Safal Niveshak's

# VALUE INVESTING ALMANACK

Wit and Wisdom on Value Investing

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## Inside this Issue



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## Spotlight: Seamless Web of Deserved Trust

*If you can find a business which is investing in building relationships that are based on seamless web of deserved with its customers, suppliers, vendors, shareholders, and employees, you've found a business with a strong moat. A moat which is hard to identify with numbers and hence not visible to Mr. Market.*

On January 3, 1972, Warren Buffett acquired See's Candy business for $25 million. This acquisition has an interesting backstory. The first time when an investment advisor approached Buffett for See's Candy, he showed no interest. Buffett was in Nebraska. See's Candy was in California.

"The candy business?", Buffett squirmed, "I don't think we want to be in the candy business."

Fortunately, Buffett's partner Charlie Munger lived in California and he was familiar with See's Candy brand. On Munger's advice, Buffett agreed to negotiate. Coming from the Benjamin Graham school of thought, Buffett was reluctant to buy See's at the asking price. But Munger nudged him in the direction of paying up for quality.

In 2015, Buffett wrote –

*"The family controlling See's wanted $30 million for the business, and Charlie rightly said it was worth that much. But I didn't want to pay more than $25 million and wasn't all that enthusiastic even at that figure. (A price that was three times net tangible assets made me gulp.) My misguided caution could have scuttled a terrific purchase. But, luckily, the sellers decided to take our $ 25 million bid."*

To date, See's has earned $1.9 billion pre-tax for Berkshire Hathaway. Moreover, in the same period, it has required only $40 million of added investment for growth. Not only that, acquisition of See's dissolved the mental block that Buffett's had for fairly priced businesses which later resulted in Berkshire acquiring many other high-quality companies. Not a year goes by when Buffett forgets to talk about how wonderful See's business is.

So, Munger played a seminal role in See's Candy transaction. For that matter, it wasn't even Munger who first identified See's candy as a business worth acquiring. Al Marshal, Munger's long time business partner, was the one who first started pursuing Munger for See's purchase.

The point I am trying to make is that while reading about Warren Buffett, most people miss out on a crucial aspect of his business life. Many of the investment ideas were brought to Buffett's doorstep by his friends and business associates. Of course, Warren didn't buy everything that was recommended to him, but he clearly had an advantage by getting quality ideas from people he trusted.

We know how Munger and Buffett have learned by reading and thinking. However, this vital ingredient of their learning process - their interaction with other equally smart people - is rarely discussed.

Talking to a knowledgeable person for 30 minutes can make up for dozens of books that one would have to read to gain the similar insights. Learning from other smart people is one of the most underrated learning tools. And there's a reason why this mode of learning isn't popular. Getting access to smart people isn't easy. Buffett and Munger have access to a network of wise people all over the world. They didn't have this advantage at the beginning of their career but over several decades, by being learning machines themselves, they have attracted similar people in their life. By deserving those people, they have become magnets for more learning opportunities.

This is what Charlie Munger says about Warren Buffett (emphasis is mine) -

*"...if you take Warren Buffett and watched him with a time clock, I would say half of all the time he spends is sitting on his ass and reading. And a big chunk of the rest of the time is spent* ***talking one on one either on the telephone or personally with highly gifted people whom he trusts and who trust him****."*

An important piece of Buffett's journey, another of his moat if you will, is the gains (investment ideas, knowledge, etc.) he made with the help of a network of incredibly intelligent and trustworthy people. And it's a two-way street. The people in Buffett's network trust him as much and benefit equally from that connection.

Charlie Munger says -

*"The highest form which civilization can reach is a* ***seamless web of deserved trust****. Not much procedure, just totally reliable people correctly trusting one another. That's the way an operating room works at the Mayo Clinic. In your own life what you want is a seamless web of deserved trust. And if your proposed marriage contract has 47 pages, my suggestion is do not enter."*

How do you build trust? Let's look at the Munger's life again.

Charlie and Rick Guerin were 50-50 partners in a company called K&W Products. Guerin once needed money and wanted to cash out his partnership. So he offered his share to Charlie. Charlie asked how much Guerin wanted for his part. Guerin figured that he would sell his stake to Charlie for $200,000. Charlie said, 'No, you're wrong about that. It's worth $300,000.' And he pulled out a check and wrote it.

This anecdote comes from Janet Lowe's book Damn Right. Buffett wrote the foreword. He writes -

*"I have never seen Charlie try to take advantage of anyone, nor have I seen him claim the least bit of credit for anything that he didn't do. In fact, I've witnessed exactly the opposite: He has knowingly let me and others have the better end of a deal, and he has also always shouldered more than his share of the blame when things go wrong and accepted less than his share of credit when the reverse has been true. He is generous in the deepest sense and never lets ego interfere with rationality."*

There you go. That's how you build trust. By being transparent, honest and 'more than fair' in all your dealings.

When Benjamin Franklin said honesty is the best policy, he chose his words very carefully. He could have called it a moral policy but he didn't say that. Being rational is the biggest edge an investor can have. I say honesty is the best policy because it's a rational policy.

If you tell the truth, goes the adage, "you don't have to remember your lies." Well, what could be more logical than this?

Honesty will do two things for you. First, it will keep you away from troubles. In 2004 Wesco meeting, Charlie said this artfully -

*"We think there should be a huge area between what you're willing to do and what you can do without significant risk of suffering criminal penalty or causing losses. We believe you shouldn't go anywhere near that line. You ought to have an internal compass. So there should be all kinds of things you won't do even though, they're perfectly legal."*

In business and in life there are many instances where there's a fine line between what's ethical and what's legal. In such situations, honesty is a great decision-making tool.

In the words of Wendy Munger, Charlie's daughter, "The lesson of his [Charlie's] business life is that you don't want to do business with people you can't trust. The economics are irrelevant if you don't have trust. Most people are just thinking about the economics, thinking that the contract will save you when entering into a transaction with someone you can't trust. You must do business with high-grade people - that's all he will deal with."

The second unseen benefit of being honest is that it will bring opportunities as it did for Buffett and Munger. But it takes time for those opportunities to transpire for the game of building trust is a very long-term proposition. It's like compounding money. On one occasion Munger advised -

*"I think track records are very important. If you start early trying to have a perfect one in some simple thing like honesty, you're well on your way to success in the world."*

Every incremental act of honest and transparent behaviour accumulates slowly and compounds - first gradually and then crazily. Unfortunately, the snowball of trust is extremely sensitive to dishonesty and unfairness. It takes a lifetime to build reputation, observed Buffett, "and a second to lose it all."

You earn trust by deserving it. The safest way to get what you want, says Munger, "is to try and deserve what you want."

Want a good business partner? Be a good business partner yourself and sooner or later you'll find a partner you deserve. And this holds true for life partners as well. For friendship too.

Munger again -

*"It's such a simple idea. It's the golden rule so to speak: You want to deliver to the world what you would buy if you were on the other end. There is no ethos, in my opinion, that is better for any lawyer or any other person to have. By and large the people who have this ethos win in life and they don't win just money, not just honors. They win the respect, the deserved trust of the people they deal with, and there is huge pleasure in life to be obtained from getting deserved trust."*

Dealing with honest people is easy and highly efficient. Lengthy legal contracts don't take away the stress associated with being unsure of other party's conduct in future? An environment of mutual trust takes away a lot of friction - the friction created by second-guessing and doubting.

Over long term, honesty turns out to be a very profitable strategy. If you can find a business which is investing in building relationships that are based on seamless web of deserved with its customers, suppliers, vendors, shareholders, and employees, you've found a business with a strong moat. A moat which is hard to identify with numbers and hence not visible to Mr. Market.

The world believes that most negotiations are zero-sum games and the side with better leverage should shoehorn the last bit of value from the transaction. This worldview is dangerous, argues Craig Shapiro in his recent article on the topic of negotiation.

I see a connection between Shapiro's insights on negotiation and Charlie's seamless web of deserved trust. Shapiro writes (emphasis mine) -

*"The winds shift so quickly in the business world that even when you feel invincible, you are still vulnerable – you just don't know it. If you spend your life extracting as much value from people when you can, do not be surprised when people don't want to help you when you get knocked down. Some of the most successful people are also the most generous.* ***They always leave something on the table for the other side.*** *They do this even when they have maximum leverage. They do this because they know what it is like to be on the other side of the table. They do this because they believe in fairness more than winning. The key is realizing that in a world where most projects are not zero sum, how things are negotiated upfront sets the stage for how the relationship will play out in the long term.*

*The next time you find yourself negotiating, and you have a lot of leverage, consider finding middle ground. Not just to be a nice person. But because it will ultimately produce a better long-term outcome."*

Peter Kaufman, the author of Poor Charlie's Almanack, runs Glenair Inc., a manufacturer and supplier of military and commercial connectors. In his business, there are times where he doesn't need to place orders to his suppliers for extended periods of time. However, many vendors find it hard to stay afloat without regular income. In spite of it being uneconomical, Kaufman ensures a steady pipeline of order for his vendors. He looks at it as an investment for building a long-term relationship with its channel partners. He's willing to leave money on the table.

Now to leave something on the table it's important to know what you're leaving on the table is of value to the other party. It's easy to win a poker game if you know the hands of the other players, argues Kaufman, "The same goes for the game of business. If you take the time to understand the needs of the other players – such as customers, employees, and regulators – you will have a winning advantage, said Kaufman. The real work in business is not learning spreadsheets or terms. The real work in business is seeing through the eyes of your counterparty groups."

The lesson: Treat partners well at all times and they will reciprocate.

Reciprocity, the tendency to return the favour, is a strong psychological force in human nature. Robert Cialdini, in his wildly popular book Influence, has classified reciprocity as one of the most powerful weapons of persuasion.

Whether it's business, investing or personal relationships, the biggest and most enduring moat one can aim to build is the seamless web of deserved trust.

# Behaviouronomics: First Conclusion Bias

*The moment a sperm enters the human egg, the doors are slammed shut. Our brain is like a human egg. As soon as an idea impregnates the human mind, it closes its doors for other ideas. The first explanation that comes to mind makes us blind towards other more plausible possibilities. Unfortunately, in our complex world, the first conclusions are almost always deceiving.*

Recently, I was accused of being unethical and a liar.

Here's the backstory. On a Friday before the new year eve, at 9 PM, a gentleman knocked on my door. He claimed that my car had hit his car in the common parking area. To show courtesy to a fellow resident, let's name him Mr. M, I agreed to cooperate and find out more about the incident.

"Did it happen in front of your eyes?" I asked him.

"No. I was away on Christmas vacation. The security guard in my block called me and told me that your car had hit my car." Mr. M said. There was a hint of impatience in his reply.

"I see. Did the guard actually see the accident?" I probed further.

"No. But he was informed by another person who was witness to the accident." He seemed annoyed that I am wasting his time with this useless conversation. Mr. M expected me to accept my mistake immediately and compensate him for the damage.

His argument went like this -

1. The dent in his car had traces of red colour.
2. My car is red coloured.
3. My car parking slot is right behind his parking.
4. There were scratches on the bumper of my car.
5. Someone saw it happening. Although, we didn't exactly know who that informer was.

My father and I are the only two people who drive my car. So I mulled over following possibilities -

1. A different red coloured car did it, and the informer was mistaken.
2. The car wash guy, who takes my car keys every Sunday, did it. To save himself he gave the wrong information to the security guard.
3. Since I didn't remember doing it, I might have been sleepwalking while driving.
4. Since my father also couldn't recollect doing it, he was sleepwalking.

I am pretty sure that sleepwalking gene isn't there in family blood. Nobody in my family has been spotted sleepwalking. No yet. So I had to rule out the third and the fourth option from my list.

But Mr. M was convinced to his core that I was lying through my teeth. His wife soon joined him.

