

A Competition for Capital Brynne Lead In February 8,2023

"Make higher level order from the constant disorder..."...Fr. Richard Rohr

Fr. Richard Rohr says that human growth and change goes through a rigorous cycle: order, disorder, reorder. Depending on your point of view, you may see this constant change as exhausting, or you might see it as energizing, but the point is, for most of us, for most of our lives, it's a real dynamic at play.

When I think of investment processes, I think of this cycle. No matter how functional and well-honed our processes are, because an investment process has to have some relationship to reality, there will be periods of order, disorder and reorder. Even more intimidating, Fr. Rohr suggests this experience of disorder will be constant. I picture it as the ever tumbling rotation of laundry thudding along in a washing machine in my basement. We hear a related apprehension from clients all of the time, no matter the market environment. It seems to be a common theme in a post-modern, internet-fueled, always-on communications and connectivity revolution: a feeling of constant tumbling in a laundry machine, but in sincere hope of advancement. This is when reordering is due.

Why is Competition for Capital a helpful framework right now, and how does it help "reorder"?

First, the concept of a competition for capital presents one of the most direct frameworks to flush through a current process to do any necessary reordering. In an era that sells us a perception of "no constraints" and attention traps, we created a work process built on competition for capital, which could also be seen as a process built on the counter-cultural phenomenon of constraint.

Second, there are many illusions at work in this period we are living in, but one in particular is nefarious for investors: that we have the time to pay attention to nearly anything, and then think we know how to allocate the amount of time needed to take all of this attention we spent and turn it into some kind of insight for investment decisions. Using competition for capital injects a clear limitation into our processes and the portfolio itself. Our time constraints are not perfect and can be personalized for your process, but again, they provide an antidote to today's cruel joke of always-on, no constraints, attention trap work we may fall into in the course of a research path.

If there is freedom through discipline, the simple model of competition for capital from Scott Booth, and the disciplines, tools and communication methods we added on and describe in this piece, is one of the more elegant starts to the journey. It put a rigorous filter around the portfolio *and* added steps for every company considered or tossed out such that we didn't lose the value of attention spent in the past.

If you play with this framework, I don't think it will feel like discipline in the ugly sort of way, for me, it felt like taking a load off, not having to contend with information and time overwhelm as is conventionally experienced today, and I felt conviction that our work was done outside the noise of the attention seeking economy, that our decisions were vetted through the order presented by valuable knowledge we had accumulated institutionally and purposely not let be forgotten, and that the result would be a more robust portfolio with fewer embedded biases and tracking errors from living, as we all do, in the disorder.



CIO Investment Diary #101

2018

A Competition for Captial

FROM PIP:

About eight years ago at our Sundance Retreat, a friend, Scott Booth, gave us a framework for thinking about the entirety of what we do. He called the process of investing...

A Competition For Capital.

...I remember exactly where I was when he said it.

Many of us were in the Rehearsal Hall. I can't recall if 40 of us were in the Rehearsal Hall or just our small group of, say, six... as the whole world sort of vanished all of the sudden and all that existed was this group of us... sort of like out of a movie. Scott was sitting and sharing wisdoms and I had just the joined the group for a few minutes and was walking around to sit in one of the leather comfortable chairs we had brought in for the three days together. It was sunny out. Gorgeous in a way that I have grown to adore about Utah in early May.

The way Scott said "a competition for capital" was as if he had developed this mindset in utero. It was as clear as a bell to Scott that a "competition for capital" was maybe the ONLY reasonable way to consider what we were all doing.

The great news was that in this case – unlike some other cases where a new meme blindsides us completely! We were already set up for a competition for capital. We

were already operating consistent with the phrase, but by having the phrase and orientation of a "competition for capital" ever since has helped us better align our time, teamwork and learning to hopefully get better and better at it. Everyone in the Coburn Ventures group instantly connected with this newly introduced phrase.

Scott... thank you for this help. This is a special Waypoints piece to us.

In some regards, it may be the second half of a 1-2 combination after writing "10 Practical Ways to Increase Conviction while Simultaneously Saving Time," which we released in September 2017. In another way, it is an update to our "Investment Philosophy and Process" piece from 2011, which is a 75-page beast that amazingly many of our clients have dug through diligently. This piece on Competition for Capital highlights some of the core tools, disciplines, and communication methods that we use today, all of which builds on top of three core beliefs of time, learning, and teamwork. This is not a complete version of our investment process, but rather a spotlight on some of the key elements.

Many of the ideas about Competition for Capital fall into three categories: disciplines, tools, and communication methods - which overlap somewhat naturally. SO first a quick set of working definitions for "discipline", "tool," and "communication method".

#1: WORKING DEFINITION OF **DISCIPLINE**: A method for overcoming a habit that we consider to not be in our best interest; or the establishment and solidification of a new habit which we think will allow us to achieve even more of what we would like to achieve.

#2: WORKING DEFINITION OF **TOOL**: A framework, lens, model, or line of reasoning that allows the possibility to see a greater insight. In the context of investing, tools may be embraced and adopted towards the end of seeing a truer and more relevant and powerful truth that isn't commonly considered already that then leads to wiser and wiser systematic decisions.

#3: WORKING DEFINITION OF **COMMUNICATION**

METHOD: In the context of an investment team, a communication method might be a way that individuals are fully benefitting from one another in the process of developing insights prior to decision making.

For clarity... we don't think these ideas are one size fits all. Maybe the ideas will trigger new ideas that far more successfully match your culture, philosophy, current method, and people.

This is the abridged version. We are happy to go into far, far greater detail and thinking.

Our processes are based on three key beliefs. These three beliefs are also our design principles in the competition for capital.

#1: TEAMWORK

The process of investing can often be dramatically enhanced through great teamwork which might be formal or informal. Our industry is mediocre at teamwork. If we do teamwork really well, we will have a sensational advantage in successfully investing.

#2: LEARNING

We believe the activity of investing is one where improvement is limitless. Our industry inadvertently discourages learning. If we are successful as learners, and compound our learning on top of each layer, we will have an advantage to help us successfully invest.

#3: TIME

Time is incredibly valuable. Our industry wastes significant time. If we use our time ever more thoughtfully, we will have an advantage in successfully investing.

The process I outline below aims to set up a competition for capital. We represent the basic organizational shape of the competition as *a funnel*.

Part I: Funnel

What is a funnel? The United States Navy Seals.

In the United States, there is much respect and celebration of the Navy Seals.

Of the 40,000 people who join the Navy each year, half express an interest in becoming a Navy Seal.

Of that 20,000, only 1,000 will attend the Navy Seal training program. Of those 1,000, only 250 will pass all training and become Navy Seals.

40,000 > 250

That is a quick snapshot of the Navy Seal funnel.

By understanding what it is looking for in such an exclusive group, the Navy can manage its funnel and all its processes to steadily allow great conviction in identifying

and developing 250 new Navy Seals each year, who will then go on to be effective in that exclusive post. I imagine that the Navy concludes that 250 is the "right" number taking into account its expectations of the need for those specialized skills.

A funnel.

AN INVESTMENT FUNNEL.

We have a funnel for our investment work.

We look at a giant universe to source about 350 leads each year.

By the end of it all we expect to identify and develop 12-15 new positions for the 30 stock portfolio each year.

