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AN ANALYSIS OF PRIVATE EQUITY & VENTURE CAPITAL

NORTHEASTERN UNIVERSITY

PRIVATE EQUITY & VENTURE CAPITAL CLUB

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By: Jordan Sarnie & Sofia Furmanovich

BUYOUT

IAC's **Dotdash** to acquire **Meredith's National Media Group** for $2.7 billion

Industry Landscape: Digital advertising spending has been on a steady rise over the years as consumers have gradually shifted viewing preferences away from cable tv. According to a report conducted by PwC, digital advertising spending grew 12.2% year over year in 2020, reaching $139.8 billion total for the year, despite an initial falloff due to the Covid pandemic.

Target Profile: Meredith is a publicly held media and marketing services conglomerate headquartered in Des Moines IA. In addition, Meredith is the No. 1 magazine provider in the U.S. and operates in segments such as entertainment, food, lifestyle, parenting, and home, and is the owner of the largest premium content digital network for American consumers.

Investor Profile: IAC is an American holding company that operates across 100 countries. A few of IAC's notable subsidiaries include brands such as Simply Recipe and The Spruce. In 2020, Dotdash posted $214 million in revenue and $66 million in adjusted EBITDA.

Structure: Dotdash announced Wednesday that it will be acquiring Meredith for a price tag of about $2.7 billion in an all cash transaction which values each share at $42.18. The combined company is to be called Dotdash Meredith, and is being financed with roughly $1.6 billion of debt. In a statement, IAC said it has received a commitment for an $850 million bridge facility and that long-term financing at Dotdash is "expected to be obtained prior to closing." The deal will combine Meredith's more than 40 brands including Better Homes & Gardens, Southern Living, and InStyle magazines with Dotdash's digital labels such as The Spruce, Byrdie and Brides. Additionally, the deal comes four years after Meredith, backed by conservative billionaire brothers Charles and David Koch, acquired Time Inc, the publisher of People, Sports Illustrated and Fortune magazines. The publisher has since sold some titles like Time, Fortune, Money and Sports Illustrated that primarily attracted male readership as it turned its focus on its core women's magazines.

Target's Vision Post-Deal: Meredith will benefit from the Dotdash acquisition, predominantly from lowered fixed costs as well as from new access to Dotdash' consumer data. In addition, Dotdash's proven playbook will create operational efficiencies for Meredith, which can be expected to further accelerate Meredith's digital growth.

Investor's Vision Post-Deal: Dot Dash's acquisition has great potential to create both financial and operating synergies between both firms. The combined company is expected to reach roughly 175 million unique visitors on a monthly basis, with 95% of that audience being women. Moreover, the overlap between brands under each company has the potential to reduce costs, since they can share IT capabilities and attract a larger audience. Lastly, Dotdash specialty is marketing through ads, which brings a large potential for brands under Meredith to launch themselves into e-commerce.

By: Jordan Sarnie & Sofia Furmanovich

BUYOUT (CONT'D)

Analyst Statement: The deal aligns broadly with IAC's corporate strategy of building brands up and spitting them back out on the public market once they mature, just like it recently did with Vimeo in 2020 and Match Group in 2019. Prior to the buyout, both IAC and Meredith were frankly clear candidates for each other. In addition to a greater audience scale, Dotdash and Meredith will result in an overall more diversified business, according to the companies. The deal combines Meredith's advertising capabilities and first-party data with Dotdash's ecommerce and performance marketing expertise. Over the last 12-month period, the companies together generated more than $1 billion in advertising revenue, while their ecommerce capabilities drove more than $1 billion in sales to retail partners. However, despite all these clear positives of the deal, there is a slight drawback. This significant amount of debt will certainly limit Dotdash Meredith cash flow, raise its EV market cap debt, and limit possible future investments and capital expenditures.

