INTEROFFICE MEMORANDUM

TO: STEVE BERG, LYTICAL VENTURES
FROM: JOHN MCCARTHY
SUBJECT: TWENTY GOOD QUESTIONS
DATE: APRIL 20, 2023

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1. **What was the inspiration for Intangibles podcast? (**About | Intangibles Podcast)
    a. **My belief that the biggest driver of success of venture deals is the team, and that understanding the people that make up these teams from a behavioral psychology perspective is helpful in assessing their ability for success. Studying behavioral psychology and sharing that work with others via a podcast made sense to me. Plus, I really enjoy doing it.**
2. **Any few traits among founders or business builders that you admire the most?**
    a. **Grit, humility, critical thinking, curiosity are my favorites.**
3. **In your view, why is VC, as an asset class, attractive?**
    a. **VC falls along the risk return curve just like any other asset class. I think the particular place in which Lytical operates makes the difference. Cybersecurity is an import space that is becoming more important as the attack surface area of enterprises continues to evolve daily. Early-stage, where the real value is telling the signal from the noise, is also a strength of our team. So, I think it is our expertise that allows us to be better at assessing risk and generating outsized returns.**
4. **What are some of the biggest changes in VC investing in last ten years?**
    a. **As the process of doing deals becomes mature and institutionalized, there is the natural inclination to write bigger checks earlier and earlier. We have ended up with inflated valuations and teams not seasoned enough to know how and when to spend their cash. The competition to win deals has also led to irrational optimism and the coddling of founders by VCs. Being an honest broker and legitimately**

looking out for the company (especially when things are tough) is how we are building our reputation.

5. **In such a fast-evolving space, is there a "first mover advantage"?**
    a. When we first started there were fewer funds that focused on cyber, data and Machine Learning. That narrow message gave us some advantage in that founders in our space came to find us. Over time there has been more specialization and we have more competitors, so we need other advantages.
    b. There is an advantage to large personal networks with folks who have clout. We are lucky enough to have cultivated important relationships, that have allowed us to have reach and leverage, particularly when deals become more competitive.
6. **Any unique challenges of governance in VC companies?**
    a. When dealing with any entity with immature processes, there is going to be outsized risk. Specifically, management risk, technology risk and financial risk. It is incumbent upon the lead investors to make sure these companies are maturing their processes to minimize these risks over time. The added benefit of doing that hard work is these companies are better prepared to be acquired, should that become an eventuality.
7. **Do you have any favorite due diligence habits that you tend to employ over and over?**
    a. We try to follow the same diligence process over and over for every deal. Over time, a step or two has been added to our diligence process as we have seen unique situations that are worth protecting against on a go forward basis. Having said this, there is no substitute for talking to technologists, team members, customers, or anyone who can add to the mosaic being developed to help make a decision.
8. **For a VC investor, what are the advantages and disadvantages to being based in NYC?**
    a. The east coast has a different mentality than the west coast typically, when it comes to allocating a fund. The west coast tends to want to build huge, world changing companies, with the notion that returns will follow. The east coast tends to be more focused on finding good deals and thinking about cash-on-cash returns. In bull markets, a more open mentality resonates better. In tighter markets, greater risk

aversion tends to be more in fashion. As a CFA, I've been grounded in the time value of money my whole career and I think I fit better on the east coast.

9. **You invest in technology. Do you consider yourself more of a technologist or more of an investor? Unfair question?**
    a. The interesting thing about venture is it takes many different skills including technology understanding, deal structure, finance, and behavioral psychology. Some people come to the industry stronger at some things than others. My partner actually broke into computers for a living – he is more technology focused. I came in from the finance side but have been investing in technology for more than 25 years - so I like to think I have some understanding. I believe the most successful investors have a decent balance of skills.
10. **You invest in cybersecurity, data analytics, and artificial intelligence. Why these three, and how are they related?**
    a. Over the last decade or so, enterprises have gained a responsibility to their data (whether they like it or not). They must mine, monitor and monetize their data for the benefit of their organizations. Cybersecurity, data analytics, and machine learning are the underpinning technologies of this responsibility to 'enterprise intelligence' as we call it. The reason why we focus here is because it is important, and this is what we are best suited to do based on our background and experience.
11. **If you were an infrastructure investor, in these three areas, where would you focus?**
    a. Noting that infrastructure is a completely different category from what we invest in, and I am probably poorly equipped to give guidance to infrastructure investors, I will say that I'm fascinated by the silicon being developed for large language models and neural networks. I also pay attention to the technology being developed for quantum preparation (which is getting ready for when we have quantum computers).
12. **Any common problems or obstacles to growth among these three areas?**
    a. There are both locus of challenge and locus of opportunity among these three areas. The biggest common challenge is product market fit. Often a company will think they have

product market fit and the data may suggest that they do, but in reality, early sales success was based on another unknown externality. Investors can sometimes be fooled into believing that the sales process is repeatable.