"I'll pay for the damages if it's confirmed that my car was involved. But let's first investigate what exactly happened." I tried to be polite.

"What other proof do you want? First, you hit our car which is irresponsible driving and now you're denying it which is highly unethical." Mrs. M raised her voice.

She even explained (in an animated way) how I had rammed into their vehicle while reversing my car. They hadn't witnessed the mishap, but in their mind, they had simulated the scene vividly, many times over.

After thirty minutes of heated discussion, I finally traced the person who had informed the security guard. He promptly navigated us to another red car parked nearby - the real culprit. The other car owner apologised and agreed to settle the matter.

The weekend episode got me thinking. From my vantage point, Mr. M's behaviour appeared as outright stupid and immature. But that's how the human mind works. Our minds jump to conclusions. The gentleman fell for something called **First Conclusion Bias**. Based on the first few facts which were "made available" to him, he latched onto the first conclusion his mind arrived. It was so convincing that he refused to consider any other possibilities.

It's a natural human tendency. We tend to solve problems by using the first solution that comes to mind. Charlie Munger, in his no-nonsense style, compares human mind to a human egg. He says -

"Human mind is a lot like the human egg, and the human egg has a shut-off device. When one sperm gets in, it shuts down so the next one can't get in. The human mind has a big tendency of the same sort."

So what explains homo sapiens' special affinity towards first conclusions?

Well, evolution has wired our brains in such a manner that it avoids anything which depletes the energy. And nothing consumes more energy in the brain cells than an unresolved observation. Unexplained events are calorie hoggers for our grey matter. Our genes are programmed to conserve energy and embracing the first answer to any problem is a very effective strategy. That's why we all jump to conclusions by making inferences and assumptions in most things we do in life, and it often helps us.

It isn't that what first comes to our mind (the first conclusion) is always wrong. But what hurts us is that the existence of what first comes to our mind leads us to feel more certain than we should be that it is correct. In fact, mistakes are much more likely when people are unaware that they have jumped to conclusions, and instead think that their assumptions are actually facts.

First conclusion bias can be very dangerous especially in places like medical profession. Medical professionals often jump to conclusions. Jerome Groopman, author of How Doctors Think, says that "most incorrect diagnoses are due to physicians' misconceptions of their patients, not technical mistakes like a faulty lab test."

Groopman explains that many doctors jump to conclusions in the following ways –

1. They assume the patient will state all relevant symptoms (or are forced to make an assumption due to thinking that seeking further personal information may lead to embarrassment),
2. They assume the patient will not want to undergo any unpleasant (albeit effective) treatment,
3. They assume the patient is a hypochondriac and therefore do not take their complaints seriously, or
4. They make a diagnosis even though they have not heard or understood all of the complaints and for whatever reason do not ask for clarification.

## In Investing

Stock market investing is fertile ground for situations that trigger first conclusion bias. In the era of cheap data and superfast Internet, access to financial information (and opinions) is easy. Finding a convincing explanation to every observation in the market is just a matter of few taps on your smartphone. Isn't it?

Why did market go down by 5 percent today? Why is XYZ stock is available for so cheap in spite of the tremendous growth potential?

Tune into any source - TV, newspaper or social media - and you'd find a simple explanation for all such questions. No wonder, 'jumping to first conclusion' is one of the favourite sports of most people participating in the stock market.

Getting most of our plausible explanations from headlines - WhatsApp groups, Twitter, and Facebook - can hurt us gravely.

## Overcoming First Conclusion Bias

Our brain needs to be trained to recognize and avoid first conclusion bias. One way to do that is to avoid seeking easily available answers to questions that begin with "why."

Professor Sanjay Bakshi, in his interview with Safalniveshak, spoke about a very relevant example. He said -

*Let's look at this hypothetical stock. It has substantial cash on its balance sheet. It has no debt or other liabilities which have a prior claim on that cash. It also has an operating business. But the market value of the company is less than cash assets alone. This is a "cash bargain."*

*Many of my students when they look at this thing, they say, "My God, this is not possible! How is it possible that in a market that is supposed to be efficient, you are seeing a stock selling below cash?"*

*They want to buy it based on their first conclusions. But under what circumstances would that first conclusion be wrong?*

*You see, the mind does not automatically think in those terms. The mind, instead, latches on to the first conclusion, which, in this case, is that the stock is ridiculously cheap, so it must be bought.*

*Now, I tell my students, "Let's force ourselves to think of three reasons why buying such a stock would be a mistake."*

*They have to come up with three reasons. Why three? Why not one? Why not four? Well, three is good enough! The idea is to force yourself to come up with multiple reasons that go contrary to your first conclusion and only when you force your mind to come up with three, will it generate three very good reasons. So what are the three reasons for "not" buying that cash bargain based on your first conclusion that it's cheap?*

*Reason 1: Cash burn: Maybe the operating business is losing money and cash will be dissipated away in just a few quarters. This is what happened to dotcoms after that bubble burst. Many companies had raised cash in the IPO bubble and now that the bubble had burst they were selling below cash. There wasn't any debt because no sane banker would lend such startups any money. But the operating businesses were burning cash at a rapid pace and it was only a matter of time when the cash would disappear. Buying such "cash bargains" when they became available in the stock market, would have been a mistake.*

*Reason 2: Corporate misgovernance: What if the promoters of the company are well-entrenched because they have a 70% stake, and they have no intention of sharing the wealth of the company with the minority investors? They pay no dividends, and will never liquidate the company. What's such a company worth? This company is what Benjamin Graham once called the "frozen corporation" which will never be liquidated and will never pay a dividend. Then what the company owns is irrelevant for minority investors, isn't it? So just because the stock is selling below cash assets alone doesn't necessarily make it an attractive investment.*

*Reason 3: Bubble market: When the markets are frothy, people desperately looking for value gravitate towards "cash bargains" because they are evidently cheap. Well, they are almost certainly making a mistake because history shows that when the markets decline, these stocks will also decline, often by much more than the market. So, now we have three very good reasons for not buying* *the stock and we can now have a much more balanced debate about whether or not we should buy it.*

*We have trained ourselves out of first conclusion bias. And you have to do this automatically, like breathing. To question your first conclusions by thinking forcefully about why they could be wrong – by doing this over and over again – you will become a better thinker, decision maker, and investor."*

Professor Bakshi, in his interview with Shane Parrish, divulged another great hack. He said that we should use the word "Part of the reason is" frequently while thinking about problems. This practice subconsciously trains the brain to keep looking beyond the first few available answers.

Remember, the real insight comes when you're willing to dig deeper. If the available information could explain everything, then everyone would be rich in the stock market.

## Conclusion

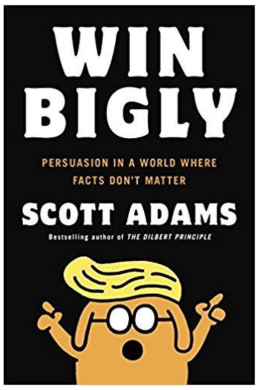
Don't try to explain things by thinking of one reason and then latching on to it. Big outcomes are rarely caused by one reason. Ask "what else can cause this outcome."

I'll leave you with this thoughtful quote from Arthur Conan Doyle, creator of the legendary fictional character Sherlock Holmes. He said -

*"There is nothing more deceptive than an obvious fact."*

# BookWorm: Win Bigly

*Trump's win in 2016 U.S. presidential election came as jaw dropping surprise. Those who concluded that Trump was nothing but a lucky clown, missed one of the most important perceptual shifts of present times. If you're curious and open to changing your world view to become a better decision maker, Scott Adams' book is for you.*




Trump's win in 2016 U.S. presidential election came as a jaw-dropping surprise. If you concluded that Trump was nothing but a lucky clown, you missed one of the most important perceptual shifts of present times. If you're curious and open to changing your worldview to become a better decision maker, Scott Adams' book is for you.

For most Americans, it was a non-event when Donald Trump announced his candidacy for President of the United States on June 16, 2015. People brushed Trump aside as a novelty and sideshow. They thought of it as another of his attempt to create controversy. So it wasn't a surprise when Nate Silver, the most respected political forecaster in the United States, put Trump's odds of winning at 2 percent in his FiveThirtyEight.com blog. However, a cartoonist sitting in the west corner of North America challenged the conventional wisdom.

On August 13, 2015, Scott Adams, creator of wildly popular comic strip Dilbert, predicted in his blog that Donald Trump had a 98 percent chance of winning the presidency. Political pundits sized up Trump based on models, numbers, and statistics. Adams spotted something unusual. He saw an powerful talent stack in Trump, i.e., his business background, a vast experience as a hardcore negotiator and above all his extraordinary persuasion skills. Adams writes -

*"I saw it as Trump recognizing that people don't use facts and reason to make decisions. A skilled persuader can blatantly ignore facts and policy details so long as the persuasion is skillful. I also believed that Trump—the Master Persuader—was going to do far more than win the presidency. I expected Trump to rip a hole in the fabric of reality so we could look through it to a deeper truth about the human experience. And he did exactly that."*

For 15 months leading up to Trump's win, Adams dissected Trump's every move through the lens of persuasion principles. Every time Trump seemed to embarrass himself in public, and the crowd gasped in horror, Adams saw it as Trump's artfully crafted persuasion blows on unsuspecting opponents and naive voters.

Although the backdrop of this book is political and Donald Trump stands as the protagonist of the story, the true value of the book lies in the persuasion principles that Adams has weaved adeptly in the Trump story.

*"I invite people of all political perspectives to enjoy this book without getting sidetracked by politics. I won't be discussing policies except in the context of persuasion. This book isn't designed to change your mind about politics or about Trump. All I hope to do is teach you some things about persuasion by wrapping it in an entertaining first-person story."*

## Why Trust a Cartoonist?

The world is full of forecasters who were right once in a row. Maybe Scott Adams is one such guy who got lucky. After all, he had no background as a political commentator. I think there are two reasons why you should listen to Scott. First, he has been using many of the persuasion tricks in his writing career since last three decades. Being a cartoonist, it takes real talent to make people laugh using very few words. So even if Trump didn't win, there's a lot of merit in what Scott has to teach on the topic of persuasion. Second, and most important, is that he had no hidden agenda or incentive to support Trump. In fact, his income from speaking assignments went to zero the moment he started commenting on Trump. Not only that, all his new contracts for Dilbert publication got canceled. In spite of that, he went ahead with his Trump project.

*"...when it came to communicating what I knew, I had one enormous advantage that almost no one else covering the election had: I wasn't doing it for the money. I'm already rich. No one owns me. The common business term for that situation is having F-you money. And I have it. That gave me the freedom to say whatever I thought was both useful and true. And thanks to my popular blog at Dilbert.com, I had a direct channel to the public. I also knew there would be plenty of haters coming at me as soon as I started saying good things about Trump's talents. And come after me they did—amateurs, professionals, and paid trolls alike. Luckily for me, I had a three-word philosophy beginning with F and ending with "money" that covered that situation. And I made sure my readers knew that's how I was thinking. The freedom to say whatever I wanted to say—and to do it publicly—was half the fun."*

Charlie Munger has always talked about the power of incentives and how they affect people's ability to make right decisions. Whose bread I eat his song I sing, goes the adage. It's almost impossible to hold an unbiased opinion when one isn't financially independent. When you listen to Munger's speeches, you can sense a similar sense of "I don't give a damn" attitude. And that fearlessness is the key ingredient for having a fiercely independent thought process.

## A Different Worldview

The strangest secret that this book (and Trump's win) uncovered is that sound logical reasoning based on verifiable facts counts far less in determining how we humans perceive our world.

