain and concluded that big techs acquired not only startups

but good size companies to fill the technological gaps also to become free from internal innovation stagnation in addition to kill competition and certainly to acquire skilled workforce of niche companies and none the less markets/customers. Singh & Singh (2020) highlighted the importance startups to not only big tech companies but also to manufacturers in Indian auto segment. They study acquisition of startups of IoT and Machine Learning domain by one of the two wheeler manufacturer, TVS India Limited and concluded startups are the key components of innovation in technology development.

Koi-Akrofi (2016) researched and mentioned that during post-merger/acquisition early stage of integration, the acquiring firms are employing major strategies to achieve stated goals of acquisition vis-a-vis organizational performance. In this stage major management and strategic decisions are taken aimed to achieve gains for shareholders, employees, and customers. He reviewed these strategies with a view to know that how the actual integration era should be. Petković et al. (2023) concluded that the key determinants that are accountable for success of investments in AI startups are technical competences, market prospective of their innovation, commercial process to market, and premeditated alliances to survive or grow, a startup can make in the short run. Colombo et al. (2021) mentioned that firm with better absorbing capabilities are able to understand technologies of acquired company, integrate research and innovation activities, able to retain skilled employees, and convert acquired knowledge for competitive advantage.

**Gap 2:** There are many theories of high tech mergers and acquisitions. In addition, there are many factors/reasons for high tech companies to acquire technologies and skills by acquiring small startups or group of skilled scientists. Past studies studied mergers and acquisition with a view to create theories based on specific data. There is a need of studying a merger and acquisition in relation to existing theories. Further, each acquisition is based on specific reasons on part of the acquirer and acquired company. This study will fill the gap by identifying reasons for acquisition under study.

Review suggests that there are studies which are based on the analysis of data of large number of acquisitions by big tech companies which in many ways impact innovation and venture capital investments. These studies are based on analysis of quantitative data of patents before and after merger and acquisitions. The studies based on individual acquisition of high-tech startups are not too many. This study will fill this gap.

## Research Methodology

### The Context

Methodology of the current research can be called as mix method. It is based of secondary data, therefore, qualified as exploratory in nature. It based on sizable data to draw inference and linkages with existing strategic and behavioral theories, therefore, can be also termed as descriptive. Secondary data for current study are collected from the different sources such as websites of Voyage AI, and its competitors, MongoDB, and research reports of companies in AI domain specifically in the domain of Voyage AI, etc.

### Research Objectives & Propositions

The objectives and research propositions of this research study are identified by analyzing the views of different experts in the merger and acquisition field as expressed in media and underlying theories of merger and acquisitions of high tech companies.

The major theories that can be linked with this high-tech mergers taken in to account in this study are (i) Resource-Based View (RBV) and its extension, the Knowledge-Based View (KBV), (ii) Absorptive Capacity Theory (ACT), (iii) Open Innovation Theory, (iv) Real Options Theory (ROT), (v) Dynamic Capabilities Theory (DCT), and (vi) The Hubris Hypothesis and Agency Theory (HHA) (Behavioral Perspectives). A brief description of these theories is presented in the following.

RBV & KBV theories assumed that acquirer will absorb the acquired firm's exceedingly specialized R&D competencies and human capital to expand its own technological boundaries (Ranft & Lord, 2002). Absorbing capacity theory (ACT) is basically state that successful merger depends on the acquirer prior knowledge related to acquired firm's technology. In many ways both theories support each other (Cohen & Levinthal, 1990; Hagedoorn & Duysters, 2002). Open Innovation theory (OIT) assumed that mergers and acquisition serves as a structured model of inorganic growth. It further states that merger and acquisitions is speedy channel for cross-organizational knowledge boundaries, allowing large incumbents to capture agile, small-scale startup innovation, market, and highly skilled manpower (Chesbrough, 2003; Van de Vrande, et al., 2006).

According to Real Options Theory (ROT), high-tech markets are full of technological disruptions and market uncertainty. Therefore, as a strategy, acquirers start with smaller investments as part of continuing tech acquisitions. A tech giant

might acquire a minority stake or buy an early-stage startup as a “call option” to enter a promising domain such as AI and quantum computing technologies. Committing massive investment in unproven technologies or firms could be risky proposition (Folta, 1998; Vassolo et al., 2004).

Competitive advantages are transitory in high-tech domain. According to Dynamic Capabilities Theory (DCT), merger and acquisitions is acquirer’s capability to integrate, build, and reconfigure internal and external competences to address fast changing technologies (Teece et al., 1997; Graebner, 2004). In many cases it is an end result of internal innovation stagnation also (Singh, 2011).

The five strategic theories assume that mergers and acquisitions is a rational journey for tech concerted effort. This journey creates synergies between acquirer and acquired firm. On the other hand behavioral theories (HHA) believe that high-tech domains are famous for bidding conflicts where acquiring executives, driven by managerial overconfidence (Hubris) often overvalue the prospective target’s unproven tech stack. This leads to massive value destruction during post-acquisition period in many cases. These executives are paid destructive premiums. It works due to information asymmetry about potential of new technologies) and “FOMO” (Fear of Missing Out) among high tech firms in the next big technology wave. Therefore, in many cases it does not result in to actual economic synergies rather than kill investment in other sector of economy (Roll, 1986; McCarthy & Aalbers, 2016). Based on analysis of available of data and theoretical advancements, the objectives and propositions of this study are identified and listed in the next sub-section.

## Research Objectives

The main research objectives of this research based on the views of acquirer and acquired firm and strategic and behavioral theories are as under.

**Research Objective 1:** To analyse the growth trajectory of Voyage AI from its inception to its acquisition by MongoDB.

**Research Objective 2:** To examine the role of venture capital in enhancing Voyage AI’s technological capabilities and innovation prior to the acquisition.

**Research Objective 3:** To analyse similar tech acquisition in the recent past and during 2025 having valuation of more than US\$ 100 million.

**Research Question 4:** To assess the technological, social, and competitive impact of the Voyage AI acquisition on MongoDB & other stakeholders.

**Research Objective 5:** To map the acquisition of Voyage AI by MongoDB with strategic and behavioral theories.

## Research Propositions

The secondary data collected from these sources are subjected to mainly content analysis to some extent trend analysis. With a view to draw meaningful conclusions of the transaction between MongoDB and Voyage AI in the context of research objectives, 7 propositions are identified. These are listed in the following paragraph with brief justification.

**Proposition 1:** MongoDB acquired Voyage AI to enhance its technological capabilities. This is aligned Open Innovation Theory.

**Proposition 2:** MongoDB acquired Voyage AI to fill the technology gap in its offerings (Singh, 2011; Singh, 2019).

**Proposition 3:** Acquisition of Voyage AI created disruption in RAG domain. The proposition is aligned to Real Option Theory which supports investment in disruptive technologies.

**Proposition 4:** The theoretical intent of the post-merger integration (PMI) of Voyage AI acquisition by MongoDB of Voyage AI is in line of absorptive capacity theory (Colombo et al., 2021; Bae et al., 2020; Carbone, 2011).

**Proposition 5:** MongoDB acquired Voyage AI to reduce hallucination in AI application. Capabilities of MongoDB fit in the definition of RBV & KBV theories.

**Proposition 6:** Voyage AI merged with MongoDB to take its cutting age technology to the larger customer group (Singh, 2011).