Blackstone (NYSE: BS) enters into a definitive agreement to provide a strategic growth investment to **Dynamo Software**

Industry Landscape: The SaaS industry has seen tremendous financial growth over the past several years as software solutions are becoming increasingly integrated into businesses around the world. The industry has seen consistent compound annual growth rates (CAGR) upwards of 20% over the past few years and is expected to grow from $120.7bn in 2020 to $145.5bn in 2021. The alternative investment industry has also benefited over this past year as alternative investments have traditionally had little correlation to public equity and bonds. In a year when COVID has created market concerns, increasing portfolio diversification has become more appealing to investors and has driven the growth of the alternative investment industry.

Target Profile: Dynamo Software is the world's largest alternative asset management software company, helping over 1000 clients worldwide. Founded in 1998 as one of the first SaaS services in the alternative investment industry, Dynamo has grown to help clients manage upwards of $5 Trillion in assets. Dynamo's software helps streamline solutions to the private investment industry through eight different types of management "solutions" ranging from deal sourcing to investor relations.

Investor Profile: Blackstone (NYSE: BS), founded in 1985, is the world's largest alternative asset management firm, with over $684bn in AUM. Blackstone Growth (BXG) operates as Blackstone's growth equity platform. BXG closed its debut growth fund in March of this year and focuses its investments across 4 main sectors: Consumer, Enterprise, Financial Services, and Healthcare. The firm provides capital to fast growing companies that are expected to be future category leaders. Since it began investing in 2020, BXG has made several significant investments, including leading enterprise software business, ISN.

Structure: Blackstone will fund this investment through BXG, its inaugural growth equity fund. BXG completed its final close of the oversubscribed fund at its hard cap of $4.5bn. Financial terms of the transaction are yet to be released, as the deal isn't expected to close until Q4 2021, however it is expected that this deal will value Dynamo at over $900mn. Existing investor Francisco Partners will also reinvest in the company.

Target's Vision Post-Deal: Dynamo intends to utilize this investment to continue its expansion into global markets and promote further growth of its product development. Dynamo CEO Hank Boughner believes, given Dynamo's products are already trusted by many of the largest managers and allocators in the industry, backing from the largest alternative asset manager in the world will further validate their position in the industry. Boughner expects this partnership to accelerate their product roadmap and promote their platforms to a much larger customer base.

Investor's Vision Post-Deal: Managing Directors Vincent Letteri and Jonathan Murphy cited "significant tailwinds behind the sector" and increased "size and complexity of the individual firms" to justify Blackstone's investment. Strong IP and comprehensive solutions put Dynamo in a position to reap the rewards of rising demand and capitalize on Blackstone's prediction. Considering Blackstone believes in overall industry growth, investing in the market leader is a low-risk decision that could generate massive returns as Dynamo continues to grow towards an IPO.

GROWTH EQUITY (CONT'D)

Analyst Statement: This deal signals a strong move by Dynamo, as they seek to secure their position as the leading software company in the asset management industry. With backing from the largest alternative asset management firm in the world, it is clear that Dynamo has proven itself to be the go-to company for managers to increase productivity in fundraising, deal management, research, and portfolio management. Considering Dynamo's role in the industry, there is a clear synergy between their products and BXG. Additional contribution from Francisco Partners proves Dynamo to be a stable investment, as Dynamo saw its revenue quadruple under the ownership of the asset manager. The rapid growth of Dynamo, due to the backing of private equity firms, is an indication of a practical investment for Blackstone. This deal will promote the growth of the alternative asset management industries, as significant tailwinds in the software space drive the increase in firms' capabilities. Additional capital enables Dynamo to potentially strengthen its competitive advantage, as they can further pursue their business plan of acquiring top competitors to retain a leading position in the market. The expansion of Dynamo's platform will continue to increase the size and complexity of firms, paving the way for new funds and investment opportunities, which creates tremendous growth opportunities for both Dynamo and Blackstone.

