Issue 04

Horizons

Family Office & Investor Magazine

HOW TO BUY **700,000** BITCOIN

CONFLICT RESOLUTION IN WEALTHY FAMILIES

THE GREATER ROLE OF A FAMILY OFFICE

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Publisher

Willis Towers Watson Investments' Thinking Ahead Group ranks the following as the top three "extreme risks":

1. Global temperature changes with scenarios where the planet becomes far less habitable
2. A potential collapse of global trade, driven by the rise of protectionism
3. Cyber warfare

Investors are advised to be "open minded, avoid concentrated risks, be sensitive to early warning signs, constantly adapt and always prepare for the worst".

While we cannot prevent a cyber war, feel free to reach out to Jeremy Samide (page 51) and his team for a free consultation on your firm's cybersecurity and why you should never think you're "too small" or not relevant for bad actors.

We also have a new, fascinating "Family Office Anonymous" contribution (page 14) - remember that you are invited to get in touch if you'd like to share your thoughts, reflections and experiences with a greater audience while making sure your identity is protected.

Like you, I believe in global collaboration, and so I'm happy and proud that the contributors to the fourth issue of Horizons: Family Office & Investor Magazine come from five continents.

Subscribe, Contribute, Give Feedback:

Horizons is a free publication, please use this link to subscribe. If you are interested in actively getting involved as a contributor or sponsor of this exclusive magazine, please email me directly. I look forward to hearing from you.

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David Werdiger: Conflict Resolution in Wealthy Families

David Werdiger

David is a second generation family member who went from software developer to technology entrepreneur to family advisor, writer and speaker. He wrote the bestselling book *Transition* on intergenerational wealth, has a science degree, a masters in entrepreneurship, and is an Adjunct Professor at Swinburne University (family governance and entrepreneurship).

When it comes to conflict resolution, families – and especially wealthy families – pose additional challenges. In this article, I will present a framework for conflict resolution, and then see how it can be used to understand family conflicts and their resolution, and derive some learnings about what techniques are and are not helpful in that context.

In this model, there are essentially three methods to eliminate conflict: power, rights, and interests. This is derived from the Harvard University "Getting to Yes" theory of negotiation.

1. **Power** is a very effective way to resolve a conflict. For example, if a young child says "I want to do X", and their parents do not want them to, they can simply say "no", and the conflict is quickly and simply resolved. In this case, there is a power imbalance between parents and (young) children and they have sufficient authority that a "no" is adhered to. It is crude, but it works.

A more salient example might be when an adult family member wishes to gain access to the family wealth, and the assets are held in a trust where control of that wealth rests entirely with the older generation. In that case too, there is a power imbalance in respect of the assets, and a simple "no" will quickly resolve any conflict over deployment of the assets.

While this method works remarkably well, it doesn't truly end the conflict. Because one party's power has been invoked, the other party is by definition "disempowered" through the process. Being on the other end of the exercise of power can lead to resentment and hurt feelings which can fester and blow up at a future date.

When using power to resolve a conflict, one may win the battle but lose the war. This is both because of the very side effect of using power, and also because it's very difficult to hold on to power forever. That means the use of power can have a time limit.

2. Resolving a conflict using **rights** is the next step up in sophistication. In that scenario, each party to the conflict submits to some external and independent standard and uses that to resolve their differences.

The standard could be a contract between the parties, the law, an arbitrator or mediator, or a court of law (as far as the parties choose to take it).

Because this method relies on a standard, it can result in a fairer outcome than the use of power. One party may not be happy with the outcome, but having agreed to the standard, it is reasonable that they must abide by the ruling that flows from that standard.

Returning to our family wealth example, a family member seeks access to the wealth, and there is a family agreement in place that sets down the distribution policy. The family agreement is the standard for resolving the conflict – the set of rules that all family members accept and adhere to. If that standard is unacceptable, it may be challenged by using another standard, such as through litigation. Even in that case, the same method of rights is being used to resolve the conflict.

Results using this method do not have a time limit, as when someone uses power but that power is eventually gone. Depending on the standard chosen, the process can take much longer. If matters end up in court, they can drag on for years, chew up huge legal costs, and cause significant collateral damage to relationships (although those relationships may already have been broken well before the decision to litigate is taken).

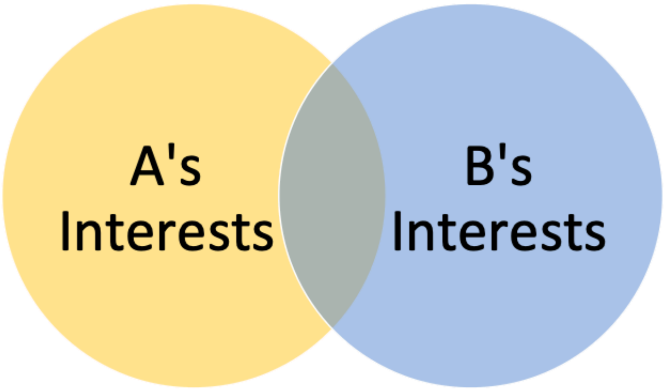
Significantly, while the process is fairer than the use of power, it will result in one party being deemed 'right', and another party being 'wrong', which may leave the 'losing' party aggrieved by the process. That again means the conflict may not truly go away, especially when the parties remain connected by family bonds.

3. That brings us to the optimal method of dispute resolution, using **interests**. In the previous two methods, we never delved deeper than the face of the conflict: one party wants X, and the other party wants Y (or doesn't want X). When we seek to resolve the dispute using interests, we start asking a very important question: "what do you really want?"

This is especially relevant in family disputes because the manifestation of conflict is often just that – a manifestation of deeper, family-related issues that just happen to be expressed in financial terms. For example, when a younger family member asks to be appointed CEO of the family business, they may really want to correct perceived favouritism, for their talents to be suitably recognised, or to be in a position of power where they can exact revenge on other family members. The current CEO – an older family member – who says "no" may actually be desperate to cling to their position because their personal identity is bound up in their role within the family business, or because they have "reserved" the CEO position for another, more favoured, member of the family.

To resolve the conflict using interests, the parties come together and discuss their interests – what they really want to achieve and what sits behind the position they expressed. This is best done with the assistance of an independent mediator or facilitator who can help the parties draw out and discuss their true interests. They may be more comfortable discussing their interests first with the facilitator, and getting assistance in presenting them when the other party is present.

Simplistically, we can express the interests of each party using a Venn diagram, as below.



The interests-based methodology identifies the interests of each party, and then finds where those interests overlap (if they do). That area of overlap represents the universe of possible resolutions that can meet both A's and B's interests. This can lead to an optimal "win-win" resolution that can leave both parties satisfied with the outcome.

Let's consider a **case study**, based on an earlier example and a typical combination of real life factors I often come across when working with families. The family in question has more than half of its wealth in an operating business, and the balance is a mix of real estate and passive investments managed through private banking. The wealth originator has passed away, and the second generation son Alan, 62 years of age, is CEO of the operating business, in which several family members of second and third generation are employed. The operating business has a board, and the family has an investment advisory board (chaired by Alan) which is responsible for asset allocation and instruction to the private banker.

A third-generation family member, Brad, son of the CEO's youngest sister and aged 25, has an idea for a business venture and wants the family to invest in it. Alan has never had a good relationship with Brad's mother, and there are ten years between them. Brad's idea is not met with any enthusiasm whatsoever.

Using our framework, what are the ways this conflict can be resolved?

1. Power. Alan says "no", and uses his influence on the investment advisory board to ensure they back his position. This leaves Brad is upset and frustrated. His mother does not have sufficient capital to fund the venture on her own, nor influence at board level to change the decision.

2. Rights. Alan is still not in favour, but wants to give Brad a chance, so allows him to present to the investment advisory board. If they approve the venture, they will invest half provided Brad can raise the other half externally. Seeking external validation of the venture is always a prudent approach, and while Brad is successful raising half the money, the board is concerned about the stark departure from the family's risk profile, and votes against investing. Brad gave it his best shot, but is disappointed the family doesn't share his view of the importance of diversifying.

3. Interests. Alan and Brad first meet separately with Charles, a family advisor and facilitator, to discuss their interests. Alan has a strong attachment to the family operating business that his late father started, and thinks that should remain the primary vehicle of future wealth creation for the family. He doesn't think much of Brad, who has completed a university degree and worked elsewhere for several years, but was only 15 when his grandfather died, never worked in the family business, and doesn't share Alan's view of the primacy of the business to the family legacy. Alan feels investment in a single startup does not fit with the overall risk profile of the company, although he notes that the investment advisory board has been considering an allocation to some VC funds with good track records.