**Proposition 7:** MongoDB is investing in Voyage AI startups to be competitive in retrieval and RAG (Singh & Singh, 2020).

## The Research Process Architecture

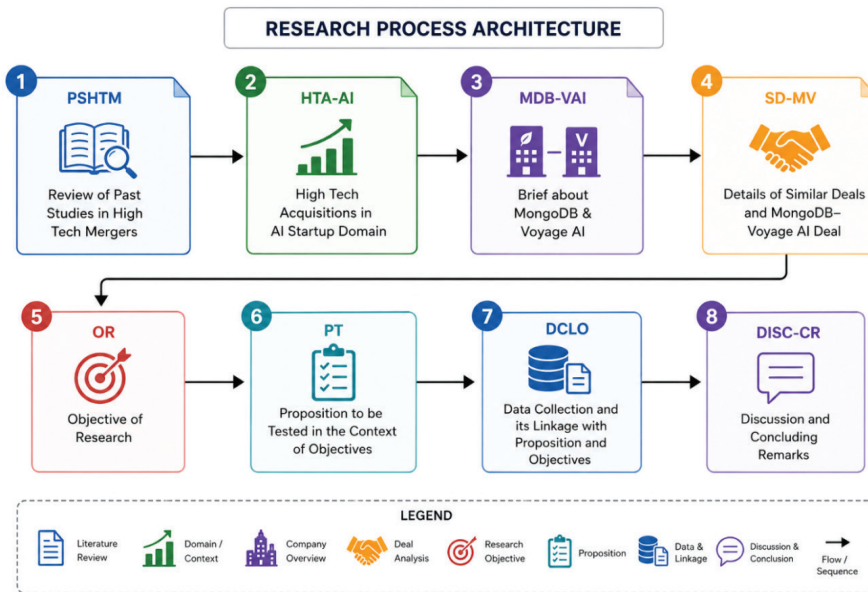
The process of conducting the present study is summarized in the fig 1. It consists of mainly eight steps starting with review of past studies in relation to the theories of high tech mergers and acquisition, analysis of high tech acquisition of startups in AI domain, a brief of MongoDB and Voyage AI, similar deals in the similar high-tech domain of the recent past in relation to Hallucination. It is followed with documentation of five research objectives and seven research propositions. Research process framework as given in fig 1 also includes the stage of secondary data collection and its analysis in the context of present research objectives and propositions.

## Data Collection and Analysis

To formalize the assessment of seven propositions, qualitative data are transformed on 1 to 10-point scale. “1” means proposition is not at all true or does not have supportive data with respect to acquisition and “10” indicates that a particular proposition is out rightly supported with available secondary data. To support strategic and behavioral theories in the context of acquisition of Voyage AI, the available secondary qualitative data contents are mapped with the core definitions of theories. To mention, it is reported that MongoDB had capabilities to integrate new technological features (Algorithms of Voyage AI) along with absorbing highly skilled scientific manpower with a view to create a unique selling proposition to its existing and new customers in the high-tech market. It is line with the theory of Cohen and Levinthal (1990).

**Figure 1.**

*Research Processes of the Present Study Consisting Eight Steps*



## Tech Acquisitions & Funding of Voyage AI

This section presents recent tech acquisition in Q1 of 2025 having exit valuation more than \$100 million. Section also presents the data of tech services companies' acquisition during 2021 to 2024. Further, the section presents the large tech acquisition of recent past and expected to conclude during 2025 including failed acquisition deals. It also includes the analysis of Voyage AI funding starting with seed money to series A.

### Tech Acquisition in Recent past & 2025

Technology in general and information technology in particular is the hot segment for the merger & acquisition activities during recent past as can be seen from the statistics given in table 2. The numbers of deals are increasing continuously during Q1 2021 to Q4 2024. However volume in terms of the \$ value had decreased drastically. This is an indication that investments are made by companies to mainly acquire startups or smaller companies having niche technology. The notable completed and abandoned big acquisitions of recent past are (i) Broadcom completes the acquisition worth of US\$ 61 billion of VMware (Gonsalves, 2023), (ii) Adobe finalizes the acquisition of Figma for \$ 20 billion (Mali, 2025), (iii) Intel acquired Tower semiconductor for \$ 5.4 billion which was later on cancelled during the negotiations (Kharpal, 2023), and (iv) Microsoft concludes purchase of Activision Blizzard with valuation of \$68.7 billion (Roush, 2023).

In addition to these four big ticket acquisitions, information technology segment had witnessed many small acquisitions in the first quarter of 2025. These acquisitions are given in table 3. It is apparent from the data presented in table 3 that Voyage AI acquisition by MongoDB is of highest volume, i.e., \$220 million. It is evident from the data that Voyage AI exit valuation after 17<sup>th</sup> month of its launch is on the top for first quarter of the year 2025. Another company Aerodome was acquired by Flock Safety within a year time for \$300 million. Both these companies, i.e., Aerodome and Voyage AI have raised \$ 28 million each and were backed by common investor CRV (MacColl, 2024).

Further, expected deals in coming quarters are (i) Swisscom acquisition of Vodafone Italia for \$8.6 billion, (ii) Private equity firm Permira (<https://www.permira.com>) is set to acquire Squarespace, a software company for \$ 6.9 billion, (iii) T-Mobile acquisition of US Cellular for \$4.4 billion, (iv) Engineering simulation ANSYS (<https://www.ansys.com/>) acquisition by Synopsys (<https://www.synopsys.com>) for \$35 billion,

and (v) Hewlett Packard Enterprise's (<https://www.hpe.com/>) acquisition of Juniper Networks, a front-runner in AI built-in systems for \$14 billion in all cash transaction (MacDowell, 2024; Patel, 2025).

**Table 2:**

*Monthly Merger & Acquisition deals in Technology Services from Q1 21 to Q4 24.*

Quarter	Year			
	2021	2022	2023	2024
Quarter 1	183	229	198	223
Quarter 2	136	173	132	212
Quarter 3	128	186	201	212
Quarter 4	206	171	191	210
Total	653	759	722	857
Volume (\$ Billion)	56.7	34.0	7.0	32.2

Source: EY (2025)

**Table 3:**

*Top 10 Tech Acquisition worth \$100 Million in Q1 2025*

Rank	Company	Year of Establishment	Valuation/ Employee	Exit Valuation	Head-count	Acquirer	Focus
1	Voyage AI	2023	\$11.6M	\$220M	19	Mon-goDB	AI data management
2	Helio	2022	\$8.8M	\$175M	20	MoonPay	Web3 payments
3	Dealer-Club	2024	\$7.5M	\$113M	15	Cars.com	Wholesale auto retail
4	GenerationGenius	2017	\$7.1M	\$100M	14	Newsela	K-8 edtech

5	Zilla Security	2019	\$3.7M	\$175M	47	CyberArk	Cloud data security
6	Kinara	2015	\$3.5M	\$307M	88	NXP Semiconductors	Chips for edge AI
6	Liquidity-Book	2005	\$3.5M	\$247M	71	FactSet	Financial trading
8	SafeBase	2020	\$2.7M	\$250M	92	Drata	Compliance automation
9	Mavely	2018	\$2.6M	\$250M	95	Later	Influencer marketing
10	Oosto	2015	\$1.3M	\$125M	98	Metropolis	Facial Recognition
11	Aerodome	2023 October	\$15M	\$ 300 M+	20	Flock Safety	Drones Technology

Source: CN Insights. Data as on 3/10/25, Aerodome was acquired on October 16, 2024.

