Why we all need to Become Early-Stage Tech Investors to Remain Relevant

And why it is particularly so for family offices and their principals

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<u>About the author:</u>

Ian Sosso, winner of EBAN's "best European early-stage investor award" in 2019, is the founder of Monte Carlo Capital (MCC), a group of business angels, UHNWI and family office principals investing in Europe and the US in early-stage deep tech and highly disruptive businesses.

MCC combines the best features of business angels and venture capital, capable of taking businesses from seed all the way to exit, providing financing and helping management scale their businesses up internationally. MCC typically starts investing as pre-seed/seed, taking an entire financing round, and leads follow-ons as well.

Ian is also a managing partner of the Startup Nursery (SUN) fund, a fund dedicated to financing the creation of deep tech from US universities spin offs.

Ian started his career in 1993 and previously worked in Paris, London, Tokyo, Singapore, and Hong Kong with HSBC, UBS, and JPMorgan, as an investment banker in trading, sales, and financial engineering. Before founding Monte Carlo Capital in 2009, Ian was the regional managing director and head of capital markets in Asia for Commerzbank. Ian managed all capital markets activities, including equity derivatives, credit, precious metals, foreign exchange, debt capital markets, as well as the treasuries of HK, Singapore, and Shanghai

Ian has been a regular keynote speaker at conferences around Europe and Asia, as well as the US and Dubai. Ian currently lectures venture capital and entrepreneurial finance to MBA and finance MSc students at the International University of Monaco. Ian is a board member of EBAN, the Brussels based European trade association of business angels. Ian is also a board member of the Monaco Venture Capital Association.

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1. Introduction

Building direct exposure to early-stage start-ups is not only a profitable strategy but is vital for the long term perennity of principals of family offices in a world where we are seeing a redistribution of wealth towards tech businesses and tech entrepreneurs.

This article is not only relevant to principals of family offices but also to any sophisticated investor who can afford the illiquid and long-term nature of the asset class: from high net-worth investors to principals of family offices, to pension funds, insurance companies, sovereign wealth funds and endowments.

To the principals of family offices, whether you still own businesses which at some stage may become threatened by new technology and business models, and therefore you need to keep on top of the technologies which affect those businesses, or your family has exited its businesses and seeks either capital preservation or accumulation, becoming a savvy early-stage tech investor provides significant upside, both direct (financial) and indirect (know-how).

Principals are increasingly investing directly in early-stage businesses. I have seldom met one that is not either already investing or at least considering it, yet, finding the right investment formula has been challenging for many: loss of capital in the first few investments, lack of understanding of technology and the investment process, ticket size too small to warrant the time and effort, etc.

So how do you build a strategy that makes sense and why it is so important that you do?

I initially started Monte Carlo Capital (MCC) to invest my own money in early-stage businesses. Now MCC is a group of private investors and family office principals investing directly in early-stage tech and life science companies, and I am the lead investor for every investment the group does. As a result, I get to deal with principals of family offices regularly and the observations highlighted in this article stem from my interactions with them. However, every family is different, and followed its own path to wealth. The comments in this article are meant to highlight some of the main trends I have observed over the years.

Let's start by giving a few definitions:

2. Definitions

Family Office: A privately held company that handles investment management and wealth management for a wealthy family. However, in the context of this article, we will consider a family office not at the office per se but rather as the principal and its family as well as the office.

Business angels (or angel investors): They usually are high-net-worth individuals who invest in start-ups at seed stages, with their own money. Some business angels are passive investors (they write a check and hope for the best). Others (like me) are active in helping their portfolio companies. A family office investing directly in early-stage businesses would be considered a business angel.

Main growth cycle of a start-up:

The following are guidelines only. Over the past decade the lines between round denominations, amounts raised at each round and the type of investors coming in have become a blur.

Seed-stage:
Seed stage businesses are typically a couple of years old, and often have little or no revenues. They may be valued at anything between 1 Mio to 8 Mio (USD, EUR or GBP), and might be raising anywhere between 350K and 1.5 Mio in a pre-seed to late seed round of financing. This is typically the stage where business angels come in.

