## **Endatabas**

### **Pitch**

Endatabas is an open source immutable database that eliminates the accidental complexity and manual work assumed by databases of the past 50 years.

#### **Market**

Since the market for databases is massive (\$80b), Endatabas will start small. First, it will reduce development complexity with dynamic SQL, eliminate IT operations through DBaaS, and automate dull business processes like auditing and reconciliation with immutability.

## **Timing**

It is difficult for legacy database vendors to address all the complexity that has accrued over the past half-century. Over the past ten years, hardware and networking have finally grown to meet the fantasies of computer scientists in the 1980s — but database systems are too calcified to exploit this.

Worse, data tools are still divided between "operational" and "analytical"; asking deep questions of your data requires copying it into a second database.

Most companies provide distribution as SaaS (DBaaS), but each database struggles to take advantage of recent advancements.

Some products attempt to separate storage from compute (Amazon Aurora, Google AlloyDB, Neon). This creates the opportunity for "serverless" databases, but they cling to an outmoded paradigm (row-oriented SQL-92 in the form of Postgres) for its stability and don't offer time-travelling queries over immutable data to users. Immutability is safety. Every database should have an undo button.

Some products allow users semi-structured data (Mongo, Neo4j) but force users to retrieve data with lax, ad-hoc query languages. Past eras of NoSQL and NewSQL will be followed by Dynamic SQL with gradual typing. The UX of Dynamic SQL can be both fluid and self-evident.

A few OLTP databases offer read-only "time travel" into the past, but none offer powerful read-write corrections into the past or speculative data written "into the future" (bitemporality).

Light and adaptive indexing exists today, removing the need for users to manually configure indexes before they store their first record. But even newer SaaS databases like Fauna choose to force a priori indexing on users rather than generating indexes with machine learning.

Immutable data with timeline queries, joyful UX, infinite object storage, well-understood approaches to columnar data, rigorous query languages, and adaptive indexing all exist today. No database puts them all together yet. Any vendor that limits itself to one or two of these advances loses out on the complete picture: a database that is automated in every possible way, avoiding operational problems altogether.

It's an exciting time for databases. In the next ten years, we will see the dream of early database visionaries realized. We are on the verge of a sea change.

### Distribution

Endatabas will begin its life as an open source project. This tells us very little about its revenue potential, but we can at least use early open source releases to validate our priorites against the utility early users want from the product.

Although AGPL-3.0 licensing provides us an opportunity for a commercial dual license, our primary distribution model will be DBaaS. Endatabas isn't complete without fully-automated serverless delivery.

### **Team**

Håkan was previously the architect of XTDB (https://xtdb.com/core2/). He has been researching both the market and architecture of Endatabas for over five years.

Steven has founded other companies such as nilenso (https://nilenso.com). Over the past two years, he worked with Håkan on the product vision for XTDB.

In the early 2000s, they were both involved in the budding agile movement at ThoughtWorks and elsewhere — both appreciate lean business practices as much as lean software.

They both have the commitment, time, and patience to see Endatabas through to success.

# Why do we need money?

We are not in a rush to secure funding. We have been speaking to other founders, reading VCs' websites and datasheets, and generally snooping around. Some VCs are a better fit for Endatabas than others. We want to work with angels and VCs who understand what we are building, and why.

Because our goal is to build a profitable business as soon as possible, we will remain a small team even after securing initial funding. Q1 and Q2 2023 will be a lean period of building on our own savings. However, by the end of Q2 we expect to begin work on our DBaaS infrastructure, which will require additional money for staff salaries and cloud bills.

Ultimately, a successful VC will help us build the early infrastructure for Endatabas and expand our network.

At this stage, we want to meet some investors, listen to their advice, and hear what an investment in Endatabas means to them.

#### Etc.

• Website: https://www.endatabas.com

• Stage: Angel / Pre-Seed

• Team Size: 2

· Capital: Self-funded

• Burn: \$5,000/mo (USD)

• Location: Remote (Sweden, Canada)

• Bibliography: https://www.endatabas.com/bibliography.html

## Meeting in person

I (Steven) will be in California from January 26th to March 10th. From January 31st to March 4th (inclusive) I am attending a 30-day Vipassana course, which means I won't have access to my phone or email for that period. My colleague Conrad will schedule March meetings on my behalf while I'm away.

If you would like to meet me in person, you can schedule a meeting for the following days as follows:

- January 27 30: steven@endatabas.com
- March 5 10: conrad@endatabas.com

I'm looking forward to meeting a variety of people on both ends of my trip.