By: Irfan Ajmeri & Anya Sood

DISTRESSED INVESTING

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Oaktree Inc, a distressed debt private equity firm, disclosed an update on its ongoing financial investment in the soccer club: **Inter Milan**

Industry Landscape: Historically, the soccer club franchises of Europe have been profitable for their owners given loyal fan groups and popular tournaments. However, two key factors in recent years have led many into a precarious situation. The first factor is a long-term trend in that salaries paid to top soccer players have been increasing rapidly which has led some soccer clubs to sign unsustainable compensation agreements. Although borrowing and additional equity investments provided some flexibility, this was a short-term solution. The second, more severe factor was the COVID-19 pandemic which led to a sharp fall in ticket sales and cancelled tournaments. As a result, many soccer clubs found themselves in distress which provided an opportunity for firms like Oaktree.

Target Profile: Inter Milan is one of the most popular soccer clubs in Europe and has generated hundreds of millions in revenue consistently. However, due to the aforementioned industry factors, the club has racked up a significant amount of losses.

Investor Profile: Oaktree is one of the largest distressed debt private equity firms in the world. Founded by Howard Marks, the company manages over $100bn in assets and was recently acquired by Brookfield Asset Management. The company has experience in distressed debt through past deals, such as Tanos Energy.

Structure: Oaktree's involvement with InterMilan began in May 2020 during the onset of the COVID-19 pandemic as the soccer club's majority owner, Suning Group had fallen into financial distress due to the termination of a $700mn broadcast rights deal. The club announced on October 1st, 2021 a loss of $285mn on $421mn of revenue. Due to Inter Milan's ongoing distress, Oaktree's initial lending terms are now in the spotlight with news outlets reporting that if Suning Group fails to repay the entire $336mn obligation, Oaktree will be able to take control of the firm. Given that Inter Milan has no major physical assets given that its value lies in its intangible brand and broadcast rights, the Suning Group had to pledge its entire equity stake in the soccer club as collateral.

Target's Vision Post-Deal: Oaktree's injection of cash in May 2020 and ongoing commitment to supporting the Inter Milan club despite heavy losses is a vital pillar keeping the soccer club alive. Despite the loan being made earlier in 2020, the Suning Group has yet to fully deploy all of the loan's principal. According to an Italian news report, the Suning Group has only invested ~$92mn into the football club with the balance remaining to be utilized. Inter Milan's main goals are to resume in-person matches in order to restore profitability and to start paying down its accrued liabilities as multiple players on the team have gone months without receiving their salaries. As vaccinations increase in Europe, the soccer club's future looks bright and it retains access to a cash reserve of ~$225mn to fund future obligations.

DISTRESSED INVESTING (CONT'D)

Investor's Vision Post-Deal: Oaktree is a well-known firm in the distressed debt space given the expertise of its founder, Howard Marks. The private equity firm has experience in this unique sport niche given another deal in 2020 to acquire a majority stake in the financially-distressed soccer team: Ligue 2 side CM Caen. Under the principles instilled by Marks, Oaktree monitors the credit cycle of different industries and waits for a lack of liquidity in order to provide distressed financing at attractive rates.

Analyst Statement: Oaktree's initial $336mn loan in May 2020 followed by the hiring of Goldman Sachs as an advisor for a potential sale highlights the major impact of the COVID-19 on the business models of professional soccer club teams. Over the past few years, many top clubs ranging from FC Barcelona to AC Milan have been forced to spend an exorbitant amount of capital to attract key talent to their teams. This has led to a large issuance of debt and burdensome principal obligations whose severity came into focus when the pandemic led to lockdowns of recreational activities. That being said, Oaktree's injection of capital was a major victory for Inter Milan and its owner as Oaktree is a well-capitalized firm with over $153bn in AUM. In the event of a default, Oaktree will assume control of 60-70% of the company and invest more capital into the soccer club's operations. The probability of a default has fallen due to vaccinations and a retreating virus, but Oaktree's presence adds credibility to the overall club. Going forward, Oaktree will likely remain as a lender while the Suning Group markets the company for sale with the help of Goldman Sachs.

