



NIEMOPEN Hackathon

Fueling Data Standardization



NIEMOPEN



**OASIS
OPEN**

KGC Case Study:



Model



Initial Sponsor: U.S. National Science Foundation financing KGC



The Knowledge Graph Conference

GenHax client: KGC (The Knowledge Graph Conference)



Operator: GenHax

A Similar Mission to NIEM OPEN

- **Engage** stakeholders to co-create Knowledge Graphs
- **Advance** Knowledge Graphs science
- **Promote** Knowledge Graphs usage
- **Build the basis of a recurring business** for our client KGC, over 3 years



KnowHax 2024: the 1st Knowledge-centric AI Hackathon

Engaging

Promoting

Advancing

275 Participants & Mentors

9 Universities involved

87% NPS, **91%** satisfaction

>25,000 views, organic

>6000 People contacted

>600 Companies contacted

15 ambassadors, **5** influencers

7 out of **15** NSF ProtoOKN supported

4 websites, **2** apps, **1** startup created

15 “resource groups” created

Client Brief

- **Timeline:** 2.5 month to prepare, 3 weeks to operate, 2 months to show impact
- **Brand & App:** build, brand & maintain an app owned by client
- **Talent & Sponsors:** create channels & partnerships

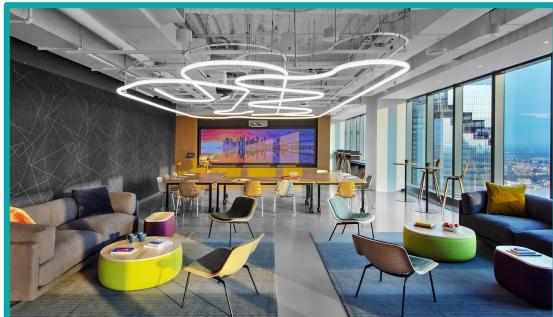


KnowHax Achievements: Impact for Companies

Business engagement around the NSF and KGC will lead to business value in upcoming hacks.



10 industries supported through the NSF Proto-OKN projects, leading to:
493 companies + 117 VC directly contacted
55 companies attending the Pitch event
5 Companies interested in sponsoring KnowHax after the Pitch event



HOW WE ACQUIRED CLIENTS AFTER THE PITCH EVENT

3 Brand challenge sponsors: \$35K ARR

(+ 3 others in pipeline)

accenture >



Tom Sawyer
SOFTWARE

2 Own-Challenge sponsors: \$80K ARR

NIH National Institutes of Health
Turning Discovery Into Health

COMPANY
VENTURES

1 Recruiting sponsor: \$25K one-time

COMPANY
VENTURES

accenture



Visibility: Sharing Knowledge Graphs and NSF's Impact

This pilot offered lots of visibility and established the partners brands



and >40 more universities

- >**25,000** organic, slack & email views
- >**6000** Participants directly/indirectly contacted
- >**600** company leaders engaged
- 53** content pieces created (of which >**20** videos made by organizers and participants)
- >**30** CEO in various industries directly engaged
- >**20** ambassadors on social media sharing news
- 8** US federal agencies supported
- 5** Influencers (François S., Thomas D., Hugo S., Paco Nathan, Chaitan Baru)
- 4** social media accounts created



Model

- **Initial Sponsor:**
OASIS **NIEMOPEN** Project
- **Additional Sponsors:** Government & Industry organizations
- **Operator:** GenHax

Strategic Goals over the next 3 years:

1. **Engage** with businesses to accelerate cross-domain interoperability at the data level
2. **Promote** standard awareness, adoption and implementation
3. **Fund** the standard through increased sponsorship from Additional Sponsors
4. **Advance** use of NIEM for AI through Knowledge Graphs (providing contexts and semantics for training AI models)

Proposed: OPENHax 2025 for



NIEMOPEN

Engage

3 - 5 hacks + 5 workshops + “Journeys”

500 partic. per hack by end of Y3

50 partners involved by end of Y3

>**80%** NPS, >**80%** Satisfaction

Promote

500K views per hack

15K individuals **1500** orgs contacted 1-1

2 other hacks evangelization (AI, Cyber)