Early-stage:
A company is now experiencing growth. The company may be valued anywhere between 20 Mio and 100 Mio and could be raising anywhere between 5 and 20 Mio in a Series A or B. This is where early-stage venture funds typically invest.

Late-stage:
A company is in expansion mode. It may be valued at 100 Mio+ and raising 30 Mio+ in Series C and above. Series E could mean valuations well north of 1 Bio and financings in the 100s of Mios. This is where late-stage venture funds typically come in.

For this write up, we will regroup seed and early-stage investing and call that early-stage investing.

Now let’s focus on tech innovation and why it’s so important to be on top of it.

3. Acceleration of tech innovation.

It is striking when talking to the older generation that they feel overwhelmed by recent technological advances. The fact is people are usually technologically comfortable with what they grew up with. My mother finally agreed to buy a smartphone after spending years claiming she had no need for it (and now she is loving it). Personally, despite being a tech investor, I am sometimes struggling to identify with some of the apps and services the millennials are using. It simply is not my generation.

However, keeping up with innovation has not been an issue until recently, as technological progress was slow and linear for thousands of years. People 200 years ago did not live that differently from people 300 years ago. But we are at the beginning of an exponential phase of technical innovation never seen before. Every decade or so brings innovation that is changing the way we live, communicate, move, etc., and this is just accelerating.

Michio Kaku (American theoretical physicist, futurist, populariser of science, and author of numerous books including “Physics of the Future: How Science will Shape Human Destiny and our Daily Lives by the Year 2100”), says that we can do things now that just a century ago would have been considered to be Godlike power. He goes on by saying that if you could travel 100 years in the future and look at the way your great-great-grandchildren live, you would think they also have the power of the Gods.

In 100 years we should be able to record dreams and move objects with our minds. Humans and technology will have merged, and humans will be enhanced by chips and robotic implants. The line between real and virtual worlds will have blurred. We might be able to stop aging or even reverse it. We might be able to beam energy directly from space. There could be cities on Mars and there could even be space elevators. And the list goes on. Sounds crazy? Well, all of this is already being worked on today.

As Peter Diamandis and Steven Kotler argue in their book “the Future is Faster than you Think: how Converging Technologies are Transforming Business, Industries, and our Lives”, the pace of technological advancement is accelerating thanks to accelerating converging technologies. Artificial Intelligence, Robotics, Virtual Reality, Quantum Computing, 3D printing, Nanotechnology, Material Science, Biotechnology, Sensors, etc are all experiencing exponential growth and further support the growth of the other technologies.

This is happening. One can ignore it or embrace it. But it’s happening no matter what.

How prepared are you as an investor and/or business owner? Are your investments positioned to benefit from what’s happening? Is your family business riding this gigantic, accelerating, and probably never-ending wave, or is it threatened by it?

4. “Conservative” versus “risky” investments.

In a world of exponential technological acceleration, investing in businesses that are creating those technologies should surely be at the top of the agenda of any family that has made its fortune by building a disrupter, a start-up. Many family offices are already big tech investors. But many still regard early-stage investment as “risky”.

If so, what would you consider a conservative investment? Let’s consider some of the usual suspects:

Government bonds?
We live in a world of over-indebted government with record-low long-term interested rates. Are government bonds conservative investments? Are we not reaching the end of a 35 yearlong bull bond bull market?

Equity:
Valuations have reached early 2021 stratospheric valuations. Is this driven by strong fundamentals, or by excess liquidity and historically low interest rates? Given current levels of valuations, is it “safe” to expect returns of the past 10 years to keep recurring for the next 10 years?

We also need to remember that many of the blue chips comprising the leading stock indices come from traditional industries: banking, insurance, oil and gas, auto, etc. All these industries are candidates for disruption by new technologies and business models.

Cars are becoming batteries with a computer and 4 wheels, which soon will be completely autonomous. The car ownership model itself is likely to be challenged and replaced with car-sharing or pay as you go services. Will the traditional car manufacturers be able to ride this wave or will we be driving some yet-to-come Google or Apple cars in 20 years? Is Tesla's autonomous robot-taxi the way forward? Or will we move towards an Uber on-demand service and away from car ownership altogether? Is buying into today's blue chip "old economy" companies a conservative investment?