The funnel is aimed at furthering our efficacy and efficiency. The funnel advances our organization on the whole process. We aim to eliminate "randomness" of process, perhaps in a similar way that the Navy also does in winnowing 40,000 people down to the mere 1,000 who will attend the formal Navy Seal training program. I have come to understand (perhaps like you have) that there is a VERY specified process of moving from 40,000 to 1,000 down to the "right" 250 Seals, just as with investments.

We also use the funnel to clearly identify what each of us will do in the next 1-2 weeks.

Many of the rounds are time restricted: For instance, a "Round 2" takes no more than 4-5 hours. Not only does this demand we decide what is most critical when using our time, it also makes all of us more discerning and hopefully better analysts by allowing us to organize our work flow. Time is precious and so is learning/development. Hopefully we accomplish both of these and, in the process, develop a work flow we believe in.

INVESTMENT FUNNEL:

UNIVERSE



Sourcing leads

ROUND I: QUALIFYING



ROUND 2: SCREENING



ROUND 3: KNOWLEDGE BUILDING



ROUND 4: MODEL



ROUND 5: SKETCH PREDETERMINED GAME PLAN



ROUND 6: ROCKS - PATH TO WISDOM



ROUND 7: THE PREDETERMINED GAME PLAN



ROUND 8: VALUING

The Navy is looking to identify and develop 250 Seals each year. We are looking to identify and develop 12-15 new stock positions.

Some people react quite negatively when faced with a funnel... Why?

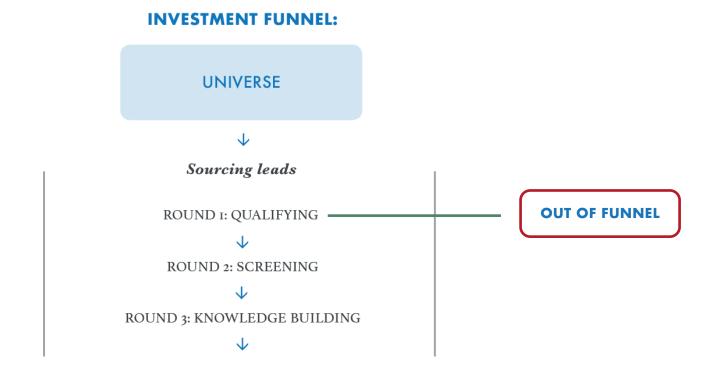
One common initial reason for such a reaction is that it seems to them that the process suggests a commoditization and check listing modality. It might seem initially that in utilizing a funnel (or in their initial minds even "invoking" a funnel), the brilliance is being extracted and replaced with rigidity. The fear is that striving for excellence is being sacrificed in the name of "standards," which is feared to really be commoditization and check listing.

I sense those are big fears when people are presented with a funnel. That isn't the intention, just the opposite.

Mainly, the process helps to easily identify winners in

each round of the competition for capital which allows easy decision-making for where to direct the next "units" of energy and brilliance in a somewhat laser-like fashion. We aren't commoditized at all. We are encouraged to get rid of what isn't so important (e.g. so-called "bathing in trivia"). The requirement for developing brilliance is not only honored, but increased, and hopefully the preconditions are established to nurture MORE brilliance that is growingly relevant. No more bathing in the energy sapping activities associated with bathing in trivia.

That is the goal.



Our funnel has eight rounds of investigation. In each round, internally we each very specifically understand what we are aiming to accomplish. We all understand what is meant to be accomplished in each round.

We provide loose names for each round in the depiction of the funnel above. Fundamental to this funnel is that ideas must compete with one another in each round to merit further work that leads into a next round.

Truly... the only purpose of work is to lead to a determination if another round of work is justified or not.

That's it.

This isn't the place where I will go into what we specifically do in each round – I will leave that for a next paper – but I will add in for here a few specifics about our own funnel.

#1: UNIVERSE—SOURCING LEADS

We start with perhaps 350 companies "sourced" from the universe.

#2: QUALIFYING

Round #I is the province of our most senior analysts who understand what's important to us -- the patterns of monumental change – and do so with high effectiveness in just 45 minutes.

#3: MIDDLE ROUNDS—PROGRESSIVELY MORE DEMANDING

Rounds #2 through #7 require progressively more skill level. Consequently, our emerging analysts' progression can be seen in the level of assignments they graduate to. Therefore, a specific idea will often be touched by 3-4 people before it might get into the portfolio.

#4: TARGET—150-175 LEAD TO 12-15 POSITIONS

In round #I, only 50% of ideas pass through at most. So, 350 companies in round #I drops to 150-175 in round #2. We have decided that if we start with 150-175 round #2s we will successfully develop 12-15 rich monumental change ideas to go into the portfolio each year.

#5: PASS THROUGH RATES

We have been tracking data on what percent of ideas are "passed through" from round to round for many years, so we might detect any unwanted creep in our process.

Knowing the math helps us generate a work plan we are confident in, allowing comparison in a relative sense (i.e. is "this" better than "that") and in an absolute sense (i.e. will "this" likely be on a path to be one of the few 12-15 companies/stocks to get in the portfolio??).

INTENTIONS OF THE FUNNEL PROCESS

#1: FROM "I'M WORKING ON XYZ"→CLARITY

Often when people say they are "working on XYZ," they aren't exactly sure what that means in terms of how to specifically advance their investment work. What is the next thing to learn/figure out? What is a great path to pursue that will most likely lead to successful accomplishment? How long will it take?

BUT... I am even less a fan of randomness masquerading as an "art-form."

I think often as an investment community, we float slightly aimlessly or undecidedly in a fashion 180-degrees away from what a scientist might consider a good approach.

We consider that maybe the degree of investing by wandering around far eclipses our collective ability to do that well. Can some people invest successfully by wandering around? Sure. Many? I don't think so. So... we start with the idea that having a game plan is more useful than presumed gifted artistry. We want a plan and having a funnel lays out our choices to consider. In a couple minutes, we can decide what is most compelling to advance during the next I-2 weeks.

I think most in our industry today would agree that in a post Internet world, our jobs are different. Wide-spread access to information has largely leveled the playing field. We can't afford to rely on our old habits to generate the same results. We are engaged in aiming to figure out ever better ways.

#2: DEFINING WHAT ONE ROUND OF INVESTIGATION IS

We identified eight rounds of investigation, at minimum, necessary for an idea to get into the portfolio. We think that when people say "I'm working on XYZ" it could mean a gazillion things. We decided it helped to break down our investigative process into smaller specified portions. These portions have what we consider to be a logical path. Each round builds from the prior round.

These individual rounds of investigation might be easily accomplished in a week.

The first four rounds are, as we said earlier, intentionally time constrained. The specificity of what would fall under the purview of each round is commonly understood in our group. Among other benefits, this process results in that we rarely have the same conversation twice. We aim to move forward constantly.

#3: MULTIPLE SETS OF EYES AND NO SINGLE "OWNER"

Between each round of investigation, a second set of eyes chimes in and is often the decision maker for whether an additional round of work will be conducted or if instead the idea will be stalled.

No idea goes from start to finish under just one set (or even just two sets) of eyes.

Our funnel approach is meant to be replete with "team".

We want to take advantage of what multiple sets of trained eyes might see. We also want to have a system that aims to vanquish the decision making biases that we as humans are known to have. We don't want the negative side effects of "ownership". Yes, we want people who are accountable and conscientious, BUT we don't want the "ownership" to bleed into defensiveness.

Our job is never ever about "defending" our thinking it is always about pursuing and sharing our best thinking at any moment. Defensiveness is about ONLY defending.