*"The common worldview, shared by most humans, is that there is one objective reality, and we humans can understand that reality through a rigorous application of facts and reason. The only wrinkle with that worldview is that ... we assume the people who disagree with us just need better facts, and perhaps better brains, in order to agree with us. That filter on life makes most of us happy—because we see ourselves as the smart ones—and it does a good job of predicting the future, but only because confirmation bias (our tendency to interpret data as supporting our views) will make the future look any way we want it to look, within reason."*

Let me remind you Charlie Munger's words - To a man with a hammer, everything looks like a nail. Most people look at the world based on small set of beliefs. Persuasion is not one of them. Encountering something which defies our worldview, triggers massive cognitive dissonance. Cognitive dissonance is a state when our brain goes on an involuntary rationalizing spree to resolve the contradictions. Instead of changing our beliefs and mental models, we get busy fooling ourselves and slip into the comfort of delusions.

*"I knew that candidate Trump's persuasion skills were about to annihilate the public's ability to understand what they were seeing, because their observations wouldn't fit their mental model of living in a rational world. The public was about to transition from believing—with total certainty—"the clown can't win" to "Hello, President Trump." And in order to make that transition, they would have to rewrite every movie playing in their heads. To put it in simple terms, the only way Trump could win was if everything his critics understood about the true nature of reality was wrong. Then Trump won. That's what I mean by "ripping a hole in the fabric of the universe." Think of it as the moment your entire worldview dissolves in front of your eyes, and you have to rebuild it from scratch. As a trained persuader, I found this situation thrilling beyond words. And I was about to get a lot of company, once people realized what they were seeing. I'll help you find the hole that Trump punched through the universe so you can look through it with me to the other side."*

Do you remember Trump's suggestion to build a wall on U.S. border to stop illegal immigrants? Wasn't the idea impractical? It was utterly ridiculous. Prima facie, it showed how naive Trump was. However, looking through the lens of persuasion, you'd realize that Trump said those crazy things deliberately.

*"When Trump said he would deport millions of undocumented immigrants who were otherwise obeying the law, his critics saw it as the beginning of a Hitler-like roundup of the people who are "different" in some way. I saw it as a thoroughly impractical idea that served as a mental "anchor" to brand Trump as the candidate who cared the most about our porous borders and planned to do the most about them. Never mind that his initial deportation plan was mean, impractical, and—many would say—immoral. Trump's position gave him plenty of room to negotiate back to something more reasonable after he was in office. That's exactly what happened, even if you don't like where he ended up. As I write this, President Trump's current immigration policy is focused on deporting undocumented immigrants who committed serious crimes after entering. His critics probably felt relieved because his opening offer (mass deportation) was so aggressive that his current policy seems more reasonable than it might have without the opening offer for contrast. That is classic deal making. You start with a big first demand and negotiate back to your side of the middle."*

That's just one small shot from Trump's arsenal of persuasion weapons.

The thing about persuasion is that it works even if the subject recognizes the technique. Everyone knows that stores list prices at $9.99 because $10.00 sounds like too much, writes Adams, "It still works."

My brain went into a tizzy when I realized that Scott was using persuasion techniques to explain how persuasion techniques work. A meta-persuasion if you will. Sample this -

*"So why did I say Trump had exactly a 98 percent chance of winning when I couldn't possibly know the odds? That's a persuasion technique. You saw Trump use the intentional wrongness persuasion play over and over, and almost always to good effect. The method goes like this: Make a claim that is directionally accurate but has a big exaggeration or factual error in it. Wait for people to notice the exaggeration or error and spend endless hours talking about how wrong it is. When you dedicate focus and energy to an idea, you remember it. And the things that have the most mental impact on you will irrationally seem as though they are high in priority, even if they are not. That's persuasion. If I had boringly predicted that Trump would win the election, without any odds attached to it, the public would have easily shrugged it off as another minor."*

## Why Should an Investor Read This Book?

As an investor, it's crucial to decode what company's promoters and management communicate to investors. These people are shrewd businessmen and master negotiators. You are never sure if you can take their words at their face value. They have all the incentives to use persuasion skills to have their way with all stakeholders including minority shareholders, i.e., you. If you aren't aware of the most common persuasion principles and tricks, says Adams, you're like a man with stick fighting against a flamethrower.

To call Scott's Trump journey a roller coaster ride would be a mild way to put it. Once you start reading Win Bigly, expect a shattering blow on your worldview. You'll need to put a seatbelt on your brain.

Good luck!

# InvestorInsights: Saurabh Madaan

Saurabh Madaan is a Silicon Valley-based investor and a Senior Data Scientist at Google. He is well-known in the investing world for his more than 30 interviews with the world's best investors through Talks@Google investing series.

Saurabh also teaches an award-winning Leadership and Teamwork course at Google, has previously addressed the global One Young World Summit to talk about leadership and education, with the likes of Richard Branson and Muhammad Yunus. Saurabh holds a B. Tech from IIT Madras (2006), MS in engineering from the University of Pennsylvania (2008), and MS in Physics from the University of Waterloo (2010). He was Literary Secretary and editor at IIT Madras, and the recipient of graduate scholarships at both Penn and Waterloo.

Over to Saurabh!

**Safal Niveshak (SN): Please share about your background in education and what work do you do at Google?**

**Saurabh Madaan (SM):** I grew up in Amritsar, India. I studied there before going to IIT Madras where I did material science and engineering. Then I got a scholarship to study masters in engineering at the University of Pennsylvania in the US. I had always wanted to study Physics, and did another masters in Physics (University of Waterloo) before I started working at Google.

Currently, I work as a Senior Data Scientist at Google. There is rich statistics and machine learning behind Google's search and ads. My team focuses on the latter. My day job involves simulations, predictive models and business strategy. I am constantly thinking of risk and probabilities, concepts which also translate well in to investing.

**SN: That sounds complex stuff to me. How long have you been doing this?**

**SM:** I have been doing this for about 3-4 years. Before this, I worked in different roles at Google including leadership, program management, and human resources (known as People Operations within Google).

**SN: Given the kind of work you do, what got you interested into reading, investing, and things around Charlie Munger and Warren Buffett?**

**SM:** I didn't get interested in investing directly. I've always been interested in reading. As a child, my father got me a set of books known as Children's Knowledge Bank. He got me six volumes of the series. The books had everything from world history to latest advances in space technology and biotechnology. I loved reading them and that started my love affair with books. I would read everything. I wanted people to gift me books. I've stuck with that habit since. I have always read things that are not just related to my studies or curriculum. I am always trying to learn something more. My interest, even as a kid, was not to top my class but to try and become better every day. And that's really something that continues to motivate me even today.

One of the principles I share with my son is that winning or losing is not important. What matters is getting better every day and giving your best.

**SN: That's a wonderful principle to live with, and something I wish more parents could advise their kids. Anyways, what brought Munger and Buffett to your life?**

**SM:** It was probably at IIT Madras (some time in 2004) when I was watching some interview on YouTube. It was Charlie Rose's show where Mr. Buffett was a guest. I thought he was refreshingly rational as well as to-the-point. In lot of interviews, people can blabber all over the place, but Mr. Buffett had two things going for him. He was succinct, and his arguments were based entirely on logic. As an engineering student, I felt: "Wow! Why don't all public discourses follow this model?" So I started watching more of his interviews and started learning more about him.

It just so happened that he turned out to be a value investor. But that's not why I was reading and learning more about him. It was Mr. Buffett's rationality and candour that spoke to me. But, even after watching all his interviews and so on, I never really had the money to invest. I come from middle-class family background, and my pocket money in IIT barely covered my then phone bill. Also, stock market and investing are not positively looked at in a lot of Indian families. So, it took a few years for me to have a nest egg that I had to think about investing.

**SN: Let's talk a bit about the talks you help organize at Google, especially the ones with the investment legends. Please share a few lessons that you have learnt across these talks. Maybe your biggest three of five lessons that you learnt by listening to or by interacting with these people. The second related question is, which talk really stands out in your experience?**

**SM:** It would be hard for me to say which one talk stands out. I have been making some notes and these are little bit dated because they were made last year. I can go over them with you in a more systematic way.

One lesson that I have learned that applies everywhere is the lesson of *compounding*. When people think about compounding, they think about small amounts of money growing into big amounts over a long time. But a key part of compounding is missed by people. And that is the following - If you look at linear growth of money, which means depositing money at simple interest and compare it with compounding for the first few years, the differences are negligible. But if you take it forward to 20-30 years, the differences start becoming staggering. This concept is very powerful because it applies not only in money. It applies in relationships, goodwill, business, and to building any sort of talent. For the first 5 to 10 years, you probably don't see much in terms of rewards. And this is when most people give up.

I teach a class on leadership at Google. And we talk about how leadership is not about a title or a position. All of us are leaders. Some people ask me if it's not about the title, what is it about? What makes you a leader and makes other people listen to you? In our discussions, we often conclude that the real currency of leadership is *credibility*, not title.

If you have credibility, if people trust you. If people believe what you say, then whatever you say, no matter what your title is, what your position is, you are going to exert leadership influence on other people. That's part one. Then the next logical question is, "Okay, if it is about credibility, then how do I earn it?"

Like love, you cannot buy credibility. That's the interesting part. And credibility is a lot like compound interest and goodwill. It comes by doing things right, consistently over time. That consistency over time is important. Most people try doing things right all the time but if they don't get instant rewards because we are evolutionary and biologically wired so, people stop doing it. That's why, many people around us are probably not the most authentic version of themselves. And the reason is because most people give up along the way as the rewards don't come instantly.

The rewards of credibility are back-ended like those of goodwill, like those of money. So that's been an important lesson that I have learnt from almost all the Google talks. I've also learned this from Tom Gayner, the CEO of Markel. You can look at Markel's book value compounding. It has matched, if not outperformed, Berkshire in book value growth over five, ten, and fifteen years.

Tom lives in a townhouse and drives a Toyota Prius. He could have a much fancier lifestyle than he has right now. I once asked him, "Look, for the billions of dollars that you manage, you could be leading a slightly fancier life?" It was interesting what he said to me after: "Saurabh, since I don't have to worry about my next meal, I work primarily for my reputation." It's *not* fame. It's not *luxury*. You have a reputation that people look up to. So that lesson on reputation, on quality and on people is important.

He also said something interesting. He said, "I have a long-term orientation. I want to associate with good people because it's my experience that usually good people don't suddenly become bad or vice versa."

**SN: To continue with Mr. Gayner's thought that good people don't become bad or, to extend it, bad people don't become good, essentially it means people don't change, right? Of course, people can change their habits and become better at something or they can develop bad habits and become worse at something. But the general underlying theme is that people don't change. Do you see people around you who are on the same path of learning and willing to change and become better thinkers and not really give in to the instant gratification thing? Do you see people changing around you?**

**SM:** I see what your question is. Before I answer that, I think when he says good people don't suddenly become bad, that *good* part was mostly about character. These values, some people say, you inculcate in the first few years of your life. And you conduct yourself with these values over the course of several decades. I am talking about the first 30-40 years here. If you're an honest person, you don't become an honest person overnight. Whenever someone says something, I never take it as an absolute truth or lie. I think of it in terms of base rates. As a data scientist, I am thinking, "Okay, what Tom is saying is probabilistically, if I take 100 honest people who have been honest for 30 years, their chances of becoming dishonest overnight are much lower than the average sample." That's how I interpret it.

Now to your question about instant gratification, I think it relates to what I was talking about first. It's such a powerful thing that you see it all around. The Marshmallow test has proven it that if we can delay gratification, then in long term there's much more to be had from life. And it's also tied in very nicely with this concept of second and third order effects.

Mr. Buffett always asks, "And then what?" If you ask the question - And then what? – that will always help you to think about the next thing which is going to happen afterwards. So, your mind will be tuned to thinking long-term. That's a trick we can all play. I don't see human behaviour changing much. The access to technology and quick-messaging is tricking our minds more towards instant gratification. My personal belief is that human beings have evolved over millennia and this quick change in our personal life due to technology has happened over the last 10-20 years. It's going to take some time in the process of evolution for us to create the harmonious balance between technology and personal well-being. And it's good to be mindful of that. I have some other lessons as well.

