## J. Michael Locke Musings

#225: Musing May 27, 2023

Here is one for you on the danger of statistics — in this case stock market indices. From Bloomberg: "Analysis by Deutsche Bank noted that if the 10 mega-cap tech stocks were removed from the S&P 500, the overall index would be slightly negative in the year to date [whereas the index is up 9%]. In other words, the giant tech stocks are putting a gloss on the stock market in a year when interest rates continue to climb and inflation remains high." This was before Nvidia's huge run late this past week (an underappreciated success story).

Retailers are getting creative in their approach to customer acquisition costs. Fast food operators are increasingly using burgers as acquisition costs to sell soda. Think about the differential in margins. I recently paid \$2.50 for a large Diet Coke which costs the operator about 20 cents to make. Top Golf uses the "golf game" to drive their food and beverage business. The best example of using low margin products to attract buyers in to sell them higher margin stuff is the new model of gas stations on the highway. If you haven't used a Bucees or Wally's — give it a try. They use the gas to be in the retail business. At Wally's in Pontiac Illinois they have 76 fueling stations that then feed their store. "The 29,600-square-foot store is split into three "experience stations," with a section for standard convenience items like candy, beverages and coffee; another for made-to-order foodservice, including barbecue, popcorn and specialty coffee drinks; and a section dedicated to selling Wally's-branded clothes, home goods, kitchen supplies, outdoor equipment, board games and more." watch-out-buc-ees-here-comes-wallys. I have even purchased Christmas presents there.

Interesting stat on retailers: "on average, the cost to process \$100 of returned merchandise is about \$26.50" (WSJ)

Good movie out on Amazon about the creation of Air Jordans. The movie referenced the "10 rules" that Phil Knight had at Nike which is part of the great entrepreneurial success story.

- 1. Our business is change.
- 2. We're on offense. All the time.
- 3. Perfect results count not a perfect process. Break the rules: fight the law.
- 4. This is as much about battle as about business.
- 5. Assume nothing. Make sure people keep their promises. Push yourselves push others. Stretch the possible.
- 6. Live off the land.
- 7. Your job isn't done until the job is done.
- 8. Dangers
  - Bureaucracy.
  - o Personal ambition.
  - Energy takers vs. energy givers.

- Knowing our weaknesses.
- Don't get too many things on the platter.
- 9. It won't be pretty.
- 10. If we do the right things we'll make money damn near automatic.

Driving high performance is not just about measurement and evaluation. The executive's job is to teach and grow their employees. A good HBR article highlights how it needs to start with a growth orientation. Performance and accountability doesn't mean no mistakes but rather that people, and the organization, learn from their mistakes. <a href="mailto:create-a-growth-culture-not-a-performance-obsessed-one">create-a-growth-culture-not-a-performance-obsessed-one</a>

Building a growth culture, we've found, requires a blend of individual and organizational components:

- 1. An environment that feels **safe**, fueled first by top by leaders willing to role model vulnerability and take personal responsibility for their shortcomings and missteps.
- 2. A focus on continuous **learning** through inquiry, curiosity and transparency, in place of judgment, certainty and self-protection.
- 3. Time-limited, manageable **experiments** with new behaviors in order to test our unconscious assumption that changing the status quo is dangerous and likely to have negative consequences.
- 4. Continuous **feedback** up, down and across the organization grounded in a shared commitment to helping each other grow and get better.

As the adults, we must be better about our "phone obsessions." I am not taking the high ground here as I check email/texts probably every 10 minutes, 7 days a week. Let's all try to leave our phone at home and focus on the humans we are with. Stunning stats in this article from CNN: "Consistent numbers are hard to come by, but according to one 2023 survey by reviews.org, nearly 89% of American adults say they reach for their phones within 10 minutes of waking. That same survey, I was astounded to learn, found that American adults check their phones an average of 144 times a day, or once every 7 waking minutes! For kids, the statistics are even more worrisome. According to a 2022 Pew survey of the under-18 set, 46% of American teens said they are online "almost constantly." And 35% said they're "almost constantly" on one of the five top social media apps: YouTube, TikTok, Instagram, Snapchat and Facebook." parenting-social-media-screens-gupta-wellness (thanks Jeff Dobosh).