### Funding Raised by Voyage AI

Voyage AI raised \$28 Million in two rounds from 9 investors and two partner investors (Brian Zhan and Murat Bicer) of CRV (Voyage AI, 2024). It is worth to mention that MongoDB was not backers of Voyage AI in any of the funding round (Strechay, 2025). This is in contradiction to Indian automakers wherein they are financially supporting startups or a group of techies in developing new technologies including AI domain (Singh & Singh, 2020).

#### \$8 Million: Seed Money

Voyage AI seed money round investment of \$ 8 million was from two investors, i.e., Wing VC (<https://www.wing.vc>) and Conviction (<https://www.conviction-vc.com>). These two investors were also the part of series-A funding of Voyage AI.

## **\$20 Million- Series A**

The series A investment was headed by CRV (<https://www.crv.com>) with involvement from Wing VC (<https://www.wing.vc>), Conviction (<https://www.conviction-vc.com>), Snowflake (<https://www.snowflake.com>), Databricks (<https://www.databricks.com>), Pear VC (<https://pear.vc>), Mayfield Fund (<https://www.mayfield.com>), Tectonic Ventures (<https://www.tectonicventures.com>), and Fusion Fund (<https://www.fusionfund.com>). Voyage AI intend to use this fund to expand offerings. It is also reported that CRV raised \$1 billion fund for startups and \$500 million for the more mature companies (Griffith, 2024).

## **Result & Discussion**

### **The deal**

MongoDB, the prominent database for contemporary applications, made a statement on February 24, 2025 that it has assimilated Voyage AI, an innovator of ultramodern embedding and reranking models that may control next-generation AI applications (MongoDB, 2025). The value of exist evaluation was \$220 Million (ODSC Team, 2025). It is in Cash and stock deal (Eastland, 2025). Even before Voyage AI acquisition by MongoDB, Databricks and Snowflake are reportedly that they are in talks with Voyage AI to acquire it. It is an ample proof of growing competition to dominate the generative AI space which is equipped with new capabilities. Though Databricks and Snowflake are rivals in the domain of data management, but aligning with each other on leveraging generation generative AI capabilities. Their objective is to help businesses to navigate and extract value from their data. Even this was their main motive to be with each other in targeting/ acquiring Voyage AI (Louise, 2025b).

Here are two set of contrasting examples of companies in developing capabilities for hallucination reduction markets. Two companies are following the straggles similar to MongoDB acquiring Voyage AI and another set of two companies developing these capability with internal innovations.

- **Databricks + MosaicML:** Databricks, and data and AI Company acquired MosaicML, a generative AI platform known for Mosaic Pretrained Transformers (MPT) large language models (LLMs). The core objective was to reduce hallucination by fine tuning the model on proprietary data to build data intelligence. The deal was worth 1.3 billion US\$ (Datta & Hu, 2023, Louise, 2025a).

- **Snowflake + TruEra:** Snowflake acquired TruEra, an AI startup having tools to test, debug and monitor machine learning models and LLM apps in making for unknown amount (Sharma, 2024). This deal is a part of strategy “catch the hallucination before it reaches to user. TruEra’s AI observability platform is a managed offering that can be deployed as software-as-a-service (SaaS) or hybrid SaaS via virtual private cloud, and public cloud (Ghoshal, 2024).
- **Elastic+ ESRE (Elasticsearch Relevance Engine):** Elastic developed Elasticsearch Relevance Engine powered by built-in vector search and transformer models. The objective is to apply AI innovations to proprietary enterprise databases (Business Wire, 2023). ESRE provide unified APIs for vector search, BM25f search and hybrid search, plus a new transformer model small enough to fit on a laptop’s memory mean businesses and teams are now able to optimize infrastructure and talent resources more efficiently.
- **Microsoft+ GraphRAG:** Microsoft had developed an open source advanced RAG (GraphRAG) that relays on knowledge graphs to understand complex relation between entities and concepts by LLMs. It was release as python library in July 2024 (Larson & Truitt. 2024). GraphRAG is an essential paradigm shift from simple similarities of the documents to the understanding of complex relationships that drive business understandings. Microsoft claimed that traditional RAG achieved 23% accuracy on multi-hop reasoning tasks as compared to 87% of GraphRAG (Richards, 2025).

## Business Model of Voyage AI<sup>1</sup>

Its business model has four sets of price offerings as per its four unique capabilities. These business models are classified as text embeddings pricing, multi model embeddings, rerankers, and fine-tuned models. The pricing models of Voyage AI were premium models. The major features of business models are technology based models, number of tokens, number of free tokens, number of pixels, number of free pixels, number of requests, and amount of services.

Price for Text Embedding = f (model, no. of tokens, no. of free tokens)

Price for Multi-model embeddings = f (models, no. of tokens, no of pixels, no of free tokens and pixels, no of images)

1 <https://docs.voyageai.com/docs/pricing>

Price for Rerankers= f (Rerankers model, no of free tokens, no of tokens, no of request)

Price for fine-tuned models = f (amount of services, negotiations with Voyage AI and its client)

## Impact on MongoDB offerings of this Acquisition

With Voyage AI, MongoDB will empower establishments to effortlessly build dependable, AI-powered applications by offering highly precise and appropriate information retrieval that is intensely integrated with operational data with Voyage AI Technology (MongoDB, 2025). Strechay (2025) mentioned that the acquisition of Voyage AI will make MongoDB as a leader in AI-powered retrieval within the database market

**Financial Impact:** The acquisition has noteworthy potential economic influence particularly in relation to the valuation of future AI segment. MongoDB's invested \$220 million in a young company; it means there is a demand and competition among big techs for cutting-edge AI technologies. This will increase the valuations for startups which are innovating to improve accuracy of their models and preventing AI models from hallucination. Big tech companies are willing to embed these capabilities into their offerings within a short period. These trends will see more aggressive mergers and acquisitions. To support these outlooks, Neeva's AI search technology acquisition by Snowflake at the cost of \$185 million is another case in Q1 of 2025 (Ferguson, 2025).

**Social impact:** Voyage AI's technology integration with MongoDB is anticipated to assist broader enterprise AI adoption, mainly for improving the trustworthiness and accurateness of AI applications. The capability of Voyage AI to significantly reduce AI hallucinations is predominantly pivotal in multifaceted industries with complex processes. Two industries, i.e., healthcare and finance that have high dependency on trustworthiness of AI tools will witness a paradigm shift in operations and decision-making processes. The innovators such as Voyage AI will be setting a new benchmark for AI application accuracy. The integration of Voyage AI with MongoDB will uplift the users trust in AI systems and promote extensive recognition of AI technologies. In summary, MongoDB had drawn a bigger mission by embedding Voyage AI's technology into its database abilities to offer more trustworthy AI solutions for communities of developers which in turn transferred to a wider social impact (Ferguson, 2025).

**Technological Impact:** Voyage AI did not mention about patents but MongoDB is certainly acquiring improved algorithm which in turn increase its competitive edge. It will generate value for MongoDB in searching and retrieval of its huge database. Due to probabilistic nature of AI, it can hallucinate. Hallucinates are due to wrong retrieval and lack of access to the right data. In turn it results in to incorrect information. If accuracy is non-negotiable in mission critical application AI model adoption is not worth. Voyage AI capabilities will prevent hallucinates and will have huge impact on the competitors to innovate (Ittycheria, 2025).