**SN: Yeah, please continue with other lessons you have learned through these talks at Google.**

**SM:** From Mohnish Pabrai I have learned a few things. A lot of people think of him only as an investor. I also think of him as an entrepreneur who quickly goes beyond understanding good ideas to executing on them. And when it comes to good ideas, execution is the key differentiator. We live in an uncertain world where everything doesn't work all the time. The beauty of investing is that you do not have to win at every decision. A few good decisions over a lifetime, if I were to paraphrase Mr. Munger, could be more than sufficient for each of us.

Howard Marks told me, "Saurabh, always remember that what *will* happen is not the same as what *should* happen." Everything is probabilistic. So, we should learn to decouple the outcome from the process. You might have picked the right stock and it didn't do well. Your thesis was right. It should have done well but it didn't do well. In the future, if the same scenario comes with the same analytical framework, you should still pick the stock as long as your process was correct. So, you should decouple the process from your outcome.

In the opposite sense, you could have picked a stock and it could have done really well. It could have doubled or tripled but really what happened was very different from what you thought would happen. And your thesis had no bearing on the outcome of the stock. In that case, you shouldn't congratulate yourself too much either. I think of this as a two-by-two matrix where the rows are – was the process right or wrong. And the columns are - was the outcome right or wrong. You get four grid boxes. When you're reflecting on your investing mistakes or investing lessons, you can put all your investments in either of these four boxes, and then think further.

Some of the most powerful things that I have learned are not related to investing. This is where Arnold Van Den Berg comes in. His parents were taken to Nazi concentration camp. He found himself in an orphanage with almost no food to eat. So, he would eat grass just to feel full. As a parent it's a terrifying thought to imagine a child eating grass. What he went through in life was horrendous. He told me what got him through was the power of visualization.

He didn't have any formal college education, but he would visualize himself becoming a successful value investor. He would visualize a picture of him as a very successful person. It was that power of visualization and self-control that got him through. So, he says five things.

First, always seek the truth. Second, develop your own set of principles for which you are willing to make sacrifices. Third, and all Buffett fans would agree, is to be totally focused. Fourth, by practicing your principles you will develop the faith and courage to carry on during tough times. And this is really important. During tough times you don't have circumstances going for you, but you still have your principles to help you. Fifth and the final one that Arnold has lived his life with is – never give up.

When he came home for dinner he had a small book in his pocket. It was called How To Know God by Patanjali. Arnold must be in the mid 70s and he literally supported his whole body weight on his two thumbs. For me to see that was just amazing. This is someone who's connected the spiritual and the psychological to the investor in him. And it's amazing to see that in real life.

Now I don't know if you've read this book When Breath Becomes Air by Paul Kalanithi. This was the hardest Google Talk I've ever done. It has nothing to do with investing. Paul was a very successful doctor, thirty five years of age, about to complete his Stanford stint and start real life. Everyone was expecting his future to be fantastically bright, better than almost everyone else in the field. And he was diagnosed with a life-threatening disease. He knew he had only a few months left. So, Paul and his wife, Lucy Kalanithi, had a discussion. He asked her, "Should we have a kid?" And Lucy, who is also a Doctor, said, "Wouldn't this make your death more painful, if you knew that you were going to leave behind a kid?" That was a very interesting question, but Paul paused, as he writes in the book. He then said, "Wouldn't it be wonderful if it did?"

Here is someone thinking about second and third order effects. If it made my death more painful or if it made the thought of ending my life more painful, wouldn't that be a wonderful thing? If your life is more painful to leave that means you would have lived a life that was more meaningful. There is a lot to learn but if I were to summarize it into one thing it would be to appreciate challenges for the meaning they bring to life. Don't look at them as good or bad. Sometimes, having something that is bad can eventually be a wonderful thing.

Then, finally the lessons from Mr. Munger - honest living, avoiding envy, no self-pity - everything is in the public domain. People asked him, "What does one think in bad times?" He said, "In bad times, your focus should be: I don't have to make one tragedy become more than one. That should be your goal and you should remind yourself so that you don't give in to depression, anxiety and so on."

**SN: Those were some wonderful lessons you shared, Saurabh. Thanks! You see, this is one of the most wonderful things about these investors. Even if you don't end up picking stocks using the principles of value investing, you end up becoming a better human being. There is so much to learn in terms of living a good life just by listening to kind of lives these people have lived. Not just in terms of learning and making money but most of the people that you've talked about have been through tragedies. They've still come up and done well for themselves. Thanks for sharing these lessons. I think they hold a lot of values personally for me also.**

**SM:** Thank you.

**SN: We're seeing rapid technological changes all around. You are at the forefront of these changes and you're also an investor. Since you practice value investing, you also look at businesses from long-term perspective. How do you combine these two aspects in terms of things changing really fast and long-term investing? On one hand Mr. Buffett talks about the concept of sustainable advantages - moats which are sustainable, and on the other hand we are living in a world where**

**most businesses are not looking sustainable. In such an environment, how do you combine the thoughts of investing when businesses are disrupted so fast beyond people's imagination?**

**SM:** I have a mental model that I call, for the lack of a better word, the Octopus Model. Let's take a company which has a technology product, and because technology is prone to disruption, its shelf life is very small. This means any new technology can come up. And as you said, value investors stay away from the fact that a new company could come up any day and break this technology with a better one or a cheaper one. So, there is no moat as Mr. Buffett might say. Therefore, value investors typically would stay away.

Now let's do a small thought experiment, in the spirit of Einstein. Let's say that this company now has not one product of technology but a few products on technology. And it also reduces its profit margins. Instead of making a 20-30% profit margin, this company makes minimal profit margin. In our thought experiment, two things should happen. One, the multiple lines of products, if they are interrelated and reinforce each other, should start creating some sort of a competitive advantage. Second, the reduced margins. What do you think the reduced margins would do Vishal?

**SN: I think low margins would create a barrier for new players from entering the market. If the incumbent is working and sustaining on lower margins, my understanding is that it creates a moat. In some way it inhibits competition because competitors are looking at industries with high profit margins and not challenging industries with low profit margin. So, this is what my understanding is. I am not sure if that's right.**

**SM:** Yes, you are right. If someone is making low or no margin, you must lose money to compete with them, assuming you cannot come up with a better technology. Moreover, if the number of technologies and products is more than one and they are related to each other, you must make three of them and lose money on three of them to compete with the incumbent. So, this adds some durability in an otherwise vulnerable situation. There is less incentive for competition to come and lose even more money. Now the shelf life, the lifetime of this company could be, probabilistically speaking, more than the previous company that we had talked about. Therefore, as a value investor it makes sense for you to at least try and look at it because its lifetime is going to be longer than a typical company, and that gives you the opportunity to invest in it at the right time.

The other thing I would add is the effect of scale on longevity. If you are delivering your product not just to one person but lots of people. You have a huge network and network effects start showing up in wonderful ways. A new competitor must first develop multiple products, then at low margin, then gather millions of users to compete with the incumbent. So there is some first-mover advantage beyond a critical mass. You can displace one product, one technology but to do it over all products, all interrelated technologies, across billions of users is going to take time and effort. You can still do it. It's not impossible but base rates start declining.

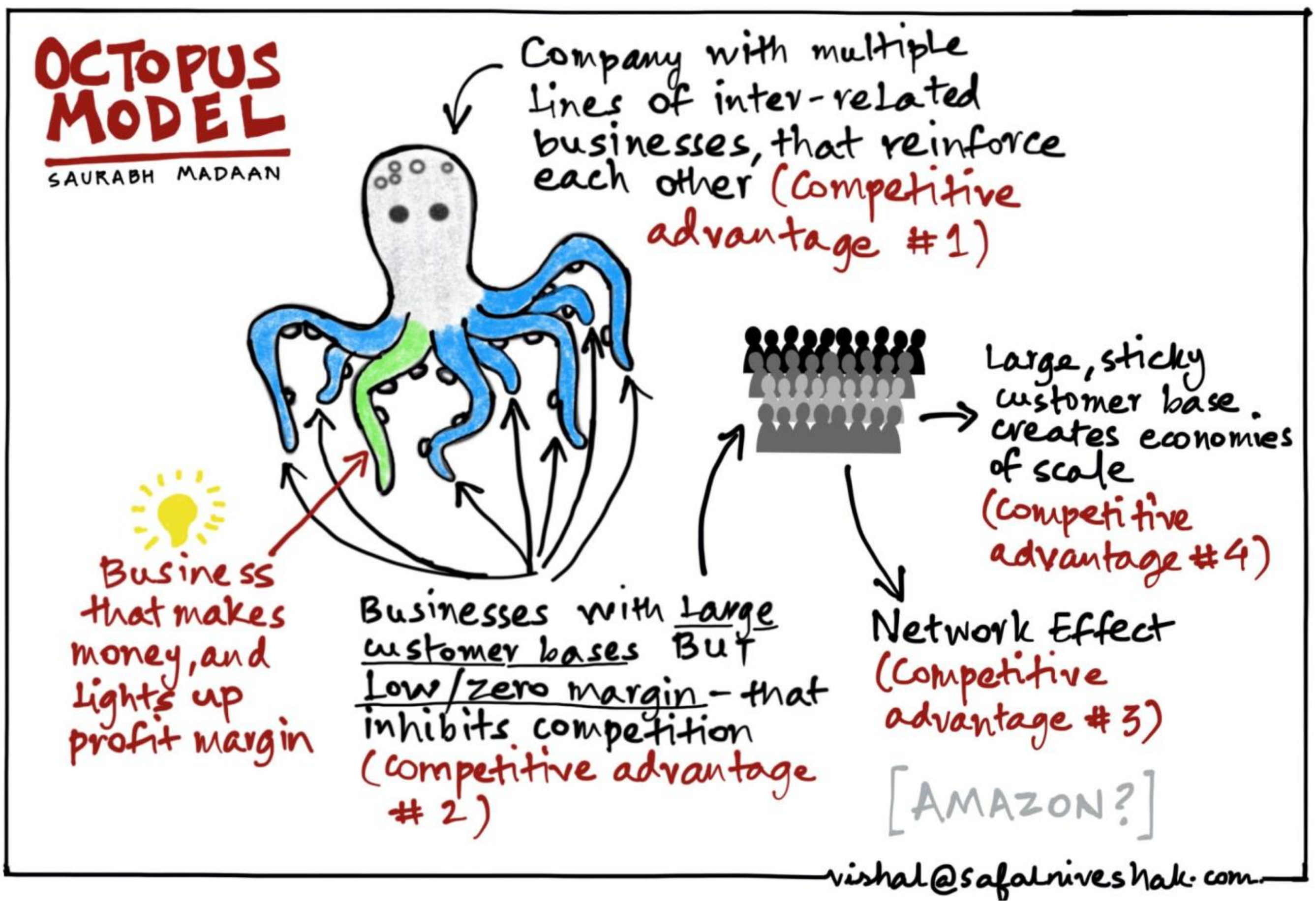
Once a company has reached this, it can add an incremental line of product out of which it lights up profit margins. It starts making money. But this line of business is behind the first four or five lines of businesses that were basically low margin. Let's think Amazon in this case. Amazon has very low (almost negative?) margin on Kindle devices. It gives free shipping to Prime Members, who also have free access to Prime video library and all sorts of other value-added services. But Amazon makes a ton of money on Amazon web services (AWS), on third party merchandise and on third party advertising.

You can see how these several lines of business where Amazon doesn't make money help it attract and get a sticky customer base. This gives the same economies of scale where you add the Nth line of business and you can light it up with profits. This is almost, in my mind, like Colgate Palmolive. If you were looking at Colgate, instead of looking at their annual revenue growth or profit growth what you should be focused on is that they have the shelf space across all the retailers and when they add a new line of product, let's say a shampoo, even if they have spent 10-20 million dollars researching it, the incremental returns on capital on that business are so huge. Because of the network and brand, other things take care of itself.

