How the playing field in investing is changing and what will happen if you don't change

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All of us have heard of the term 'changing the playing field' and while this is normally used as a metaphor it actually refers to something that we can see in the real world - at times literally.

For example, in cricket whether you are playing in a dust bowl or a textbook green the mix of players and skills you need are very different. Of course, occasionally the Field on which you play changes, as it happened with our national game, hockey.

What Happened to Hockey when the Field changed

Ever heard of Dhyan Chand?

For the sake of the millennial readers, let's do a quick bio of Dhyan Chand - the hockey equivalent of cricketing legend Sir Donald Bradman:

Dhyan Chand scored 14 goals at the 1928 Amsterdam Olympics. He was hailed as a 'magician of hockey' by newspapers. So astonishing was his stickwork that the Netherlands' hockey authorities are believed to have broken his hockey stick to investigate whether there was a magnet inside it. After India's win at the 1936 Berlin Olympics, Hitler offered Dhyan Chand, a German citizenship!

And, of course, India and Pakistan were Kings of the Field Hockey heap, from the '20s to the '70s. They reigned supreme. India beat America 26-0 in the Olympics, a world record.

The sub-continent teams' fluid passes, superb dribbling and bewitching stick-work ran circles around the Western and Australian teams, enthralling crowds worldwide.

And then, one sudden day, India and Pakistan became part of the rubbish heap.

Why?

The Developed nations struck back: they changed the field of play. Literally. Through Astroturf Technology.

This technology innovation changed hockey forever.

Astroturf offered a flat terrain, allowing fast passes with precise ball control. Because the speed of ball travel went up massively, reaching the ball in time, to convert passes, became critical. Therefore, fast sprinting speed became absolutely essential. This meant extreme fitness.

No prizes for guessing which players were fitter: the Developed nations! There were Western hockey players who could run the 100 m in under 11 seconds!

To add to this, their superb fitness was the result of superior training and nutrition tech. Precise video recordings, unheard of in India, were brought to play. Kinesiology, the Science of Movement, came in (Sydney University led at this); Time-release nutrition became the order of the day.

So at all levels of the game, from grass to training to nutrition, deep science and tech took away the edge that the "traditional" players enjoyed. They were simply out-muscled and out-gunned in this tech arms race. They didn't stand a chance.

The Traditionals became history.

Sport after sport has gone that way. Remember Tennis legend Bjorn Borg making a comeback with his comfort wooden racket, in face of Titanium rackets, and beating a retreat, never to be seen again on a tennis court?

Today, sensors in active wear allow players to measure their breathing, heart rate, temperature and hydration in real time.

Then there are GPS and lasers that measure exact positions, acceleration, distance and velocity, moulding players' movements and speed to the desired targets. An elite cyclist only needs a pair of heads-up display glasses to record cycling information and make adjustments mid-ride. Swimmers utilize sensors to capture dive angle, leg movement, rotational speed and hydrodynamics.

Being faster by a few milliseconds can mean winning the Olympic gold.

Bottom line: once the playing field changes there there is no option to continue to play by the Old rules and with the old skill sets. If you choose to do that you will be left far far behind.

It is the same as an auto company saying today that they will stick to the traditional combustion engine and not look at electric vehicles.

We all know how that story will end.

The Playing Field is changing in Investment Management ...and How!

Advanced tech is doing to investment management, what it did to sport.

Traditionally, investment decisions were made only by the human mind. There was only one way to do things.

If you put your money in a mutual fund or PMS scheme, your "human" fund manager painstakingly analysed Company and industry data in order to decide where to invest.

Think Warren Buffet and Peter Lynch.

They still do. They attend conference calls. They read annual reports (at least you hope they do!).

Almost all investment management practices today, remain frozen in a 1940s-1990s time warp.

It's all touchy-feely old school...still.

But there is seismic change afoot.

Why the Human only model of Investment Management no longer works

For one, a large part of what made the traditional model work was getting additional or different information by meeting companies and their management. This was true not just of India but of all markets around the world where large fund managers could sit in a closed room with a company and get information. I personally have done plenty of that - meeting company managements for decades going around the countryside.

However, this edge has been regulated away across the world - information availability has been made uniform. All call transcripts for instance have to be out in the public domain.

In fact, now the problem is something quite different which is an absolute surfeit of data which is humanly unmanageable.

