Deep Knowledge Ventures VITAL board algorithm

IMPLEMENTED 2014–2017 · FINANCIAL SERVICES AND INSURANCE · HONG KONG · BAND E · CLAIMED ONLY

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In May 2014 the Hong Kong venture firm Deep Knowledge Ventures said it had appointed VITAL, investment analysis software, to its board. Commentators quoted by the BBC and The Register called it publicity. In 2017 the managing partner said VITAL had observer status and had kept the fund out of overhyped projects. No measured results were published.

ABOUT THIS SYNOPSIS

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The impact band, proof marker and SEAM view are MarLuc's opinion. The organisation is not a MarLuc client and has not reviewed or endorsed this synopsis. Names and trademarks belong to their owners.

NOTICE WORDING LAST UPDATED 16 NOVEMBER 2026

AT A GLANCE

No measurable effect: no results reported.

AI and automation used: Investment analysis software (VITAL) that scored life sciences companies on risk parameters; how it worked is not established.

Implemented: 2014–2017. Grade: band E, No measurable effect, Claimed only.

Headline result, as reported: Algorithm announced as a board member in May 2014; commentators called it publicity, and no measured results were published

1 · The case

The facts, as reported by the 5 sources listed at the end. Where a source is silent, the field says "Not reported".

Organisation

Deep Knowledge Ventures. Hong Kong venture capital firm investing in drugs for age-related diseases and regenerative medicine. In 2014 it was led by Dmitry Kaminskiy with five partners, per Vice. Staff numbers: Not reported. Canvas block: 8. Governance and risk. Also 4. Operations and process.

Business challenge

The challenge. Biotech has a very high failure rate, with around 96% of drugs not completing clinical trials, per Nikkei Asia. The managing partner said the fund's analysts were failing to find the patterns that made a company likely to succeed.

How it was addressed. In May 2014 DKV said it had appointed VITAL, software developed by UK-based Aging Analytics, to its board as a sixth member with a vote on investments. VITAL scanned prospective companies' financing, clinical trials, intellectual property and previous funding rounds. A spokesperson told Vice the board would only put money into companies VITAL suggested were a good bet. A firm representative told Business Insider that it was not what you would call AI at that stage. In 2017 the managing partner said the board treated VITAL as a member with observer status and would not make positive investment decisions without its corroboration, and that VITAL 2.0 would launch in the second half of 2017. [1] [2] [3] [4] [5]

Who implemented it

Aging Analytics (Software vendor): Developed VITAL and licensed it to the firm.

Technology (SEAM pillar E)

SEAM types: not established; the sources do not say how the system works. Deployment: Not reported. Vendors and products: Aging Analytics, VITAL (Validating Investment Tool for Advancing Life Sciences).

Where it was built in: Used by the board in investment decisions on life sciences companies, scanning financing, clinical trials, intellectual property and previous funding rounds.

What changed

Before: a traditional biotech fund using advisers and analysts. After: by the firm's account, no positive investment decision without VITAL's corroboration, and a strategy refocused on longevity companies after VITAL's analysis. [1] [2] [3] [4] [5]

What it cost

Not reported.

What it saved

Not reported. The managing partner said in 2017 that the fund would have gone under without VITAL because it would have invested in overhyped projects; no figures were given. [1] [2] [3] [4] [5]

Governance and control

The firm described VITAL first as a voting board member and in 2017 as an observer. The Register noted that Hong Kong law normally requires a director to be a natural person and called VITAL's presence cosmetic. Owner, testing and validation of VITAL: Not reported.

S2 · Accountable owner · Claimed
The board, led by managing partner Dmitry Kaminskiy, took investment decisions with VITAL described as a member; no owner for the tool is named. [3] [5]

A1 · Safe use · Not reported
Not reported.

A2 · Human in the loop · Claimed
In 2017 the managing partner said the board treated VITAL as an observer and would not make positive investment decisions without its corroboration, so people kept the decision. [5]

A3 · Monitoring and assurance · Not reported
Not reported.

A4 · Vendor AI · Not reported
VITAL was developed by Aging Analytics and licensed to the firm; how the firm checked it is not reported. [2] [4]

A5 · Agent controls · Not reported
No agents described.