The truth is tech and life science already take the lion's share of the main equity indices, but boast valuations that match their growth rates. Are these large tech companies conservative investments? Will we be using iPhones in 20 years? Or will a Quantum Leap-like company have managed to replace screens with augmented reality? Or will we already be using smart contact lenses that will make screens redundant altogether? When that time comes, will Apple be able to adapt and lead in those new technologies or will they have a Kodak (or Nokia or Blackberry) moment?

Richard Foster of Yale School Management argues that the average lifespan of an S&P company in the US has fallen from 67 years in the 1920s to just 15 years recently. He also argues that 75% of the S&P 500 companies will be gone within 15 years.

Richard Watson of Imperial College[1] continues this thought by reaching similar conclusions for the FTSE 100 (albeit with slightly longer life expectancy), he argues that "nothing recedes quite like success and large companies can become delusional about their fitness, their intellect or the speed and energy with which new ideas and inventions can move". His advice to large companies to survive:

1. "Constantly look out for and test new ideas that could breathe new life into your company or fatally wound your company if applied by a competitor.
2. Similarly, don't simply keep an eye on what your closest competitors are doing, also study what small start-ups outside your immediate market or geography are doing. Are they doing anything unusual? Are they doing anything that doesn't immediately make sense? If so, dig into why.
3. Keep a close eye on what your youngest customers and employees are doing. What are they doing that you aren't? Could such behaviour be an early warning signal of change?"

This highlights why it is important for any investor to not only be aware of what's happening in the early-stage tech space, but vital to be on top of it.

Just to be clear, I am by no means arguing to disregard the traditional asset classes. The "conservative investments" mentioned above are liquid, have reasonably low volatility and large investments can be deployed. However, I am arguing that those so-called conservative investments are not as conservative in the long term as one may think, and that early-stage businesses warrant a greater allocation than they typically get, both for financial reasons and transfer of know-how reasons.

So how do you participate in the future of tech? Should you be an active direct investor in early-stage businesses or is there an easier way in?

5. Passive vs active investment

Some may be tempted to randomly allocate capital to a basket of start-ups, hoping to build a diversified portfolio that would somehow be a proxy to investing in the start-up world and deliver some kind of average start-up return (more on angel investing returns in section 6).

Indeed, there has been a debate for decades in the long-only and liquid investment industry about whether one should invest actively or passively. Today there is broad literature supporting the case for passive investment, arguing that active managers can't on average, and in the long term, outperform a simple index. These findings have led to massive growth in the passive investment management industry. And those investors who would still want to be active, but not invest via a fund, can do so by investing directly in listed stocks and liquid bonds.

It would be nice to have an index of start-ups we can invest in to express our view that the start-up world is changing the world. Unfortunately, the nature of tech start-ups does not lend itself easily to such an index.

So, could we allocate capital randomly to a broad range of start-ups and look to create a broad exposure to the asset class? If only it was that easy. Investing randomly in start-ups is a sure way to lose every penny. Most start-ups will fail. The skill is in sourcing and picking the right companies and then helping them all the way to exit, to a liquidity event (more on this in section 9).

It is usually understood that the greatest share of returns in a portfolio stems from asset allocation, followed by geography and sector, and that stock picking is hardly generating any excess return.

The accelerating converging technologies are well-known, and there is little debate that AI, robotics, and biotech are all sectors that are moving fast. But most companies in those sectors will fail. In early-stage investments, it is all about stock picking, choosing the right company to invest in

Retail investors can invest in any listed company of their choice at the click of a button and at little cost. And they can do so with (arguably) similar access to information as sophisticated investors do. It is a lot more complicated when it comes to investing in early-stage investing private companies.

I would argue that early-stage investment is the ultimate alpha generation asset class. The closest thing there is to entrepreneurship. It is all about being a "stock picker" and an active investor.