We speak of three core design beliefs of (1) time is precious, (2) learning is a lifetime in investing, (3) teamwork...if we added a fourth design principle it would be "vanquish decision-making biases".

We often move an idea from one analyst to another along the way which means that for this to work, the handoff from one analyst to another must be efficient and complete. To do that very well, it helps tremendously if the chronicling/writing is extraordinarily clear and organized sensationally.

We consider that writing is perhaps the best form for transference of our thinking.

#4: PRIORITIZE WRITING OVER PRESENTING

We watch out for processes too dependent on "presenting" because the winners of the competition for capital may be weighted to a third immaterial variable that suddenly becomes quite material: presentation skills, social presence, or political capital. We are wary of systems that demand people be skilled at something other than their core ability. If "Sue" is a great analyst and investor, I don't want that to be hard to notice because her presentation and sales skills are subpar. And I don't wish to recruit based on "presentation" ability or presume that "they" will get up to speed in presenting. I would rather alter the process and in this case, let writing dominate.

I am fortunate in a specific regard as my reference to the power of presenting and varying comfort levels: for years I was highly, highly uncomfortable presenting almost anything. I wouldn't sleep well the night before. I was nervous and self-conscious. Many find this hard to believe but it is verrrrry true. Across time receiving training/coaching, and then throwing myself into the fire of a high profile position, I became quite comfortable.

But I haven't forgotten.

And as such...

I am wary of processes that can be dominated by some but not by others based on something other than the core criterion (e.g. presentation as opposed to analytical skill).

#5: SHAPING THE FUNNEL

The shape of the funnel can be revealing. We start with about 300- 400 leads in Round #I and work to identify and develop 12-15 new positions. We have eight rounds. You may want to start with 100 companies and get down to 25. You may prefer four rounds as opposed to our eight. With just these factors in mind, you can create something that fits where you are as opposed to some perfect place.

#6: ORGANIZE INTO FOUR NODES IN EACH ROUND

Very loosely speaking, we organize our work at each round into one of four buckets:

> RELEVANT SOCIETAL SHIFTS

INVESTMENT FUNNEL: UNIVERSE Sourcing leads **OUT OF FUNNEL** ROUND 1: QUALIFYING ROUND 2: SCREENING -ROUND 3: KNOWLEDGE BUILDING -ROUND 4: MODEL -ROUND 5: SKETCH PREDETERMINED GAME PLAN -ROUND 6: ROCKS - PATH TO WISDOM ROUND 7: THE PREDETERMINED -GAME PLAN ROUND 8: VALUING -

- > MARKETPLACE SHIFTS
- > UNFAIR SUSTAINABLE COMPETITIVE ADVANTAGE
- > BUSINESS MODELS

We find these four categories cover all of what we are interested in.

NODE #1:

RELEVANT SOCIETAL SHIFTS

NODE #2:

MARKETPLACE SHIFTS

NODE #3:

UNFAIR SUSTAINABLE COMPETITIVE ADVANTAGE

NODE #4:

BUSINESS MODELS

#7: PRIORITIZE BUSINESS ANALYSIS VS. SECURITY ANALYSIS

We separate business analysis from security analysis. We don't think of security analysis until Round #8.

#8: CREATE A SENSE OF COMPLETION

Our orientation is that humans LOVE the experience of completion. Imagine creating a to-do list on Saturday with a list of errands. When you complete one of the elements, you take your pen and cross it off. Feels great! "Completion," whether it is picking up shirts at the cleaners or successfully completing an exam, feels great. But in many investment processes, there is very little completion... until the very end... and... that I think can lead to a bias for that BIG COMPLETION to lead to taking a position!!! Competition for capital gets kicked to the side with availability and recency bias (the newest ideas) infiltrating the process.

The adrenaline gets going! We don't want adrenaline to be part of the investment process.

Warren Buffett observed that most M+A becomes fated at a certain point because the investment bankers have gotten their clients to an emotional point-of-no-return. This is, of course, in the bankers' best financial interest.

By breaking the investment process into rounds, we provide loads of fulfilling completion points to experience so that the experience at the end of Round #8 is no longer a runaway train. Only about 60% of ideas getting to round #8 get into the actual portfolio.

We aim to guard against this adrenaline rush.

Another design method to avoid the adrenaline rush associated with the "go" "no go" in deciding whether to add a stock to the portfolio is to have other less dramatic options to choose from at THAT moment. We have the categories of "Active Tracker" and "Bench" which fulfill this design idea.

Part 2: Active Trackers and Bench

So many investors seem to share at least one common problem:

"How do I effectively track certain companies which I decide not to include in the portfolio?

I do not want to fully lose track of them because I know some of those companies will be ones that I may want to own in the future. How do I do this in a way that is possible to execute well? In the spirit of "active research" that won't require a gazillion hours of repetitive work across a couple hundred stocks? And how do I do that in a way that inject insight, and isn't just regurgitating the common thinking already in the market since I am the one who is not involved and potentially late?"

One of the initial limitations in the investment process as we specifically designed it in 2005 was that we didn't have a strong idea of what we would do to "track" ideas that failed to get into the portfolio. This was maybe because through 2005-2007, we were learning about so, so, many new companies that instead of the 150-175 number of companies we are looking at from round #2 onwards now, at that point we were doing more like 450! So it took a while to notice that we had a clear gap in our process.

The company that woke us up was the movie theatre company called Imax. Brynne had done some great work to clearly lay out a "Predetermined Game Plan" which led to a conclusion to "stall". BUT, it wasn't until about 9-12 months after her work that I happened to notice that Imax shares were moving up a good bit! So I dug in to learn that I-2 of the key triggers Brynne had identified in the "Pre-Determined Game Plan" had been trip wired.

Ugh!

In other words, we had done the work to be in position and then we let the work sit dusty on a bookshelf and only an accident woke us up. Counting on full-out accidents is no more a part of a good process than, let's say, hoping.

Another reason for the initial lapse in our process may be that I am really turned off by processes that are passive. I don't like words such as "maintenance" or "track" or "monitor," and so perhaps I failed to create a process that would be both "tracking" and "active". After all, here we have done loads of interesting work. It MUST be the case that there would be a time effective way to use that work to lead to engineering/designing "wake up" calls.

What I have learned across years is that loads of our clients struggle with this as well.

No one wants their analysts tracking everything in some fashion that resembles the sell-side and its bulky, non-investing, non-pursuing, passive, regurgitating tendency. But they also don't want analysts looking so widely that they miss key moments in companies that are deemed very, very, important for one reason or another.

So with that in mind...

If an idea has progressed deeply into the funnel for us – let's say rounds 5-8 -- but fails to win the next stage of the Competition for Capital, instead of merely "stalling," we will off load the idea into what others might call a monitor list or close tracking list.

If we choose this path, we make time to precisely consider what THREE specific points/questions/objectives for a given company are meant to be actively tracked. Yes, we use the word "Active Tracking" so as to remind us to be active and not passive. How does this play out? We watch for news flow that perhaps touches on one of those three points! Or we assess the quarterly earnings to see if

anything popped out that affected just those three points.

We stay focused. We don't want to review everything. It is a waste of time and boring as anything.

An old friend said at our Budapest Retreat in 2011: "Process Can't Kill Passion"

Our "Type Two Error Avoidance" piece from a few years ago goes deeply into the topic of process which destroys passion.

So we don't review the whole thing. Presumably, we decide where we got stuck when the company did not advance in the competition, so if those considerations are attended to we can fast track the company back into the funnel and perhaps have a new position inside a week or two.