A6 · Standards and regulation · Not reported
Not reported. The Register argued that Hong Kong law normally requires directors to be natural persons; no regulator action was found. [4]

What worked, what did not, what is unproven

WORKED

– By the firm's account, VITAL helped approve two investments by May 2014, including InSilico Medicine.

– The managing partner credited VITAL with keeping the fund out of overhyped projects and with its move to longevity, by his account in 2017.

DID NOT

– Professor Noel Sharkey told the BBC the appointment was a little bit of publicity hype, and called the algorithm voting a gimmick.

– The Register wrote that VITAL could not be a natural person and that its presence on the board was cosmetic.

– The firm's description of VITAL's role changed from a voting member in 2014 to an observer in 2017.

UNPROVEN

– Whether VITAL's recommendations improved returns or avoided losses; no figures were published.

– Whether VITAL 2.0 launched, and whether VITAL is still in use: Not reported in the sources that could be opened.

Timeline

May 2014 DKV announces VITAL as a member of its board [1]

May 2014 The Register calls VITAL's presence on the board cosmetic [4]

May 2017 Managing partner says VITAL has observer status and credits it with avoiding overhyped projects [5]

2 · Grade and SEAM assessment

MarLuc's opinion, made on the evidence above. How cases are graded: marluc.co.uk/case-studies/how-we-rate

Level of change and impact

Claimed: Not applicable. Grade: E, No measurable effect. Proof: Claimed only. Level of change: Not graded.

No level assessed: band E, no measured results reported. The appointment described a decision tool, with the human board keeping the decisions.

The appointment was widely reported, but the firm published no measure of VITAL's effect, and its description of VITAL's role changed from voting member to observer. The firm credits VITAL with avoiding bad investments and with a shift to longevity companies; these are its own statements, with no figures. Band E: no results reported.

The SEAM view and lessons learnt

The announcement drew wide coverage, but commentators at the time saw the tool as close to the analysis software investors already used. The only results are the managing partner's statements, so VITAL's part cannot be separated from the fund's change of strategy. A leadership team should ask what decision rights a tool really holds, who answers for its advice, and how its effect will be measured before announcing it.

1. Describe AI tools by what they do, not by titles.
2. Keep accountability for decisions with named people.
3. Set out how a decision tool is tested before claiming results.

Evidence

Score 1 of 4. Self-reported: the firm's statements to the press; commentators quoted by the BBC and The Register questioned the claim.

Evaluation method. Self-reported statements; no measurement of results published.

Sources disagree. The BBC and Vice reported in May 2014 that VITAL would vote; Business Insider reported it had not yet cast its first vote; in 2017 the managing partner said it held observer status. Business Insider quoted the firm saying VITAL was not yet AI, while Nikkei Asia reported the firm calling it the first artificial intelligence system for biotech investment analysis.

Status. Unknown: no reporting after 2017 that could be opened was found; whether VITAL 2.0 launched is not reported.

3 · Original sources

Read these in full. To challenge a fact or a grade, use the contact form at marluc.co.uk or the link on https://marluc.co.uk/case-studies/deep-knowledge-ventures-vital-board-algorithm

[1] BBC News: Algorithm appointed board director (May 2014)
https://www.bbc.com/news/technology-27426942

[2] Business Insider: A Venture Capital Firm Just Named An Algorithm To Its Board Of Directors (May 2014)
https://www.businessinsider.com/vital-named-to-board-2014-5

[3] Vice: The robot-turned-venture-capitalist exec isn't giving interviews (May 2014)
https://www.vice.com/en/article/the-robot-turned-venture-capitalist-exec-isnt-giving-interviews/

[4] The Register: Software 'appointed to board' of venture capital firm (May 2014)
https://www.theregister.com/2014/05/18/software_appointed_to_board_of_venture_capital_firm/

[5] Nikkei Asia: Artificial intelligence gets a seat in the boardroom (May 2017)
https://asia.nikkei.com/Business/Artificial-intelligence-gets-a-seat-in-the-boardroom

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