Saudi Sovereign Wealth Fund completes $409 million takeover of English Premier League team, **Newcastle United**

Industry Landscape: In June 2020, the Saudi Public Investment Fund tried to complete a similar deal to purchase Newcastle United. They were met with opposition due to concerns about Saudi Arabia's human rights records and prior accusation of TV piracy of Premier league games. They ultimately did not get the proper approval needed from the Premier League board and withdrew their offer. Over the past year the PIF has taken interest in other possible soccer teams for acquisition. Notably they were in talks with Inter Milan after Newcastle talks fell apart. In the end they were able to get their offer accepted the second time.

Target Profile: Newcastle United is one of the most historic English soccer clubs. They haven't been wildly successful in recent memory, with their last championship coming over 50 years ago. Despite the lack of success on the pitch, they regularly attract crowds of more than 50,000 for regular home games. For the year ended July 31, 2020, Newcastle posted a pre tax loss of £25.9m, while in 2019 they had posted a pre tax profit of £14.9m. The variance was largely due to the fact that a large chunk of the 2020 season was played in an empty stadium. Matchday revenue suffered the greatest hit, in addition to broadcast revenue as a result of rebates given back to broadcasters. The wage bill was greater than expected as well due to the scheduling of the Premier League the club had to pay an additional months worth of wages to players.

Investor Profile: The PIF has previously invested in several blue-chip companies in countries such as the United States (Facebook, Boeing & Disney) & India (Reliance Jio) but has also ventured into private dealings with other firms such as the Blackstone Group. However, the PIF has veered towards making investments per the Vision 2030 plan. The Vision 2030 plan has allowed the PIF to scope-out investments that are within a specific framework: "Vision 2030 is a bold blueprint intended to build the best future for Saudi Arabia. It is designed to harness and showcase the nation's greatest strengths, build upon its leading role at the heart of Arab and Islamic worlds, and help to create a more sustainable economy by forging new and stronger cultural business connections with the world" which subsequently has allowed the PIF to diversify its investments into private firms. One such investment has been the Red Sea project that, similar to the takeover of Newcastle United, falls into the consumer discretionary sector, and aims to build an array of beach resorts and employ an estimated 35,000 individuals in the process. Such investments have allowed the PIF to venture into businesses that "cultivate entrepreneurial activity and economic development" that provide outsized returns in the long run while also being foundational drivers of economic activity in different parts of the world to increase the Saudi Arabian footprint as well as a show of its far-reaching economic powers.

Structure: The PIF is set to provide 80% of the takeover bid, while the Reuban Brothers and PCP capital will each provide 10%. Yasir al-Rumayyan, the governor of PIF, joins the club's non executive chairman. Amanda Stavely of PCP Capital will be joining the board of directors with the Reubuen brothers to oversee day-to-day operations. Amanda Stavely previously facilitated Sheikh Mansour's takeover of Manchester City in 2008.

Target's Vision Post-Deal: The deal will allow the club to inject a significant amount of capital into its net long and short term investments. This would include development of club facilities and hiring top talent and leadership to manage the football club. In the medium term, Newcastle can expect its net spend on these areas to increase as a result of re-branding the club into hopefully a title-winning side. A clear comparative example would be Manchester City; a takeover that was also facilitated under Amanda Stavely's stewardship. Since Sheikh Mansour's takeover of Manchester City in 2008 it has seen a meteoric rise in success as well as YOY valuation increases. Per KPMG, Manchester City's EV almost grew x1.6 within a time span of 4 years ($1.8bn in 2016 to $2.9bn). Seeing the recent success of Manchester City's foreign takeover leaves an optimistic outlook into the club's future valuations and PIF's ability to bring in outsized returns over the next 10-20 years.

Investor's Vision Post-Deal: This takeover is well within the framework setup by the Vision 2030 plan that will allow Saudi Arabia to leave a significant footprint of its economic power in a foreign country with a controlling interest. It is also important to note PCP Capital Partners' significant role in this takeover, being a boutique private investment firm specializing in complex financial situations.