We are surgical.

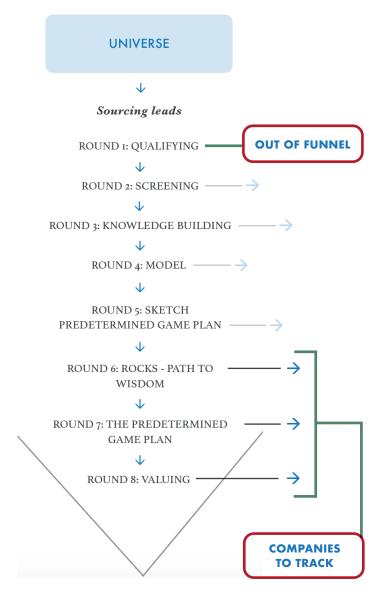
There is a competition to even get into the "Active Tracking" path. We restrict the number of "Active Trackers". We don't want to track everything so, yes, some companies TRULY stall out and those only return to the funnel if/when there might be a fresh monumental change pattern we recognize that triggers that "stalled" company as a fresh lead.

There is one more category we employ: Bench

The Bench is exceptionally important to us. Imagine that the funnel involved two more rounds. Round #9 would be "Bench" and Round #10 would be "Portfolio".

So some candidates that are so close don't go into "Active Tracker" but instead they go on to the "Bench" and perhaps that quickly leads to them being included in the portfolio itself.

INVESTMENT FUNNEL:



We want a very, very, active bench for many reasons - one of which is that we never want to be "stuck" with what is in the portfolio when some new significant information is revealed that diminishes the investment case for a stock that is in the portfolio. Since we use a fixed number of positions, if we want to remove a position, we are required by our approach to find a replacement then and there. Typically, we will have 5-7 "Bench" companies that we

believe are so close to being in the portfolio that they each merit a far more active process than even "Active Tracking".

Sometimes there is just one smidge of a fundamental element that has the company fail to win a spot in the portfolio so we will be very watchful for that thing. Sometimes the valuation is just slightly less appealing, and that is what holds us back. At any rate, while we have 15 long positions in the portfolio (and 15 short positions) we have 5-7 companies/stocks on the Bench.

Here is the critical process distinction above all else of "Bench" companies versus "Active Trackers": We treat the Bench companies as if they were already in the portfolio but with a mere 0.0% position!

What that means practically is that we are as active in considering Bench companies/stocks as the portfolio companies themselves. This means that these Bench companies are ready to go into the portfolio at a moment's notice. Zero "extra" work is required because we are doing what we think is required every week.

Part #3: Thesis

We find that there Is incredible power in a crisp, well-developed thesis statement, both for crystallizing one's own thinking most powerfully as well as for the benefits of great communication that a thesis statement provides.

Remember that old game of "telephone" where you repeat what your neighbor says...It is usually one word or a short phrase and after it circulates through ten people or so, it winds up wildly different...I suppose because neither our speaking or listening is good enough. I suspect that is what makes that game funny. Something that seems so easy is actually shockingly harder than we might have

thought. It is a fun look at our human-ness. The good news about that game is that there isn't anything on the line

But...

...what about in our vocation as investors when we are serving clients?

In this case, being able to accurately hear and comprehend one another's most powerful thinking is pretty valuable.

So around 2005, we started to get very precise in each word of a 100-word max business thesis. We found that the process helped crystallize our best thinking. The challenge of the "telephone game" is even more convoluted as an investor. While in the party version, the initiator has a clear phrase or sentence that starts the action, typically in the investment version, the initiator doesn't have the business thesis crisp and so the hand off even to the very next person gets to be erroneous and often ineffective and misunderstood.

We have a phrase that in some moments "it is important to slow down in order to later go fast".

In this case, we find that getting really clear on the thesis allows all sorts of benefits, including the heightened possibility that everyone on the investment team understands our best thinking.

The business thesis is a communication method above and beyond all else.

For us, a thesis has three crisp parts:

- #1) Company ABC is in the business of X
- #2) Because of a specific factor(s), Company ABC will experience the following future set of conditions Y

#3) The resulting effect on future financial metrics will be Z

That's it. That's our business thesis.

We aren't in any way set to be cheerleaders. We treat this thesis as if we were scientists. We will think it through richly. We will consider what evidence would support or negate the thesis.

Here are two examples:

EXAMPLE 1: ALIGN TECHNOLOGY - BEST WORKING BUSINESS THESIS

Align Technology will benefit as its Invisalign system - an invisible substitute for traditional braces - goes mainstream. Align can "make its own weather" because it I) is replacing an outdated product (wires and brackets) 2) has a long runway into a massive market and 3) orthodontists and general dentists still profit from implementing Invisalign. The core market for Invisalign has been adults. We believe that increasing awareness, sales process changes, and incremental innovation is igniting growth among teens, a key demographic (75% of the total market) that has been under penetrated by Align.

EXAMPLE 2: ACTIVISION - BEST WORKING BUSINESS THESIS

Activision, a video game developer, stands to continue reaping the benefits of a movement in the point of sale – from physical cash register to consumer device (smartphone, PC, console). Allowing consumers to complete purchases at all times, nearly without friction, has fundamentally changed the video game industry. Activision in particular, with its stable of compelling content, has found that focusing less on creating brand new game series and more on 1) producing additional modules for existing franchises and 2) using existing IP/

characters to create new games, keeps customers engaged and spending – a powerful way to make money.

Imagine how every meeting until the end of time could be more clear and powerful if everyone understood the clearest thinking and the best argument on the table.

What we find is that a crisp thesis makes it easy to find critical components of the debate. Then, we are able to more directly pursue a path to wisdom on THAT part as opposed to feeling as though our random rambling moment to moment has created a bag of melted caramels investment case.

Imagine how much easier it is to avoid thesis creep – which is highly dangerous – if you have 100 words written down. The "worst" form of thesis creep is the subconscious form where one is deluded into thinking their brain hasn't mangled the investment case. Imagine how teammates might help one another avoid investment creep – and a million other issues – by knowing clearly the business thesis.

I have specifically mentioned a "business thesis" so I am going to stop here to offer two additional points.

The first is that we break down "stock picking" into three components:

- #1) Business Analysis
- #2) Security/Valuation Analysis
- #3) Market Psychology/Expectations Analysis

(Thanks to M.I. for the phrase "expectations analysis".)

We have written elsewhere that these are three different functions, which each require distinct training and where humans have varying degrees of capability. Specifically, we believe that business analysis is where sharp analysts can thrive and learn and generate high conviction about

matters that would be highly confusing to most people walking up and down the street. We think that for most investors - other than clearly valuation-led philosophies - security/valuation analysis can be largely automated. Professional investors' conviction about the direction of valuation multiples is far lower than their conviction on business analysis. Finally, we don't think many investors are trained in market psychology and as such, there is a ton of seat-of-the-pants guess work once we move beyond "I think they will beat the quarter and the stock will react positively."

So that's our basic thinking. There are three distinct activities in stock picking. There are three different skill sets. There are differing levels of conviction for each part and the three functions are best clearly separated for analysis as well as for communication.

Usually, the three parts are not separated in conversation, so it is even harder to clearly understand the best thinking of one another.

A different idea might be to develop a business thesis about the company, a security/valuation thesis on the stock, and a market psychology thesis about how the market might think of the business fundamentals of the company and valuation multiples of the stock. When we get to the "Integrated Decision Engine," we will speak to how we go about delineating each component and then specifying our thinking as just one model to perhaps consider.