I call this the Octopus Model *(see illustration on next page)* where all these lines are the reach of the octopus, building connections with the users. I feel this is one of the many patterns or mental models that as value investors one might want to have. Through your mental models you gain some insights, first or second order. Here we are not talking profit margin and linear growth and revenues. We are not doing any of that modelling. But we're trying to get to an insight about the business that is not dependent on precise numbers, but could lead to a better predictive outcome than other quantitative models. If you have an insight like that in any business -- we just used technology as an example because you asked me -- I think that could differentiate you as a value investor.

**SN: Wonderful insights, Saurabh. I can see delayed gratification here where a company is losing money across business, across different areas and because of which it's inhibiting competition. But it's willing to hold its ground and sustain business for few years to be able to see profits and then it's a different story altogether.**

**Since you talked about Amazon, it reminds me of Jeff Bezos who mentioned that the only sustainable advantage that a business has is long-term thinking. If you are thinking in terms of 1 to 3 years, then you are thinking like everyone else. But if you are thinking in terms of 7 to 10 years, then you are thinking uniquely. It's a very valid point that you made. My feeling is that it applies**




**so well, not just to technology but to any industry, any promoter, any management who in an era of shrinking attention span and shortening business cycles is willing to think long term.**

**SM:** Absolutely, and the other nice thing about this is what Mr. Buffett says, "The secret...is to sit and watch pitch after pitch go by and wait for the one in your sweet spot." If I might add something to it – you can decide the time at which you are going to swing your bat. What I mean by that is there are various stages in the life cycle of the company that you just talked about. You very rightly connected it to delayed gratification which is the key here. If a company is building one product, one line of business and if you invested at that point and it did well, you'd make a ton of money. But a lot of such companies may not make it to the stage of the Octopus that we were talking about. You can even identify this pattern happening at a later stage. After the critical mass is reached, your margin of safety has gone up so much and your chances of permanent loss are so little that you can then decide to swing. So, you don't have to swing at every stage of the game either. It is very interesting in that sense.

**SN: Great! Let us talk a bit about your personal investing. Do you invest in stocks or is it some other way? Do you really apply your learnings in value investing to identify stocks? And the second thing is, since you're so close to the technology industry which is changing the world, are you largely invested in technology or have you diversified outside the area?**

**SM:** I believe that the reading gets you only 10% of the way. The remaining 90% is in the doing. It would be very hypocritical of me if I were to not follow what I believe myself. Most of my net worth is invested in the stock market, with the exception of my home. I have been investing for a better part of the decade now. I try not to write or blog about stocks. I think you must be aware of the things that help you become a better investor. I don't want to be subject to several biases that can come as a stock investor. This might change over time, but I want to stay true to what I feel at a certain point in time.

To your second question, I don't think of myself as a "tech person". I think of myself as anyone else who is trying to learn more and become wiser about the world. I happen to work in Silicon Valley right now and that gives me exposure to businesses in this part of the world. But I read a lot across all sorts of companies. Whether it's an insurance company, a bank, a homebuilder, an automobile company or a travel business. I don't have mental blocks in terms of learning. I don't learn with the agenda that I am going to invest. I learn with the agenda of learning. I love reading about businesses. So, I will read about every business that I can find. If you send me something related to any kind of business, I will go through it.

This is an evolving process. I'm learning a lot every day. Investing to me happens as a second or third order thing where you've been reading for a while, you have been reading a bunch of things and then suddenly you make a connection and you feel that, "Oh! No one is looking at it from this angle." Of course, you can also do DCFs, data analysis and all of that. But once you have an insight, that is when your risk of permanent loss of capital is low, and the numbers back your narrative, then you can decide to swing. It happens very rarely. But when it does, I've learned to swing.

**SN: My experience also tells me that one does very well in investing when one disconnects from investing and looks at things outside investing. So, as you rightly said, we must keep an open mind and become learning machines, and let the insights come to us automatically. It makes more sense than being 24x7 connected to investing and searching for those next big ideas. Because when you are actively into that process, it's very difficult do to that. It's like building muscles. You build muscles when you are resting between your training sessions, not when you are working out in the Gym.**

**Anyways, you've talked about learning. You're an ardent learner. Since you read a lot, how do you retain what you read? Do you have any specific system for making notes and keeping track of what you've read?**

**SM:** I'll share some tools that I use. I believe it is helpful not to become a slave of a style or technology or process. I have friends, some of who passionately debate that one should always read hard copies of books. Another friend says one should have a Kindle because it's more portable and so on.  My view is that you should be flexible. Absorb in the medium that is accessible, without becoming a slave of the medium. If it's a PDF, start reading the PDF. If it's a book, start reading the book.

More importantly, learning, especially in investing and even in life, doesn't happen just during the reading time. It happens a lot during the reflecting time. If you spend an hour reading, you should ask yourself how many hours did you spend reflecting? Think about what Mr. Buffett has said, "We know no one else who spends as much time just reading *and thinking* as us." The reading part is one, but the thinking part is equally, if not more, important. I try, whether it's during walks or whether it's during downtimes, to think and connect different things. And in that it's hard to build a system because if you have a system, you'll only connect based on those rules. These connections must be a little bit serendipitous. So, having a system kind of defeats the purpose. What you can do is you can have a system that says, "Ok! I have to spend some time reflecting." You do it regularly, whether it's writing in a journal, whether it's just thinking about today, whether it's reflecting on the books that you've read in the last seven days. Whatever system works for you, have something that accomplishes the task.

**SN: Serendipity in learning makes great sense. Do you believe in making notes of what you're reading?**

**SM:** I believe that you don't have to make notes on everything. If I were to start making notes on every newspaper article, and some people can do that and can do it very well, but it's not me. It would slow down what I can consume and for me being able to read a lot across different fields is important. Having said that, sometimes you just read a book that speaks to you. For me, that happened recently. Couple of years ago, a book came out. It's called Common Stocks and Common Sense by Edgar Wachenheim. I read the book in one flight then I went and underlined everything that I found interesting. Later I bought the Kindle version of the book and I highlighted everything. Then what I did is, the case studies that were mentioned in the book, I went to SEC's website and downloaded all their filings. I did my own analyses just so that I could reproduce the insights that were being talked about in the book. It's was a fantastic process.

Edgar Wachenheim also talks about how he thinks about when the stock market is expensive and not expensive. While you cannot predict what will happen to the stock market, you can at least have some sense of whether it's expensive or not. Being expensive doesn't mean it will go down. It just means that you have a baseline. So, I tried to reproduce that analyses and tried to improvise on it. I emailed the author. Edgar and I met a couple of times. We discussed ideas and we spent half a day together. He is based out of New York and runs a US$ 6-7 billion hedge fund. He's a very nice, humble person. I am digressing, but I am trying to give you a sense that the process of learning does not have to be about underlining and highlighting. It must be a living and breathing process where you get so animated and absorbed in it that you reach what some people call, the flow state. It captures you. And then the underlining and highlighting will take care of itself.

I like to read a lot of transcripts of earnings calls and a lot of annual reports. And sometimes when I am reading ten years of this material for a company, I might want to highlight stuff. I've been using this tool called Bamsec (www.bamsec.com). It's especially helpful for US stocks, where you can highlight text from earnings calls online. I find tools like these very helpful. I keep exploring new tools and technologies that come into the market that are available for all of us. The other thing that I find useful is if you were to look at the 10Ks which are the annual filings of US companies, a lot of the useful information is not in the balance sheet, not in the P&L. It's not even in the cash flow statement. It is in the footnotes. So, I find it helpful to go to the footnotes.

In making electronic notes, I often use the GoodNotes app with the Apple Pencil. You can take handwritten notes, and its search function recognizes handwriting. This can be very useful when looking at your archives for some idea or event.

I read the filings. I absorb all the information. I also do my analysis. I might do a DCF or I might do a spreadsheet. I look at all sorts of accounting matrix like ROIC, growth, capital expenditure, and incremental returns on capital. When I have some sort of an insight, like the Octopus model I mentioned earlier, that I think is not already understood by the analysts or the market, that's where I start getting the confidence to explore more. But really when I look at stocks or businesses, I'm not looking at them with the objective of investing in them today. I am looking at them with the objective of learning and building my base of mental knowledge because I know it is cumulative. I might do something 30 years from today which might be based on the knowledge that I am gaining today. That's really the spirit of my learning process.

**SN: Wonderful! When we use Charlie Munger's principle of inversion in the context of reading, it's more important to figure out which book to abandon rather than which ones to finish. How do you decide that it's a time to stop reading a book and move on to the next one? In other words, what's your process for separating signal from the noise given the fact that there are so many good-looking books or books with good reviews?**

**SM:** My reading process has over time deviated from the linear, cover-to-cover journey. Now, I sometimes start with the table of contents in the beginning or the appendices in the end. If there's a gap in my understanding, then I'll read through the relevant sections or chapters. Because there's lot of repetition, especially in non-fiction books, I don't have to spend my time rereading everything. The goal is never to read a book cover-to-cover. My intent is to learn and test new ideas. If it's a business or mathematics or a physics book, I might read it line by line. But if it's a book on, let's say productivity, or about ideas that I have already read and understood, I will just skim them. I will try to get to the point of what the book is. A lot of books can be summarized better in blog posts. So, I first try to get to the blog post version of the book. Then, if it seems exciting and the parts of it seems exciting, I would go to them. And one thing leads to another. Usually, when you read something, and you discover, "Oh, I don't understand this part," then you read that part too. That's how I really approach it.

Vishal, one more thing here. As far as educating yourself and understanding all the mental models properly is concerned, you must sometimes read everything without bias. That's also important depending on the circumstance. For example, let's say you wanted to get educated on science and you don't have much background in the subject. I know someone smart who took the Discover magazine's articles on science over the last 30 years. These included interviews for each year's Nobel Laureate in the sciences. This person read through all these interviews without discriminating. They didn't say that, "Oh! my interest is in this part of physics, so I am going to read only this article, and this is not interesting, so I am not." Their objective was to familiarize with the key ideas of science, so they did it the survey without bias.

If the objective is to develop a mental model or critical mass of knowledge in a field where you know nothing, then you collect everything that is of importance. And you don't discriminate based on your preferences. I think that's also important. For example, if you are reading accounting, you cannot say that I don't like the balance sheet, and so I am not going to study that.

**SN: What big ideas have you changed your mind on in the last few years? Any big idea that you thought was right a few years back but now you think it doesn't work?**

**SM:** One thing I have changed my mind on is that of linearity in thinking about your career, which I now think is an imprudent thing to do. I am talking especially as a person who makes part of his current living from a salary. Naval Ravikant, who I recently had the pleasure of meeting, said this beautifully. He said, no one gets rich by renting their time. My time has always been precious to me. But it has become increasingly more precious with time. I don't want to rent it out to anyone now, unless it is for what I would do on my own anyway (and get paid for it). What that also means is that you don't look at your career as a linear progression, i.e., you start as a junior analyst then you become an analyst and then a senior analyst. I am not thinking like that anymore. I think each of us is the CEO of the company called 'myself.' You want to have your vision, dreams as the CEO and owner of this company, and you follow the path that you want to.

**SN: What about failures? I am sure when you start your career, probably in a smaller organization or a smaller role, it's very normal to fear failing. But now you've grown in your career and you work for an organization like Google, where I am sure failure is not really scoffed at. What are your thoughts on this?**

**SM:** I have never feared failure. It is an idea that has stood the test of time for me. Almost every failure has been an opportunity to go on to do something better. And I always think, "Okay, what can this teach? How does this make me stronger? What do I learn through this?" That's been a constant in my life.

