

***Michael S. Dunn***

---

***Technical Due Diligence for Funding & Acquisition***

***NYC - MySQL Group***

***3/24/10***

## ***Session Scope - Due Diligence is a Conversation***

---

- No matter the size or maturity of a company, the story of the technology should be proactively prepared within the normal course of planning the business
- This process is about leveraging a structured approach toward the conversation that occurs between a funding or acquiring entity and those being analyzed
- There are business model, financial, legal, product and technology aspects to the conversation
- I will focus primarily on the technology and some of the product aspects
- The end result of this conversation is an understanding of the current state of a company's technology landscape and their desired roadmap
- If the conversation is regarding an acquisition then opportunities for integration and/or optimization will also be explored and factored into the parallel financial decision making
- Meant as a mechanism to provide value to VC's, entrepreneurs and corporate folks

## ***Background - Hearst***

---

- A private diversified media company, one of nations largest
- Made up of six divisions
  - Hearst Television
  - Hearst Magazines
  - Hearst Newspapers
  - Hearst Entertainment
  - Hearst Business Media
  - Hearst Interactive Media
- Mostly domestic operations except International Magazines, Funds & Fitch Ratings

## ***Background - Current Role***

---

- CTO - Hearst Interactive Media
  - Venture Technology
  - Enterprise Technology
  - Strategic Relationships
  - Academic Relationships
  - Innovation Program
  - Emerging Media

## ***Background - Previous Roles***

---

- CTO of Time-Warner
- CTO of Dell Online
- CTO of Encoda
- Technology Leadership Roles
  - True North Communications
  - Turner
  - Hanna-Barbera Studios

## ***Background - Relationships***

---

- Technology Advisory Roles
  - Mochila: Media Marketplace
  - Infoworld: CTO Advisory Council
  - Advisor to Portfolio of Start-Ups
- Board Membership
  - Ballston Spa National Bank
- Academia
  - Columbia MS in Technology Management: Mentor
  - MIT Media Lab: Sponsor/Coordinator
  - Northwestern-Kellogg: Coordinator Executive Education

# ***Enterprise Technology***

---

- Focusing on and comprehension of the “enterprise” is critical when acquisitions are considered
- In large companies technology leaders of units tend to focus solely on their own unit and industry technology requirements without meaningful consideration to the commonality of an enterprise’s requirements or resources
- My roles tend to represent an unbiased enterprise technology focus
- My goal is to foster technology initiatives that benefit the entire enterprise while allowing units to focus on their core
- I focus on opportunities to maximize the return on investment of technologies

# Venture

---

- Investment & Acquisition
  - Simple business models that can be easily understand & explained work best
  - Tend towards minority stack in media focused Series B startups
  - Range \$2-10mm - we rarely lead
  - Goal: Economic return, seat at the table knowledge, enter ecosystems
  - Acquire: Internet Media businesses not fitting into our traditional divisions
- Venture Technology
  - Due Diligence
    - Standardized Process in Place
  - Guidance for Portfolio
    - CTO mentoring & Networking
  - Oversight for Wholly Owned
    - Technology Guidance & Hearst Relationship



## Portfolio (<http://hearstinteractivemedia.com>)

PANDORA™

BuzzFeed



gazillion  
entertainment

mobity.

voxpox.tv

brightcove™

gather  
.com

the newsmarket  
digital. global. now.



WHERE GAMERS CALL HOME  
1UP  
.com

kaboodle

sphere

E·INK

broadcast.com

sling  
MEDIA

local.com™



iVillage



HEARST *interactive media*

# General Entrepreneurial Suggestions

---

- Seek out advisors & angels who are successful entrepreneurs who appreciate and understand the challenges facing new business owners looking for growth capital
- Raising money will take 6-9 months from the time you start to the time you have money in the bank
- The CEO will need to focus 50-90% of their time on fund raising once underway
- NDAs - Good investors will not sign them and they have no real interest in "stealing your ideas"
- Make your company plans "stage appropriate" in 18 month "views"
- Ensure that your staff is committed to and understands your vision
- Be prepared to change your vision, plan & product often
- Ambiguity is normal for startups - embrace flexibility
- Clearly be able to state what market "gap" your product/service addresses, the problem it solves and why it's different than competitors

# Technology Due Diligence

---

- Is this an Investment an Acquisition or we're not sure yet?
- Staffing
- Infrastructure
- Architecture
- Products
- Workflows & Processes
- Budgets
- Contracts
- Answers generate Conversation