Analyst Statement: Newcastle United fans were met with excitement at the announcement of the deal going through. The previous owner, Mike Ashley, was not a fan favorite. During his 14 years in charge, the club was riddled with poor play and threats of relegation from the Premier League. Not to mention the club's inability to bring in and develop top tier talent. Newcastle is not the first team with middle eastern ties. Manchester City was bought by Sheik Mansour, of the United Arab Emirates for roughly $212 million. When he purchased the team Manchester city had finished 9th and hadn't won championships in decades. He invested 1.8 billion into the club and in a decade since his take over the club's value has ballooned to over $4 billion. They are one of the best and most recognizable clubs in the world. Qatar's investment into French club Paris St Germain netted a similar result. The PIF has allowed Saudi Arabia to differentiate itself from the state to bypass Premier League laws that prohibit direct investments by a nation or national government. The PIF has an estimated AUM of over $450 billion, and they have plans to double that by 2025. Soccer doesnt follow a salary cap but is governed by UEFA Financial Fair Play Regulations (FFP) that was introduced in order to reduce football club debt and ensure wage bills are at an acceptable level. However, these teams often make high price acquisitions and have the capital ready to pay players high wages as per the competitive European football landscape. In the past, Sheikh Al-Thani of Qatar made a $40 million investment into Spanish football side Malaga that in a few years left the Sheikh in a dire financial position that forced him to divest, leaving the club's essential personnel with significant unpaid wages. As a result, it cannot be determined with certainty whether the takeover will result in outsized returns, but with the PIF's strong corporate governance on other projects and Newcastle United's rich history and brand, the club as a whole is well-equipped with the right tools that can be leveraged to facilitate their rise.

By: Krishnan Moran & Jonathan Rodgers

CoinSwitch Kuber raises $260 million in Series C Round co-led by **A16z** and **Coinbase Ventures** to scale India's largest cryptocurrency marketplace

Industry Landscape: Despite India's recent regulatory concerns regarding cryptocurrency trading, the industry has thrived, following the global crypto bull-cycle starting in early 2021. So much, in fact, that the country's crypto market has grown 641% in the last 12 months. Wazir X, a cryptocurrency exchange owned and operated by Binance, formerly dominated the Indian cryptocurrency trading markets as the core provider of crypto-related financial services. However, in September 2021, CoinSwitch Kuber quickly established itself as the leading player in the Indian crypto exchange market. Although CoinSwitch had been leading the pack in India, there were many other global marketplaces in the space that saw incredible success coming from the market hype. This was especially evident in the large VC interest in cryptocurrency exchange platforms throughout the year. Within the last month alone prior to CoinSwitch's Series C round, marketplaces Easy Crypto, Yellow Card, and BitOasis closed recent funding rounds for $12 million, $15 million, and $30 million, respectively. CoinSwitch Kuber's local Indian competitors have also pushed to raise more funding recently, one example being CoinDCX who recently raised $90 million in its Series C this past August.

Target Profile: Named after the Hindu god of wealth, CoinSwitch Kuber is India's fastest growing and most valuable crypto asset platform. Based in Bangalore, their competitive advantages include offering zero-fee transactions, as well as an incredibly wide range of tradeable cryptocurrencies (100+). Prior to their recent Series C round, they raised a $24 million Series B led by Tiger Global Management, a $15 million in Series A led by Paradigm, and a $1.5 million seed round by undisclosed investor(s). The recent series C round led by a16z and Coinbase Ventures has deemed them India's 30th unicorn company, as well as the country's second crypto unicorn. The CEO and co-founder, Ashish Singhal, previously founded and developed cryptocurrency start-up CRUXPay along with the rest of the core executive team and is a former Amazon software developer. Their co-founder and CTO, Govind Soni, worked with Ashish at both CRUXPay and Amazon as CTO and developer, respectively.

Investor Profile: A16z, a venture capital firm based in Silicon Valley, CA, focuses heavily on the consumer, enterprise, fintech, and crypto industries. They are a stage-agnostic firm and invest equally in early stage and late stage companies, but their average deal size is roughly $63 million. Some notable prior investments include GitHub, Coinbase, Facebook, Airbnb, and Lyft. They are currently managing 20 funds with a total of $19.2b in assets under management, and have had 174 successful exits since the inception of the firm. CoinSwitch proves to be Andressen's first investment in India, as they expand their new $2.2b cryptocurrency fund started in June.