Understandably, Brad has a very different view of the world. He talks to his first cousins (there are 13 in his generation) about innovation, startups and venture capital, and some of them share his enthusiasm, others don't at all, and a third group have no interest. He has attended the annual family briefing and has a fair understanding of the family asset base and how it is allocated. He views the possible investment in his venture as "throw away" money and doesn't understand why the family won't give him a chance to prove himself in his way (as opposed to several of his cousins, who are working in the family business). He would like to see the family eventually diversify into entrepreneurial risk as another significant source of wealth creation. While he's not interested in joining the family business, he does want guidance and mentorship in his journey, and not to carry the burden of doing it all alone.

Charles coaches Alan and Brad separately toward a conversation where they share their interests and map them out on a whiteboard. The conversation is focussed initially on identifying the overlap in their interests, and using that as a base to consider options. It turns out they agree in principle that the family should seek further diversification, and that a single investment in one startup operated by a family member carries too much risk. They discuss how that risk might be mitigated, and together with Charles, develop a structure by which to achieve this. Together, they write a proposal to the investment advisory board to establish an "entrepreneurial risk investment subcommittee" comprising two second generation family members of the main board, two from the third generation, plus an independent specialist in VC investment. Their proposed mandate is to develop an investment plan for diversification (to be ratified by the main board), and then to recommend a series of investments. Brad agrees to park his venture idea, but embarks on a number of internships at startups so he can (a) make more informed investment decisions, and (b) prepare to start his own venture, at the appropriate time. The family also identifies an external mentor for Brad, who now sees a future role for himself within the wider family asset base. Alan is happy that any diversification is measured, and has input of older and more experienced minds.

The resolution of this issue took nearly two months, and its implementation will take about a year. Importantly, it has resulted in a "win-win" outcome for both parties, teased out some latent issues that had the potential to explode down the track if not dealt with, and built some bridges between the generations within the family.

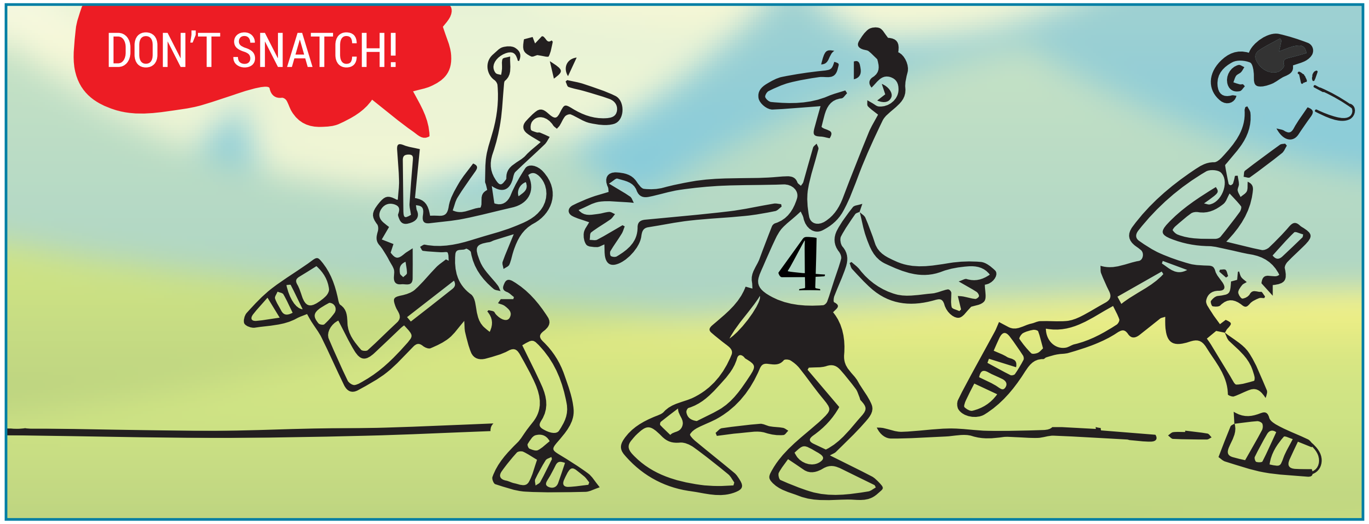
Contrasting the three methods, it is evident from this case study that while interests-based resolution takes much longer, it leads to superior outcomes particularly in families where the issues are often multi-layered and therefore benefit from deeper discussion around interests.

More broadly, the power-rights-interests construct is useful even without the (overt) presence of conflict. In particular, family members from the "in power" generation should be very wary of using their power with other adults in *any* context, and also be aware of the potential fallout from using rights to "rule" on issues. At the very least, a preliminary examination of interests (even as simple as asking "five whys") can uncover the core issues that are at the heart of a matter.

Dominik von Eynern: Behavioral Risks in Successions

Dominik von Eynern

Dominik von Eynern comes from a business family now in the 5th generation and is a Partner of Blu Family Office. He holds a BA in Economics from the University of Augsburg and a Masters in Financial Engineering from the Goethe University in Frankfurt and has over 20 years of experience in principal investment and business development.



Matthias Knab: Dominik, in our last conversation we spoke about the role and efficient processes on how to create a family constitution.

Today I'd like to talk with you about behavioral risks in successions since I know that this is a theme you have done a lot of research on.

Dominik von Eynern: You are right, this is very dear to my heart. Coming from a family business which is now in the 5th generation, we had a couple of successions and just recently in the corporate governance set-up.

Families need to accept the fact that every family's wealth is at risk. There are various risk exposures, far and foremost, behavioral risks, financial risks, and operational risks. When it comes to successions, the usual focus is on solving operational issues, but in my opinion, the focus should be on behavioral risk.

The family wealth is usually tightly embedded into and linked to human capital which includes the possibility to deliver and to contribute to the whole as a group by collaboration and cooperation. Now, if behavioral risks strike, the whole human / social capital are eroded, and financial capital loses its anchors and falls literally off the cliff.

If you look at statistics, it's rather interesting that 70% of family wealth transitions fail not because they made the wrong financial decisions. That actually is only responsible for about 5% of all failures, 2% some other reasons. 93% of wealth transitions fail because behavioral risks are materializing, and so, they are, clearly, the biggest risk exposure families have.

Wealth succession can be broken down into two parts: Allocation which is basically the question of what is fair, and governance, meaning who is looking after the wealth. Obviously, there's a relationship between the allocation and fairness and the governance on the allocation side.

Let's look at what we think is fair. There was an interesting experiment where scientists looked at monkeys to find out if they had a concept of fairness (video link here). The scientists kept monkeys in cages and trained them. They would receive cucumbers in exchange for a stone. The monkeys ended up understanding perfectly that handing over a stone means getting one cucumber. Until one day, one monkey was given grapes which wound-up all the other monkeys. They basically threw out their cucumbers and were complaining, displaying signs of inequity aversion. This study was done by France de Waal. We obviously can't put humans into cages, and so, we are using methods of Behavioral Game Theory, where we also try to find out and predict which decisions rational players would make if it came to an allocation problem.

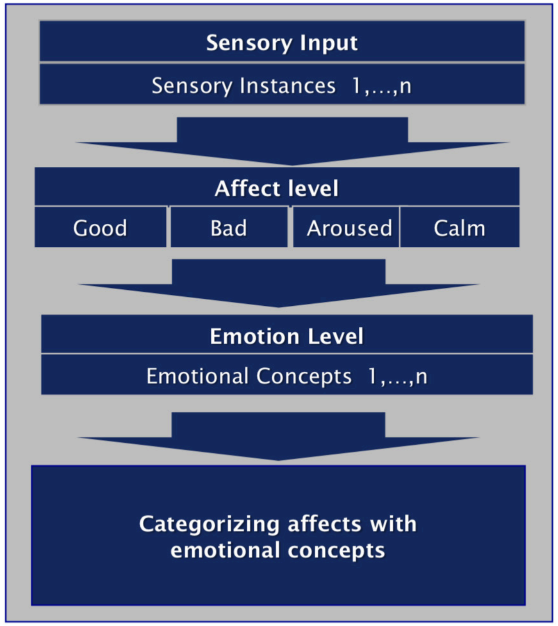
The ultimatum game is a very simple game, where you have two possible outcomes. It involves two people, one proposer who is offering a share of his pie of wealth, and one responder who can accept or decline. This is the basic game setup. And now to the rules. When both agree on the split, the proposer gets the remaining share and the responder gets the offered share. And if they can't agree, all the pie goes to charity. So, the payoff is zero for both.