b. In terms of common opportunities, there are two things to point out, 1) LLMs greatest value is their ability to detect patterns or anomalies in large data sets. A 'hack' is really just an anomaly in a normal behavioral pattern, so machine learning is ideally suited for cyber security. 2) going forward, we believe that every tech stack of every new company will have some form of machine learning. ML has become table stakes this quickly.

13. How do you define AI?

a. The most broadly accepted definition is probably machine sentience. Of course, in practical terms, we are nowhere near that point. If you look back through my earlier answers, you'll see that I have tried to avoid the term AI, because that is not really what we invest in. Some people use it for shorthand, which is understood, but it gets tricky then when defining it. In truth we mostly invest in really sophisticated algorithms which mimic some of the thing's humans do.

14. From a macro perspective, what things about AI, if any, are worrisome to you?

a. I think that GPT functions essentially like the human ego. It knows a lot of things and relates those things when asked. It also has an ID. It knows a bunch of 'not so nice' things (based on the data it has been given) and can easily be tricked into disclosing those things, or sometimes making things up. At this point, however, GPT doesn't have a very well-developed superego. It is not smart enough to say, "I know this bad thing, but it is probably better to keep that to myself or answer the question in a more constructive way based on a moral judgement." We have to figure out how to make sure we create a machine learning superego in a way that balances out the ID in a way that society is comfortable with.

15. **Now from a micro perspective, based on the things you have looked at, any mismatch in supply/demand for AI products or services?**
    a. **Two things: 1) we are early in the application of human creativity to machine learning. There are a bunch of tools that are only moderately useful and while they maybe be creating some value in productivity nobody is really capturing that value in terms of profit. That will change as we apply more creativity to the use cases of the technology. 2) I think of Machine Learning as creating more of the commodity 'intelligence'. As we have access to more intelligence we will find more uses for the commodity. We will begin to apply it to places we did not before when it was more expensive. I think this will make things really interesting. I, by the way, have a less dour view of what ML will do to unemployment levels than others based on this thinking.**
16. **If you were a brand- new Chief Information Officer of a large company that produced a lot of client data, what would be your top priorities?**
    a. **Security first, monetization second.**
17. **It seems like many cyber threats come from overseas. True? If so, from where do many originate?**
    a. **There are a lot of nation state threats. US cyber command is watching things from all the countries you would think of, and some you may not. The ones you would not, tend to be individuals or hacking groups. We have some anecdotal access to this, but not a lot. These types of hackers go after companies too. For example, when Johnson & Johnson was developing the vaccine for Covid-19, they were getting probed daily. However, don't kid yourself, the US has it fair share of hackers doing business both home and abroad we don't say much about.**
18. **Are there any unique challenges when commercializing a data analytics company?**
    a. **Data ops people are not really used to paying for analytics packages, and in particular generic tools. They like to open source them or build these tools themselves. Getting initial uptake is very hard. So, we are back to solving specific use cases, which takes specific vertical knowledge. We**

definitely use that as a decision principle when choosing our analytics investments.

19. **Software-as-a Service: more product or more service in your view?**
    a. I think of SaaS as a billing model that helps with revenue recognition rules. The software being built is sold as a subscription as opposed to being licensed or purchased outright. It is true that for really cutting-edge technologies there might be a services component to get the software integrated and up and running in a given environment. And, in the beginning the percent of revenue that is services vs software is greater, but when the operating model is at steady state, we would never invest in a company that doesn't generate at least 80 percent or more from software.
20. **Among the investments you already have, what are some common characteristics that combine to make a large opportunity?**
    a. Here is a list of things common among our investments:
        i. Deeply technical founders
        ii. Unique prior experience
        iii. Incredible work ethic
        iv. Defensible intellectual property
        v. Sustainable competitive advantage
        vi. Greater execution risk than market risk, competitive risk or business model risk
    b. If we add these commonalities to the notion that these companies are contained within large, fast-growing markets and our team is particularly good at filtering signal from noise (as I mentioned above), what we believe we get is the ability of our fund to generate outsized returns.