Investor Profile: Coinbase Ventures, another prominent investor in the round, is a San Francisco based fund focused on early-stage ventures in the crypto space. Their parent company, Coinbase, is a well-known cryptocurrency exchange that was the first major cryptocurrency start-up to go public on the U.S. stock exchange. Founded in 2018, they've invested in various decentralized platforms in spaces ranging from NFTs to financial protocols — some notable investments of theirs include OpenSea, Compound, and Dapper Labs.

Target's Vision Post-Deal: With this new round of funding, CoinSwitch hopes to grow to 50 million users, introduce new financial products (e.g., lending for retail investors), and expand their reach to institutional clients while developing an ecosystem fund. They also plan on expanding their engineering team in order to rapidly scale the platform. Especially with new relationships to cryptocurrency fund giants like A16z and Coinbase Ventures, they will be able to take advantage of a top-tier talent network in order to develop and grow the necessary teams.

Investor's Vision Post-Deal: Both a16z and Coinbase Ventures see this investment as an enormous opportunity to take advantage of the rapidly-growing Indian crypto market, due to CoinSwitch's incredible success since their inception. In a little over 14 months of operation, they have amassed over 10 million customers, despite the country's regulatory uncertainty regarding cryptocurrency trading. On top of that, their headcount has grown over 78% over the last 6 months, further illustrating the immense growth that the platform has seen recently. Both funds will be able to provide vast networks in the space for hiring talent, as well as propelling the global expansion and user acquisition. It's also possible that Coinbase sees this as an opportunity to expand their US-based cryptocurrency exchange into India's market segment.

Analyst Statement: With the cryptocurrency industry at an all-time high and CoinSwitch at the forefront of India's market, it is evident that their success will continue to grow as long as the regulatory environment is stable. A16z is a powerhouse in terms of both talent sourcing and experience, helping startups become the next big thing largely due to their incredible platform and the sheer amount of resources that they have at their disposal. Combine this with Coinbase Ventures, a subsidiary of one of the largest crypto exchanges in the world that has been enormously successful, and we see the potential for CoinSwitch to grow exponentially. The collaboration of these three companies could result in the largest and most profitable cryptocurrency exchange to date as India's crypto marketplace continues to grow, as CoinSwitch now has everything it needs to reach the 50M user goal. All it has to do is execute — and based on its history, CoinSwitch should have no problem doing that.

By: Justin Radist & Joshua Labkoff

VC - INDUSTRIALS

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Climate tech startup **Made of Air** announced $5.8mn in seed funding from **TD Veen**, a Norwegian fund focused on sustainability

Industry Landscape: The carbon-negative thermoplastics/Biochar space is a relatively new industry. Made of Air is at the forefront of it all with not much competition. Newlight Technologies, a California based start-up, seems to be the only company doing the same thing as MoA. The plastics industry, however, is a massive space worth well over $500 billion per year. With increasing regulation and pressure put on by shareholders, companies are facing a growing desire to become more sustainable. This leads many to believe that there will be a massive increase in the Biochar/carbon negative thermoplastic space and a decrease in the traditional plastics industry.

Target Profile: Based in Berlin, Germany, Made of Air (MoA) is a 2016-founded climate tech firm that creates carbon-negative thermoplastics. MoA burns wood waste like sawdust and wood chips in the absence of oxygen to produce Biochar. Biochar is a carbon-negative material that can trap and store carbon dioxide around it permanently. MoA then makes materials out of the Biochar, which can be used for a wide variety of products from automobile frames to sunglasses to furniture. Its value proposition is the ability to significantly reduce corporations' carbon footprints.