**Industry and Competitive Impact:** MongoDB being a high tech company which may provide better platform for innovation to the employees of Voyage AI. In turn, it may result in to concentration of talented workers with MongoDB for better career opportunities. This is based on the past trends which are indicative of the fact that talented skilled workers pool concentrate with biggies that in turn will certainly impact the growth of startups. It may convert in to a scenario of sluggish growth of innovations in the long run. It will further enhance the concentration of talented workforce and may become impediment for the growth of startups. It may redefine the landscape of databases with AI capabilities.

Voyage AI is also presently competing with many competitors for Large Language Model Operationalization (LLMOps) software. These competitors are (i) Vertex by Google, (ii) Botpress from Botpress (fund raised \$15 million), (iii) Kong API gateway from Kong Inc. (Fund raised \$ 345 million and valued at 2 billion), (iv) Tune AI from NimbleBox.ai, (v) SuperAnnotate from SuperAnnotate<sup>2</sup> (\$60.5 million in 5 rounds from 15 investors), (vi) Azure Machine Learning from Microsoft, (vii) Aporia from Coralogix (Aporia is acquired by Coralogix for US\$ 50 million (Orbach, 2023), (viii) Clarifi from Clarifi, (ix) Dataiku from Dataiku (Fund raised \$1.04 billion in 9 rounds), and (x) TrueFoundry from TrueFoundry (Fund Raised \$21.3 million from 15 investors) (Kong Inc., 2024), Some of these competitors may follow the path of Voyage AI at the earliest due to their dependency for training models, commercialization of their technology, and marketing of their technologies.

2 [https://tracxn.com/d/companies/superannotate/\\_CYkGxumXxYNfmgAkgkxcG-9eIFCvwcCZZD-cAuLmqd1A/funding-and-investors](https://tracxn.com/d/companies/superannotate/_CYkGxumXxYNfmgAkgkxcG-9eIFCvwcCZZD-cAuLmqd1A/funding-and-investors)

## **Voyage AI Acquisitions, Competitors and Propositions**

This section presents the reasons for MongoDB to acquire Voyage AI and select list of competitors of Voyage AI. In additions, grounded on available secondary data composed from diverse sources on net, this section also presents a measurement index on 10-point scale in support of seven propositions.

### **The reasons for acquiring Voyage AI by MongoDB**

There is no specific data is available with respect to reasons for MongoDB to acquire Voyage AI. However, there is enough reporting of the facts that MongoDB acquired Voyage AI due to improved performance of its algorithm and to assured customers that MongoDB at the forefront in innovating technology to create value for money of its customers.

### **Competitors of Voyage AI.**

Traxcn.com listed 36 competitors of the Voyage AI including the competitors listed in section 5. The competitors are classified based on the locations and raised funds. The competitors which had raised more funds are Tamr (\$69.2 million), Paxata (\$ 68.8 Million, Acquired), DatalogyAI (\$57.6 million), Lattice (US\$ 20 million, acquired), Forge AI (\$ 11 million). Most of the competitors of Voyage AI are from USA.

### **Propositions & conclusions**

The deal to acquire Voyage AI by MongoDB is not a big ticket buyout; therefore, media was active for a short period. Still there is sufficient data available to draw meaningful conclusions.

#### ***Proposition 1: MongoDB acquired Voyage AI to enhance to enhance its capabilities.***

Aiello (2025) mentioned that 60% to 70% accuracy of the predicted results with existing applications is not enough for highly sensitive sectors such as finance and healthcare. According to founder of Voyage AI, the models of Voyage AI and massive storage of structured, unstructured and semi-structured data in databases of MongoDB will have unlimited potential in enhancing the accuracy. Combined technologies of two companies under reference can offer a “clean, simple solution” to developers of AI-powered apps (Aiello, 2025), reduction in cost of development and manpower and high skill competencies needed to stitch up together multi-

ple components. MongoDB also shares his strategic vision for the future of AI. It is predicted by expert that the next generation AI applications will be built on MongoDB data base platform (Ma, 2025). Sahm Capital (2025) also mentioned that buyout of Voyage AI will reinforce AI product roadmap of MongoDB and position within the modern data stack. It will help organization to build trustworthy AI applications (MongoDB, 2025). By integrating Voyage 4 AI models, MongoDB introduced automated embeddings in MongoDB vector search (Gluck & Agarwal, 2026). These postings are an ample proof that Voyage AI had enhanced the technological capabilities of MongoDB hence the proposition support score is 9 on 10 point scale. It is not a heavy investment on part of MongoDB but it is startup tech acquisition and therefore in line with Open Innovation Theory (Chesbrough, 2003; Van de Vrande, et al., 2006).

***Proposition 2: MongoDB acquired Voyage AI to fill the technology gap in its offerings.***

PR Newswire (2025) reported that MongoDB had acquired Voyage AI to fill the technological gap by integrating technology of Voyage AI. In the present day context, Voyage AI technology is treated as leading embedding and reranking models technology that provide highly accurate information and applicable information retrieval systems to power sophisticated AI use case in its existing technology stack. Voyage AI's advanced text embedding and reranking models will add technology to the stack of MongoDB that will help customers of MongoDB in developing RAG-enabled AI applications with three features. These are improved contextual relevance, cost efficiency, and reduction in latency (Sahm Capital, 2025). This is the case with many big tech companies that they had still many gaps in their existing AI models & fill such gaps external technologies are acquired. MongoDB is not exception. Whiting (2026) mentioned that Voyage AI will fill the gap between experimentation and operating reliably. Incorporating these competencies in to databases, MongoDB will transform its storage engine in to full retrieval stack. These citations are in support of the proposition and can be assigned a score of 9 on 10-point scale and it is in line with finding of other studies of merger and acquisition in high-tech merger domain (Singh, 2011; Singh, 2019).

The data collected from different sources suggests that there is a reduction in number of patent application filing by MongoDB (Table 4). It can be seen from data given in table 4 collected from different sources that MongoDB granted by 2025 only 92 patents and up to May 2026 102 patents. This data suggests that innovation

activities of MongoDB are not at par with many high tech companies. Voyage AI technology is heavily protected with trade secrets, open weights release, exclusive machine learning architecture. The Voyage AI technology may enhance innovation at MongoDB and fill the skill & technological gaps. Finally results in to more patent filing to compete in era of AI innovations.