Another thing that has changed is that you don't have to be the smartest person to succeed. You don't have to be the most capable person. You can always either team up with someone or you can always remember that you are a unique person, so you will bring something unique to the table. And that's all you need to care about.

I did well in my studies. I went to a good college also. All of that happened. But I increasingly realized that, at best, what this does is help you surround yourself with good people. And it gets your foot in the door. But you can accomplish that in other ways that are just as effective. So, what really matters is surrounding yourself with good people and getting better as a person every day. For example, in my current team, I am probably the only person who doesn't have a PhD in statistics or operations research. So, I am far from the smartest person in my team. I know that I am who I am, and I bring something to the table. I know that my life has been different than every other person's in the universe. So, I'll certainly bring something different to the table. And I am comfortable and safe in the that knowledge, and that's all I need. It's something that I have gradually learned to appreciate more and more.

**SN: Wonderful. What about mistakes? Which has been your biggest mistake so far and what lesson did you learn from that one? Maybe an investment mistake, maybe work or career related. Any big mistake that you think you made and you've learned a lesson?**

**SM:** I make lots of mistakes every day. I write a letter to myself at the end of every year, just for my own reading. I reflect on mistakes and what I learned from them. So first, maybe it's easier to start on the investing side. There is this idea that you should be concentrated. And then there is this idea that you should diversify and have more than 30-40 stocks in the portfolio. I had always been more on the concentrated side. That had appealed to me. But in studying various investors, I realized that you can be Walter Schloss and you can still compound at 18-20 percent in the US. And Joel Greenblatt published magic formula with 30 stocks, and showed that you could do 30% a year. Mr. Buffett has compounded with a concentrated portfolio at gigantic rates - about 19-20% over long times. In his partnership years, the rates were even higher, around 30-40% for about a decade or so. So, both are possible. But you should really understand what you want to concentrate on and what you want to diversify. If you are just buying cheap stocks and not all of them have moats surrounding them, then having a diversified strategy is fine. Some of these businesses will not do well and you should expect that. You shouldn't over analyse them. If you buy 30 stocks that are all cheap in a basket, some of them will do bad, some of them will do well. The good part will overcompensate the bad part over time (for Rs. x invested in a stock, you can lose only x, but upside is unbounded). But on the concentrated side, if you want to concentrate, you cannot concentrate on something that is just cheap. You cannot swing at anything that has the risk of permanent loss of capital. Your first priority is to ensure that you won't lose money, so there must be durability around the business.

And you could also do a hybrid approach. So, both work but it's important to not mix and match, not to put coffee when you are thinking of making tea and vice versa.

**SN: What according to you is the most important psychological blind spots that one should try to overcome to become a better decision maker?**

**SM:** Clearly, for me, it's thinking in absolutes. If you start thinking as a data scientist, or someone with background in Physics, it almost happens naturally that you think of things in a probabilistic way. But sometimes when speaking with friends and family, I find that things are conveniently characterized as either good or bad. And causality has hindsight bias -- things either happened because of this or because of that. But personally, when I think of things, I think of them as decision trees with probabilities attached to them.
As an investor, you buy a stock, you think you can either be wrong or you can be right. You could be neither and you could be right while the stock does bad, or you could be wrong but the stock does well. All those outcomes are possible with different base rates. If you can train yourself to think probabilistically, that's very helpful.

Of course, the other roadblock is very well known. It is 'confirmation bias' - we seek information that is consistent with our beliefs. So that blocks all the other information which could help us become a better decision-maker but is counter to our held beliefs.

And the third thing is the process of thinking about failure or unpleasant memories or experiences. A lot of people don't want to go through that pain. Understandably so. In the book Snowball, the author writes about how Mr. Buffett deals with it. He talks about having a "bathtub" memory. All the unpleasant memories swim to the top of the bathtub and they evaporate, and he forgets about them. It's very useful in life to forget unpleasant memories and have positive outlook. That's essential. However, what I am referring to here is the inability to reflect on your mistakes and learn from them. That's a mental blocker because it's emotionally unpleasant. But if you can learn to think of it in positive ways and trick the mind thus, "Hey, I am really not thinking about a failure or a bad thing. I am looking at something that can make me stronger, make me a better person." And once you're done with it, erase the unpleasantness of the memory but retain the lesson. That can be very helpful.

**SN: We are all creatures of habits. We've talked about good habits bad habits and how easy or how difficult it is to change habits over a long period of time. Talk about one habit that you are trying to change right now. What new habit are you working on?**

**SM:** One of the things that I was talking to someone about recently, was that we need to start thinking of life in different areas. At least that's my objective. Family, business, spirituality and health - these are four key areas. Mr. Buffett is definitely a hero in one, but he may not be the right hero in all the areas. I want to take inspiration from best practices in all these areas of life.

**SN: I remember watching Berkshire AGM when it was telecasted live on Yahoo recently, along with my kids. And I had to answer a lot of tough questions around Coca Cola and all that kind of stuff that Mr. Buffett and Mr. Munger were consuming. So I agree with you. Carry on.**

**SM:** Here is what I told my six-year-old, "Look, it's more about happiness. He [Buffett] is very happy. He's so happy in his life. Being happy does compensate for some of this. And he does keep a count on calories." If we keep happy, that is important. Having a balance in these areas, for me, is important. For some it may not be. Somebody might say that for me the only thing that matters is work and business and nothing else. That's fine for them. For me, I want to maintain a balance in all those areas. And one of the areas where I am lacking key balance right now is health. I want to develop the habit of doing some sort of physical activity that's a part of my daily routine. I do meditate. I've run a half marathon. I occasionally try to do stuff. But what I am going to do is what Tom Gayner told me. He said, "Saurabh, my target is to wear my running clothes and go out for five minutes every day." That's all I must accomplish. Scott Adams also talks about habits in his wonderful book How to Fail at Almost Everything and Still Win Big." He says, you should have system instead of goals. So, going out with a running gear every day is a system. Goal-oriented thinking sounds like "I must run at 6 miles per hour for 20 minutes and then run a marathon and then lose 20 pounds by this and this time". The problem is that goals can be self-defeating when missed one time. They can reinforce negativity and unpleasantness that doesn't help you accomplish the original goal. Whereas the system is what Mr. Gayner talked about. Doing something very similar is something I am looking to adopt in 2018.

**SN: I read a book called One Small Step That Can Change Your Life by Robert Maurer. Prof. Sanjay Bakshi recommended it. The book talks exactly what Mr. Gayner mentioned to you. Taking small steps. Five minutes but doing it daily is so important. I realized the benefit by implementing the lessons from this book, specially on the health front. Few years back I was in the same boat as you are. I'm not yet perfectly fit and healthy. But I think that one book and that one lesson - taking small steps but doing it daily - has stood the test of time for me.**

**SM:** Health is so important that we need to start thinking about it differently than the previous generation. The average life expectancy in the western world is 80-90 years. That is with current science and technology. As science and technology improves, life expectancy would continue to rise. We might have much longer lives. Of course, anything can happen tomorrow. But I am talking in terms of base rates. That the base rates on lives might be much higher for everyone living today compared to the base rates when they were born. And what they were trained and the way the school system was designed and so on. So mentally we must start training ourselves to think more longer term than we have been trained to think previously. And therefore, having a better health throughout that long life, having a better emotional stability, is much more important than it might have been earlier.

**SN: Yeah, that's paramount. Anyways, what are some of the books that you've re-read multiple times? Maybe two or three books that you would like to mention that you re-read every now and then.**

**SM:** On the investing side, Mr. Buffett's letters. Like I said, Common Stocks and Common Sense by Edgar Wachenheim. On the psychology and behavioural aspects, Influence by Robert Cialdini. On the spiritual side, The Bhagavad Gita. I especially like the version by S Radhakrishnan. Another book that comes close is Man's Search for Meaning. There are parts of it that are interesting. There are other books which may not be the entire book or even all sections of the books but for example Mindset by Carol Dweck has a chapter on parenting that I might want to revisit once a year or so.

I also enjoy reading biographies. Some of my favorites include Life of Mahatma Gandhi by Louis Fischer, books on John Wooden by Steve Jamison, Ben Franklin: An American Life by Isaacson, Team of Rivals about Lincoln, and of course, Snowball by Alice Schroeder.

**SN: Since you mentioned about Buffett's letters, one of my last questions is a very hypothetical one. Let's say you knew you were going to lose all your memory the next morning. Briefly, what would you write in a letter to yourself so that you could begin re-learning everything starting the next day. What are the most important things that you would you write to yourself in a letter, assuming you know that tomorrow morning you're going to lose your memory?**

**SM:** So first the concept of compounding. And how it applies not just to money and business but to all aspects of life. To relationships and so on. Second, I would write about the concept of critical mass. A lot of the returns in compounding are back-ended. And so are the returns in other areas. You may call this delayed gratification, or critical mass, or something else. But the idea is that do the right thing consistently over time and results will take care of themselves. Don't look for instant gratification. It's also what the Bhagavad Gita says. Focus on the Karma and not on the outcome. Outcomes will take care of themselves.

The third thing I might want to write about is just focus on being a learning machine. And fourth thing would be the process of being a giver that Adam Grant spoke about in his book Give and Take. And fifth would be that emotional and spiritual well-being and meaningful relationships in life are key. Sit a vipassana meditation course at a Goenka center.

If I have those five things written to myself and I am able to focus on them and live my life accordingly, it would be a happy life.

**SN: Who's your favourite contemporary business owner and why? Just to give an example, maybe Jeff Bezos or Mark Zuckerberg or someone else. If you were to bet your money on one person, who would it be?**

**SM:** Honestly, I would think of Mr. Buffett as contemporary as well. He is by far my favourite for a lot of different reasons. He's not only done well with the business and designed it in such a way, he has designed systems that take care of themselves. He has also lived his life in a way that his schedule is free, and he has a lot of time to spend on reading and thinking which most other executives are unable to do. That part of him I love the most.

Talking about others like Mr. Zuckerberg, Mr. Bezos, Larry Page, Sergey Brin - all these people and a lot of the CEOs in India and China - very remarkable people. Look at Jack Ma in China with Alibaba or Pony Ma at Tencent.

They are all very accomplished people. By far my favourite is Mr. Bezos. If you read his annual letters they are also just like Mr. Buffett's letters. They have a lot of lessons about life and thinking in life in general. When he says long term, he really means long term. It's not even five or ten years. It's really long term.

In the book that came out on Amazon - Everything Store by Brad Stone - the author talks about Mr. Bezos talking about building a clock that spans a millennium rather than 12 or 24 hours. Think about it. If you try to visualise a clock which runs across a millennium, you'll barely notice its movement through your lifetime. And because you will notice hardly any moment or very minute moment, the idea of time in your head will change. These are ideas that Mr. Bezos has constantly not only talked about, but he has lived through in Amazon. That is really inspiring.

The way he has run Amazon, it really shows you that he's thinking of second order effects and delayed gratification rather than immediate first order effects. All that makes him stand out in my opinion. And finally, not as a business owner but as a CEO who has made a transition through different stages is Bill Gates.

He is someone to look up to and learn from. After running Microsoft for so many years, the work that he has been doing with Bill and Melinda Gates Foundation and learning just as fast about so many different areas and having such a huge impact on the world. Very few people have been able to do that. Although it's a non-profit, but if you were to think of it as an organisation and the way they are running it, it has some amazing lessons for people to pick up from.