Now, as a purely rational player, you would assume that any offered share above zero is good enough for the responder to say, "Yes, please." However, in 50% of the cases, offers of under 20% were rejected. So, the responder harmed himself as he didn't get a payoff because he rejected, and the proposer didn't get a payoff either, because everything then went to charity. In all those cases, the responder was quite happy to punish the proposer.

On the other hand, shares between 20% and 50% were mostly accepted as fair. These findings from behavioral science are in stark contrast with what the rational player would do. It's a bit like monkey business, but surely, we do have to admit we don't know what fair is. Fair is not a general concept; it has a lot to do with social comparison. There might be a hardwired inequity aversion as we saw in the monkey business, or it might also be something like an acquired emotional concept. When we are treated unfairly, we derive negative utility that creates cognitive dissonance, which we are striving to compensate. And when we punish the people who we feel treated us unfairly, we derive positive utility. This is confirmed by neuroscience where it has been found that the reward center of our brains is stimulated when we punish others.

And this punishment in a family context doesn't come in money only but also in behavior – reputation risk comes to mind here. When we say fairness is an emotional concept, then we also need to understand what emotions are. One might say that emotions are innate and that we have certain emotions such as happy, excited, scared, angry, etc., but the thing is, these are categories that we have constructed. What we call emotion usually starts with input through our five sensory organs which create a certain level of affect which is undefined at this stage. Their effect can be either good, bad, aroused, calm. And out of those base sensations, we create many emotion concepts. We categorize our sensations into these emotion concepts we can imagine as drawers

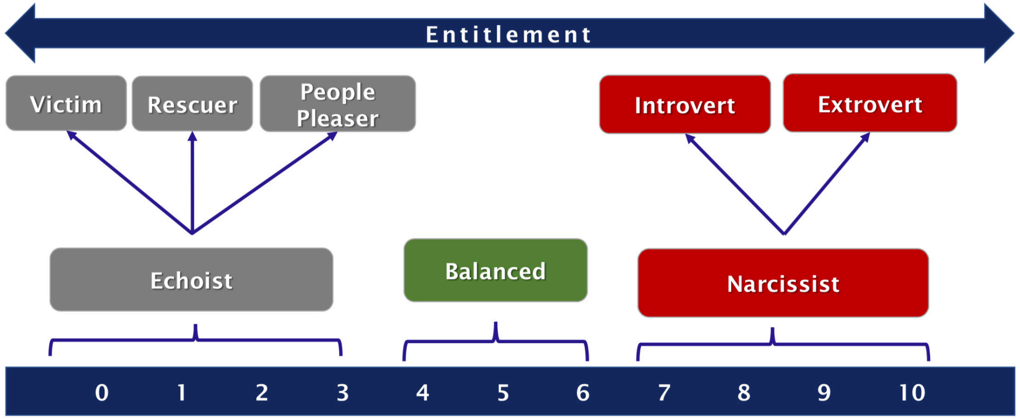
AREN'T EMOTIONS INNATE?



So, we have a sensation, an affect, and then in another step, we try to understand probabilistically into which emotional drawer should I put that affect. Again, it's probabilistic and in the end driven by our belief system. And sometimes we jump to conclusions, like, for example, the feeling of being treated fair or unfair in a certain situation. But the reality is that what is fair or unfair is a probabilistic approach, driven by our own probability distributions that we learn over life. And as our belief systems and probability distributions are different, people can also have different concepts of fairness.

Let's look at a narcissist's scale which runs from zero to ten. On the zero end are the 'Echoists' who are basically defined as the victims, the rescuers or people pleasers. And on the other, side we've got the narcissists – the introverted narcissists who always say, "No one sees me, how good I am, how beautiful I am," and obviously also the extroverts who can't be overseen.

FAIRNESS' ON A NARCISSIST SCALE

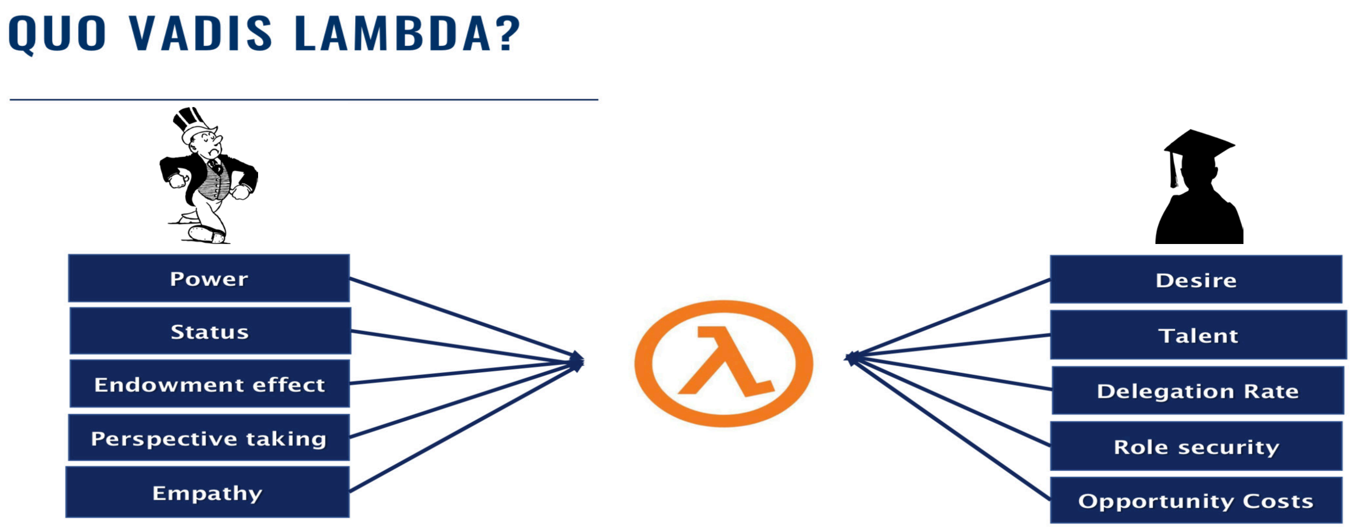


In any event, the echoist and the narcissists both have a sense of entitlement. You can imagine that in the narcissist's scale, both these extremes will have different perceptions of fairness. And of course, when we have formed the belief that people treat us unfairly, like the victim, we will look for evidence and tend to only see this evidence. If someone comes with information that would torpedo that evidence and say, "Look, here's a good example where you have been treated fairly," we would gladly ignore that.

Typically, when beliefs are attacked, we as humans tend to fight. This is what behavioral economists call the confirmation bias because we only look for evidence that supports our beliefs, so, we only see what confirms our beliefs, not what's happening around us, which is also why the notion of fairness is a complicated one. And, to be precise, fairness or the emotion of fairness is a result of negotiation rather than anything we can throw out there as a notion or a concept as such with a general application.

Let's turn to governance now. When the principal is handing over the business to the youngster, then obviously, there are mutual expectations. The patriarch expects a positive utility from handing over the business, and that utility is not only driven by money but also by socio-emotional payoffs and the successor is obviously required to deliver that payoff. In any event, the two are in something like a principal agency situation because the patriarch is delegating to the successor, and this situation cannot be entirely remedied by corporate governance since we are speaking of two highly interrelated and associated human beings.

But still, how can we mitigate the agency risks? I think cooperation is a wonderful thing, but again, what is cooperation? Well, in my mind, cooperation is a profitable social exchange and the currency we are dealing herewith are utilities, or utils, of utility functions. So, we have a delivered utility, which must be greater or equal to the expected utility, either in direct reciprocity, which is tit for tat, or indeed, indirect reciprocity, where reputation is a huge influence factor on the propensity to cooperate.



Over many direct and indirect interactions, reputation is built up, and so are expectations.

The trouble with expectations is that when we meet expectations, it's all right; if we over exceed expectations, it makes us happy one time; however, if we undershoot and disappoint, this then has a weight of two. It's two times worse to disappoint than it's good to surprise on the positive. Obviously, this dynamic has major implications for the successor and the patriarch/matriarch succession play.

