

CASE STUDIES: UNDER-PERFORMING INVESTMENTS

Case Study: Bleximo

Company Overview & Thesis

- Bleximo was a developer of application-specific superconducting quantum computing chips.
- Dillon's investment thesis centered on the belief that certain quantum algorithms would benefit from hardware designs that were purpose-built for each use case.
- Additionally, superconducting quantum chips had potential to be better than other architectures (e.g., Quantinuum's ion-trap computer) for select use cases given potentially higher computational throughput.
- Bleximo had assembled a best-in-class hardware team in the Bay Area, led by a former Technical Lead at superconducting quantum computing player Rigetti.

Backstory

- Dillon met the Co-Founder & CEO of Bleximo, Alexei Marchenkov, in July 2022 through other operators in the quantum computing industry.
- Alexei was raising a convertible note round to extend runway from ~6 months to ~12 months before raising his Series A round. Khosla Ventures, GV, and other top VCs were beginning to spend time with the company.
- Dillon invested \$45,000 in a ~\$1.5 million bridge round in August 2022.
- Other investors included:

 ENIAC
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Failure Points

- After closing the convertible note round, the Company continued to progress on its hardware roadmap but was slow to build commercial partnerships.
- Khosla Ventures, Google Ventures, and other lead candidates fell through, throttling the Company's momentum as they had shifted resources and restarted fundraising.
- The CEO tragically committed suicide in August 2023, driven primarily by personal challenges but also exacerbated by company-related stress.
- Bleximo's board attempted to sell the Company's IP in the months thereafter, but no buyers emerged given they would also have to assume the Company's operational liabilities (e.g., large unpaid accounts payable).

Lessons Learned

- **Spending meaningful time in-person** with the founders should be a non-negotiable requirement to investing. Dillon invested after only 2 phone calls with the CEO and 4 reference checks, which is definitively not enough diligence needed to properly vet the founder and understand his personal life.
- **Bridge rounds should be scrutinized more heavily**, given they are typically an indicator of weakness. Although it was a positive signal that current investors were leading the bridge round in significant size, Dillon also over-indexed on the perceived interest by Khosla and Google to lead the Series A, who both fell through in diligence afterward.
- **The founders were both highly technical and did not demonstrate meaningful commercial aptitude.** Dillon trusted the strength of their commercial leader and assumed they would make appropriate sales hires. The best deeptech founders actually tend to have both high technical credibility and strong commercial instincts, with the desire to reach revenue generation quickly and build a business (e.g., Ilyas Khan @ Quantinuum).

Case Study: Entheos

Company Overview & Thesis

- Entheos was a developer of software-defined industrial battery packs for renewable power operators, which allowed for autonomous, precise battery charging and discharging based on real-time grid usage.
- Entheos was founded by CEO Merijn Terheggen (founder of a lithium-iron EV battery manufacturer), Christian Ringvold (former founder & CEO of unicorn cybersecurity startup HackerOne), and TJ Ragsdale (Former Head of Growth at lending startup Maker).
- Dillon underwrote (i) high customer ROI (8-10% operating efficiencies and lower capex), (ii) clear customer demand (underpinned by \$60+ million of signed revenue for the NTM period), and (iii) a next-generation solution selling into the large \$18+ billion industrial batteries market.

Backstory

- Dillon sourced the opportunity in Q4 2022 through his friendship with Entheos co-founder TJ Ragsdale.
- Dillon spent considerable time with TJ in multiple diligence calls, including a detailed review of financial projections, unit economics, and GTM opportunities.
- Dillon invested \$15,000 in a \$5 million seed round in January 2023.
- Other investors included:



Failure Points

- Entheos relied on an initial distribution partnership with battery hardware provider TESVOLT, where Entheos would integrate its software-defined smart controllers with TESVOLT battery packs. TESVOLT ended up being heavily delayed in battery delivery due to (i) supply chain issues, and (ii) top grid customers receiving higher priority than Entheos.
- Entheos went through a long diligence process with Lowercarbon in mid-2023, who ultimately fell away in November 2023 as Entheos failed to deliver products to customers given the hardware delays. Entheos tried to find alternative hardware partners but could not find a suitable partner in a short period of time given broader industry backlog.
- Although the founders cut their salaries to zero and made strategic headcount cuts, Entheos ultimately folded in Q1 2024. An IP sale and acqui-hire sale process were both unsuccessful.

Lessons Learned

- Dillon did not fully appreciate the risk of Entheos' reliance on TESVOLT and the difficulty of switching hardware partners. Dillon should have further dug into the TESVOLT relationship dynamics given the vendor concentration, including a direct reference with TESVOLT. **For hardware businesses, having a deep understanding of the underlying supply chain should be a critical part of underwriting.**
- Contracted revenue requires timely product delivery.** While signed contracts support de-risking of commercial demand, any delays on delivering on these contracts can severely damage important customer relationships. Contracts should not be taken at face value, and all supporting assumptions and adjacent dynamics (e.g., supply chain as mentioned before) should be investigated.
- The team was split across the U.S. and Norway, with all three co-founders located in different time zones (California, Florida, Norway). As challenges arose with the company, this dispersion made team management and culture difficult. **Having founders (and ideally the whole team) co-located is important for rapid iteration, cultural excellence, and overall decision making.**