6. Performance and drivers of returns for business angels

A 2015 paper from Fifth Era[2] summarises the main research carried out on the performance of business angel groups in the US and the UK. Each research leads to similar conclusions:

Returns

- Median IRR (Internal Rate of Return) is in the mid 20% and remains consistent over the long term.
- Those IRRs are achieved typically within 3 to 5 years.
- The research also shows that angels typically generate returns superior to VCs and have a lower failure rate on their portfolio companies.

Drivers of performance

One of the most comprehensive studies was carried out by the Kauffman foundation[3] over 17 years and over 500 angels. The business angels surveyed averaged a long-term IRR of 27%. In their study, those angels who did more than the median 20 hours of due diligence generated a median return on investment (RoI) of close to 6X (6 times their investment). Those who did less than 20 hours of due diligence generated an RoI barely above 1X, with close to 40% of investors overall losing money. The top quartile investors in terms of time spent doing due diligence did more than 40 hours of due diligence and generated returns of 7.1X. The other drivers of return are expertise in the sector, and the degree of involvement with the company, but those are less critical to returns than due diligence.

In summary, early-stage investment is about active investment.

So, back to our previous question, how do you participate in the future of tech?

7. Fund vs direct investment

Venture funds

Investing through a fund is certainly a good way to gain exposure to the asset class for investors that do not need the transfer of know-how that direct investing brings. Pension funds, endowments and insurance companies fall in that category. The distribution of skill and performance is greater in venture than in most asset classes so it's critical to choose well. The main skill for the investor is to be able to find a good team.

But as we previously argued, the transfer of know-how is critical for the long-term prosperity of a family. Investing via funds robs the investor of one of the key benefits of direct investment: the inherent transfer of know-how that investing directly brings the investor: generating a solid deal flow, understand tech due diligence, learning about cutting technologies, and working with great entrepreneurs. The fund does the job for a fee. There is little the investor learns in the process on tech investment.

We should make the distinction between early-stage and growth/late-stage venture. I would argue that there is significantly more value in early-stage investment than late-stage where valuations have become inflated over the past few years. And there are a lot more opportunities for angel and family investors to get involved in a business at the earlier stage when valuations are still low and the business needs all the help they can get, than when the business is in late-stage. But discussing this is beyond the scope of this article.

Building tech investing know-how is not done by investing in funds. It is done by investing directly.

Direct investments

Over the years, I have found that although most families do see the need to get actively involved directly in early-stage businesses, many have struggled to find the right formula. Most angel investors lose money when they start, even seasoned entrepreneurs struggle when they start investing. The various studies mentioned previously were all done with business angel groups with an organized process. These groups are typically not comprised of professional investors, but they will have nonetheless built a process that allows them to do the job. But when people start investing, they typically lose money. There are several reasons for this, and most angels and families usually go through a similar journey when they begin:

Many take their first steps by investing in opportunities shared by "friends":
The investor thinks the idea sounds good, but unfortunately, the friendly party sharing the opportunity is not an experienced investor: they have limited deal flow, don't understand the sector, have done limited due diligence, etc. As a result, the deal goes south, and so do the next couple of investments. As a result, the investor gets discouraged and gives up. Truth be told, I started invested this way a couple of decades ago and lost money on my first investments. Many angels start this way, and many give up.

They invest in too few businesses:
Some argue we should look to build a portfolio of 50 companies; however, it is impossible to be active with that many portfolio companies. Instead, I prefer to have a smaller portfolio and be hands on. I would argue that investors should look to build a portfolio of 20 companies over a few years to reduce the dispersion in potential outcomes, maximise the chances of strong returns, whilst being able to follow each business.

In any instance, we have to diversify as bad news comes faster than good news with start-ups: business plans don't materialise, sales are not in line with forecasts, more money is needed, etc. After a few investments, the investor starts worrying and gives up.

In early-stage investing, the first 3-4 years are the most difficult. Once you start seeing that things are not going according to plan with your portfolio companies, do you persevere and keep building a portfolio to be able to generate hopefully big returns, or do you call into question your strategy (and sanity) and give up? It takes staying power to get to that first big exit that will pay for the entire portfolio.

