Harmonix: Predictions And Advice From Krish Ramadurai

By Amit Chowdhry

Harmonix is a venture firm that invests at the nexus of healthcare, life sciences, and deep tech, which was profiled by Pulse 2.0 earlier this year. Given Harmonix's substantial experience in venture capital and data-driven insights, Pulse 2.0 reached out to Harmonix investment partner Krish Ramadurai to find out its take on a recent PitchBook report that showed a 67% drop in VC fundraising compared to last year and the squeeze that startups have been facing when it comes to raising additional capital.

(Krish Ramadurai)

Investment Positioning

Given the PitchBook report highlighting a decline in valuations and an increase in down rounds, how has Harmonix positioned itself to remain resilient in this challenging market environment? Ramadurai said:

"Harmonix has a rigorous due diligence process and deal assessment framework that has been instrumental in its top-performing portfolio. While the market has experienced a reset in valuations across early and growth stages, Harmonix's portfolio continues to raise up-rounds and has achieved three exits in 2023 alone."

"During our diligence, we ensure that the company's valuation reflects its validation and that the business model is sustainable."

"Over 70% of our portfolio companies generate revenues between $1 million to $200 million, and our companies continue to meet and exceed their revenue targets and technical development milestones. Over 25% of Harmonix's Fund II companies are expected to achieve profitability in the next 18 months, an unprecedented feat in venture capital."

Navigating The Economic Climate

As the lead investment partner at a firm deeply involved in AI, deep tech, and healthcare, what strategies have been implemented at Harmonix to navigate the current economic climate? Ramadurai replied:

"This current economic climate has required exceptional operational support for our portfolio founders and CEOs. Given the contraction in liquidity and capital in the markets, we have had to trim operational budgets with companies and focus on technical platform development, product launch, customer engagement/acquisition, and strategic financing."

"We have gotten creative with financing rounds by leveraging robust investor syndication, non-dilutive government SBIRs, and venture debt sources. We have continued to work to ensure that companies have sufficient runway capital for at least 18 months and very clear tangible KPIs and OKRs to position them for continued growth and success in the near and long term."

AI And Health Tech Predictions

What are the predictions for the AI and health tech sectors in Q1 next year, and how does Harmonix plan to adapt to these anticipated changes? Ramadurai reflected:

"Given our portfolio concentration on compute-enabled platform technologies in healthcare, we're excited by the potential of AI to continue to automate redundant workflows in healthcare and improve provider productivity and patient outcomes. We predict continued strong investment in clinical workflow automation solutions in pathology, radiology, oncology, and digital surgery."

"Companies that can create 'drop-in' solutions that integrate seamlessly with existing healthcare EMR data stacks and increase RVUs, billings, productivity, and mitigate provider burnout and malpractice will continue to be a game-changer. Furthermore, on the clinical trial side, we expect AI to dramatically improve clinical trial design, protocol automation, and patient enrollment. Harmonix has already adapted to these changes with a robust portfolio containing leading healthcare companies with AI-enabled solutions, including PathologyWatch (Acquired), Rad.AI, Caresyntax, Trials.AI (Acquired), and xCures."

Influence From Portfolio Companies

Can you elaborate on Harmonix's investments in startups like Bit.Bio, Strateos, and Insilico Medicine? How have these investments influenced Harmonix's growth and the broader industry? Ramadurai noted:

"At Harmonix, we've been delighted to invest in incredible companies that have developed breakthrough technologies to substantially optimize, accelerate, and reduce the cost of drug discovery and

development. Our portfolio has had numerous 'world's firsts' and scientific breakthroughs that have dramatically improved society."

"This spans from the development of the first ever fully end-to-end AI-developed drug in human trials by Insilico Medicine to the development of the world's first automated robot cloud laboratory for biotech R&D by Strateos to the development of the most scalable human cell manufacturing platform by bit.bio. Each of these companies has optimized critical bottlenecks in the biotech industry with unprecedented cost efficiencies and savings."

"Insilico Medicine went from drug hit to clinic in less than 18 months with only $2 million for their lead program compared to conventional biotechs that would take 3-5+ years and more than $30M to achieve the same feat. Strateos has solved the replication/reproducibility challenge in scientific R&D, allowing research to accomplish a 95%+ experiment replication rate saving time and money. Bit.Bio can produce over 20 human cell types at scale with consistent batches of human cells with 90%+ viability. This gives researchers worldwide access to high-quality, uniform batches of cells for preclinical drug development."