Al might be the google slayer as it will fundamentally change searching the web. Good post from my old Northwestern business school professor Mohan Sawhney:

"Google has dominated the search business since the launch of the Google search engine in 1999. Google has over 85% market share in the search market, and its search business generated over \$160 billion in revenues in 2022. But there is a fundamental flaw with the concept of "search", from the end-user perspective. Search is a MEANS to an end, not an end in itself. Search is the journey, not the destination. As an end-user, I don't want to generate search results. I want to get a job done: Write a blog post, plan a vacation, run a digital marketing campaign, prepare a business plan, get advice on healthy meals, etc. There is a big gulf between "search" and "Jobs to Be Done" - a gap that we have bridged manually, and paid Google handsomely for. Generative AI, with tools like ChatGPT, changes this. We can directly focus on the Job to Be Done. For instance, with one prompt, we can plan a vacation. There is no need to search separately for flights, hotels, restaurants, places to see, and then assemble all this information manually into an itinerary. This is revolutionary. And it is very disruptive for Google. No wonder that Google announced the "Search Generative Experience" yesterday - its move to incorporate advertising into the

Generative Search experience. But Google has its work cut out for itself. Last week, OpenAI added plugins and web browsing to GPT4 - two enhancements that amplify its ability to get jobs done. How will this battle evolve?"

William Blair published a great report on AI with these Top 10 takeaways:

- 1. **Generative AI is a game-changer**, in our view. In contrast to traditional artificial intelligence (AI), which focuses on pattern detection, generative AI (as the name suggests) can generate new content on its own (new text, images, audio, software code, etc.) after being trained by a machine learning model. This ability to generate new content on its own is what makes GAI so powerful, mimicking the learning and creative capabilities of the human brain.
- 2. **Don't dismiss GAI as just hype**. While we readily admit that the tech sector is littered with new technologies that promise to take the world by storm but are often more hype than reality—think autonomous driving, the metaverse, Web 3.0, and crypto—we believe GAI is fundamentally different. Beyond the power and simplicity of the technology from an end-user perspective, the reason we believe that GAI is so transformative is its applicability to virtually all industry sectors and its potential to fuel a new wave of productivity and innovation in the global economy.
- 3. We expect multiple winners in GAI. Near-term beneficiaries from GAI are likely to be hyperscalers Alphabet, Meta, and Microsoft (and by extension OpenAI), which have the voluminous proprietary datasets and at-scale cloud platforms to train large language models (LLMs) and deliver GAI services—cloud infrastructure scale, in particular, we see as a near-term competitive moat given the high cost of training models and hardware supply constraints. On the "picks and shovels" side, we see Nvidia as the most obvious winner given its dominance in GPUs and related AI software, with other potential beneficiaries including AWS (cloud services), Broadcom (networking chips), and Arista Networks (low-latency switching). On the application front, we believe winners are likely to be companies with domain-specific data, like Salesforce for customer data or Workday for employee data, and workflow/execution engines (like marketing platforms that send emails to customers) that could see increases in volumes that flow through their platforms.
- 4. **It's all about the data.** GAI models are only as good as the data on which they are trained. This pertains to both general-purpose LLMs like ChatGPT and Bard and domain-specific and customized enterprise models. In the long run, the best, unique datasets are likely to drive competitive advantage for GAI models (and the applications they spawn), in our view, and data monetization/licensing opportunities are only just emerging.
- 5. **Generative AI represents a giant new workload for cloud computing**. While still early, we are starting to see a material impact from GAI on cloud consumption as the LLMs that services like ChatGPT are trained on require a ton of computing resources (10,000 GPUs to be specific for ChatGPT). Given the recent deceleration in cloud services growth, the GAI tailwind should be welcome news to the large cloud service providers (CSPs) and their investors—as well as "cloud builder" infrastructure software names that ride the coattails of the success of the CSPs.

