

ΤM

A Novel AI-Enabled Platform for New Technology Investment & Development Decisions (any technology / any application)

- Accelerate Development
- Increase Rate of Success
- Reduce Risks & Costs
- Create a New Knowledge Marketplace

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Business & Government

Achieve greater Product & Technology Development Success

Burn down technology & business **risks**, reduce **costs**, accelerate **growth**

Patent-pending platform brings together Expert Human Collaboration and five (5) Expert GPT-Enabled AI Agents in a highly guided process.

9-HI uses quantitative, evidenced-based scoring to provide **Decision Guidance** when it's most needed to keep critical programs healthy.

Multi-user Enterprise Platform with holistic Al-based guidance for:

- SelectionChoose the right technologies that can succeed for youInvestmentImprove success rates and ROI three-fold.
- **Development** Manage technical projects from Concept to Launch with the Team and AI Guidance that can meet your objectives addressing the **right risks** at the **lowest cost**.

9 Core Metrics govern all Risks and Improvement Opportunities for:

Product Technology / Team & Stakeholders / Market Application

9-HI Bridges the Valley of Death



Video Demos

Selection Projects (Investments, RFI, RWP, RFP, Pitch Events)
 <u>https://vimeo.com/792004211</u>

 Al Agents Capabilities and Growth Training from Bulletins & Innovation Exploration Projects

https://vimeo.com/788474465

Development Projects Guidance for TRL-to-TRL Decisions
 <u>https://vimeo.com/840080336</u>

The Government & Enterprise Need Seemingly Awesome Tech Often Fails.

But the need to innovate has never been higher!



It's not any easier for Investors...

Many <u>key decisions</u> need to be made correctly by many different stakeholders who often lack the necessary information, priorities and processes to be consistently successful.

Problems We Encounter in Technology Investment & Development



Critical Investment & Acquisition Challenges:

- Multiple Solicitations & Pitch Day cohorts per year
- Hundreds of white papers & proposals with unclear/scattered information
- Poor Proposal Response Alignment to actual Market Application needs
- Qualified human evaluators are not available or overused (fatigue)
- Investments into the wrong products or wrong suppliers or wrong applications
- No historical record of decision criteria available when selection/investment is scrutinized
- Poor feedback for proposer improvement

Critical Development Challenges:

- Highest priorities & critical needs of tech/product are lost or never Identified
- Programmatic Objectives, Risks & Actions not well thought out or tracked
- Cooperation & intelligence (Smart Collaboration) is limited
- *Subjective & Inconsistent* decision criteria used for important decisions
- Historical record and decision guidance is lost: Over and Over and Over again
- Decision criteria can be wildly different by technology & organization
- Programs derailed with loss of confidence in the technology, the team or the provider

Reasons For Failure

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Investment & Development Decisions lack context, actionable intelligence and knowledge of prior/similar experiences.

Choosing the wrong innovation.

No/limited knowledge share across the organization.

Failure to identify red flags early on.

Making choices based on subjectivity/biases.

Missing or deprioritizing critical risks.

BAIN & COMPANY

Business performance is 95% correlated with decision effectiveness.

Gartner.

Decision Intelligence is a top strategic trend for 2023.

What metrics determine success?

Product Technology	Appeal	Value	Reliability
hings you want to invest in and	What does the user want from the	What reason/features/capabilities	How do users feel after their
evelop	technology /want to accomplish?	does it provide to the user or buyer?	experience with it?
eam and Stakeholders	Personnel	Planning and Process	Finances
trategic alignment and	How well can people execute	How do you handle information, support	What is the ROI? How do you
nprovement of your organization	the other eight categories?	autonomy, and deploy processes?	maximize opportunities for the cost?
Market application	Size and Scope	Demand	Access and Delivery
Maximize growth of market	What is the existing applications	What are your user profiles, and	How do people learn about your
opportunities	or market? Will that grow/change?	how do you cultivate Demand?	technology, and how do they get it?