Fund

\$50K hack sponsoring/year (Y1)

\$150K hack sponsoring/year (Y3)

\$200K NIEMOPEN donations/year (Y3)

Advance

4 standard ideations per workshop

4 standard developments per hack

4-8 standard tests & feedback journeys

Client Brief

Brand & Build: a hybrid hackathon + its application

Sponsors: Build financing channel for **NIEMOPEN** with a dedicated **3 years Go-to-Market plan** to grow revenues by \$200-300K per Year after hack costs.

First 12 months:

Feb: 8 months to prepare

Sep: 2 weeks to operate

Oct: 3 months impact, Journeys, and reporting



Recommendation

Year 1- 1 hack - \$50K fixed seed + \$50K variable from Additional Sponsors + Funding goal for NIEMOPEN

- App Creation
- Marketing, Branding, Community Engagement
- Acquiring Sponsors for **NIEMOPEN**: \$50K to break even on the cost of the hack ([Plan](#)).
 - Stretch goal: Additional **NIEMOPEN** Sponsorship \$50K.
- Hosting Hackathon events (pre-, during and post-event)
- Post event activities (employee “Journeys”, report metrics, sponsors, social media)

Year 2 & 3 - 2 hacks - \$50K fixed + \$50K variable from Additional Sponsors + Funding goal for NIEMOPEN: \$200K

- Same as Year 1 + additional revenue from employee “Journeys”





NIEMOPEN

Appendix



OPENHax Elements

Overview of the operational elements we'll set up for **OPENHax**

- **Hackathon Format:**
 - **Hybrid:** Depending on partners who might want to make it partly local + facilities that NSF might bring.
 - **Duration:** Workshop(s) a few hours. Hackathon: either a full week, or 2 days a week for 3 weeks.
 - **Onboarding:** Stakeholders will register and be activated on the app (i.e. app.openhax.org)
 - **Domain groups:** NIEMOPEN Domain Groups: will be set up and leveraged on the app.
 - **Journeys:** Engagement activities for stakeholders after the hackathons to drive impact for 3 months
 - **Application:** hackathon stakeholders will join the OPENHAX app and have related paid or free seats and features enabled for them
- **Hackathon Stakeholders:**
 - **Organizer:** NIEMOPEN
 - **Operator:** GenHax
 - **Initial Sponsors:** DoD, OASIS (TBD)
 - **Sponsors:** Companies supporting OPENHax financially
 - **Donators:** Companies driven to donating to NIEMOPEN through the hackathon
 - **Partners:** Organizations supporting NIEMOPEN or/and OPENHax in-kind (communication, resources)
 - **Participants:** App users taking part in hackathon teams for days of work, in view of producing solutions
 - **Mentors:** App users registering to mentor others, for a few hours only, not part of teams
 - **Speakers:** Reputed individuals invited to speak during the hackathons
 - **Leaders:** Reputed individuals invited to participate in Ideathon Leader Workshops before the hackathons

OPENHax Audiences & GTM

Who we target and how we target them

- **Target audiences:**

- Additional Sponsors:
 - Tier 1 government contractors and large tier 2 companies who have the national and international network to promote the standard
 - Same as the NSF sponsors
- Participants & Mentors:
 - Technologists within Sponsor companies. Realizing the value of using NIEM for data interoperability.
Example: Directors, Managers, SMEs.
 - Tech & IT SVP levels for leader workshops
 - No Students

- **Sponsor Segments:**

- **Segment 1 & 2:** NIEMOPEN + OASISOPEN current sponsors
- **Segment 3:** Data tech vendors and IT consulting
- **Segment 4:** Data tech final clients/implementers
- **Donators:** Companies giving directly to NIEMOPEN

GTM Strategy

Phase 1: Get feedback and adhesion from Segments 1 and 2

Phase 2: Acquire 2-3 logos from Segment 4 to build up interest from Segment 3

Phase 3: Address Segment 3 at scale once we've got Segment 4 stories.