Part #4: Pre-Determined Game Plans

Earlier, I mentioned the "Pre-Determined Game Plan Sketch" and then the "Pre-Determined Game Plan" itself.

What are we talking about?

In Round #5, we create a waypoint. We stop and consider all the knowledge we have collected and, from that base, what insights we may have generated. There is a Confucian expression which states that in order to gain knowledge you should add one thing each day...and then to gain insight you should subtract one thing each day. So after four rounds tilted toward knowledge-building, we stop and see what we have. We subtract it all down to just one page of what we think is our best insight. We organize our thoughts into three elements:

- **#I) Business Analysis** (Which we just discussed)
- #2) Burning Questions (Vital questions we want greater conviction about)
- #3) Thesis Threats (Real threats! No room for strawman "challenges")

It takes deep insight to truly develop a sensational predetermined game plan of thesis, burning questions, and thesis threats.

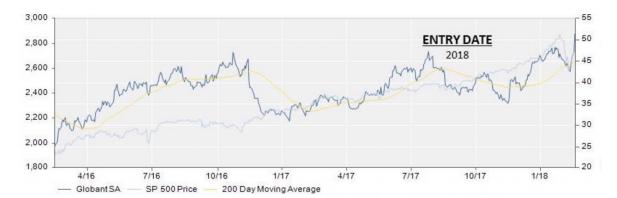
This work reflects our collective ability to generate insight and clear thinking. Our analysts are very much assessed on how relevant the predetermined game plans are. IF for instance, we are always being surprised by factors for companies we are engaged in that were not specified in the one-page Pre Determined Game Plan, it would be really, really, bad! IF we consider that the Pre-Determined Game Plan for a particular company is schlocky, well that might indicate that we are sort of just guessing as THE key ingredient of our investment process.

And if "hoping" is the number one enemy of a well-crafted investment process, a neighboring problem child is inadvertently guessing.

Below is an example of a clear and relevant Pre-Determined Game Plan:

GOOGLE (LONG)

GOOGLE THESIS: WHAT IS THE CHANGE? The crisis for advertisers to reach digital users is intensifying, and Google will benefit disproportionately due to its position as *the* institutional imperative for marketers when choosing where to spend their digital advertising budgets. Google has a rare - and still growing - property in Search, but Mobile and Youtube, in particular, will add to the addressable market for a long time, leaving Google in a position to grow in the high teens for several years as mobile search becomes common and as advertisers grow increasingly comfortable with placing ads in front of the hundreds of millions of Youtube viewers. Importantly, in the next 18mo's, the co will demonstrate the ability to reverse margin declines.



MODEL 2018E

Sales Growth: 21% Gross: 39% **EBIT: 14%**

KEY RECENT POINT:

(4Q16)Google sites clicks up 43%; prices down 16%

BURNING QUESTIONS (JAN 2017)

- #I. PIVOTAL QUESTION: What will trend-line paid click growth be as smart phones mature? And will mobile cost per click rise such that mobile will drive re-acceleration of Google's overall top line growth now that mobile > 50% of all queries??
- #2. EXPECTATIONS: Is it reasonable to expect Google to sustain 25-26% y/y growth in its core business?
- #3. YOUTUBE: Will Youtube ad prices meaningfully grow from 2015's levels? If so, why? What is Google's path to get them higher?
- **#4. YOUTUBE:** What is the growth and potential earnings power of Youtube?
- **#5. AI:** Exactly how will AI and machine learning contribute to Google's growth potential? Are they becoming "table stakes" among the big platforms or will they meaningfully enhance trend-line growth?

THESIS THREATS (JAN 2017)

- #I. TOP OF S-CURVE: Reversion to normal growth rates happens sooner than we expect and Google grows 12% instead of 20%.
- #2. KEY THREAT MARGIN: If growth comes at a significant cost to margins - from either hardware growth or ongoing opex
- #3. YOUTUBE: If Youtube can't effectively monetize the activity that is taking place on its platform.
- #4. CLOUD: If Google chases Amazon down a rabbit hole to pursue a low margin, capital intensive cloud services business.
- **#5. FRAGMENTATION:** If a new platform arrives on the scene to grab more of the online advertising pie, effectively splitting the market that now "belongs" to Google and Facebook.
- #6. VOICE: If voice search one day grabs more share of society's overall queries and if Amazon is the victor there.

With this in mind and to be specific, we aim to be good "scientists," not good cheerleaders. A particular sin would be to have strawman "thesis threats" such as "well, the company could be challenged satisfying demand if they are asked to grow 30% instead of 20%." That is NOT a thesis threat any more than "I care too much" is a real weakness to "disclose" in a job interview. The good news is that although one analyst will specifically create the Pre- Determined Game Plan, there are always many hands and minds reflected in that single page by the time it is generated. A lot of teamwork. A lot of methods to undermine cheerleading have hopefully had their effect.

If all else was lost, the quality of thinking in the predetermined game plan would be the single gauge of the quality of the work we are doing.

How specifically does the Pre-Determined Game Plan Sketch aide the competition for capital?

Well, by round #5 each year, we might create 40-50 Pre-Determined Game Plan Sketches. Often this round helps us clearly identify through comparison which companies/stocks are worth much greater work and which ones are relatively non-captivating. For instance, if we see a company with 8-10 really meaty Burning Questions, that might indicate a level of complexity in gaining answers which would lead to high conviction. We might expect to see 2-3 tough questions, not 8-10. If we saw 7-8 serious thesis threats, that also might be a signal to stall further work. In other words, this Round #5 is a reality check. For those companies that are selected to move on to round #6, there is great clarity about where our energy is best directed.

From that moment on the Pre-Determined Game Plan is our dynamic reflection that guides us.

The Pre-Determined Game Plan is the communication method for us to direct our collective energy with the best of our insight.

Round #7 is another Pre Determined Game Plan "final" check-in. Companies that move on from round #7 undergo security/valuation analysis in round #8. Most of the companies that fail to win at round #7 will go into "Active Tracking". Since they made it this far, there must be something pretty powerful going on.

PRE-DETERMINED GAME PLANS AND EARNINGS ASSESSMENTS

The Pre-Determined Game Plan is meant to be the ongoing concise dynamic storyline of our work on companies/ stocks. It is meant to be updated as we learn more.

It is also our guide to separating noise from signal once a stock has gotten to the bench or into the portfolio. We are pretty specific about what we do during earnings release periods. The basic idea is that it is a very active process (we use the phrase "earnings assessment," as opposed to "earnings review," as "assessment" to us suggests a far more active orientation.) Effectively, what we do is take the three parts of the Pre-Determined Game Plan – Thesis, Burning Questions, and Thesis Threats – and scan to see if there is information in the release that attends to any of those elements. Most everything else – barring a fresh monumental change pattern that might easily catch our eye (e.g. hired a new head of sales) – is ignored.

We find that many write ups of earnings tend to regurgitate management far too much and there isn't a high value in today's world of repeating/reporting back. So our intent is that earnings assessments are far more valuable because we are actively sorting through the data to find signal and we can do this because we have decided very clearly what signal is for us to the best of our ability.

Part #5: Portfolio Structure

In the next 12 months, I expect to write a comprehensive note with thinking about portfolio structure...but not today. For today, I do expect a quick bridge between "Portfolio Structure" and "A Competition for Capital".

We build "competition" into the portfolio structure in a number of ways.