Hiring of investment professionals without adequate experience in early-stage investment:
Family offices wanting to give it a serious shot sometimes hire a person or two to focus on the asset class. Unfortunately, people with sufficient experience as early-stage investors are few and far between. A good degree and 5-10 years of experience in private equity or strategic consulting are not sufficient. Traditional private equity and early-stage venture require very distinctive skills: deal sourcing, due diligence, company valuation, etc. are different. It takes years to build a deal flow and the ecosystem that allows an investor to identify the right opportunity. Besides, those with the skills don't work for others. The early-stage investment ticket size is low enough that they can invest their capital and/or build their fund.

The younger generations in the families are often the keenest on tech investing and are often driving the family initiative into tech. However, being young and interested in tech is not enough to be a good tech investor. But it's a good start.

If you want to understand tech, you cannot be a passive investor. You need to invest directly and enjoy the benefits of the transfer of know-how that comes with it.

The fact is, investing in early-stage businesses is a full-time job. It is the closest thing an investor can get to being an entrepreneur. It is not a hobby. It is something the best angels do 24/7. The families initially built their wealth thanks to an entrepreneur giving it all to build a successful business. No great business can be built part-time. Being a good early-stage investor is not different. It can't be done half-way.

So far, we have argued that it’s critical for investors to get educated in early-stage investment, that this should be done by investing directly, and that success can only be achieved by doing this by dedicating time and effort.

Of course, very few investors, let alone family principals, can spend all their time being early-stage investors

8. What are the options?

One option is to align with an active direct investor, or a group of direct investors, who have a demonstrated track record, and co-invest with him/her/them, and build a diversified portfolio of businesses over time.

For family offices with a significant amount of capital to deploy, one major hurdle of early-stage investing has been the small ticket size. But by working with an active direct investor, essentially outsourcing to him/her/them the whole investment process (deal sourcing, due diligence etc), deploying capital in 20+ companies over a few years, then participating in follow-ons and taking a larger position in the businesses that are showing the most traction, those family offices can deploy sufficient to justify their time, should hopefully reward them with attractive returns, and provide the know-how transfer that the family should strive for. The economic arrangement with the group of angels can vary, but will typically allow the family to remain in control of the investments they choose to make, allow them to amend the strategy along the way and stop deploying capital at any point if they wish.

Here is a simple example:
Invest 500K in 25 seed/late seed companies over 3-4 years = 12.5Mio
Invest 2 Mio in the follow-on A rounds of the top 15 companies = 30 Mio
Invest 3 Mio in the follow-on B rounds of the top 8 companies = 24 Mio
Invest 4 Mio in the follow-on C rounds of the top 5 companies = 20 Mio
Invest 6 Mio in the follow-on D rounds of the top 3 companies = 18 Mio

Total investment = 104.5 Mio.
The largest positions will be 15.5 Mio in 3 businesses, built over time in 5 successive investments.

This is how we operate. A strong deal flow and disciplined process allows us to identify the businesses we want to invest in. We work closely with each business, and when the time comes for follow-on investment, the information we have accumulated since first investing helps us decide whether we want to keep participating or not. This allows us to build the bigger positions in the “winners”. If we do not participate in a follow-on, the business typically seeks its own funding. This article provides a more comprehensive overview of how we invest[4]. The article also explains how we invest in US university spin-offs in partnership with venture builder Ikove Capital (In essence, we source technology straight from US universities and finance and build those businesses). This webinar presented at EBAN[5] also provides a good introduction to how we work.

9. Investment Process

In this article, I have been arguing the importance of being an active direct investor. But what does that mean in practice? What are the main steps, and what are the challenges for investors? The following is designed to give you an outline. Most professional active investors will follow some variation of the following process.

Deal sourcing
This is a critical part of the investment process and where most non-professional investors fail. It is important to build a significant deal flow of quality. Building the right access takes years of work and entails building visibility and a reputation as an investor who can both deploy capital and be a value-add to the businesses.

It has never been easier, cheaper, or more popular to start a business. As a result, all sorts of businesses are fundraising every day, and many will fail. Knowing a few incubators and having "relationships" is not enough. The best start-ups choose their investors, and outside some exceptions don't need to attend incubators or business plan competitions.