**SN: What are your thoughts on education system? I know you are closely associated with education. You have been teaching underprivileged kids in Delhi on your visits there. And you mentioned that you also take lectures on leadership at Google.**

**What are your broader thoughts on education system and what's good and what's bad and how can the system be improved to enable kids to become better thinkers than rote learners?**

**SM:** Maria Montessori has done a fantastic job in talking about kids and learning. I am a fan of at least the core philosophical idea that let kids spend time in things that help them achieve what we call the 'flow' state. Let them do it disproportionately. I'm not a fan of the current education system as far as linearity is concerned. Pre-kindergarten, first grade, second grade, and so on. I think human beings learn different things at different paces. An ideal education system, whenever it's taking effect at mass level, would allow people to move through their trajectories of life in different fields at the pace that they want to and are comfortable doing.

As someone who is involved with through work, non-profits and also as a parent, I think of the educator's role as one of asking the right questions. Whether I am speaking with Arjun (my six-year-old son), I am generally asking questions to help him discover his learnings.

So, for example, when talking about leadership, I am asking the question - is leadership about titles? Some will say yes, some will say no. And then I'll ask a second question, "Okay! If it's about titles how about this versus that?" And then students themselves read a conclusion.

When I ask what title did Mahatma Gandhi have, everyone is surprised, "Oh yeah! It's not about title." Then we say, "Okay, we agree that it's not about titles, let's think about what it is actually all about?" And that Socratic method of asking question is a very powerful way because then you're not teaching. You are simply facilitating and helping the students discover things themselves.

I wish we could do this more and more in the education system. I know that the demands on syllabus and the shortage of time and the number of students each teacher must deal with, they make it hard. But with advance of technology, with the access that we have to the best knowledge, with this small device, our mobile phones, that holds all the knowledge in the world now, we should be able to do a better job.

Finally, we must take more direct inspiration from the best educators in sports and other fields. Personally, I consider John Wooden a hero. After stints as a high school coach and teacher, he took over as head basketball coach at UCLA in 1948 and led the Bruins to record 10 national championships.

He was the first person to be inducted to the Basketball Hall of Fame both as a player and coach. His consistency as a player and coach proves the importance of having the right *process* in life. New players felt a shock when the first thing Wooden did was to sit them down and teach them how to put on their shoes and socks. Doing this properly was the initial lesson for "everything [the players] would need to know for the rest of our lives."

Coach Wooden said: "*Success is peace of mind, which is a direct result of self-satisfaction in knowing you made the effort to do your best to become the best that you are capable of becoming*."

Notice the focus on effort and process, not inconsistent with the Gita's focus on karma or Mr. Buffet's focus on the "inner scorecard". I would encourage your readers to take a look at John Wooden's pyramid of success, and his brilliant Ted talk.

Those are my broad strokes on thinking about education and learning, but of course this a topic into itself.

**SN: Those are valuable insights. My final question is what would you be doing if you weren't working in technology and what other things are you occupied with?**

**SM:** Like I said earlier, I don't define myself as a person working in technology, but think of myself as someone trying to learn and get better. Technology happens to be one of the things I am currently doing. I spend a lot of time reading, thinking, and learning about different areas. I don't have a grand plan but my broad philosophy in life is – good people and good thoughts.

I believe that if I can associate myself with good people across all fields, whether it's technology, whether it's investing, whether it's science and medicine, whether it's philosophy, and I can surround myself with good thoughts, the outcomes will take care of themselves. In terms of profession, if I were not doing this I could have been a teacher. I could have been a writer. That's couple of things I can think about.

**SN: Thank you so much Saurabh for your time and patience in answering my questions.**

**SM:** Thanks Vishal for taking the time. It was great talking with you.

# StockTalk: InterGlobe Aviation Ltd.

*We explore the business of India's largest and most profitable airline operator and assess the opportunities and challenges it faces.*

***Statutory Warning:*** *This is NOT an investment advice to buy or sell shares. Please make your own decision, as blindly acting on anyone else's research and opinions can be injurious to your wealth. I do not own the stock, but my analysis can be biased, and wrong. I have been wrong many times in the past. I, Vishal Khandelwal, am a registered Research Analyst as per SEBI (Research Analyst) Regulations, 2014 (Registration No. INH000000578).*

## About InterGlobe Aviation Ltd. (IndiGo)

IndiGo is India's largest passenger airline company, with a 40% share of the domestic air travel market. It is also the fourth largest in the world in its category, i.e., low-cost carrier (LCC). Since its inception in August 2006, it has grown from a carrier with one plane to a fleet of 153 aircrafts today.

In an industry marred by huge losses and bankruptcies, Indigo has stood apart with its 60%+ CAGR in revenue and 30%+ in PBT over the past nine years. Not just that, the company has become more profitable as years have passed by. This is reflected in its PBT CAGR of 65% over the past five years, as against a revenue CAGR of 19%.

## Indian Air Travel Industry

India is the world's third-largest and fastest growing air travel market. India's domestic air passenger traffic reached 100 million in 2016, behind only that of the US (719 million), China (436 million) and ahead of Japan (97 million). According to Airbus, the number of passengers flying in the Indian domestic market is expected to multiply by almost six times in the next 20 years compared to 1.5 times for domestic US and almost four times for domestic China. This growth estimate is based on many factors including demographics, increased consumer spending, government initiatives, growth in tourism, etc.

Today, India is the second-most populous country in the world. Our population has grown more than 14% over the past decade to 1.3 billion. Even with such a high population, only about 100 million passengers fly on domestic routes in a year. That is less than a quarter of the size of air travel in China, which has a similar population. One of the reasons is under-penetration. There are many unserved and underserved cities in India, which require reliable air transportation. The Indian aviation industry has a current capacity of just 450 commercial aircrafts serving a population 1.3 billion people. To address this, the Indian Government rolled out its regional air-connectivity scheme (UDAN – Ude Desh Ka Aam Naagrik) under the National Civil Aviation Policy 2016 to ensure connectivity with smaller cities. Subsequently, 43 new airports are likely to be developed – mostly in tier 2 and tier 3 cities – raising the number of Indian airports to 118.

As India is projected to emerge as the world's most populous country by 2022, with more than 50% of its population younger than 25 years old, air travel is likely to increase manifold. Rising affluence is the biggest driver of consumer spending in India. The affluent segment is all set to grow from 8% to 16% of the national population by 2025. The country's burgeoning middle-class is going to lever the growth in air travel.

India's tourism industry is fast-growing and contributes close to 6% of India's GDP. According to the World Travel and Tourism Council, India would form part of the ten fastest-growing destinations across the world for leisure travel. Strong economic growth, expansion of the middle class and growth in tourism are some of the key catalysts to the growth of the Indian aviation market.

## Oh, Airlines!

Before we get into discussing InterGlobe Aviation Ltd. (IndiGo), let me share a few insights from Warren Buffett on airline industry in general. It's pretty known in the investor community that Buffett has had a long standing negative view on airline businesses. He burnt his fingers in an airline stock when he invested $385 million in USAir. That gave him an opportunity to get a closer look at the poor economics of aviation industry. In an interview in 2002, he commented –

*"If a capitalist had been present at Kitty Hawk back in the early 1900s, he should have shot Orville Wright [inventor of airplane]. He would have saved his progeny money. But seriously, the airline business has been extraordinary. It has eaten up capital over the past century like almost no other business because people seem to keep coming back to it and putting fresh money in. You've got huge fixed costs, you've got strong labor unions and you've got commodity pricing. That is not a great recipe for success. I have an 800 (free call) number now that I call if I get the urge to buy an airline stock. I call at two in the morning and I say: 'My name is Warren and I'm an aeroholic.' And then they talk me down."*

Airline is a commodity business. The sale of airline seats is tightly coupled with the price. Often the airlines get into price wars, the consumers benefit, but the airlines go into red. It's an industry marred by numerous factors which are outside the control of the business operators e.g., regulation, fuel prices, business cycles etc. No wonder the base rates of finding a consistently profitable player in this industry is very low. There have been more than 100 airlines who have gone bankrupt since Kitty Hawk.

However, in every such industry, once in a while, you see someone defying the base rates. In the US, Southwest Airlines is one such example. In its 47 years of service, Southwest has remained profitable for an amazing 44 years in a row. It's a track record unheard of. If you see that in an industry marred by poor economics, someone shows consistent signs of profitability along with growth, it's worth paying attention. IndiGo is one such outlier in the Indian aviation space with nine consecutive years of profitable operations.

Anyways, before we get into details, let's first briefly discuss some of the terms which are used for measuring the numbers in commercial passenger aviation.

ASK (Available seat kilometer) is the fundamental unit of production for a passenger-carrying airline. It is a measure of the passenger carrying capacity of an airline flight. ASK is equal to the number of seats available multiplied by the number of km flown. When a IndiGo flight having 100 seats flies from Mumbai to Delhi, covering a distance of 1400 km, it produces a total of 140,000 ASKs. So higher the ASK for an airline, larger is its operation. With this metric it's easier to visualize the efficiency of airline operations. A CASK is cost per ASK. A RASK is revenue per ASK. A lower CASK means it's easier for the airline to make profit as it has to charge less to break even.

Another frequently used metric is ex-fuel CASK. Excluding fuel is a commonly used measure to compare the cost performance of airlines. Due to the volatility of oil prices, airline fuel cost is generally not viewed as controllable. Therefore, management's success at controlling costs is often judged by looking at how the airline's ex-fuel CASK changes from one period to another.

Block hours is another useful metric to assess the aircraft utilization. The purpose of an aircraft is to fly and spend minimum time on the ground. Usually flight hours (the time from the wheel leaving the ground to the time they touch back down) is a more accurate way of measuring the airtime but a block hour is an industry standard. Block hour is the time from the moment the aircraft door closes at departure of a flight until the moment the aircraft door opens at the arrival gate following its landing.

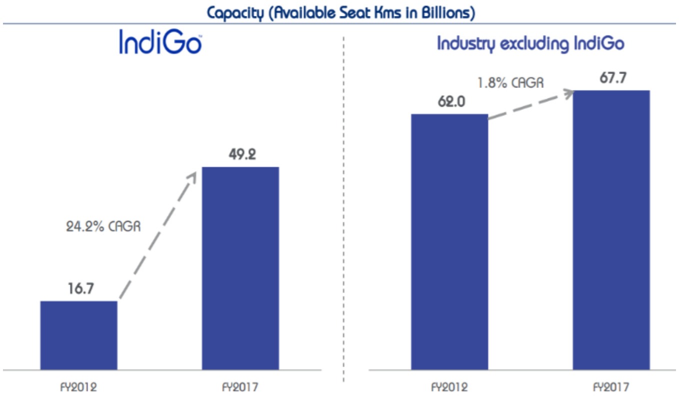
With this basic understanding of airline business, let's now analyze IndiGo using a set of questions to test the underlying business and management quality.