It is therefore extremely important to be clear about the expectations, but sometimes expectations are tacit, which is a problem. **Family constitutions are not sufficient to clean that up.** To be more technical, we can introduce a cooperation metric called Lambda. When Lambda is minus one, there's full competition, and when Lambda is a positive one, we have a situation like in a beehive, the perfect cooperation. Now, patriarchs, matriarchs, and successors will be between the two extremes, and each one has more or less an incentive to compete, or to cooperate indeed.

So now, the next question is what influences the cooperation factor Lambda? On the patriarch-side, he is used to holding the power, which is associated with a status. He loves his status and has a need for status. From that perspective, every inch, every delegation he gives to the successor means he loses status.

Like with expectations, losing status is twice as hard as gaining is. This is where his incentive to compete comes from – he wants to maintain his status. Then, he has got an endowment effect, because he worked and built the business for so long, he either founded the business, or he took it over from his father or his mother, and he grew the business, but it's his business, his baby, and it has been for so many years. And if he doesn't let go, that obviously comes down to a competing behavior. Another question is his ability to take perspective. Some patriarchs are not very good at taking the perspective of a successor, or even have empathy. Empathizing with the successor is quite a different thing because that means he needs to dial back and see how he behaved in a similar situation back 40 years.

And then finally, the successor obviously not only needs the talent, but he also needs to have the desire to join the business. I heard about a family where the successor was trained as an architect and wanted to work as an architect, but father says, "No way that you are working as an architect. You are going to knit socks [or: stay in the family business]." And son says, "No, but I really like to build houses." He said, "Well then you are not entitled to the business and you are not entitled to the wealth."

So, the son doesn't even have the illusion of choice. He is forced to work in the business, how does that impact his motivation to work and make it a success?

We also need to look at **delegation** in this context. Given the patriarch's need for power, status and its endowment effect, how much delegation he is really able and happy to give to the successor? Often you find a situation where the patriarch says, "Yeah, you do it now, but you know what, you can't do it this way." That's a problem. This also feeds into role security: Who is doing what, and why? Role confusion, it is pertaining to conflict. And if the successor really is talented, well, he or she has opportunity costs. They could do something else and maybe something which they enjoy much more and may even make more money. You see, when you define fairness in succession as a result of negotiation, there are many things that are suddenly up for discussion.

Let me point out something else here. Sometimes people say that you just need to trust one another and then cooperation works. Yes, trust is very, very important, it's the most important ingredient for successful cooperation, but there's **a decreasing marginal utility of trust.** This means that if you just trust endlessly, the cooperation rate will go down because people who are trusted the most may even have an incentive to misuse this trust and finally end up competing. Again, family and corporate governance help, but the psychological safety to challenge is vital to keep trust healthy at an optimal level.

What's the next challenge then? Well, of course, we also need to address who is the successor? Is the successor maybe completely overwhelmed with the task at hand? Is the successor having some other, especially emotional stress which actually can draw him or her into anxiety or even into depression? Very anxious and very depressed people, for whatever reason, are not able to cooperate, to reach out and make it happen.

These are all among the things to consider in successions. Think of that architect. He might end up depressed because he's been actually forced to do something he didn't want to do in the first place.

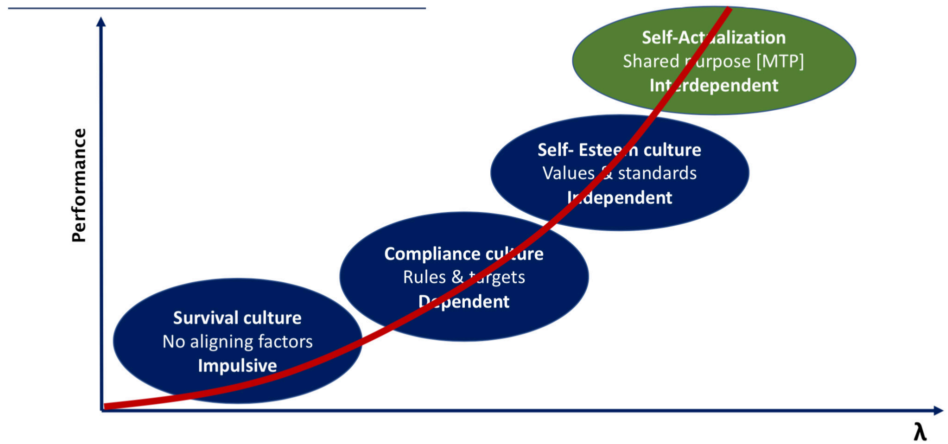
The fear of social rejection can come into play, or ambiguity, particularly when there is a situation where there are three possible successors and the patriarch just holds back and says, "Well, let's have a look who might be the one who crystalizes as the most talented." That ambiguity is even worse than social rejection and causes emotional stress and in extreme cases, toxic stress which negatively impacts the physical well-being.

You can see that many behavioral risks can be created on the way to succession which ideally will need to be cleared up before anyone succeeds anyone. The echoist is not able to truly cooperate nor will the narcissist be able to cooperate because obviously he knows it all and he wants to shine in the light. Teamwork is actually impossible for complete extroverted narcissists.

We also need to evaluate what kind of performance culture it is in the business. Is it a survivor culture where everything is driven by impulses, where you have no aligning factors? People basically, just to make sure they survive until the next year with their very impulsive patriarch and then suddenly the successor does it in a very different way. Or, is it a complete compliance culture? Yes, there will be rules and targets, but there you end up with a bunch of dependent people saying 'yes'. Or, do you have a self-esteem culture with values and standards and more independent thinking which pertains to group intelligence? Or, do you have, indeed, self-actualization where you have a shared purpose where people understand they are dependent on one another, which enables the highest form of cooperation.

So, how to deal best with succession? As I said in the beginning, succession is not only a matter of a family constitution, of legal structures or of tax structures, it is indeed about behavioral engineering.

λ, CULTURE AND PERFORMANCE



Succession themes usually involve a few people, but there are strong ripple effects which can go very far. Two individuals are already a group, so there is a need for good and positive group dynamics. If the family doesn't get on, that would have an impact on the organization and the organization might suffer in performance as a result. That can have ripple effects in communities, in particular when the family business operates in a structurally weak region. And if you aggregate family businesses, it can negatively impact the world - GDP and society.

My plea here is to **use behavioral engineering to make successions successful.** How exactly? To my mind, the unstructured needs to be structured and the unstructured is in the heads of the families, of the patriarch, of a successor. The answers are all there, but they need to be brought to light through structured questioning, to find common ground and be clear on mutual expectations. Going through that process make people 'own' what was agreed.

This is similar to what we discussed in our last interview regarding Family Constitution. People just don't own what an advisor says to them, but they will usually own what they have worked on and brought up themselves, and that's the idea behind family coaching. Structure the unstructured by asking structured questions, leading to an outcome that a family really wants.

So, the key takeaways are: Successions are at behavioral risk. Fairness is a variable perception and an emotion concept which is created and hence, different for everyone. What is 'fair' must be negotiated. Passing on the baton in governance can be very tricky and needs behavioral risk management. Succession planning goes way beyond the tax and legal aspects. I am very happy to speak about these matters with concerned people and share experiences.

How to buy 700,000 Bitcoin

In **Family Office Anonymous** we speak with family office leaders and principals who want to share their thoughts, reflections and experiences with a greater audience while making sure their identity is protected.

Contact Matthias Knab using Horizons@Opalesque.com if you like to be part of future columns.

Matthias Knab: **The largest quantity of Bitcoin ever in a transaction is reputed to be 500,000 BTC in April 2015. You have been involved in some pretty large BTC transactions as well, can you tell us what it is like to potentially do transactions that amount to a dollar value of over $1 billion USD?**

A number of years ago a large investor and friend asked for my help in finding counterparties from which he could purchase very large amounts of Bitcoin ("BTC") for his firm. I assume he asked me because he trusted me and knew that I have great friends and business associates around the world. He wanted to buy multi-billions of USD worth of BTC. I am used to trading billions of dollars of traditional financial instruments in milliseconds on exchanges. I know many people who have and/or control many billions dollars, I go to Davos, and so on – I thought - how hard could this be? I figured I'd send out a few texts, make a few phone calls and we would be on our way to completing the purchase in no time.

I am sure that anyone who knows the OTC BTC space and is reading this is laughing at how naive that was! Nonetheless, he was the first of a number of friends and significant investors who asked for similar assistance, either buying or selling, and over the years I developed real expertise and a team of experts as I assisted them in their objectives.