And this is where the machines come in...

Which is where comes in advanced computing power, making extreme data crunching prowess accessible.

There are mathematical models that dispense insights at speeds unimaginable in the past. They can analyse more securities AND more data points in each than is possible even for large teams of humans.

Most important, they can do this consistently and without bias - something which is impossible for human beings.

Machines do the thinking for you. Machines "learn", quicker and better than humans ever can.

Adaptive learning systems can replicate human inventiveness, only much better.

Artificial intelligence & Machine Learning are set to transform portfolio management. Truly forward thinking Portfolio management services companies are training machine learning models to automate various aspects of trading and investing.

An expertly constructed Quant ML model can do bewildering things: it can read millions of research papers, balance sheets, conference call transcripts, social media feeds!

It can analyse a company's auditor's reports and management commentary. It can distinguish between good accounting policies and bad.

It can granularly analyse ratios, in time series as well as cross section, across thousands of companies.

A well developed machine can expertly analyse reams of data, discern patterns & linkages, across stocks and securities across the world. No set of humans is equipped to cast such a wide and narrow eye, contemporaneously, on data.

For example, at First Global, we have developed a System called the FG-Agreement in Motion. This system, a part of our larger Investment Tech stack, called the ExoTech, looks for areas of maximum "agreement" or consensus, across the world. By doing this, one can understand how the world's thinking on various things is converging or diverging. This sets up very interesting trades.

Can any humans ever do this?

Very few humans, if any at all, have the compound skills that being a successful investor needs.

Investing, the way it has been done so far, is nothing but luck masquerading as skill, with most gains coming from just a handful of stocks. As Charlie Munger says: "If you take away our few big winners, Berkshire's record is very mediocre".

This, in mathematical terms, is luck. Not skill.

Machines reduce the role of luck hugely, bringing skill to the fore.

Which is exactly why the traditional investment management business worldwide has been in crisis for years - because traditional fund management simply cannot beat markets, owing to their severe cognitive limitations.

Human beings are many things but they are almost never consistent. Their world view keeps changing depending on their own circumstances.

Add to this the fact that if a large number of securities have to be analysed (we at First Global analyse over 20,000) which means that even if a large enough team of human beings can be assembled to look at them, each human being's way of looking at it will be different which means the entire picture can never be consistent.

Machines are consistent. They will look at data with an even, un-jaundiced eye.

And this, in turn, translates into consistent market beating performance which the traditional fund managers simply cannot match, because of their biases, and inherent inability to process and comprehend vast amounts of data.

One of the more interesting aspects of quantitative investing is – the more the data fed into machines, the more accurate predictions they generate. This is absolutely the opposite in humans! Most human brains decline in capabilities, with age and load.

Very interestingly, because humans can process only limited data, they tend to build more concentrated, clustered portfolios, largely around their comfort zones. This increases correlation in the portfolio, leading to very volatile returns. Remember that saying 'I will invest only within my circle of competence' is just a fancy way of saying that I will only invest within my comfort zone. And as an investor why should your investment be constrained by your fund manager's comfort zone?

In contrast, Machines can build far larger, more carefully diversified portfolios, across a wide spectrum of securities: this approach reduces correlation, thereby reducing Risk, while not sacrificing returns.

Another important difference is that machines are clinical about acknowledging and analysing mistakes as well as correcting the process that led to these mistakes. Each of these steps is extremely difficult for a human being as we are hardwired to defend our decisions and stories.

Reality is: humans have limited capacity to absorb data and when confronted with vast amounts of data the human brain simply shuts down and resorts to "armchair thinking": wherein it forms reliance on underanalysed, oversimplified lazy opinions and simple stories.

Quantitative Investing is free from behavioural biases and emotions. The human mind, no matter how intellectually sound, cannot be emotionless.

As Daniel Kahneman, Nobel Laureate, who has written the seminal book on human biases says "Humans are simply incapable of giving up on their biases. Even I can't". He also says that a well-contructed algorithm will almost always outperform a human being.

The Investment Playing Field is changing and you cannot afford to be left behind

The Machines are coming to the Investing Game. The playing field is changing. Sticking to the old way of doing things will only mean that you will be out of the game.

Don't become obsolete like the combustion engine will be in an era of Electric Vehicles.

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