We WANT to inject friction into decision-making when it comes to the portfolio. I know...this sounds weird and counter-cultural to invite, welcome, and demand to have friction in a system.

We have all been trained to get rid of friction and that is the steady promise of technology: to gain more from less effort. And so we are going against the grain.

We want friction/edge injected in because we think having waypoints where we must somehow compare A to B in order to move forward can be very, very, valuable moments to see more clearly.

We aim to create a clear connection between portfolio structure and our communication methods. The friction/edge in a greatly important conversation is palpable. Personal conversations involving a critical decision...Professional moments...Investing moments. We want to benefit from that energy. The energy of a conversation you might remember ten years from now.

Our portfolio has 15 longs and 15 shorts. Always. I realize that this concentration of 15/15 is far greater than most of the world would want, but that isn't the key point at all here. The key point is that the number is always fixed.

If something is going to get into the portfolio, something else MUST come out of the portfolio. In doing so, two things will be compared against each other...or more than two things. If we have a new idea we consider to be sensational, it WILL displace something but we might not currently know what to eliminate. So, we may compare three companies/stocks in a competition for elimination.

We like that discussion. We like that there will routinely be these moments of edge in which our greatest available clarity is required.

So each new entrance requires an exit (edge/friction) and every desired exit demands a new entrance.

For us, we expect to have perhaps 10-12 new positions in a typical year. Well, that doesn't sound like enough friction/ edge moments if we really WANT friction!!?? Can we inject more friction? Sure.

On both the long side and short side, we have three designations: large position, medium position, small position. And you may have guessed it. The number of large, medium and small positions is also always fixed.

What that means is that if we think one of the companies/ stocks is a great fit now as a large position as opposed to its current small position, some position that is currently large will no longer be! It may be that a small position goes to large, a large goes to medium and a medium goes to small. In fact, last year we had 47 of these such trades where a position moved buckets per se. All sorts of ways to make the math simply work such that at the end of all the friction/edge, the number of positions in each of the three categories remains unchanged.

Incidentally, with teamwork in mind, these waypoint moments when considering position moves NEVER have individual champions or even devil's advocates (a strained form of teamwork at best) or a separate unconnected "skunkworks unit" or such... We are all charged with bringing our best thinking to these discussions... they

are decidedly devoid of any "us/them" nature. We are all striving to act as a group of multi-disciplined collaborating scientists.

This mode is likely significantly aided in that no one is ever rewarded for having "representation" in the portfolio which, understandably as humans, might subconsciously color our perspective!

Perhaps color it in a meaningful way!

And THEN how do you tell a person working alongside you that you think their thinking may be biased out of subconscious self-interest!? THAT could be a flammable circumstance, huh?

But if the system clearly has zero reward for "representation," that idea of subconscious bias from selfinterest in the back of the mind can fade away. Pheww! You might imagine that thinking that others in your "team" are acting from self-interest first (let's forget about the "subconscious" part for now to heighten the venom some) could mightily dampen the possibilities of collaboration!

"Never ascribe to malice that which can adequately be explained by incompetence..."

- NAPOLEON BONAPARTE

If reward for "representation" (or at least its negative side effects) can't be fully vanquished (or you don't want to fully vanquish it!) there are many ways to reduce its impact.

We spoke earlier about the "Bench". We suggested that we treat each company/stock on the bench as if it is IN the portfolio and treated exactly the same but just with a 0.0% current position. So maybe there are four position sizes: large, medium, small and zero!

Part #6: Integrated **Decision Engine**

Well... this is all well and good, of course, to build in this friction/edge into the system where we are required to compare different ideas but, well, how are we going to organize that?

About 5-6 years ago, a client called one day. I was sitting in my home office in Maine. It was a beautiful summer day just outside. I was having the time of my life getting to do this work. At any rate, our client's responsibilities were changing from analyst to portfolio manager and he had a specific question: "How did you think about position sizing?" as in...how did I decide what companies/stocks had which position sizes?

I love this topic.

Many clients are drawn to this topic.

So I swiftly spoke of the six key factors I consider when determining position sizing. I literally went bam - bam bam - bam - bam and why for each one. It was a question that I had contemplated for a long while and had developed my thinking on, for better or worse.

And as I hung up the phone, I was laughing to myself and AT myself... because... I had recognized an incongruity in our investment process. When I say "incongruity," I mean mistake, error, oversight, or something like that.

What struck me was the "incongruity" between my easy crisp answer to the question of "How do you decide position sizes?" with my clear focus on six factors... opposed to my stat sheets being arranged in some very

odd manner that made it virtually impossible for me to actually USE those six factors with the sort of ease that I had answered the question itself.

I hadn't organized my data to support my decision making! So much for a well-devised "Competition for Capital"!

I guess I was laughing because I knew instantly that it was an easily fixable problem. It took about 5-6 weeks to rearrange the data in a supporting way.

As I finished my first laugh AT myself, I started a second laugh at myself, but one that more so hit on a sore point for me. What I realized now was that by NOT having the data organized such that I might easily compare stocks to determine position sizes, I had made it almost IMPOSSIBLE for the analysts who work with me to contribute as fully as possible to the decision making process. If I didn't have the data clearly organized, that meant they didn't either! How could they affect decisions if they couldn't see the data? Not easily. And then finally I realized that our own analysts LIKELY – if not most certainly – did not know what my six factors of position sizing were!!!!

Aye ye ye.

What a mistake on my part.

I wanted insightful, directed, frictionless input from our analysts in our friction/edge method!

Here is a spot that some easy changes would reduce the friction in a good way!

Again, it was all fixable. And the communication tool/method we created was half-jokingly call the "Integrated Decision Engine". We have written more extensively on this tool previously than I will here today but I will offer a few points.

We have included a sample below.

We have removed the names of the companies not because we do that in some sort of a blind-test – though now that you have mentioned it, that might be a good twice a year exercise – but rather so as not to distract from the method as opposed to mere temporal content. We are happy to forward the current Integrated Decision Engine if you are intrigued.

I almost wanted to also remove the specificity of our six factors because the purpose in bringing up this tool is NOT about our factors but rather to feature an idea that will allow others to use THEIR six factors. The odds of our six factors also being YOUR six factors is very low. The idea of organizing your critical factors – whether it is six or four or eight – we think has wide spread application and has seemingly resonated with many of our clients.

So...

- > The Integrated Decision Engine is NOT a black box.
- > The factors are not even weighted
- > Some factors are quantified (e.g. 13%) and some subjective (e.g. VERY HIGH)
- Some factors are supported by additional material such as valuation.
- Our most powerful factor tends to be "conviction in business thesis".
- > Business Thesis is attended to in factors 1-4
- > Security/Valuation Thesis is reflected in factor #6

- Factor #5 and Factor #7 to the far right represent "Market Psychology"
- > It often takes clients clean space to identify their factors and sub-factors.
- > Each week, analysts are responsible for updating the cells for their companies.
- > Analyst company cell changes stimulate rich conversation in themselves.
- > In some cases, vague quantification is better than specificity or qualification.
- > Factor context required (e.g. valuation of a Brazilian e-commerce leader).
- > We can compare seemingly unrelated stocks (e.g. emerging markets retailer vs. a New Zealand-based SaaS company) with a method we grow to believe in.

What we are really doing with the Integrated Decision Engine is providing a clear framework for a group of people to surgically, efficiently, and hopefully effectively discuss and decide position size changes as we had alluded to in the prior section "Portfolio Structure".