9-HI[™] provides smarter Decision Guidance because it leverages these 9 Metrics in a novel 2-Layer Power Set to provide Higher Order Logic (HOL).

<u>To Al Agents</u> Let **machines** do what machines do best: *Perform rapid calculations, and access data* <u>To People</u> Let **humans** do what humans do best: *Bring context, and make final decisions*

SME Team Collaboration Requirements Knowledge Evidence Information





5 Al Agents: <u>SME Team Selection</u> <u>Risk Identification</u> <u>Solution Options</u> <u>Success Factors</u> <u>Success Evidence</u>

The 9-HI™ Process & Metrics

The 9-HI[™] Engine



AI Guidance for Human Decisions

9 Standard Scores

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9-HI[™] Results



9-HI[™] Calculates scores for procurement & development options compared to the "Art of the Possible" to improve Investment & Development decisions:

- > Human SMEs collaborate with each other & AI for Decision Guidance
- Compare technologies or proposals to identify best candidates for investments and improvements
- > Enable collaboration across DoD verticals, Industry and Academia
- Standardized objective/quantified measurement approach across diverse technology proposals
- Integrate AI and ML into the technology and product Selection & development process
- Al-guided development decisions throughout the TRL-to-TRL development process including deployment
- Accelerate technology and product development with lower overall risks-BE MORE SUCCESSFUL

		Target TRL: 9			
roduct Technology					
Appeal	7.2	Value	6.9	Reliability	6.9
Range of use	7.2	Function/Price	6.5	Meets customer expectations	6.4
Newness or refreshable	6.5	Multiple capabilities	7.5	Performs on par with competition	6.8
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Longevity of target application	7.8	Target users involved in design/	7.5	Distribution requirements	8.2
Potential to offer follow on variatio	8.0	Affordable to customers	7.7	Customer feedback implemented	7.0
Product life cycle advantages	85	Satisfaction guaranteed	75	Fast response to demand change	75

9-HI: All Paths should Start with an IE Project



Innovation Exploration Project

- Company, government or common interest Group of SMES considers Technology Topics to brainstorm and determine Risks and Success Factors
- Export to Selection Project or
- Export directly to a Development Project <u>or</u>
- Formulate project prior to seeking funding <u>or</u>
- Just for community benefit and for SMEs to gain research experience

(Must create individual profile and Group before starting any project)

Selection Project

- Request for Information
- Request for Whitepaper
- Request for Proposal
- Group can conduct one project or string together as an acquisition cycle
- Awarded Proposal is transferred to a Development Project

Responder Solution Project

- Allows Suppliers, Contractors or internal Dev Teams to create Responses measured using 9-HI SFs that were determined by the Host Selection Project
- Responder submits proposal back to
 Host Selection Project

Development Project

- Import Topic information from IE Projects or Selection Projects
- Create Evidence to drive SF Scores higher and bring Technology to Production/Deployment

- Multiple Project flows and starting options are possible
- Every Project Can utilize AI Agents with or without GPT
- Every Project can invite
 Volunteers or Paid Consultants
 using the convenient 9-HI
 payment system
- ✓ Simple imports are available from one project to another

Traction Achieved Thru February 2023

SBIR Phases I & II

> \$1.5 Million Phase 2 SBIR Funding- AFWERX/OUSD

(Joint Enhanced Munition Technology Program/Joint Fuse Technology Program)

DPA, Title III, SBIR Phase III

- > \$4.1 Million Funding- OUSD: Defense Production Act, Title III (Completed 03/2023)
- > Working Platform available for Demo
- Seeking additional Gov Programs for sponsorship through ATO and database access for enhanced AI Agent training

Commercial Traction Microsoft



- > Accepted into Microsoft "Fast Track" program by CTO Anu Gupta to team for Security, AI integration & BD. (includes >\$180k in credits)
- > Invitation and Proposal from Capital Factory & Multiple DoD services for new integrated deployment project
- > Pilot partners: MxD, National Armament Consortium, Multiple accelerators, Connex Marketplace, Marcantonio Global, et al.