Bitcoin is touted as having the advantages of being capable of transferring around the world easily at lightning speed and not relying on a central trusted authority. It is therefore exceedingly ironic that transacting BTC in size that even begins to approximate "institutional quantities" turns out to be one of the slowest, most cumbersome financial processes ever engaged in by modern business.

My friend who first asked for my help had already experienced many of the pitfalls of trying to engage in large size BTC transactions. Between what he had learned through some transacting and a lot of frustrating experiences and my contributions we hoped to accomplish his goals with a minimum of additional frustration.

There were not any widely agreed procedures for moving toward a transaction or for transacting and the situation remains the same. Later I can describe some of the challenges the industry faces with developing widely agreeable procedures. But for now suffice to say that for someone used to doing business in a highly regulated environment with traditional assets where the parties involved are appropriately registered, well trained in compliance procedures and generally honest – what I experienced entering the OTC BTC space was quite a shock.

My friend who retained me as Mandate for his fund told me that essentially he was prepared to buy as much BTC as could possibly come onto the market. But we decided that the largest number we would quote when anyone asking the quantity that we wanted to buy would be 700,000 BTC. After months of contacting anyone I knew that might have a large amount of BTC or know someone who did have billions of dollars worth of BTC who was interested in selling, I got in touch with the CEO of one of the larger and more well known companies that had been funded for the purpose of engaging in large Cryptocurrency transactions. He indicated that their strategy was generally to buy from Miners and then re-sell to Institutional Buyers. However, initially we experienced more frustration as each potential deal had one or more factors that were unacceptable to my buyer.

Then after months of potential deals that all turned out to be dry wells, I got a call from the CEO saying that they were teaming up with a seller from Canada to be able to sell 700,000 BTC to my friend's Asian fund. They said that the Canadian seller and their representative would fly to Hong Kong, meet the various procedural requirements that my buyer had set and even give us an especially large discount on the price for buying such a large quantity. It seemed nearly perfect although we all understood that nothing is quite as easy as it might seem and nothing is a "done deal until the deal is actually done" in the world of OTC BTC trading.

The next step was a conference call with my friend the buyer, me, the Canadian seller and the CEO and CTO of the selling company based in Europe. The call lasted almost 3 hours and went through many ups and downs. But by the end, it seemed that we had all of the key points agreed. The Canadian seller would get back to us to schedule the transaction after he figured out when he could fly into Hong Kong. Since I was Mandate to the buyer and direct to the seller – as well as the especially high discount increasing the amount of compensation for putting the deal together – my company would be paid approximately $70 million USD upon completion of the transaction...

Matthias Knab: So how does the story end?

Perhaps it is best to save that for later and fill in some other information along the way.

Matthias Knab: Fair enough. Who are the "players" that you tend to encounter in this space? What are some of the widely believed myths that are not true?

One of the reasons that I continue to be active in the Blockchain/Cryptocurrency space after getting involved at the request of friends who are large investors is that I find it very interesting. I have met very engaging people who are successful in a wide variety of professions from technology, law, of course, institutional investing, family offices, prop traders, entrepreneurs and even a physicist or two. It is also very interesting to observe the development of a quite primitive financial space after decades on the leading edge of the most advanced financial applications. I feel somewhat like a contemporary Archaeologist who is surprised to find the opportunity to actually observe the development of an ancient civilization in real time.

Within the OTC BTC space the "players" generally fall into two groups: The **OTC Trading Desk category** and the **Natural Buyer/Seller segment** (aka the non-Trading Desk or non-Desk segment).

The OTC Trading Desks are the companies that would be familiar to many readers of *Opalesque* – the exchanges, trading platforms, proprietary trading firms and other liquidity providers. The natural buyers/sellers are typically miners or early adopters who bought large quantities at very low prices and held onto a significant percentage for years.

Family Offices and Ultra-high net worth individuals looking to diversify their portfolios and/or to protect their assets from government confiscation in unstable, untrustworthy political environments make up the majority of the natural buyers. The few, relatively small funds dedicated to investing in the Cryptocurrency can be found mostly at the trading desks but occasionally in the world of the natural buyers.

There are few participants that understand both of these groups well. Usually they specialize in one or the other. However, I have been able to capitalize and help others capitalize in a variety of ways by being knowledgeable in both segments.

It seems that many people who are otherwise sophisticated in financial matters but not experienced in Cryptocurrency believe that Bitcoin is primarily the realm of money launderers, tax evaders and all manner of hardcore criminals. In my experience, this is very far from the truth.

In all the transactions that I have been aware of, the Fiat currency always needs to go through a traditional financial institution – always a bank in my experience – and all parties have been keen on compliance with KYC-AML and all other applicable laws and regulations.

In many Asian jurisdictions the banks require that they review all of the contracts involved with the pending transaction. Overall, large OTC Bitcoin transactions are more highly scrutinized and leave a more thorough electronic trail than transactions of similar size done completely in fiat currency.

Another myth that seems to be widely believed is that large BTC trades can be transacted easily on well known exchanges and platforms. I am working with a group of strategic partners in order to provide liquidity in larger sizes combined with the sophisticated order entry methods that are common place in traditional assets for institutional traders and investors. However until we launch this solution in Fall 2019, even a few hundred BTC can often times destabilize the market.

If you request a bid-offer from another platform for 5000 BTC, the quote will likely come back at 2% wide or more – if they will make the market at all for that size. Of course, given all of the hacks and failures of Cryptocurrency platforms that have resulted in customer losses, many traders prefer to place only a minimal amount of value at such an entity and then only for the shortest time possible. **It is for reasons such as these that the off-desk OTC BTC market of natural buyers and sellers continues to thrive.**

Hong Kong is one hub for BTC trading and 100,000+

BTC trades do happen relatively frequently there and all across the world. However it requires a competent guide with knowledge and experience in a variety of areas to actually complete a successful transaction of that size. Without such expertise the result will almost certainly at best be a huge waste of time with considerable frustration and perhaps much worse such as losing substantial assets to some type of scam.

Matthias Knab: You point out that there are substantial dangers and you also stated that the space is in a somewhat primitive stage. What do you suggest to make it safer, in addition to utilizing the services of experts for off-desk OTC transactions, and what do you foresee for the future of this space?

I think it is useful to see this topic with the 3 touchstones of Standardization, Curation and Consolidation in mind.

There are no longstanding, standardized and widely accepted set of procedures such as there are in traditional assets. So most participants make up their own procedures for transacting and often refuse to deviate when their proposed counterparty has their own procedures which are usually quite different.

With both buyer and seller holding tight to their respective procedures – which are often inconsistent with each other – a great deal of time and energy are often wasted before the parties finally acknowledge that the deal has failed.

While the medium to long term solution is a Standardization of Procedures that can facilitate safe and fast transactions such as occur in traditional assets; the short term solution that we employ is "Flexibility". Specifically having the ability and willingness to facilitate and/or participate in transactions in a wide variety of ways so that as many potential counterparties as possible can be accommodated.

For example, in addition to maintaining the capability to transact in non-trading desk transactions in a variety of ways as I previously mentioned, we are engaging a number of experts and strategic partners in order to launch an offering that will provide greater liquidity for much larger trades that can be made with the sophisticated tools that family offices and other institutional investors/traders are accustomed to using. This includes everything from properly maintained data to algorithmic order entry to trading system development.

The second touchstone is "Curation": Because there is such a wide variety of offerings – as innovation runs wild in the space and some of the offerings are excellent while many others are inferior at best and often financially dangerous – I have found that I can add substantial value by engaging in curation of the offerings. Myself and my team have helped less informed participants to find the better solutions and avoid the more risky offerings.

Many family offices and institutional investors are feeling a strong sense of enthusiasm for engaging in the space, mixed with a cocktail of risk factors and volatility. So it is easy to see why most participants in the space are a bit disoriented, and so my clear recommendation would be to seek specialized expertise. Just speaking for myself and my team, we found it possible to create and engage in more secure, reliable and profitable processes in the Blockchain/Cryptocurrency universe. In addition to trading in Cryptocurrencies, we have also gained expertise in applying compliance procedures to the specifics of the Blockchain industry, security and utility tokens, evaluation and valuation of Blockchain companies, utilizing tokens to disintermediate established technology as well as to support charitable and impact investing organizations and a number of other related areas.