**Table 4:**

*MongoDB's Year wise Patents applications and Patent Granted*

Year	Applications Filed	Patents Granted	Cumulative Total
2026 (iDiyas, n.d.)		102	-
2015-2025 (PlainPatent, n.d.)		92	-
2023 (GreyB, n.d.)	-	4	69
2022 (GreyB, n.d.)	9	14	65
2021 (GreyB, n.d.)	5	7	51
2020 (GreyB, n.d.)	12	19	44
2019 (GreyB, n.d.)	5	10	25
2018 (GreyB, n.d.)	7	3	15
2017 (GreyB, n.d.)	25	6	12
2016 (GreyB, n.d.)	11	2	6
2015 (GreyB, n.d.)	4	3	4
2014 (GreyB, n.d.)	1	-	1
2013 (GreyB, n.d.)	6	1	1
2012 (GreyB, n.d.)	1	-	-
2011 (GreyB, n.d.)	2	-	-
Sources: <a href="https://insights.greyb.com/mongodb-patents">https://insights.greyb.com/mongodb-patents</a> <a href="https://idiyas.com/company/mongodb">https://idiyas.com/company/mongodb</a> <a href="https://plainpatent.com/company/mongodb-inc/">https://plainpatent.com/company/mongodb-inc/</a>			

It is further mentioned that MongoDB sets a new standard for retrieval accuracy with Voyage 4 models for production-ready AI applications after integrating Voyage AI technologies (PR Newswire, 2026). The datasets provided by the articles on this section and additional data available on net support this proposition. Support may be ranked as 9 on a 10 point scale.

***Proposition 3: Acquisition of Voyage AI created disruption in RAG domain.***

High valuation of Voyage AI by MongoDB and quick decision on part of MongoDB to acquire Voyage AI may result in to very high valuation of AI startups in future for mergers and acquisitions domain (Ferguson, 2025). Voyage's flagship general-purpose and multilingual embedding model, voyage-3-large (released January 7, 2025), surpasses retrieval quality by an average value of 9.74% and 20.71%, of its competitors OpenAI-v3-large and Cohere-v3-English respectively. This may be qualified to be a disruptive Technology in future but at present not (Mishra et al., 2025; Gisca et al., 2023). Walter (2025) mentioned that Voyage AI acquisition will be a Database AI's turning point but did not mention disruptive technology in RAG domain. Not much data is available in support of this proposition. Its score is therefore, kept at 3 on 10 point scale. Though the data has intent of Real Option Theory but support is weak.

***Proposition 4: The theoretical intent of the post-merger integration (PMI) of Voyage AI acquisition by MongoDB of Voyage AI is in line of absorptive capacity theory, RBV & KBV theories.***

According to Bodner and Capron (2018) if acquirer chooses to absorb an acquired firm and the acquired firm does not require high autonomy to pursue its functions and there are strong inter dependencies between acquired firm and acquirer firm, this is termed as absorptive capacity theory of Pre-Merger-Integration (PMI). Based on data composed from diverse sources (such as <https://www.mongodb.com/docs/voyageai/quickstart/>), it can be concluded that MongoDB will comprehend the technology of Voyage AI which have developed algorithms for search and retrieval across unstructured databases. Voyage AI competency is in building (i) embedding mathematical algorithms, custom-made these models/algorithms for specific domains and companies, for improving retrieval accuracy and RAG applications, (ii) developing APIs endpoints for embedding and reranking models that help in taking operational data (e.g., documents, queries, or query-document pairs) and (iii) yield their embeddings or relevance scores.

Embedding models and rerankers can be integrated with other parts of RAG stack such as vector stores and generative Large Language Models (LLMs). MongoDB will identify these components and have the capacity to merge these components in its existing technologies. For absorbing knowledge of Voyage AI, MongoDB will follow four stages: acquisition (completed by MongoDB), absorption, transformation, and application, and will continue internalize the knowledge & skills of

the workforce of Voyage AI. If done so then it will justify absorptive capacity of MongoDB (Zahra & George, 2002). Secondly, Ma (2025) communicated to the tech world that Voyage AI wish to be with strong and did not mention about Voyage AI autonomy. The score of this proposition is 8 in view of available data. The finding in line with RBV, KBV, and Absorbing Capacity theories.

***Proposition 5: MongoDB acquired Voyage AI to reduce hallucination in AI application.***

Ghoshal (2025) mentioned that Voyage AI embedding and reranking models used in retrieval-augmented generation (RAG) help in reducing Hallucination by augmenting vector search capabilities. Andre (2024) reported that “Series A funding will help Voyage AI “innovating in the RAG field, coagulating its place as a leader in reducing AI hallucinations and improving the trustworthiness of AI-generated evidences”. Wiggers (2024) written that Voyage AI is developing RAG tools to reduce hallucination. Wilde (2025) mentioned that RAG implementations are still grappling with hallucination where in AI generates information that is plausible but incorrect. To mitigate these challenges, MongoDB has taken a strategic decision to augment its database capabilities with acquisition of Voyage AI. Zilliz (2024) reported that Voyage AI RAG will help in reducing hallucination. The score of this proposition is 9 since Voyage AI models will reduce hallucination but it remains as one of the important concern of all developers in the domain.

***Proposition 6: Voyage AI merged with MongoDB to take its cutting age technology to the larger customer group.***

PR Newswire (2025) stated that promoter of Voyage AI who claimed that MongoDB will enable Voyage AI’s cutting-edge AI retrieval technology to reach larger customer base and MongoDB will seamlessly integrate it into mission-critical applications. The know-how of Voyage AI in embeddings and reranking along with MongoDB’s best-in-class database, organizations will develop AI applications. These applications will provide more precise and trustworthy output at scale and empower firms to develop AI based use cases.

Chowdhry (2025) mentioned that the competitors of Voyage AI are merging with competitors of MongoDB and will take technology which is in many ways similar to Voyage AI. The small startup competitors are also attracting venture capitalist investment, it may hamper the dream of Voyage AI but it can be compensated with availability of infrastructure and databases of MongoDB and may help further tun-

ing of Voyage AI models. Investing.com (2025) reported that MongoDB anticipated a visible growth in its Atlas Platform. MongoDB expected an increase in its annual recurring revenue from US \$2 billion to US\$ 4 billion with new technological capabilities. In view of these opportunities and uncertainties the score of this proposition is tagged at 5 out of 10. This is in line of Real Option Theory.

***Proposition 7: MongoDB is investing in Voyage AI startups to be competitive in retrieval and RAG.***

Voyage AI developers of AI applications will stitch together multiple components, i.e., databases (from vector databases to operational databases), rerankers, and embedding models, to create retrieval-augmented generation (RAG), generative AI models and agent systems with the support from MongoDB in near future to make the models more robust and stable. In particular, the merger of MongoDB and Voyage AI will aid in achieving this integration for operational databases (Ma, 2025; Ghoshal, 2025). Another piece of technology, i.e., Voyage AI's voyage-3-large model had sets a new accuracy-cost benchmark ahead of its competitors. The better techniques like quantization-aware training and Matryoshka Embedding Learning will help MongoDB to reduce storage costs and processing times with minimal impact on retrieval quality (Aarsen et al., 2024; Singh, 2025). These features will make MongoDB more competitive in the domain of retrieval and RAG with the acquisition of Voyage AI. For building a retrieval-augmented generation (RAG) system a fragmented stack is required. The acquisition will provide natively managed pipelines with further scope of improvement. However, not much directly supportive data is available about this proposition but many claims are made by the management team of Voyage AI, therefore this proposition may be given a score of 7 out of 10. This is in line with Dynamic Capability Theory.

## **Concluding Remarks**

Voyage AI technology is considered as highly innovative by MongoDB but not exactly disruptive technology. The existing technologies are 60 to 70 % accurate in predicting outcome of target / dependent variables of health care or finance data. If Voyage AI can increase it by 10% it can be termed as a breakthrough technology as per the CEO of MongoDB (FinSMEs, 2025). These capabilities are also mentioned by promoter of Voyage AI (Ma, 2025).