Investor Profile: TD Veen is a small Norwegian-based venture capital firm founded by Tor Dagfinn Veen in 1986. With the slogan, "The investment is only good when it also benefits society," TD Veen has a clear focus on ESG and sustainability. It has been the lead investor in 10 out of the 17 total it has made since its inception. TD Veen targets start-ups in their seed and series A funding rounds, typically providing $1-5mn in capital. A notable exception was a $19mn investment into poLight (a micro-optics autofocus components manufacturer for mobile phone cameras) in 2015.

Target's Vision Post-Deal: MoA expects the demand for carbon-negative materials will grow significantly for the foreseeable future as more and more companies attempt to decrease their carbon footprints. The company intends to use its seed funding to ramp up production capacity and further its pioneering technology to capture this growing market demand. Specifically, MoA will open a new factory soon and hire more employees in its R&D, product, and business development divisions. CEO Allison Dring says MoA's core purpose is to reverse climate change, and he believes this deal is a major step towards that goal.

Investor's Vision Post-Deal: TD Veen shares MoA's belief that the demand for its products has substantial growth potential. The VC firm will serve as an advisor on MoA's business practices and eventually reap the long-term benefits. Due to TD Veen's small portfolio, it can spend a lot of time on each of its start-ups. The industry-specific guidance will come from co-investor Patrick Pichette, who has much experience in the forestry industry. Additionally, because of how niche its portfolio companies are, TD Veen is always looking for promising companies that can also increase portfolio diversification, which MoA will.

VC - INDUSTRIALS (CONT'D)

Analyst Statement: A partnership between MoA and TD Veen makes sense because the firms' missions are very aligned. MoA has a strong desire to positively impact the environment, and TD Veen only invests in companies that focus on sustainability. This funding is crucial for MoA to accelerate its business and discover the full potential of carbon-negative materials. It currently has partnerships with major corporations such as Audi (car frames) and H&M (sunglasses), but that is only scratching the surface. Plus, if MoA grows quickly enough and demand keeps up, it can cement itself as the undisputed market leader even when the industry becomes populated with dozens of competitors.

Perfect Day Inc. has raised $350 million in a Series D funding round, led by **Temasek** and the **Canada Pension Plan Investment Board**

Industry Landscape: The dairy alternatives market has exploded in growth over the past decade. Consumers are shifting their preferences to plant and other non-animal based options as part of an increased societal focus on the environmental impacts of animal products. Additionally, these lactose-free alternatives offer a seamless transition for consumers who previously avoided dairy products, greatly expanding the market cap of the industry. Although a highly competitive industry with many big players that are moving from dairy to alternatives, Perfect Day's innovative microflora process claims to provide all of the benefits of cow milk, without any of the negatives. In a report titled, "Dairy Alternatives Market, 2021-2028", Fortune Business Insights claims that the dairy alternatives market will reach nearly $54bn by 2028.

Target Profile: Perfect Day Inc. is a company with animal-free dairy ingredients on the market. A leap was taken by Perfect Day Inc. into untouched territory when they had a vision to start producing animal-free ingredients 8 years ago. In 2019, they came out with animal-free dairy ice cream which gave them traction. A quote from 8 years ago when Perfect Day first kicked things off states, "When we first started this almost eight years ago, we had the simple goal of creating a way to make dairy without animals." From there, they continued to expand into this newer, growing industry with their ice cream line now sold in 5,000 stores nationwide. Perfect Day tied with Nature's Fynd for the single largest funding this year within the industry. The management team plans to launch a variety of animal-free cream cheese to expand into other sections of the grocery store. Ultimately, their focus is to make their products widely available and more effectively distributed nationally.

Investor Profile: This Series D funding round has brought the company's total funding up to $750mn. Led by Tamasek and the Canada Pension Plan Investment Board (CPP Investments), long-term investors such as Horizons Ventures and Bob Iger also expanded on their involvement with the company. Now valued at $1.5bn, the company has generated ample opportunities to grow in a fast-paced and constantly evolving market. A notable investment of Horizons Ventures was Catalog, a data conversion and storage platform. The included investors have portfolios with broad horizons, but a sudden focus of attention on dairy alternative food companies has gained notice.