First time investors face adverse deal selection and often only see deals others have passed on.

First Screening
It is important to decide what type of business you want to invest in. Here is my first level of filter. Every investor will have his/her preferences

-We target two types of businesses:
Most of our investments are in deep tech businesses, typically backed by leading scientists, based on technology solving big problems. We invest in anything from medical devices to artificial intelligence, robotics, big data, and the internet of things.
We also seek highly disruptive businesses that are smarter/better/cheaper than anyone else. This could be in pretty much any traditional tech industry (e.g. fintech, e-commerce, etc).

-We seek businesses with a strong team and invest in the US, UK, and throughout Europe

-We only invest in businesses with the potential to reach exit valuations superior to $200 million, and a minimum target RoI of 20X. It is important to keep in mind that things often don't go according to plan and it is critical to build a diversified portfolio of businesses with significant upside to be able to generate substantial returns.

The first filter allows us to eliminate a substantial portion of the proposals we receive.

Due diligence
As highlighted by the Kaufman foundation report, due diligence, together with deal sourcing, is the most important part of the investment process. We do a deep dive due diligence on the remaining companies: business model, competition, team, legal, etc.

Having access to advisors and an ecosystem of technical experts as well as other early-stage investors is important to assist in the due diligence process.

Ability to deploy capital
Monte Carlo Capital is looking to be the best of the angel world and the venture world, a group of private investors investing directly in businesses with the capacity to deploy capital of a fund.

Raising money is a challenge for most early-stage businesses, and it remains a challenge as businesses grow. In fact, not being able to raise enough money to sustain growth is a major risk in early-stage investing.

We typically make our first investment at early to late seed. We like to start investing at what we call the “valley of death” in the financing cycle of a start-up: the 500K to 1 Mio raise. This is typically too small for venture funds and too big for regular angels. Most start-ups are struggling at those levels.

As businesses grow, and assuming we are still keen to back the business and we like the terms, I keep leading the investment in the subsequent rounds and I have led up to 4 financings in a row in several companies.

Ability to help the businesses all the way to exit
An investor can either be passive or active. A passive investor usually receives a quarterly report with some high-level update. He/she is seen by the entrepreneur as being a check writer and his influence is limited to the number of shares he/she owns.

I choose to be a hands-on investor, working closely with our portfolio companies, which can take many forms: helping define the corporate and financial strategy, introducing clients and commercial partners, bringing in advisors, etc. Often it’s all of the above.

Our co-investors and advisors are based in various parts of the world and can also open doors for our portfolio companies. Being active allows us to help our companies become successful, which de-risks our investment.

Being able to not only take an entire seed round but also lead subsequent rounds while remaining a group of private investors, and actively helping a business succeed, is a very compelling proposition to start-ups and has helped us build a significant and high-quality deal flow. In turn this allows us to be able to pick great businesses.

10. Get started

Here is how to get started:

1. Make the decision to allocate a few percent of your net worth to the asset class over the next three-four years,
2. Find a reliable direct early-stage investor with a solid track record to work with,

3. Work with him/her/them to determine how the capital will be deployed. You could for instance adapt for size the portfolio strategy example provided in section 8 above,
4. Implement

11. Conclusion

This article covers numerous topics which in themselves warrant their own write-up.

We are at the very beginning of the acceleration of tech. Many large incumbents will be disrupted by what's happening. Most large companies are not nimble enough to adapt quickly and many will fail.

Family principals, and indeed every investor, must ride this wave. It is critical from an investment perspective to be participating early in the success of businesses that are changing the world and learn sooner rather than rather what being an active early-stage investor entails. For those families that still own and operate businesses, it is critical to remain on top of those new technologies and business models that can disrupt their own businesses. Being active, direct early-stage investors will help them see both challenges and opportunities coming their way.

End note

1. https://www.imperial.ac.uk/business-school/blogs/executive-education/why-companies-die/
2. https://static1.squarespace.com/static/5481bc79e4b01c4bf3ceed80/t/564c0e53e4b0b8eacea93c15/1447824979977/Fifth+Era+WP+final-c.pdf
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