Harmonix's Innovation Contribution

In what ways is Harmonix contributing to innovation within the AI and health tech fields? Are there any specific projects or technologies that exemplify this? Ramadurai pointed out:

"Harmonix has backed numerous industry-leading AI and healthcare companies that improve patient outcomes, increase productivity, and mitigate provider burnout. Our companies have automated a number of critical healthcare workflows, including radiology dictation (Rad.AI), pathology sample analysis and reporting

(PathologyWatch), end-to-end surgical tracking to improve surgical efficiency and patient outcomes (Caresyntax), NLP for medical affairs analysis (Sorcero), virtual reality for cardiac ablations (SentiAR), as well as structured data procurement for oncology real-world data (xCures)."

Challenges In This Market Environment

What are the biggest challenges and opportunities Harmonix faces in the current 'frothy' market environment? Ramadurai acknowledged:

"Perhaps the biggest challenge is the lack of available capital for growth-stage opportunities. As our portfolio companies continue to achieve their milestones and progress beyond Series B, it has been challenging to access growth capital, especially for deep tech and biotech. This same problem is also an opportunity for arbitrage for companies that need just a bit of additional growth capital and could trigger a short-term liquidity horizon when the IPO markets begin to thaw over the next 24 months."

Long-Term Vision

How does this impact your long-term vision for the company? Ramadurai affirmed:

"Given that we are an alternative asset class, we view things as a long-term holding period as many of our companies are early-stage. By leveraging both early-stage (Seed and Series A) companies and later-stage (Series B and C) companies, we've achieved a great balance between creating liquidity and returns for our more mature companies with the high alpha generation of the early opportunities. This is a portfolio allocation model that we will continue to stick to in the future as it has generated top-decile returns thus far."

Sector Trends

How does Harmonix view the current trends in AI, deep tech, and healthcare? Ramadurai commented:

"With regard to upcoming trends, we are particularly excited about digital twinning for deep tech, healthcare, and deep tech applications. The ability to create a digital simulation or model of an animal for preclinical drug development could prove to be a breakthrough in solving the 95%+ attrition and failure rate that drugs have when going from animals to humans."

"On the deep tech side, digital twinning can be utilized to create digital models of materials and test their interactions before they are integrated into an aircraft or spacecraft, saving valuable time and money. In healthcare, the ability to create a digital twin of patients and enroll them in clinical trials without physically doing so could present a radical shift in how we conduct trials for diseases such as Alzheimer's in the future."

Shaping The Trends

What role does Harmonix see itself playing in shaping these trends? Ramadurai explained:

"Harmonix has led the charge in investing in truly nascent and novel technologies that have influenced these upcoming trends. Our firm has been investing in AI/ML/DNN-enabled solutions far ahead of the current hype in AI and computing technologies. As operators, scientists, and engineers, we've been able to assist with the financial needs of these breakthrough companies and the fundamental science and engineering aspects shaping humanity's future."

Advice About Navigating Current Economic Conditions

Given Harmonix's experience working with numerous startups, what advice would you offer to emerging companies in this sector during these turbulent times? Ramadurai responded:

"I have been advising both our existing portfolio companies and founders, in general, to make sure that they are raising enough money to provide at least 18 months of runway and have clear attainable OKRs and KPIs with a clear line of sight to the next set of value inflection points."

"Furthermore, viable asset dev programs and robust data packets are critical for biotech companies, as well as strong storytelling behind how the management team and technology are poised to succeed. Customers and strategic partnerships are vital in building external validation for the technology, as well as unique opportunities for upfront payments, LOIs, and product development/launch traction. I always advise founders to make sure they are building 'pain killers' and not 'vitamins' in that their technology is truly solving a unique problem that customers/partners/strategics are in greatest need of."

Current Approach To Funding And Development

How has the investment climate affected Harmonix's approach to funding and development, especially in light of the recent market changes? Ramadurai emphasized:

"As an emerging fund, it has been perhaps the most challenging environment to raise capital in the last 25 years. Limited partners and institutional investors have reduced allocations into alternative assets, in which emerging managers have been squeezed by the lack

of available capital and have to truly demonstrate exceptional track records/returns, liquidity, and differentiation from other fund strategies."

Long-Term Vision

What is Harmonix's long-term vision for its role in the AI, deep tech, and healthcare sectors, and how does it plan to achieve it amidst the current economic landscape? Ramadurai concluded:

"We have had an unprecedented track record of success in a short period of time and remain bullish in investing in critical technologies that are quite literally changing the world as we know it."

"We remain steadfast in our diligence, robust sourcing, and operational support capabilities for our portfolio now and in the future. We're excited at the prospect of continuing to invest in and accelerate technologies that are creating Humanity 2.0 regardless of macroeconomic conditions."