## ***Goal of Due Diligence Process***

---

- The goal of the due diligence process is to allow a fully understanding of the technology practice of a company, including how they are staffed, their tactical and strategic utilization of technology and the processes that allow them all to work together to produce what's required for the company, both for current state and roadmap
- So where relevant to the business, be prepared to provide written answers for the scoping questions and then to discuss them
- This is the start of the interview process, which will ultimately generate a written report on the technology state of the business
- I normally send the document in advance and then do a call or meeting to go over the answers
- For some companies I hire regional consultants or subject matter experts to work with me on the analysis

# Technical Staffing

---

- Most critical aspect of all due diligence - confidence in the people involved
- Organizational chart (or staffing list)
  - Include all FTE names & roles
  - Include any contracted resources & outsourced roles
  - Describe relevant groupings of roles such as development, operations and IT
  - Provide a logical workflow of how groupings interact
- Salary information, tenure and basic background for all technology staff including compensation history for previous 3 full years and any changes anticipated for current year (Acquisition)
- Contracted costs for previous 3 full years and anticipated for current year (Acquisition)
- List any unfunded yet desired staffing or contracted roles with an explanation of reasoning behind desire

# ***Infrastructure, Architecture & Product***

---

- Network & infrastructure diagrams (or descriptions)
- Systemic, programmatic & product architectural diagrams (both physical & logical)
- Data center services
  - Summary of data center services contracts (or approach)
    - Bandwidth under contract
    - Racks under contract
    - Data center operations services under contract
  - Budgets for all data center and operations support services for previous 3 full years and anticipated for current year
  - Provide Methodology regarding Disaster Recovery & Business Continuity

## ***Infrastructure, Architecture & Product***

---

- List of development, staging and production hardware in use, including whether it is owned or leased (include full specs)
- List of major software systems in use, including whether they are owned or leased or purchased on an ASP basis (include versions)
- Describe methodology related to such key technology decisions such as: security, data integrity, scalability and dealing with emerging technology requirements (include others as needed)

# ***Infrastructure, Architecture & Product***

---

- List major software platforms, toolkits and applications, including:
  - Whether purchased, partnered with or built in-house
  - Detailed description of all Product related platforms/applications
  - Detailed description of all Supporting or Backend platforms/applications
  - Explain who is responsible for maintenance of the above platforms/applications
  - List details of all patents (device, method or process)
  - Analytics
    - Provide all traffic metrics, such as monthly page views and monthly unique visitors for previous 3 full years and anticipated for current year
    - Provide any other relevant analytical reporting that is utilized by the company for previous 3 full years and anticipated for current year



# Workflow & Processes

---

Describe your product/project workflow (or provide diagrams)

For example, how are the following capabilities or functions handled:

- Project management & approvals
- Software development & enhancements
  - New features & functionality,
  - Change mgmt & bug fix
  - Graphics & UI design
  - Database overview
  - Testing & Quality Assurance
  - Build vs buy decision making
  - Roadmap and Research
- Business requirements documents
- Infrastructure Management
  - Monitoring & alerting
  - Upgrades
- Integration & Partnerships
- List any others specific to your offering

# ***Budgets & Planning***

---

- Expense & Capital budgets with depreciation for previous 3 full years and anticipated for current year
  - Provide an overview of Technology Plan, as implemented to-date
  - Provide an overview of Technology Roadmap, especially any major initiatives outstanding or desired
  - Describe how Technology initiative priorities and funding decisions occur (state your governance process)

# Contracts

---

- List of all 3<sup>rd</sup> party contracts with all relevant terms, including:
  - Data center contracts
  - Hardware and software maintenance contracts
  - ASPs & outsourced services
  - Software licensing agreements
  - Outside software development
  - Any other technology services under contract

# Summary

---

- Prepare in advance for the conversation regarding your technology & product decisions and desires
- Create a structured story that can be easily explained
- Be a discerning Technology Agnostic
  - Invest in core technologies that differentiates your company/product
  - Partner for commoditized technologies & services
  - Ask: “What will an entity that funds or acquires us think of these decisions?”
- Hopefully the process involved in addressing these questions and the conversation that it generates will be considered valuable

# Links

---

- <http://venturemaven.com>
- <http://www.readwriteweb.com/start/>
- <http://www.businessinsider.com/alleyinsider/startups>
- <http://www.theglobeandmail.com/news/opinions/columnists/mark-evans/>
- Brad Feld (Foundry) <http://www.feld.com/>
- Fred Wilson (Union Square) <http://www.avc.com/>
- <http://tamccann.blogspot.com/2009/09/what-i-should-have-said-about-raising.html>

***Please feel free to Follow or Contact me...***

---

**<http://glemak.com> has links to all my online activities**

**<http://glemak.pbwiki.com/techdd> contains full document**

**[glemak@gmail.com](mailto:glemak@gmail.com) or [mdunn@hearst.com](mailto:mdunn@hearst.com)**

**“the meeting on time travel will take place last week.”**