MongoDB acquisition of Voyage AI ahead of its backers such as Databricks and snowflake at an enormous high value establishes the importance of Voyage AI models. Secondly, irrespective of its acquisition by MongoDB, Snowflake is set to integrate the Voyage AI models into its Cortex AI service which is based on the similar technology from Snowflake's acquisition of AI search vendor Neeva (Kerner, 2024). This further supports the fact that technologies similar to Voyage AI are of utmost importance in the present day context.

Overall, this is a valuable acquisition for MongoDB, both in terms of technology and talent. This acquisition can be put in the category of DataFox acquisition by Oracle to fill the gap in technological capabilities (Singh, 2019). With Voyage AI's models integration in the very near future, MongoDB will be offering top-tier embedding models that provide performance and cost benefits, potentially it will become fast-tracking AI production workloads on MongoDB's platform.

With the acquisition of Voyage AI, MongoDB will augment its capabilities for operational data, search, real-time analytics, and AI-powered retrieval since it has absorbing capacities (Colombo, et al., 2021; Bae, et al., 2020; Pillay et al., 2021). As per statement of executives of MongoDB, the transaction under reference will benefit organizations ubiquitously in moving faster, innovating more efficiently, and simplifying complex architectures. However, it rests on the results of further training of models on large data bases which are large enough as per the basic requirement of models. The reality is that the data and models are created and/or can be created independent of each other but utility of models depends on the basic nature of data. This is more important for AI models since many of these models did not have backing in mathematical theories.

Based on the features of technologies and size of the acquirer (MongoDB) and acquired company (Voyage AI), the acquisition is in line with many strategic high-tech merger & acquisition theories such as RBV, KBV, Absorptive Capability Theory, Dynamic Capability Theory, and Open Innovative Theory (OIT). The statement of acquired company's executive in praise of Voyage AI technology acquisition impact on MongoDB cannot be said supportive of The Hubris Hypothesis and Agency Theory (HHA). It is not exaggerated to fit in the definition of HHA.

Irrespective of these facts, AI will create models to get rid of hallucinations due to historical inaccuracies, lack of mathematical support to the algorithms, geographical errors, incorrect financial & healthcare data, scientific and engineering inaccuracies, incompetent legal advices, and data poisoning due to 'n' number of factors. These happenings in terms of reduction in hallucination will be in line of

investment made by MongoDB and commitments of the management of merged entities. The emergence of better models with similar functionalities by startups may pose challenges to the MongoDB and Voyage AI models.

## References

- Aarsen, T., Joshua, & Sanseviero, O. (2024, February 23). *Introduction to matryoshka embedding models*. Hugging Face Blog. <https://huggingface.co/blog/matryoshka>
- Aiello, C. (2025, February 24). *Voyage AI just sold for \$220 million after launching less than two years ago*. Inc. <https://www.inc.com/chloe-aiello/voyage-ai-just-sold-for-220-million-after-launching-less-than-two-years-ago/91151766>
- Andre, D. (2024, October 4). *Voyage AI develops RAG tools to reduce AI hallucinations*. All About AI. <https://www.allaboutai.com/ai-news/voyage-ai-develops-rag-tools-to-reduce-ai-hallucinations/>
- Bae, Y., Lee, K., & Roh, T. (2020). Acquirer's absorptive capacity and firm performance: The perspectives of strategic behavior and knowledge assets. *Sustainability*, 12(20), 8396. <https://doi.org/10.3390/su12208396>
- Bodner, J., & Capron, L. (2018). *Post-merger integration and organizational design: Toward a behavioral theory of the firm*. *Journal of Organization Design*. <https://doi.org/10.1186/s41469-018-0027-4>
- Business Wire. (2023, May 23). *Elastic unveils the Elasticsearch Relevance Engine for artificial intelligence*. <https://www.businesswire.com/news/home/20230523005378/en/Elastic-Unveils-the-Elasticsearch-Relevance-Engine-for-Artificial-Intelligence>
- Carbone, P. (2011). Acquisition integration models: How large companies successfully integrate startups. *Technology Innovation Management Review*, 1(2), 26–31.
- Chan, R. (2019, April 24). *MongoDB is acquiring the startup that powers mobile apps from Starbucks, Netflix, and McDonald's for \$39 million*. Business Insider. <https://www.businessinsider.in/mongodb-is-acquiring-the-startup-that-powers-mobile-apps-from-starbucks-netflix-and-mcdonalds-for-39-million/articleshow/69027655.cms>
- Chesbrough, H. W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business School Press
- Chowdhry, A. (2025, March 1). *Why MongoDB is buying Voyage AI in a \$220 million deal*. Pulse 2.0. <https://pulse2.com/why-mongodb-is-buying-voyage-ai-in-a-220-million-deal/>
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Colombo, M. G., Messeni Petruzzelli, A., & Piva, E. (2021). The impact of absorptive capacity on acquisition performance: Evidence from high-tech mergers and acquisitions. *Technological Forecasting and Social Change*, 170, 120882. <https://doi.org/10.1016/j.techfore.2021.120882>
- Datta, T., & Hu, K. (2023, June 26). *Databricks strikes \$1.3 billion deal for generative AI startup MosaicML*. Reuters. <https://www.reuters.com/markets/deals/databricks-strikes-13-bln-deal-generative-ai-startup-mosaicml-2023-06-26>

- de Barsy, L., & Gautier, A. (2024). Big Tech acquisitions and innovation: An empirical assessment (CESifo Working Paper No. 11025). *CESifo Working Paper Series*. [https://www.ifo.de/DocDL/cesifo1\\_wp11025.pdf](https://www.ifo.de/DocDL/cesifo1_wp11025.pdf)
- Dineshwori, L. (2019, April 25). *MongoDB to acquire mobile database startup Realm for \$39 million*. Open Source for You. <https://www.opensourceforu.com/2019/04/mongodb-to-acquire-mobile-database-startup-realm-for-39-million/>
- Eastland, M. (2025, March 17). *MongoDB buys Voyage AI for \$220 million to bolster AI search*. MSN. <https://www.msn.com/en-us/technology/artificial-intelligence/mongodb-buys-voyage-ai-for-220-million-to-bolster-ai-search/ar-AA1zGasK>
- EY. (2025). *Deal activity rebound: Marked increase in deal value and volume in 2024*. <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-in/insights/mergers-acquisitions/documents/ey-connecting-the-dots-m-a-deals-in-technology-services-in-2024.pdf>
- Ferguson, M. (2025, February 25). *MongoDB snags Voyage AI for \$220M: A strategic leap in generative AI*. OpenTools AI. <https://opentools.ai/news/mongodb-snags-voyage-ai-for-dollar220m-a-strategic-leap-in-generative-ai>
- FinSMEs. (2025, February 25). *MongoDB acquires Voyage AI*. <https://www.finsmes.com/2025/02/mongodb-acquires-voyage-ai.html>
- Folta, T. B. (1998). Governance and uncertainty: The tradeoff between administrative control and commitment. *Strategic Management Journal*, 19(11), 1007–1028.
- Genig, H. (2018, October 10). *MongoDB acquires mLab, expands global cloud database*. Yahoo Finance. <https://finance.yahoo.com/news/mongodb-acquires-mlab-expands-global-141142065.html>
- Ghoshal, A. (2024, May 22). *Snowflake acquires TruEra's AI observability platform*. InfoWorld. <https://www.infoworld.com/article/2336899/snowflake-acquires-truera-s-ai-observability-platform.html>
- Ghoshal, A. (2025, February 24). *MongoDB acquires Voyage AI to reduce hallucinations in AI applications*. InfoWorld. <https://www.infoworld.com/article/3831631/mongodb-acquires-voyage-ai-to-reduce-hallucinations-in-ai-applications.html>
- Gisca, O., Matinmikko-Blue, M., Ahokangas, P., Yrjölä, S., & Gordon, J. (2023). Regulatory challenges and implications of the European Electronic Communications Code (EECC) for local mobile communication network business. *Telecommunications Policy*, 47(10), 102651. <https://doi.org/10.1016/j.telpol.2023.102651>
- Gluck, E., & Agarwal, P. (2026, January 5). *Unlocking AI search: Introducing automated embeddings in MongoDB vector search*. MongoDB Blog. <https://www.mongodb.com/company/blog/product-release-announcements/unlocking-ai-search-introducing-automated-embedding-in-mongodb-vector-search>
- Gonsalves, A. (2023, November 22). *Broadcom completes VMware acquisition, promises investment*. TechTarget. <https://www.techtarget.com/searchDataCenter/news/366560755/Broadcom-completes-VMware-acquisition-promises-investment>
- Graebner, M. E. (2004). Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Strategic Management Journal*, 25(8–9), 751–777