- 6. **GAI use-cases are ubiquitous and growing by the day**. Beyond search, we see clear use cases today in content creation, software development, marketing and sales, customer service, data analysis, healthcare, drug discovery, and education—though this is just the tip of the iceberg, in our view, given the broad applicability of GAI to virtually all industries.
- 7. **Search will never be the same**. ChatGPT (now integrated into Microsoft's Bing search engine) has taken the world by storm, and Google potentially has some market share to lose given its 80%-plus market share in search today. Still, Google's I/O conference has reinstilled its Search AI confidence and Bard is now upgraded to a much more powerful model. In our view, the battle has just begun in AI-assisted search, and Google maintains some distinct advantages (e.g., the quality and breadth of its dataset) and is marshaling its formidable resources to protect its turf.
- 8. **GAI should be a productivity accelerant**. GAI is likely to be adding fuel to the fire for a corporate investment/productivity shift that is already underway. We see GAI as effectively the new demographic that is replacing shortages related to slower population growth and aging populations. The ultimate impact will depend on adoption rates, but if the last few months are any indication, we are entering a J-curve of adoption for GAI. With fewer workers at the disposal of companies, and technologies like AI achieving mainstream adoption, economic output should be the same or higher, and productivity will rise.
- 9. **GAI** is likely to have profound impacts on knowledge workers (and corporate costs) across various industries, but this will not happen overnight. Unlike robotics, which has generally affected blue-collar workers, GAI is likely to mainly impact white-collar/knowledge worker jobs like marketers, software developers, writers, accountants, consultants, graphic designers, customer service reps, law clerks, and even equity research analysts (gasp!). While we expect some near-term disruption to certain roles as companies assess GAI opportunities, we note that paradigm shifts in technology have historically not resulted in a reduction in aggregate employment, but instead have led to the creation of new roles and reduction of labor inputs in certain existing roles. Although still early and emerging on a case-by-case basis, we believe efficiency gains from GAI will also drive incremental cost savings for most enterprises over the next several years, providing a tailwind to profit margins.
- 10. Is any of this even legal? The risks associated with GAI seem to be multiplying and include sensitive data exposure, intellectual property rights, data accuracy/bias, and phishing and social engineering attacks—though perhaps the scariest risks are the ones we are not even contemplating yet. In the near term, the big risk we see is the legality of LLMs that are trained on wide swaths of online data, some of which may be copyrighted. Several lawsuits have already been filed against LLM providers, which if successful could hamper the development of the space (think Napster in the early days of online music).

That big old rock on the finger may not cost as much as you think. Lab grown diamonds have advanced so much that the difference from natural is basically indiscernible. A one carat diamond grown in a lab costs around \$1,500 compared to a mine grown diamond at \$5,600. Over 33% of rings purchased last year were lab-grown. Time for a nice big anniversary gift for Heather. <a href="https://doi.org/10.1001/jhi.com/heather-a-challenge">https://doi.org/10.1001/jhi.com/heather-a-challenge</a>

There is a growing discussion in public policy circles about "baby bonds." The objective is to help in the disparity amongst races etc. in generational wealth. The concept is to give each baby born a trust fund

established and guaranteed by the government. In Connecticut, legislation has been passed to put \$3,200 in a trust for every child born on the state's Medicaid program. Most models are the individuals then gets the money when they are 18. I worry about the 18 year olds ability to handle the rapid availability of cash. <a href="mailto:baby-bonds-ct-money-ned-lamont/">baby-bonds-ct-money-ned-lamont/</a>

Last week I expressed negativity about "No Mow May." Here is more than you ever wanted to know about the history of grass lawns in the US. Apparently, grass was imported (Kentucky bluegrass is from Algeria) to be a symbol of wealth as it was difficult to upkeep. <u>youtube on lawns</u> (Thanks James Hornick.)

RIP the former President of the University of Chicago Bob Zimmer. He was a great leader and passionate advocate of freedom of expression as a pillar for discourse in higher education. <a href="https://president.uchicago.edu/from-the-president/announcements/112920-free-expression">https://president.uchicago.edu/from-the-president/announcements/112920-free-expression</a>.

Hope everyone has a good Memorial Day weekend. Let's remember the meaning of the holiday and take a moment to reflect on those who sacrificed so we can enjoy our burgers and brats.

Jml