We are looking to crisply see where the specific discussion on stock positions is best meant to be directed. Perhaps the "controversy" is at Factor #2 and we can focus our collective attention THERE as opposed to any of the other factors.

To quote one of my fascinating life mentors, Hale, it is so helpful to ask: "What is the question on the table?"

So often I sense stock discussions can devolve into randomwalk / stream of consciousness as opposed to a clear discussion about what specifically matters.

I say this as someone who deeply values the power of stream of consciousness thinking... at the right time... I haven't found making a clear decision on portfolio sizing to be one of them.

So the point of the Integrated Decision Engine is to organize our data on what we already consider to be six critical factors in a way everyone can easily see, understand and then be in position to contribute specifically. If we don't think it is a key factor for us why would THIS be the time to be pondering some random X-factor?? Probably isn't the moment. As a by- product of the Integrated Decision, I find that we rarely have the same discussion twice.

		Factor #1	Factor #2	Factor #3	Factor #4	Factor #5	Factor #6		Factor #7		
COMPANY		Conviction in Business Thesis	3-5 Year Range of Business Outcomes	Mild Term Revenue Growth Est 2018-2024	Earnings Change Signal	Node 5 Wildcards for the next 12 months	VALUATION OVERALL	Comment: Risk / Advant. / Dynamism / Zone	Tech	ysis	
	Analyst								50 DAY MA	200 DAY MA	% off o 12mb high
ARGER POSITIONS	s										
Large Position #1 xxxxx	Ixxx	VERY HIGH	Wide	13%	POS	none	Medium	A: Bundle secret saucehelps marketing	1.09	1.28	-19
Large Position #2 xxxxx	XXX	VERY HIGH	Medium	13%	POS	none	Low	D/Z: Youtube EARLY and increasingly impactful	1.00	1.10	-7%
Large Position #3 xxxx	XXX	VERY HIGH	VERY WIDE	19%	none	none	Very High	R: Key (only?) risk: XYZ CEO gives away excess success.	1.14	1.36	-2%
Large Position #4 xxxx	XXX	VERY HIGH	Wide	16%	none	none	Low	R: Can they grow 25%+ for many years flawlessly?	1.02	1.21	-3%
Large Position #5 xxxx	XXX	VERY HIGH	VERY WIDE	16%	POS	none	Medium	R: Margins - video; Game - comps	1.05	1.29	-6%
MEDIUM POSITIONS	S							•			
Medium Position #1 xxxx	Ixxx	VERY HIGH	Wide	8%	POS	none	High	D: Cash register to our hand: incremental vs. new game content	1.07	1.15	-5%
Medium Position #2 xxxxx	XXX	VERY HIGH	VERY WIDE	13%	POS	none	Very High	D/Z: Growth runway = teens, IP/competitors ?	1.03	1.29	-129
Medium Position #3 xxxxx	XXX	High	Wide	7%	POS	none	Low	R: Late in special zone?	0.98	1.01	-139
Medium Position #4 xxxxx	XXX	High	VERY WIDE	16%	POS	none	Medium	R: Energy in/out - curation	0.99	1.08	-89
										1.00	
Medium Position #5 xxxx	XXX	VERY HIGH	VERY WIDE	19%	POS	none	Very High	R: CEO	1.11	1.29	-2%
Medium Position #5 xxxxx MALLER POSITION Small Position #1 xxxxx	NS XXX	High	Wide	10%	POS	none NEG	Very High Medium	R: CEO R: Near Term Box Office Results	1.03	0.86	-2% -549
Medium Position #5 xxxxx MALLER POSITION Small Position #1 xxxxx	VXX VXX			10% 16%	POS none	NEG none	, ,		1.03	0.86	-54° -7%
Medium Position #5 xxxxx MALLER POSITION Small Position #1 xxxxx Small Position #2 xxxxx	NS XXX	High	Wide	10%	POS	NEG	Medium	R: Near Term Box Office Results	1.03	0.86	-54° -7%
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Part #7: Conclusion

When I am finished writing the final section of a longer piece, the last thing I really want to do is write a "conclusion".

So instead of reviewing what I wrote, I will offer just a few quotes. At this point some entertainment seems just rewards for having engaged for the last x-number of pages.

- PIP

"When you improve a little each day, eventually big things occur. Not tomorrow, not the next day, but eventually a big gain is made. Don't look for the big, quick improvement. Seek the small improvement one day at a time. That's the only way it happens - and when it happens, it lasts..."

- NATER AND GALLIMORE

"To listen is to continually give up all expectation and to give our attention, completely and freshly, to what is before us, not really knowing what we will hear or what that will mean. In the practice of our days, to listen is to lean in, softly, with a willingness to be changed by what we hear..."

- MARK NEPO

"You can shift your effort, shift your attention. From doing it right, aiming to gain approval, you shift to meeting and working with the ingredients at hand."

- EDWARD ESPE BROWN

"I get up in the morning determined to both change the world and have one hell of a good time. Sometimes this makes planning my day difficult..."

- EB WHITE

"The meaning of life is not what happens to people but between people..."

- THICH NHAT HAHN

"Who looks outside dreams...Who looks inside awakens..."

- CARL JUNG

"Process can't kill passion..."

- BORIS PETERSIK

"It's a competition for capital..."

- SCOTT BOOTH

Appendix:

An Earnings example—

For the last two years Grubhub has taken the time to mention trials they've put in place with various chains to determine if both sides can benefit from being a part of Grubhub's platform. Sometimes these agreements were set up by the parent company using a few locations, but most of the time it would involve local franchisees acting first – Buffalo Wild Wings, Papa Johns, Subway, Little Caesars and others have been mentioned.

But, none of the deals have gone as far as what Grubhub announced this quarter with Yum Brands:

- Grubhub will act as the exclusive ordering partner for all Kentucky Fried Chicken (KFC) and Taco Bell locations in the US, delivery and pickup.
- Yum will purchase \$200m worth of Grubhub shares.
- Pizza Hut's U.S. President, Artie Starrs, is joining Grubhub's board.

More than the immediate impact of orders from KFC/ Taco Bell flowing through Grubhub, in our eyes the deal accomplishes four things:

- 1. It provides another data point to validate Grubhub's position in the market, especially vs. the ever-lurking threat of platform crush from Amazon, Facebook, Uber.
- 2. With one national deal under its belt, Grubhub is in a better position to go back to all the chains it is having trials with to expand the scope of their relationship.
- **3**. Along with the Eat24 deal, KFC and Taco Bell will immediately add volume and restaurants to many smaller cities where Grubhub expects much of its growth to come from.
- **4**. It adds delivery expertise to Grubhub's board.

GRUBHUB THESIS ASSESSMENT (LONG POSITION)

FEBRUARY, 2018, DAN

Grubhub reported 4Q17 results on February 8th.

- Positive, BULLET POINT #I: YUM DEAL: Provides evidence of the platform's power, as well as incremental sales in the future.
- Positive, BULLET POINT #2: EAT24: Integration plan is under way, with Eat24 restaurants having been added to the Grubhub platform.
- Neutral, BULLET POINT #3: COMMISSION RATE/ PROFIT PER ORDER: Flat take rate excluding the impact of delivery and Eat24, EBITDA per order up 8% y/y even with the addition of lower margin Eat24 orders.

WHAT HAPPENED?

- Sales of \$205m vs. \$202m estimates.
- EPS of \$0.37 vs. estimates of \$0.31.

WHAT IS THE NEXT THING THAT SIGNIFICANTLY MATTERS?