> We are on the verge of the next stage of evolution of Blockchain as we see how the possibility of offerings of Blockchain based

products such as Libra by large commercial entities as well as potential Digital Currencies/ Digital Fiat by Central Banks evolve. I believe this is the next battlefield for determining the future evolution of the space. Will truly decentralized currencies be allowed to flourish on a massive global scale? Will governments use the technology to merely increase efficiency or in some cases to increasingly assert government power over private interests? Will the Cryptocurrency solution be as easily accepted as Bitcoin if it is controlled by a centralized authority? This coming phase of evolution reminds me of "ancient" times when software companies faced the question of whether they should standardize on the Apple OS or the Microsoft platform when the outcome was unpredictable and they knew the decision would ikely lead to either great success or complete failure. In some ways the specific dynamics are quite different. However the magnitude and importance of the developments and choices made are quite similar.

Exactly which possibilities that regulators will accept for custody solutions that can lead to a variety of listed derivatives is an important related question. Clearly the expertise to effectively respond quickly to these changes as they emerge and maintain optionality until they emerge is the most important strategic variable in this highly complex equation of the future evolution of this highly dynamic technological advance.

Matthias Knab:You mentioned "Consolidation" as the third touchstone. The crypto currency space is massively decentralized with 200 or so marketplaces and the majority – it is said around 60% – of transactions are happening off exchange in an "OTC" format. Where do you see the marketplace or exchange landscape heading? Is consolidation ahead?

Although the Cryptocurrency space is greatly decentralized, as you state, ironically the ownership of Cryptocurrency is very concentrated. For example, Business Insider estimates that approximately 97% of Cryptocurrency is held in only about 4% of wallets. At the same time a prominent platform for institutional investors states that they consider a "large trade" to be one of only 20 BTC or more. This is currently about $200,000 USD in value (at $10,000 per BTC). This is another reason to expect that the off-desk marketplace of natural buyers and sellers could continue for to thrive some time.

It seems inevitable that this expansive frenzy of innovation, duplication and regulation will lead to a consolidation of the space that will likely be equally as powerful and rapid as the expansion – once the balance tips from expansion to contraction. Larger investors should make efforts to get excellent advice and assistance to help them navigate the treacherous waters of the consolidation phase in the most efficacious manner with processes such as M&A. Clear-sighted Industry Intelligence reports will prove exceedingly valuable in this phase of industry evolution that is inevitably coming – and probably coming sooner than most participants anticipate that it will.

Matthias Knab: Do you see family offices playing a role in crypto, and which one?

Having run my own family office for about a quarter century and having advised a great many family offices, I can say that Family Offices are already playing an important role and will continue to play a very central role as the Blockchain/Cryptocurrency space continues to evolve.

Family Offices have substantially greater capabilities than individual investors generally have and are able to act in a more flexible and nimble manner than most large, publicly funded institutions. So the current phase – after the early adopters and before the new technology is widely utilized – is the perfect time for Family Offices to be involved as investors, innovators, users of the technology and advisors.

Matthias Knab: And what about the 700,000 BTC transaction you were discussing earlier – how does that story end?

Well, as anyone who has become involved in the non-Trading Desk OTC BTC space has learned, the first step is that everyone involved signs a non-disclosure agreement. So let me just describe somewhat of a composite picture of how such a transaction might take place in Hong Kong or a similar jurisdiction. This is only one of many ways of completing such a transaction. Of course, there are a number of less dramatic ways to transact, including utilizing: Escrow services, Attorney Escrows, Trading Platforms, various financial instruments or bank guarantees, etc.

However, since the Face to Face transaction at a bank is the most suspense filled and dramatic, I will give a brief description of it. After extensive negotiations, a Buy-Sell Agreement with all significant aspects of the transaction including the payments to the intermediaries/ representatives that have arranged the transaction would be completed.

Then the contract would be presented to the Private Banking Officer at the bank where the transaction will occur. On the day of the transaction, both buyer and seller would arrive at the bank with their own entourage – including a large professional security team, their lawyers and advisers.

They are escorted by the Private Banker to the bank's meeting room and the process begins. The tranche sizes would have been agreed to in the contract along with the total amount to be transacted, the manner of establishing pricing, etc. Usually the Fiat currency is sent first since when BTC is sent there is no realistic recourse to the sender if the Fiat does not promptly follow. So the first Fiat payment is sent and everyone waits tensely until the Fiat transfer is confirmed. Then the first tranche of BTC is transferred and once the transaction is confirmed and the BTC found acceptable according to the terms specified in the contract the process is repeated until the total amount of BTC agreed to be transacted is complete. After the first 2 or 3 tranches are completed the participants tend to relax a bit and settle in for what is likely a long day of repeating the same process many times. So much for the dream of transacting today friction free at lightning speed across the globe. But that day will surely arrive.

While Family Office Anonymous respects the confidentiality of our interview partners and contributors, the principal of this family office has signaled his openness to answer questions regarding Bitcoin and other cryptocurrency related transactions and inquiries.

Please email Matthias Knab using Horizons@Opalesque.com, your email will then be confidentially forwarded.

The Last Frontier: Western investors (still) don't know Africa

Mario Marconi

For more than 25 years, Mario Marconi held senior executive positions at UBS in services such as wealth planning, global philanthropy and UHNW families and family offices advisory. Last year, Marconi and his partner Martin Emodi, himself a UBS alumni with deep experience in Africa, founded Africa Wealth Partners in Zurich, to serve as advisors to HNW families in Africa and as intermediaries for business partners and investors. It has, so far, been a unique endeavour in many ways.

Opalesque: Mario, how did Africa Wealth Partners get started?

Mario Marconi: Martin Emodi and I created Africa Wealth Partners in early 2018. Martin used to run the Africa business at UBS. I have a corporate finance and family office background, along with banking experience from UBS. With our combined experience and network, we are in the position to act as the "family doctor".

The focus is to serve as a multi-family office for African entrepreneurs and assist them across a spectrum of needs on the private side or on the business side. Our clients are typically entrepreneurs who have built or are in the process of building businesses, and we help manage the various aspects of their financial and private affairs. We make sure that what they do on the business side is done in the right way. Typically, entrepreneurs focus intensely on their business and tend to overlook the private and family aspects, so we try to help them with that too.

We work as trusted advisor, we match strategies, and we help them navigate the various aspects of their activities. We provide Swiss savoir-faire. We also act as intermediaries with other business partners and investors.

"Among our biggest challenges, we do not count competitors, because nobody does what we do."

Opalesque: How has your experience been so far?

Mario Marconi: It has been a fascinating and a learning journey. Seeing the macro picture underneath, going onsite and meeting with entrepreneurs, making it happen.

We do not count competitors, because nobody does what we do. But one of biggest challenges is about clients who often do not understand what we do because what we offer is perceived as intangible. Furthermore, it takes a long time to build trust, as on this continent, the general level of trust is extremely low. There is also a time issue, as the people we talk to are very busy, they're sitting on amazing opportunities and their time is precious.

"In general, western investors don't know Africa."

Then in the Western world, when we talk about access to capital for these entrepreneurs, the challenge is that in general, western investors don't know Africa. The lack of knowledge about Africa is too often linked to negative connotations. So to mobilise capital, there is a need for education. We need to explain what the real risks of the continent are, and these risks are different from the general perception. There are some geopolitical risks, but then business risks tend to be similar to businesses risks in other parts of the world.

Also, countries within Africa are very dissimilar. We spend a considerable amount of time in Nigeria, and when we talk to investors in Europe about opportunities in Nigeria, the first response from those who don't know the context is negative because all they know about Nigeria is what they hear on CNN, and CNN is definitely not the best ambassador for Nigeria. In the real world of Nigeria, yes, there are risks, but not the risks you hear on CNN. It is also a land of great people, great entrepreneurs and amazing opportunities. That's why I say education is needed to change the narrative.

Note: *This year's African Economic Outlook from the African Development Bank shows that the continent's general economic performance continues to improve. GDP reached an estimated 3.5% in 2018, about the same as in 2017 and up from 2.1% in 2016. GDP growth is projected to accelerate to 4% in 2019 and 4.1% in 2020. New research for this Outlook shows that five trade policy actions could bring Africa's total gains to 4.5% of its GDP, or $134bn a year. According to the IMF, about half of sub-Saharan Africa's countries— mostly non-resource-intensive countries—are expected to grow at 5% or more, which would see per capita incomes rise faster than the rest of the world on average over the medium term.*

Opalesque: The European Union is said to be by far the most important trading partner of Africa. Is there a discrepancy between trading partners and investment partners?