Target's Vision Post-Deal: Perfect Day intends to use this late round of funding to fuel its new focus on biological engineering, innovation of production ingredients, and consumer products. Enterprise biology is also a new initiative, which provides technology development services to brands that wish to capture the sustainable scale Perfect Day has been able to produce.

Investor's Vision Post-Deal: Temasek continues to follow through on its core values through the firm's investment decisions. Changing the world with innovative and eco-friendly products has been one of the driving forces behind the company's success, and that has certainly been displayed here with Perfect Day.

Analyst Statement: This late stage funding round was very much needed in order for Perfect Day to capitalize on the rapidly growing dairy alternatives industry. There won't be much time before the dominant players in the space have truly established themselves, so improving scale, bioengineering, and the ingredient composition of its products are all vital qualities required for Perfect Day to be a successful competitor. This funding is especially crucial and necessary in regards to the expanding of products for Perfect Day. They hope to seek better production numbers, store expansion, and new product creations through this, in hopes of massive growth.

Synthetic DNA computing startup **Catalog** raises $35mn in Series B funding led by **Hanwha Impact Partners**

Industry Landscape: Over the last decade, the DNA computing industry has seen a series of startups rise along with increasing venture capital activity as technology becomes evermore apparent in feasibility as well as its number of uses. More recently, competitors Molecular Assemblies closed its first Series A funding at $24mn last April and in September, U.K. based Evonetix was granted a patent for its DNA data storage and retrieval technology. While the current competitive environment remains fragmented, the market shows signs of maturation with companies in the industry entering the public market for the first time such as Ginkgo Bioworks in September.

Target Profile: Catalog is a Boston-based startup aiming to spearhead the creation of the world's first large scale digital data archives utilizing synthetic DNA technology, and potentially disrupting traditional electronics hardware technologies. Founded by MIT scientists in 2016, the company now includes David Turek as the CTO, who joined Catalog from IBM's supercomputer business. Since the company's foundation, it's been involved in seven funding rounds to raise a total of $54.3mn. Lead investors include SOSV, New Enterprise Associates, Horizons Ventures, and now Hanwha Solutions. Future plans for the company include commercializing their services to offer DNA computing online, followed by offering tangible products.

Investor Profile: Hanwha Impact Partners is a subsect of the investment firm Hanwha Solutions. Based in Seoul, South Korea, Hanwha Solutions was introduced as the merger of Hanwha Chemical (the country's leading petrochemical company), Hanwha Q CELLS, and Hanwha Advanced Materials. Post merger, Hanwha now aims to provide sustainable solutions in the chemicals, total energy, and advanced materials sectors. Its first investment was in May of 2020, when $3.5mn was raised for SwitchDin, an Australian company centralizing the management of energy assets with smart infrastructure. Hanwha's most recent investments have been in 2021 with $32mn distributed to New Age Meat in Series A, and now Catalog, Hanwha's largest investment to date, in Series B.

Target's Vision Post-Deal: With its newly acquired funding, Catalog seeks to expand its operations. Currently, Catalog operates with a team of 14 employees, which they plan on doubling in size in order to increase their competitive edge.

Investor's Vision Post-Deal: Hanwha Impact Partners's investment in Catalog reflects its primary goals of expanding its parent company's presence in sustainable technologies and investments. Additionally, with this investment, Hanwha has geographically opened itself into Cambridge, Massachusetts, a hub for biotech and potentially other future investment opportunities.

Analyst Statement: Catalog's $35mn Series B funding demonstrates significant growing interest in the prospects of DNA computing solutions. The strategic partnership between Catalog and Hanwha allows Catalog to expand its operations, leverage Hanwha's global and strategic chemicals and materials supply chain, and ultimately increase its competitive edge in an increasingly competitive market. As large scale DNA manipulation becomes more and more readily feasible with new technologies and as investments in sustainability continues on the rise, through this funding round, Catalog has positioned itself as a strong contender of leading the shift towards disruptive DNA computing technology.