- GreyB. (n.d.). *MongoDB patents*. <https://insights.greyb.com/mongodb-patents>
- Griffith, E. (2024, October 2). *Venture capital firm CRV planning to do something rare: Give money back*. Business Standard. [https://www.business-standard.com/world-news/venture-capital-firm-crv-planning-to-do-something-rare-give-money-back-124100200967\\_1.html](https://www.business-standard.com/world-news/venture-capital-firm-crv-planning-to-do-something-rare-give-money-back-124100200967_1.html)
- Gugler, K., Szücs, F., & Wohak, U. (2025). Start-up acquisitions, venture capital and innovation: A comparative study of Google, Apple, Facebook, Amazon and Microsoft. *International Journal of Industrial Organization*, 98, 103134. <https://doi.org/10.1016/j.ijindorg.2025.103134>
- Hagedoorn, J., & Duysters, G. (2002). External sources of innovative capability: Innovations and acquisitions in the international computer industry. *Research Policy*, 31(2), 167–188.
- iDiyas. (n.d.). *MongoDB*. <https://idiyas.com/company/mongodb>
- Ism, I. (2024). *Reranking explained: Why it matters for RAG systems*. Chatbase. <https://www.chatbase.co/blog/reranking>
- Investing.com. (2025, September 11). *MongoDB at Piper Sandler: Embracing AI for future growth*. <https://in.investing.com/news/transcripts/mongodb-at-piper-sandler-embracing-ai-for-future-growth-93CH-5002433>
- Ittycheria, D. (2025, February 24). *Redefining the database for AI: Why MongoDB acquired Voyage AI*. MongoDB Blog. <https://www.mongodb.com/blog/post/redefining-database-ai-why-mongodb-acquired-voyage-ai>
- Kak, A., West, S. M., & Whittaker, M. (2023, December 5). *Make no mistake—AI is owned by Big Tech*. MIT Technology Review. <https://www.technologyreview.com/2023/12/05/1084393/make-no-mistake-ai-is-owned-by-big-tech/>
- Kerner, S. M. (2024, October 3). *Voyage AI's multilingual embeddings boost Snowflake's Cortex AI for improved enterprise RAG*. VentureBeat. <https://venturebeat.com/ai/why-snowflake-is-banking-embedding-startup-voyage-ai-to-improve-enterprise-rag/>
- Kharpal, A. (2023, August 16). *Intel scraps \$5.4 billion acquisition of Tower Semiconductor after regulators fail to approve deal*. CNBC. <https://www.cnbc.com/2023/08/16/intel-scraps-5-point4-billion-acquisition-of-tower-semiconductor.html>
- Koi-Akrofi, G. Y. (2016). Mergers and acquisitions: Post-merger and acquisition integration strategies. *International Journal of Economics, Finance and Management*, 5(2), 49–56.
- Kong Inc. (2024, November 19). *Kong secures \$175 million new financing at \$2B valuation to power the API world*. <https://konghq.com/company/press-room/press-release/kong-secures-175-million-new-financing>
- Larson, J., & Truitt, S. (2024, February 13). *GraphRAG: Unlocking LLM discovery on narrative private data*. Microsoft Research. <https://www.microsoft.com/en-us/research/blog/graph-rag-unlocking-llm-discovery-on-narrative-private-data/>
- Louise, N. (2025a, January 3). *Databricks and Snowflake in talks to buy AI search startup Voyage*. TechStartups. <https://techstartups.com/2025/01/03/databricks-and-snowflake-in-talks-to-buy-ai-search-startup-voyage-reports/>
- Louise, N. (2025b, March 11). *Top 10 tech acquisitions worth \$100M+ in Q1 2025 (so far)*. TechStartups. <https://techstartups.com/2025/03/11/top-10-tech-acquisitions-worth-100m-in-q1-2025-so-far/>

- Ma. (2025, February 24). *Stronger together: Why we choose to join MongoDB*. Voyage AI Blog. <https://blog.voyageai.com/2025/02/24/joining-mongodb/>
- MacColl, M. (2024, October 23). *Flock Safety paid over \$300M for 17-month-old drone startup Aerodome*. TechCrunch. <https://techcrunch.com/2024/10/23/flock-safety-paid-over-300-million-for-17-month-old-drone-startup-aerodome/>
- MacDowell, S. (2024, January 9). *A look at HPE's acquisition of Juniper Networks*. Forbes. <https://www.forbes.com/sites/stevemcdowell/2024/01/09/a-look-at-hpes-acquisition-of-juniper-networks>
- Mali, S. (2025, February 13). *Adobe's USD 20 billion acquisition of Figma: A strategic expansion into cloud-based design*. Cognitive Market Research. <https://www.cognitivemarketresearch.com/blog/adobes-usd-20-billion-acquisition-of-figma-a-strategic-expansion-into-cloud-based-design>
- MarketScreener. (2018, November 31). *MongoDB, Inc. completed the acquisition of ObjectLabs Corporation from Baseline Ventures and others*. <https://ca.marketscreener.com/quote/stock/MONGODB-INC-45064741/news/MongoDB-Inc-completed-the-acquisition-of-ObjectLabs-Corporation-from-Baseline-Ventures-and-others-34530406/>
- McCarthy, K. J., & Aalbers, H. L. (2016). Technological acquisitions: Managing the risks of knowledge transfer. *Journal of Strategy and Management*, 9(3), 268–291.
- Merritt, R. (2025, January 31). *What is retrieval-augmented generation (RAG)?* NVIDIA Blog. <https://blogs.nvidia.com/blog/what-is-retrieval-augmented-generation/>
- Mishra, P., Singh, N. P., & Farooq, A. (2025). Regulatory disruptions in the Indian telecommunications industry. *International Journal of Innovation and Technology Management*, 21(8), 1–19. <https://doi.org/10.1142/S0219877024300076>
- MongoDB. (2014, December 16). *MongoDB acquires WiredTiger Inc*. <https://www.mongodb.com/company/newsroom/press-releases/wired-tiger>
- MongoDB. (2025, February 24). *MongoDB announces acquisition of Voyage AI to enable organizations to build trustworthy AI applications*. <https://investors.mongodb.com/news-releases/news-release-details/mongodb-announces-acquisition-voyage-ai-enable-organizations>
- ODSC Team. (2025, February 24). *MongoDB acquires Voyage AI to enhance trustworthy AI applications*. OpenDataScience (ODSC). <https://opendatascience.com/mongodb-acquires-voyage-ai-to-enhance-trustworthy-ai-applications/>
- Orbach, M. (2023, December 23). *Coralogix acquires Aporia in \$50M deal to boost AI system transparency*. Calcalist Tech. <https://www.calcalistech.com/ctechnews/article/5y3de8pii>
- Patel, K. (2025, January 12). *Upcoming mergers and acquisitions in 2025 + recent big deals*. Dealroom. <https://dealroom.net/blog/upcoming-m-a>
- Petković, M., Jambal, E., Mesa, C. B., & Emdadi, F. (2023). The odyssey of strategic investing in artificial intelligence (AI) startups. In *FINIZ 2023: Sustainable development as a measure of modern business success* (pp. 131–136). <https://doi.org/10.15308/finiz-2023-131-136>
- Pillay, S., Chiba, M. D., Verachia, A., & Mthombeni, M. (2021). Mergers and acquisitions in emerging markets: What drives absorptive capacity in target firms? *South African Journal of Business Management*, 52(1), a2039. <https://doi.org/10.4102/sajbm.v52i1.2039>