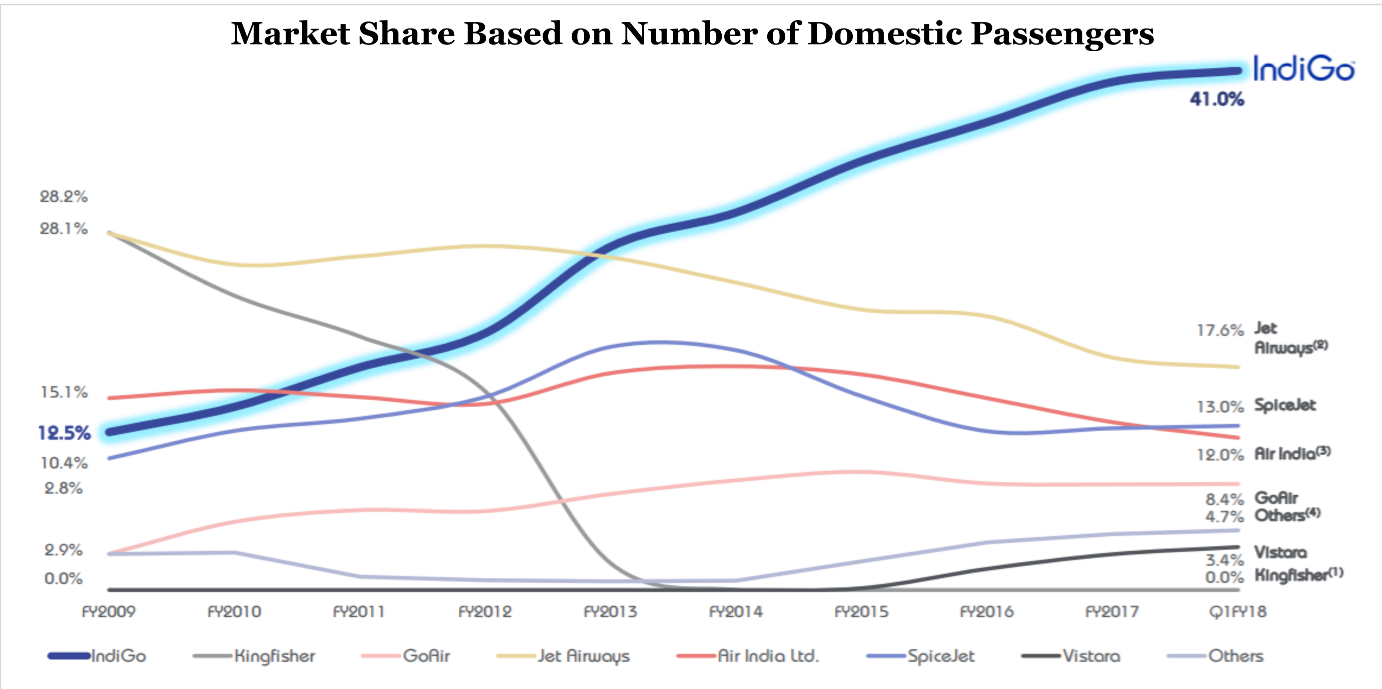
**1. Has the company done well in terms of sales and profit growth over the past few years?**

IndiGo has doubled its domestic market share in last 5 years from 20% in FY12 to 40% in FY17. Most of IndiGo's competitors including Jet Airways, SpiceJet and Air India have lost market share in the same period. So, the company is not only benefitting from the increase in the size of the industry but it's also eating away the share of other players.

IndiGo's domestic ASKs have increased from Rs 16.7 billion in FY12 to Rs 49.2 billion in FY17, growing at a CAGR of 24%, while all the other Indian carriers collectively grew at a CAGR of 1.8% over the same period, according to DGCA data.

In terms of traffic, IndiGo's domestic RASKs have increased from 13.7 billion in FY12 to 41.9 billion in FY17, growing at a CAGR of 25.0%, while all the other Indian carriers collectively grew at a CAGR of 4.6%.



In an industry marred by huge losses and bankruptcies, Indigo has stood apart with its 60%+ CAGR in revenue and 30%+ in PBT over the past nine years. Not just that, the company has become more profitable as years have passed by. This is reflected in its PBT CAGR of 65% over the past five years, as against a revenue CAGR of 19%.

Indigo is the cost leader in the Indian aviation space, and manages efficient operations, which ultimately show up in its profitability. The company follows a strategy of running a young fleet (average fleet age – 3.2 years) with similar types of aircraft (A320/A320 Neos). Having a single type of aircraft helps in better management of repairs and overhauling costs with fewer spares, engineering costs etc. This also lowers pilot training costs.

Its strategy of ordering aircrafts in bulk, which help it get huge discounts from manufacturers, also helps matters on the cost front. IndiGo mostly uses the operating lease model to fund its aircraft fleet. Under this model, it sells the aircrafts ordered at existing market prices, and then leases them back for six to seven years. This helps it to earn trading profits.

IndiGo currently has a strong order pipeline of aircraft over the next decade, which provides growth visibility.

**2. How profitably have retained earnings been reinvested?**

IndiGo, being the most profitable carrier in India, has also done well on retaining its profits. Its average ROE over the past five years has been around 140%, but that is largely owning to leverage on the balance sheet (debt/equity has averaged 4.6x during this period). However, post the IPO on 2015, where the company used funds to repay debt, debt/equity has fallen to 0.7x in FY17 and ROE has dropped to 44%, which is a good number in itself.

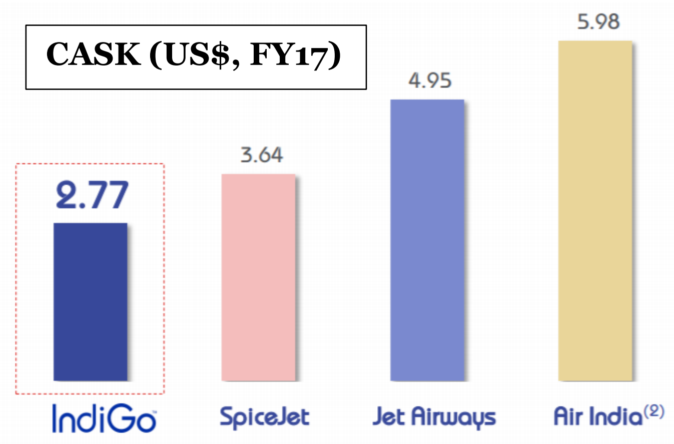
IndiGo's management has been proactive in its handling of the business through cycles and has allocated capital well, which is a big positive.

**3. Does the business have a durable competitive advantage?**

A durable competitive advantage or moat as Warren Buffett likes to call it, can come from five different sources. First, Intangible assets like brands, patents, licenses etc. Second, from high switching costs like sticky products or services. Third, from network effect. Fourth, from economies of scale. Fifth and final is from low cost advantage. The moat that comes from low cost advantage is the most interesting one. Professor Sanjay Bakshi in his interview with Farnam Street said -

*"The low-cost model is a far more sustainable model and its actually an admirable model in capitalism because there is less wastage... It's got a nice karmic feeling about it. You are doing something pro-social, something good for the society and, in the process, you are not compromising on creating wealth for your owners. Even if you make slightly less money, civilization is better off having businesses with low cost advantages."*

IndiGo's low-cost operations is its moat and that has benefited the company in raking in profits consistently for the past many years, even as other Indian airline companies have suffered. As reported, its CASK or cost per available seat kilometer stood at US$ 2.8 in FY17 as against US$ 3.6, US$ 4.9, and US$ 5.9 for its competitors SpiceJet, Jet Airways, and Air India respectively. And not just in India, IndiGo's CASK is amongst the lowest globally, beaten only by Air Asia and Ryanair. This suggests the prevalence of some moat the business enjoys, and which is also proven by its consistent profitable track record in not just the Indian aviation market but globally.




**4. How has the management fared?**

In a competitive space of domestic air travel, IndiGo continues to do well with a remarkable consistency in providing cheap airfares and on-time flight services. The company has been able to drive down the costs without affecting the quality of their services. Let's take a look at some of the cost optimization measures IndiGo deploys.

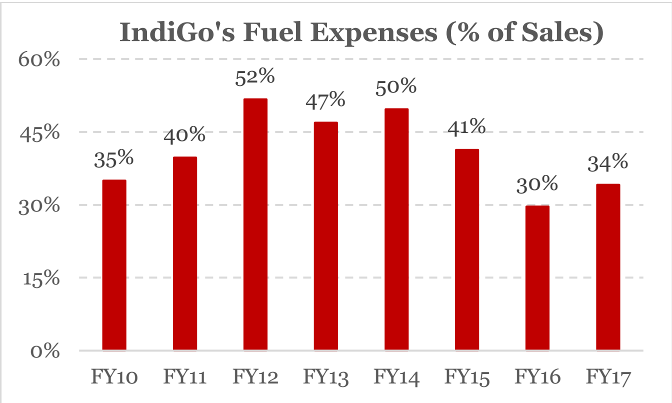
Airline business is a capital-intensive business, but IndiGo runs an asset light model by running 80 percent of its fleet on operating lease. This helps in lowering the fixed costs. Here comes an interesting bit about IndiGo's sale and leasehold model for procuring aircrafts. It sells the ordered aircraft back to the manufacturer at the current market price, then leases it back for six to seven years. This way, any increase in the ordered price and the current price of aircraft results in a trading profit. Not only that, IndiGo orders aircraft in bulk attracting huge discounts from the manufacturers. Moreover, like Southwest, IndiGo operates with only one type of aircraft - A320. This helps in cost effective repairs and overhauling (a malfunctioning spare part in one plane can easily be replaced with the same part from another aircraft in the fleet). It also brings down the pilot training costs.

In my own experience, I noticed many unconventional and innovative methods that IndiGo staff used, which were not being used by other airlines. For example, it was unusual to find IndiGo staff patrolling the security check queue and making sure that an IndiGo passenger whose boarding time is about to end, isn't stuck somewhere. Similarly, in the hopping flights where some passengers would continue to stay in the flight for next destination, the staff would check with each passenger if their cabin baggage isn't accidentally picked up by another passenger.

None of these processes and methods are a secret. Inspite of that, its competitors have struggled to replicate it. It speaks volumes about the execution abilities of the management. The story is very similar to how Sam Walton built Walmart. He kept the costs ultra-low by adopting innovative practices and none of his competitors could keep up with him. The real moat in low cost advantage is the ability to execute.

### 5. What are the risks to the business?

Aircraft fuel accounted for around 34% of IndiGo's revenue and 38% of its operating expenses (opex) in FY17. There are low as compared to 52% of opex that fuel expenses formed in FY12, and are a result of airlines enjoying the benefit of lower crude oil prices.




However, as airline companies like IndiGo have high earnings sensitivity to oil prices, a sudden jump will affect overall profitability. This is a key risk to watch out.

Secondly, airlines are a high fixed-cost business, with limited pricing power. As such, rise in competition among incumbents or the entry of new player can lead to a decline in yields and profitability.

Thirdly, the benefits of IndiGo's capacity expansion are like to accrue only on the back of capacity augmentation at major airports in India. While the government has identified investment in new airports along with capacity augmentation to implement growth, any delay in execution of these plans is another potential risk.

## Valuation

IndiGo's stock is currently trading at around Rs 1,210 (as on 20th Jan. 2017), which implies a P/E multiple of around 20 times its trailing twelve months EPS. Dividend yield stand at around 2.6%.

In recent past, even Warren Buffett has changed his mind on airline business because he believes airlines have learned to operate with more discipline and are no longer adding capacity. In the last few years, Buffett's Berkshire Hathaway has invested close to $10 billion in four airlines - American Airlines, United Airlines, Delta Airlines and Southwest Airlines. However, Buffett doesn't have the advantage that a small investor like you and I have. It's about opportunity cost. Airlines can be a reasonable bet for the likes of Warren Buffett who are burdened with the task of generating reasonable returns on their hundreds of billions of dollars.

No matter how great the business of an outlier like IndiGo looks, the fact can't be ignored that it operates in an industry which remains afflicted with very poor economics. So, apart from the opportunities, you must also consider the risks to the business plus ensure sufficient margin of safety in the stock's price, before making any investment decision.

***Statutory Warning:*** *This is NOT an investment advice to buy or sell shares. Please make your own decision, as blindly acting on anyone else's research and opinions can be injurious to your wealth. I do not own the stock, but my analysis can be biased, and wrong. I have been wrong many times in the past. I, Vishal Khandelwal, am a registered Research Analyst as per SEBI (Research Analyst) Regulations, 2014 (Registration No. INH000000578).*

# About the Authors

**Vishal Khandelwal** has 14+ years' experience as a stock market analyst and investor, and 6+ years as an investing coach. He is the founder of Safal Niveshak, a website dedicated to helping small investors become smart, independent, and successful in their stock market investing. Safal Niveshak, which Vishal started in 2011, is now a community of around 40,000+ dedicated readers, and has been ranked among the best value investing blogs worldwide. You can connect with Vishal on Twitter @safalniveshak.

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