Mario Marconi: I am not sure that there is. The kind of money which goes to Africa is more from the public sector than from the private sector. Africa trades a lot of commodities, but FDI is still very low – although it is slowly growing. The kind of investors in Africa tend to be government-related organisations like development financing institutions, from the World Bank to the CDC and other similar organisations.

Note: *Africa escaped the global decline in foreign direct investment (FDI) as flows to the continent rose to US$46bn in 2018, an increase of 11% on the previous year, according to UNCTAD's World Investment Report 2019. Growing demand for some commodities and a corresponding rise in their prices as well as the growth in non-resource-seeking investment in a few economies underpinned the rise.*

Opalesque: Is there a bit of overcrowding in terms of foreign investors in infrastructure?

Mario Marconi: I don't think there is, yet. There is still a substantial gap in infrastructure and the need for investments is significant. China is playing a significant role in that space, having taken a very strategic approach to Africa as a source of commodities. Indians have been present in parts of Africa for generations; they are more part of the ecosystem than the Chinese.

Opalesque: What kind of businesses do your African clients run?

Mario Marconi: We are sector-agnostic. So far, our focus has been on Nigeria, and in that context, the older generation of entrepreneurs tends to be in oil and gas. And the younger generation are in the tech, agriculture and FMCG (fast-moving consumer goods).

"The younger generation of entrepreneurs are building very exciting initiatives in tech, mobile payments, agriculture..."

Opalesque: You've just mentioned an interesting phenomenon taking place in Nigeria.

Mario Marconi: Indeed, the privileged elite systematically send their children to study abroad, such as boarding schools in the UK or Switzerland, and then university in the UK or the US. Many of these children, after their study and some work experience, go back to their country to seize the opportunities that Nigeria has to offer, with its population of 180 million and its economic growth.

So the younger generation of entrepreneurs, in their 30s and 40s, are building very exciting initiatives in tech, mobile payments, agriculture, etc. These people are much better connected to the rest of the world than the older generation.

"The opportunity is that Africa can leap-frog from the old world ... without going through a transition."

Opalesque: You have mentioned a disruptive transformation taking place in the next decades.

Mario Marconi: We have already seen some of that disruption in Africa in certain sectors, such as telecom and mobile payments. The opportunity is that Africa can leap-frog from the old world due to the lack of existing infrastructure, without going through a transition. They can go much faster when adopting new technologies and new approaches. We see it various sectors and there are many well-known examples like Mpesa in Kenya, or Paga in Nigeria.

"Africa is the ultimate frontier. It is the last one."

Opalesque: You have said "investors can no longer ignore Africa". What do you mean by that?

Mario Marconi: Investors have been ignoring Africa and focusing on Asia in the last 20 years. The Asia wave is not over but it is slowing down. Africa is the ultimate frontier. It is the last one.

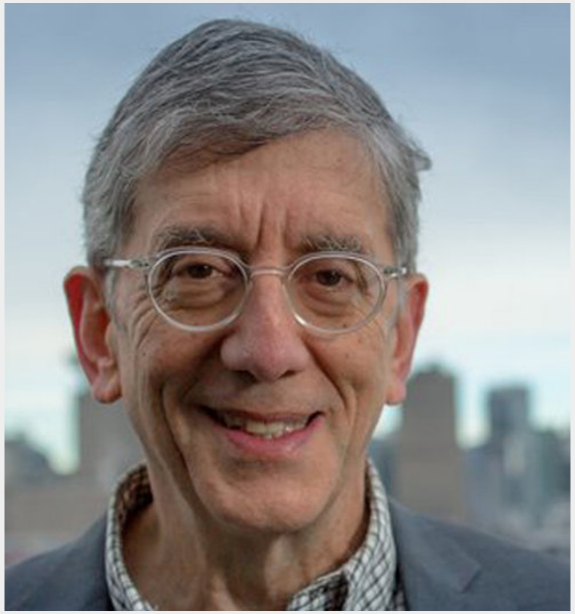
If you compare Asia and Africa; in Asia, for any sector, you already have an established market base, whereas in Africa, you don't have that, the games are still open. Very few players have tackled the pan African opportunity yet, which is where the next frontier is. You find large, well-established domestic players in a number of countries but businesses which have tackled the sub Saharan African opportunity are few. Going forward, this will be facilitated by the free trade zone which was signed recently. That's why the opportunity is in Africa. Investors will have to come to Africa eventually.

Note: *Last March, 44 countries signed the agreement to create the AfCFTA (African Continental Free Trade Area) in Kigali, Rwanda. Nigeria signed up in July, at the last minute. The free trade zone will comprise 1.2 billion people with a combined gross domestic product of $2.5tn, according to The Africa Report.*

Opalesque: What about global warming affecting investment opportunities in Africa?

Mario Marconi: We don't see much correlation here. But Africa does not have a great energy infrastructure today, so it is being built according to today's standards, so with a focus on renewable energy. That is one of the many opportunities in Africa. And investors with renewable energy projects are looking at Africa.

Book Review: The Clean Money Revolution



Joel Solomon

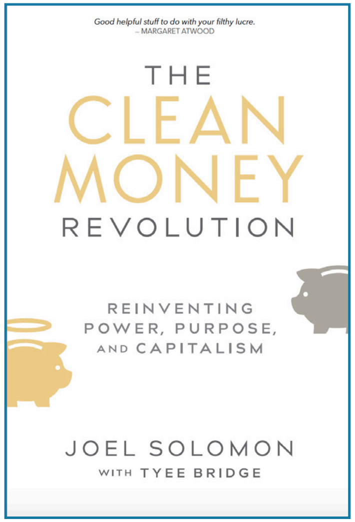
Joel Solomon, Chairman of Renewal Funds, is an impact investor with a 35 year track record and change agent. He has invested in over 100 early growth-stage companies, delivering above-market returns while catalyzing positive social and environmental change.

I highly enjoyed meeting Joel Solomon earlier this year in Toronto and enjoyed reading The *Clean Money Revolution.* It is part memoir of an inspiring thought leader's journey from presidential campaigner to pioneering investor, part insider's truly empowering guide to the businesses remaking the world, and part manifesto for a new vision of profit, power, and purpose.

Joel is also a Founding Member of Social Venture Network (SVN), Business for Social Responsibility, and the Tides Canada Foundation; Board Chair of Hollyhock, and a member of the University of British Columbia Board of Governors.

Matthias Knab: Joel, when you set out to write your book, did you have a specific audience in mind?

Joel Solomon: There are four main audiences. People with wealth, their children, their advisors, and young people that are motivated and ambitious-the emerging entrepreneurs who are building the map of the future. Very importantly is the wealth management industry. They face profound change in the meaning and purpose of their industry.



For each of those audiences, a common theme is emerging. With ever more information, awareness of crisis is growing. We face challenges socially, ecologically, and politically. *Meanwhile, immense wealth is growing.* That wealth can be deployed profitably, when that's the goal, or philanthropically when we with most of the resources, realize we have more than enough. In the middle of those two concepts, is a vastly under-explored potential. It's ever more apparent that we need a new perspective of our responsibility to the underlying well being of the whole. We ignore this responsibility at the peril of future generations.

My aim is to stimulate the inquiry of our true responsibility for the long term. We must awaken to a reality of a new era, where we often find ourselves unconsciously damaging the very systems that support us. The future of humanity is now at profound risk.

Matthias Knab: Joel, you come from a successful entrepreneurial family. Your first personal investment in 1983 was in a business which was founded a year earlier called Stonyfield Farm. You describe your investment style a "sprinkle investor", building a portfolio of small private-equity investments in promising mission-based investments.


Carol Newell

In 1994 you were asked by heiress Carol Newell to set up her "activist family office" to build a multi-sector portfolio dedicated to her vision and mission. The office deployed the majority of her wealth across for-profit companies, creative philanthropy, public policy and politics, and leadership development across sectors, focused on your region of British Columbia, Canada.

From that base your team built Canada's largest "mission venture capital" firm, focusing on organics and environmental tech. You have invested over the years in over 100 early growth-stage companies in North America, delivering above market returns while catalyzing positive social and environmental change.