- PitchBook (2025). *Voyage AI Overview*. <https://pitchbook.com/profiles/company/539347-96#overview>
- PlainPatent. (n.d.). *MongoDB Inc*. <https://plainpatent.com/company/mongodb-inc/>
- PR Newswire. (2025, February 24). *MongoDB announces acquisition of Voyage AI to enable organizations to build trustworthy AI applications*. <https://www.prnewswire.com/news-releases/mongodb-announces-acquisition-of-voyage-ai-to-enable-organizations-to-build-trustworthy-ai-applications-302382979.html>
- PR Newswire. (2026, January 15). *MongoDB sets a new standard for retrieval accuracy with Voyage 4 models for production-ready AI applications*. <https://www.prnewswire.com/news-releases/mongodb-sets-a-new-standard-for-retrieval-accuracy-with-voyage-4-models-for-production-ready-ai-applications-302662558.html>
- Prado, T. S., & Bauer, J. M. (2022). Big tech platform acquisitions of start-ups and venture capital funding for innovation. *Information Economics and Policy*, 59, 100973. <https://doi.org/10.1016/j.infoecopol.2022.100973>
- Ranft, A. L., & Lord, M. D. (2002). Acquiring new technologies and capabilities: A grounded model of acquisition implementation. *Organization Science*, 13(4), 420–441.
- Richards, D. (2025, August 3). *The GraphRAG revolution: How Microsoft's knowledge graph architecture is crushing traditional RAG systems*. RAG About It. <https://ragaboutit.com/the-graph-rag-revolution-how-microsofts-knowledge-graph-architecture-is-crushing-traditional-rag-systems/>
- Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business*, 59(2), 197–216.
- Roush, T. (2023, October 13). *Microsoft finally buys Activision for \$69 billion after regulatory approval*. Forbes. <https://www.forbes.com/sites/tylerroush/2023/10/13/microsoft-closes-69-billion-acquisition-of-activision-following-regulatory-approval>
- Sahm Capital. (2025, February 26). *Voyage AI acquisition adds advanced tech, talent to MongoDB's AI capabilities: Analyst*. <https://www.sahmcapital.com/news/content/voyage-ai-acquisition-on-adds-advanced-tech-talent-to-mongodb-ai-capabilities-analyst-2025-02-25>
- Sharma, S. (2024, May 22). *Snowflake acquires TruEra to deliver LLM observability inside data cloud*. VentureBeat. <https://venturebeat.com/ai/snowflake-acquires-truera-to-deliver-llm-observability-inside-data-cloud>
- Singh, N. P. (2011). Critical analysis of expansion strategies of SAP, IBM, Oracle and Microsoft in the area of business intelligence. *International Journal of Strategic Information Technology and Applications*, 2(2), 23–43.
- Singh, N. P. (2019). Oracle acquired AI startup DataFox. *Industrija*, 47(2), 77–95. <https://doi.org/10.5937/industrija47-20182>
- Singh, N. P., & Singh, E. (2020). IIoT and machine learning technology: A case of investment of TVS Motors Limited (India). *Industrija*, 48(1), 81–108.
- Singh, N. P. (2025). *Growth of Matryoshka embedding models* [Unpublished teaching note].
- SolarWinds. (2017, June 14). *Why WiredTiger is the default MongoDB storage engine*. Orange Matter. <https://orangematter.solarwinds.com/2017/06/14/why-wiredtiger-is-the-default-mongodb-storage-engine/>

- Sourabhkv. (2024, November 12). *What is retrieval-augmented generation (RAG)?* Microsoft Tech Community. <https://techcommunity.microsoft.com/blog/educatordeveloperblog/what-is-retrieval-augmented-generation-rag/4286747>
- Strechay, R. (2025, February 24). *A win for MongoDB as it acquires Voyage AI.* The CUBE Research. <https://thecubereseach.com/a-win-for-mongodb-as-they-acquire-voyage-ai/>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533
- Van de Vrande, V., Lemmens, C., & Vanhaverbeke, W. (2006). Choosing governance modes for external technology sourcing. *R&D Management*, 36(3), 347–363
- Vassolo, R. S., Anand, J., & Folta, T. B. (2004). Non-systematic risk in strategic alliances: New technology ventures as an option portfolio. *Strategic Management Journal*, 25(11), 1045–1062.
- Voyage AI. (2024, October 3). *Announcing our \$28M fundraise.* <https://blog.voyageai.com/2024/10/03/series-a-funding/>
- Walter, S. (2025, March 3). *MongoDB's Voyage AI acquisition: Database AI's turning point?* Hyperframe Research. <https://hyperframeresearch.com/2025/03/03/mongodbs-voyage-ai-acquisition-database-ais-turning-point/>
- Whiting, R. (2026, January 15). *MongoDB aims for production-ready AI apps with new model capabilities.* CRN. <https://www.crn.com/news/ai/2026/mongodb-aims-for-production-ready-ai-apps-with-new-model-capabilities>
- Wiggers, K. (2024, October 3). *Voyage AI is building RAG tools to make AI hallucinate less.* TechCrunch. <https://techcrunch.com/2024/10/03/voyage-ai-is-building-rag-tools-to-make-ai-hallucinate-less/>
- Wilde, K. (2025, February 24). *MongoDB AI hallucination: Solving challenges with RAG.* Tempemag. <https://tempemag.com/mongodb-ai-hallucination-solving-challenges-with-rag/>
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185–203.
- Zilliz. (2024, June 13). *Voyage AI embeddings and rerankers for search and RAG.* Medium. [https://medium.com/@zilliz\\_learn/voyage-ai-embeddings-and-rerankers-for-search-and-rag-587d9bfff877](https://medium.com/@zilliz_learn/voyage-ai-embeddings-and-rerankers-for-search-and-rag-587d9bfff877)