More: [Go-to-Market plan](#)

OPENHax Challenges

Challenges are questions and topics on which participating teams are going to work.

- **Challenge goals**
 - **Understand, define and promote** the advantage of **NIEMOPEN** compared to other standards/process, applied to different types of data and domains.
 - **Leverage AI** to evolve the standard
- **Challenge requirements:**
 - **Leverage AI for data.** **NIEMOPEN** needs to bridge multiple semantics and ontologies that were built at different times for making decision-ready data.
 - **Challenge:** Define what we need to do, for all domains. Build a large KG to rule them all? or other ways to query?
 - **Define answer** over a prequel leader workshop with stakeholders.
 - NSF ProtoOKN group theme 2 to invite
 - **Avoiding silo issues:** Avoid the same cross-collaboration issues as are witnessed in the ProtoOKN groups. To avoid siloing issues, we need
 - Explicit boundaries to create alignment: “think about TCPIP standard imposed for the web: we need that for data”
 - Consensus is achieved by itself within a community of interest but not across. So: challenges to bring the various domains together, to a consensus. Facilitating the methodologies for assessing costs of standardizing data in one way or another could be part of the Leaders workshop too.

OPENHax 2025 Timeline

Planning & Preparation

- Define Objective
- Target Audience
- Theme/Focus

Ideathon

- 2 hour leadership workshop
- Bring together leading sponsors, researchers, influencers.

Post-OPENHax

- Judging, winners, prizes
- Post-Event social media impact promotion. Next hack's ideathon.
- Sponsor follow-up, Reporting

Jan-Feb
2025

Feb-Sep
2025

June
2025

Sep
2025

Sep - Dec
2025

Development & Marketing

- **Build** your Application, Website, Branding material, Event Calendar
- **Talent acquisition:** Participants and Mentors: Direct Campaigns, Social Media, Colleges & Universities, Developer Platforms, Direct Recruitment, Partners
- **Sponsor** engagement- existing and new

OPENHax

- **Kickstart** and operate for 2 weeks
- **Onboard** & Build teams
- **Manage** community & run events
- **Organize** Mentor sessions
- **Aggregate** resources
- **Gamify** with milestones & badges
- **Activate** & drive success with activities
- **Pitch** solutions/challenge
- **Launch Campaigns** for next Quarter's hack



GenHax Satisfaction

The only hackathon platform that implements solutions beyond events.

Paco Nathan
(KG influencer)

“ Thank you @Hugo, the KnowHax Pitch Event was fantastic!! Congrats on the teams competing.

My team and I are excited to work with the many talented participants of this hackathon to address these emerging issues using knowledge-centric AI. [More](#)

Tianyi Yang
(Researcher)

Lew Lefton
(Researcher)

“ The CollabNext Team from the NSF Proto-OKN project is excited to engage with such great people at the KnowHax hackathon! [More](#)

Support is appreciated!! Thanks so much

Angelica (Participant)

came back to new
hack Episodes

Yuan Tian (Participant)

“ Thanks for your help and management! I like KnowHax a lot with a rating of 10.

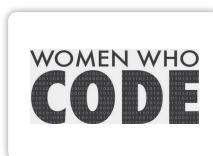
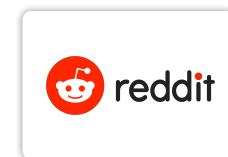
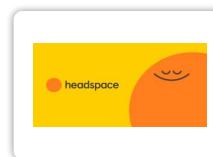
Hugo and the GenHax team exceeded expectations for our KnowHax hackathon and received gleaming praise from the NSF who were the main sponsor, importantly we saw great projects come from teams distributed across the globe. Looking forward to future collaborations.

KGC Thomas Deely
(Sponsor)

Stratos K. (Mentor)

“ I am very happy to serve as one of the mentors for KnowHax, a first-of-its-kind hackathon on Knowledge Graphs and knowledge-centric AI technologies. [More](#)

Let's Partner.





**WELCOME
TO THE
HACK
SIDE**