How quickly can we see a positive impact from the recent acquisitions and newly added restaurants, particularly when it comes to active diner and order growth?

THE BUSINESS THESIS:

Grubhub, an online platform for food delivery, just completed two critical announcements – acquiring Eat24 and forming a partnership with Yelp – which may lead them to become the de facto standard inside three years. We think these two actions have allowed Grubhub to A) further consolidated the market and neutralize a potential competitor 2) immediately increase its restaurant count by 50% and C) create a pool from which to source future restaurant additions.

We think local network effects (more restaurant options leading to more consumers) and the small form-factor of a smartphone ought to lead to one app being the go-to choice for consumers. Lowering the pain of adoption for restaurants is Grubhub's variable percent of transaction model, as there are zero upfront costs for restaurants to join the platform.

Slogan: Thai on the fly.

IS THERE A NEED TO CHANGE OUR BURNING QUESTIONS OR THESIS THREATS?

Not at this time.

BURNINGS QUESTIONS:

#1: GO-TO APP - Can the company effectively balance the need to add both restaurants and consumers in order to drive gross food volume and, in doing so, become THE go-to app for

food delivery?

Update: Two parts here - the business' performance during the quarter, and more on the Yum deal.

A) Business performance:

1Q16-4Q17

- Active diner growth: 24%, 24%, 20%, 21%, 26%, 25%, 28% (26% organic), 77% (high 20s organic)
- Gross food sales: 21%, 29%, 33%, 27%, 26%, 20%, 18% (16% organic), 39% (22% organic)

So what?

We're starting to see an impact on all of Grubhub's metrics (active diners, daily average grubs, and gross food sales) as the Eat24 restaurants are integrated.

But, we're still in the very early stages of seeing the real benefit of the acquisition – when consumers see more options on Grubhub and take advantage of that, while also pushing up the take rates in smaller cities as more restaurants are added and competition drives bidding higher.

Grubhub expects that order frequency of some of the added diners from white label sites that Eat24 powers will improve over time, converging with the higher level that is typical of Grubhub customers.

B) Yum deal:

The fascinating thing here is that Grubhub will be the EXCLUSIVE ordering partner for KFC and Taco Bell, two businesses which combined have ~\$14bn in US sales. Additionally, the parent company's third main franchise is Pizza Hut, which – as with any pizza chain - has a lot of experience with take-out ordering.

As Yum explained on their 4Q17 call: "Yum! is acquiring \$200 million in primary common stock, an investment expected to provide Grubhub with additional liquidity to in part accelerate expansion of its industry-leading U.S. delivery network, drive more orders to Yum! Restaurants and further enhance the ordering and fulfillment experience for diners, restaurants, and drivers. We are excited for this unique partnership which includes having a seat on the Grubhub board of directors and aligns with Yum!'s long-term strategies to make our three brands easier for customers to access."

So what?

As the quote above mentioned, and it was further elaborated on their call, Yum sees this partnership as first and foremost about driving additional orders to KFC and Taco Bell, but also about making it easier for consumers to access Yum's restaurants. In our parlance, it's about lowering the pain of adoption for consumers to get their hands on a bucket of KFC chicken, which includes integrating the point of sale backend so it is seamless for consumers if they want to order from KFC's website or app, or Grubhub's app or website.

Also, there are no restrictions in the deal preventing Grubhub from announcing partnership with competitors of Yum.

#2: ACQUISITIONS - After a series of acquisitions, can Grubhub successfully take advantage of its new scale?

Update: The integration of Eat24 is moving along.

The first few stages just involve bringing the customer restaurants together and backend consolidation. Once that happens, the power of the combination should start to show through – hopefully via higher order volumes per consumer (thanks to more choices) and higher take

rates (through more competition when bidding for search result spots).

Eat24's incremental restaurants have been added to Grubhub. Next up is migrating Eat24's product onto Grubhub's technology, then integrating Grubhub's network with Yelp so Yelp users can easily order delivery. A reminder on the potential for higher profitability, from last quarter:

* "When all is said and done, after full Eat24 platform migration and Grubhub integration with the Yelp transaction platform, we expect these orders to generate significantly more than\$1.50 of EBITDA per order (Grubhub's average today)... I think the question is how do we get from kind of zero to significantly higher than \$1.50 in terms of timing? And I think that it'll be mostly related to those two big milestones of moving the Yelp transaction platform onto Grubhub as opposed to Eat24, and a lot of that is just going to be us being able to send a lot more volume through the existing infrastructure."

#3: DELIVERY - Will investments in delivery/distribution turn into a money pit, or successfully drive further online adoption?

Update: Grubhub currently delivers in 80 markets, and will launch in 100 new ones throughout 2018 – in part thanks to the partnership with Yum and the restaurants acquired through Eat24. This will require an incremental spend of \$10m in 2018.

EBITDA per order grew 8% y/y.

And while we haven't had an updated number in a while now, its good to remember that nearly a year ago (IQI7) 20% of all orders placed on its platform were delivered by Grubhub.

So what?

The Yum deal is another example of why Grubhub started offering its own delivery – it makes platform more powerful by adding restaurants which wouldn't otherwise be with Grubhub (because they don't have their own delivery people), gives Grubhub more control/data about orders flowing over their platform, and some incremental profits.

THESIS THREATS:

#1: PLATFORM CRUSH

IF any of the monster platforms (Amazon, Google, Facebook) significantly decide to throw their weight behind a similar service.

Update: This threat will likely never go away, so all we can do is watch it and consider how relative strengths change.

Uber shows no sign of backing off with its UberEats service, including expanded delivery with McDonalds.

At the same time, Grubhub's deal with Yum has helped their position:

"And then what you mentioned and what the other – what lots of restaurant operators are talking about is the singular focus, and we don't deliver power cables or deodorant. We only deliver food. We specialize in dinner. We do lunch. We do catering. We make sure that we're connecting the restaurants with hungry diners and that's all we think about. That's all that our tools are built on. That's all our drivers deliver. And that's why we're the best at it."

So what?

Our #I thesis threat for a reason, and it is unlikely to be displaced. While we suspect that every quarter that goes by Grubhub is able to further solidify their usefulness in

the eyes of consumers, we've seen enough examples of platforms coming into a market and taking mindshare (and dollars) to be cautious.

**PRICE / VALUATION REMINDER: Grubhub shares now trade at a PE of 41x FY19 EPS.

#2: TAKE RATE PRESSURE

IF take-rate begins to decline.

Update: We still don't see troubling signs of commission rate compression.

Grubhub's take rate in the quarter was 18%, up 120 bps y/y but down 80 bps q/q.

For a number of quarters we've seen the impact of Grubhub delivering more orders on its own - which has pushed up the take rate, but at a lower gross margin (hence why the company started reporting EBITDA per order as well).

Now that the Eat24 restaurants are integrated, we're seeing some pressure because those orders have typically resulted in a lower rate, which is what created the difference between 3Q and 4Q. Excluding Eat24, the commission rate increased slightly q/q.

So what?

As mentioned earlier, Grubhub's commission rate is a function of the popularity of the site for a given geography. The more orders and restaurants, the higher the competition to be first on a page listing (and therefore the more restaurants are willing to pay to Grubhub). That is why take rates in New York and Chicago are the highest, as they are the biggest geographies for Grubhub.

We'll wait and see if the inclusion of Eat24 can push more dollars to Grubhub by rapidly growing the restaurant base in numerous geographies.