9-HI[™] Platform Features

3.)

5.)

9-HI Platform Build Completion



Gov Organizations, Enterprises & Universities can:

- Build it's own group with privacy and usage controls & privileges 1.)
- 2.) Deploy multiple teams with SMEs they find on 9-HI[™] on multiple Projects and Topics
 - Use the 9-HI[™] AI Agents to identify Risks, Success Factors, and Success Evidence for their Topics
 - Deploy actual RFIs, RWPs, RFPs, or Pitch Events AND Import them into Development Projects Send out announcements to potential solution providers
 - Screen, register and select Responders based on their abstracts or Unsolicited White Papers
- 7.) Provide Responders ability to evaluate their own ideas based on 9-HI[™] scores BEFORE they respond
 - Responders provide their proposal to the Host in a 9-HI[™] Format on the 9-HI[™] Platform
- 9.) Allow Host to right size the number and variety of experts to judge all responses
- Down select proposals to move from RFI to RWP to RFP within an acquisition cycle 10.)
- Select finalists for awards and import data from project to project 11.)
- 12.) Document reasons why Host judges made their decisions with feedback to Responders
- 13.) Explore New Innovation Opportunities with self-directed groups within in organization
- 14.) Request Recommendations of Risk, SFs, & Evidence from all AI Agents and SME members on 9-HI™
- Transfer the winning proposal into an R&D Project where it will be constantly measured and it 15.) can progress from TRL to TRL using 9-HI[™] objective measures and deploy when it reaches TRL 9
- 16.) Payment from Enterprises to consulting SMEs at any stage of a project

All of this is guided by SMEs and the 5 Al Agents using the 9-HI[™] process



Meet the Team & Advisors*



Dave Mroczka Founder, 9-HI



Ryan Hart

Brianne O'Brien*

Program Manager, AVI

Principal Subcontractor

Dave led five private and public company business units, 24 yrs. in P&L leadership roles with companies up to \$5 billion in revenue. Top executive at the largest private DoD product development lab in the US. Set records sales and profit for ClipFix, Luitpold Pharmaceuticals, UBE Industries, API Industries and Dayton T. Brown Corp. Bachelor of Science in Mechanical Engineering at the University of Hartford, MS and MBA from Rensselaer Polytechnic Institute



Frank Zinghini* **Principal subcontractor**

Frank founded Applied Visions, Inc. to create software solutions and products for business across many industries. AVI has developed critical cyber security tools for the federal government, through funded R&D programs for DoD, DHS, and the Intelligence Community. AVI transformed the results of a DHS-funded research program into Code Dx, a cyber security spinout closed in 2022.

Ryan worked as an Energy Engineer/Project Manager for an energy services company and an IT Auditor within the Risk Advisory Program at EY. Ryan received his BS in Industrial & Systems Engineering from Binghamton University and his MS in Industrial/Organizational Psychology from Touro University of New York.

Brianne defines, manages, matures, and successfully

Community. As a senior embedded systems engineer, she

developed avionics cockpit and fuel management aircraft

systems software.. Brianne holds a BS in Computer Science

from SUNY Stony Brook and an MBA from Adelphi University.

transitions R&D projects for DoD, DHS and the Intel



Dr. Simon Hong Lead AI Engineering

Simon is an expert in AI and Neuroscience, applying knowledge gained from biological experiments to build AI models and its applications. Simon also brings in leadership and communication skills having experience in leading teams at MIT, NIH, and was a CEO of a startup company, Robilis. Simon received his PhD from Boston University and did his post-doctoral training at NIH





perception software for intelligent robots

OSU Personal Robotics Lab and developed object recognition and

Julian Weisbord* Machine Learning Developer