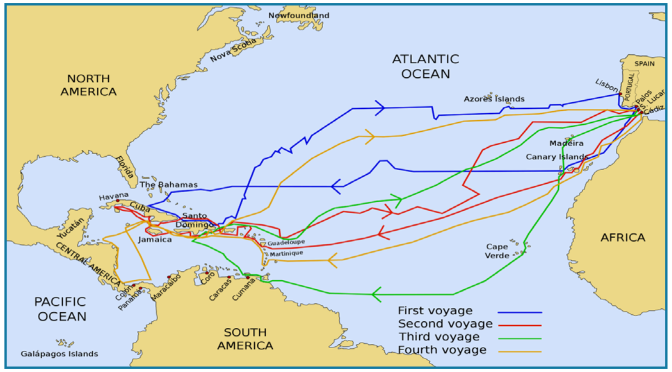
Let's go maybe back to the 1990s when you met Carol who in the fall of 1992 received the bulk of her inheritance and then decided to invest that money completely differently and also with a real long term vision?

Joel Solomon: It is surprisingly unusual to run into the insights, perspective and drive that Carol has. She grew up in a family that created financial success. She was also very empathic for the challenges going on in the world. She studied geology and spent a lot of time out in the mountains learning about the state of the earth. She came to the realization that we are overtaxing the life systems that sustain humanity, and concluded that we must focus on the long-term impact on the systems which enable the precious balance of life to thrive.

When Carol inherited a large amount of money, her attitude was, *"I didn't make this money. I'm not truly clear why I now own it. My responsibility is to do the most good in the world, that I can do. I have far more than enough, and I am okay to reduce the amount for myself, and would rather support meaningful causes that I believe in."*

Carol's insight coincided with my own thinking and perspective, so it was a great match and partnership between us. We had a shared vision and distinct roles that matched our skills and interests.

We took a very long term outlook, growing from our first planning meetings in 1994, shortly after the 500-year "celebration" of Christopher Columbus and his so-called, "Discovery of America". That "discovery" concept was effectively ignoring and colonizing the flourishing indigenous people of the continent who had lived there for many centuries. This anomaly caused us to think about what had happened in those 500 years of European settlement, genocide, and the importation of slaves from tribes in Africa, to enrich the settlers who forcibly took the land for their own, across North America.



On one hand, humanity was exuberantly successful at building economic activity, but on the other, the growth of industrialized society caused irreparable and profound harm to planet and people.

There must be wiser ways to include long term thinking along with better awareness of externalities that could shift capitalism and money to create a positive long term future.

We contemplated the complex idea of "500 years into the future", and how our work with money might begin with such a long term intention. "500 years" was a powerful metaphor to use as an exercise to help us think outside of the norm, particularly on the outcomes we wanted to have. Could people today intentionally affect what happens in 500 years? Or is it simply beyond our control, and we just ride the wave wherever it goes?

We were captivated by the idea of such an intention serving as a guiding "North Star" for us to use as a screen for everything we did. It could add far more dimensions to our financial thinking, and our personal inspirations, when we considered each transaction we committed to in light of how it contributed to a better long-term future we or our children would ever see.

This thinking unleashed our creativity. We wanted our money making, our philanthropy, our human relations, and any influence we could have, as a representation of a vision and way of thinking about financial capital.

We chose to look at our life and work from the perspective of our own death beds. What would we do to have fulfilling lives, use money to its full creative potential, and use it as a blessing for the future?

Thus arose some obvious questions. How much is enough money to own, for an individual, for a family? What is the purpose of an answer that sees no limit to those questions, shouldn't this be a basic truth? Isn't it a higher purpose to use our talents and resources for helping create a stable long term civilization that is clean, safe, fair, and about human potential for the spiritual balance of ecology and society, driven by a visionary capitalist economy.

We were determined to experiment with this thinking.

We found these guiding principles worked well for us. We then set out to model and prove that creative capital could adhere to this thinking. If more smart people accepted this point of view, might 500 years into the future be a magnificent testimony to human creativity and ingenuity?

Matthias Knab: If you put yourself into the shoes of other asset owners, be they small and be it large, would you give the same advice?

Joel Solomon: I think a good starting place is to consider what matters to you in the long term, and highlight that thinking as the central multi-generational question.

As humans, we want to enjoy the pleasures and benefits of life, but we must also care about the future. We ought to make a conscious effort to find out what matters to each of us in the deepest possible way. The anticipation of our metaphorical death bed gives us a powerful tool for evolving our own guiding principles for lives well lived. Imagine all we could accomplish if the highest spiritual achievement were to contribute intentionally to the best possible future human civilization.

Profound economic transitions are underway. Change happens throughout history, but right now change is happening at an ever more accelerated pace. A huge amount of money can be made by investing in the shifting of the economy towards what can be more resilient, less wasteful or damaging, and more regenerative, well beyond our lifetimes. Those funds can continually revolve into ever more contributory excellence.

Each of us, whatever asset level we have, should first consider what our basic needs are, for our family, and then ultimately our communities. What's the long-term future? What is our part? What will we be remembered for about our life work? What is our legacy and how will it matter in the future?

Each one of us can create unique and meaningful legacies, far beyond financial success. Then, life can be creative, and we can experience more love. Making money can be fun, and the rewards wonderful. It is a powerful tool. Let's be outstanding creators of positive change. Let's guide our lives to maximize long term contributions to community, society, and to the future.

Matthias Knab: Why isn't everyone sharing this philosophy? Is there a kind of invisible wall people seem to run against?

Joel Solomon: We have developed a conventionality that says the most meaningful thing we can do is to double our wealth. And then, double it again. Too often the only ethic around money is simply, "How can I get more?" That ignores morals, spirituality, philosophy, and our sense of the future and what our true sacred responsibilities are.

Our natural enthusiasm for ambition and accomplishing things is wonderful. Emerging generations are highly creative and entrepreneurial. Necessity will bring forth sophisticated design improvements that reward much more than traditional financial rates of return. Signals of hope emerge continually, as so many people are recognizing the urgent need for new and innovative thinking approaches.

When you ask people, everyone wants clean air and safe food, a toxin-free household, and to live in a healthy environment. People don't want ever more species extinctions, masses of people living in extreme poverty, or an apparent global insanity in high-risk atmospheric carbon numbers exploding.

By 2050, $50 trillion will change hands in North America in the largest generational wealth transfer ever. It will remake the world and be the biggest money-making opportunity in history. And yet, we have a grand opportunity to shift trillions of dollars towards good outcomes for civilization and the natural world we all depend upon. The greatest economic activity in history is to rebalance the entire economy for long-term well-being, as we solve the problems of the future.

Matthias Knab: Joel, with such a long track record investing in impact and green finance, please share with us also what you are focusing on in your investment funds right now.

Joel Solomon: I have invested in the solutions economy for 30+ years, in clean food, healthy households, and environmental technologies that contribute towards slowing the acceleration of climate damage. So many investors now understand the issues at hand and want to engage in solutions.

20 years ago and even 10 years ago, when we launched our first funds for LPs at Renewal, we were viewed as exotic and a bit idealistic. It's satisfying to do business based on what seems to us as simple truths, be patient as that thinking evolves and spreads, and then be well positioned for success. Innovation can be as simple as common sense. Who doesn't want a safe, clean, fair future for everyone? Why invest other than with our deepest values and spiritual beliefs? How much money is enough? Then what? Can we sleep at night having little idea what the dollars we own, are doing to people and places? How are we fulfilling our service to future generations?

Excess wealth should only serve our higher purpose. Let's be billionaires of good deeds!

Mitzi Perdue: Selling Heirlooms to Stop the Sale of People

Mitzi Perdue

Mitzi Perdue identified the failure to develop the right family culture as the main reason why family businesses fall apart and shares **five practical tips** to develop and maintain such a culture.

Mitzi Perdue is the daughter of Ernest Henderson, the man who built the Sheraton hotels from one hotel to more than 400 during his lifetime and was the first hotel chain to be listed on the New York Stock Exchange in 1947. She is also the wife of Frank Perdue whose promotion of the Perdue brand through high-profile advertising resulted in creating the first well-known brand of chicken in the U.S. While Frank is now recognized as a visionary – branding his Perdue Farm chickens with his own name and being the first to put a name tag on them – Mitzi says that as much as she admired him for his success in business, she admired him even more for his success as a family man. Mitzi is also a businesswoman in her own right. She started the family wine grape business, now one of the larger suppliers of wine grapes in California.

Mitzi likes nothing better than to share insider tips for successful family businesses. The Hendersons started their Henderson Estate Company in 1840 and her Perdue family started in 1920 in the poultry business. These two families have a combined tradition of 278 years of staying together as a family.

Without spending a single penny, you can play an important part in the global effort to combat human trafficking. We'll tell you how in a moment, but first, exactly what is the issue?

Human trafficking is modern-day slavery. Because this slavery is hidden, it's impossible to know exactly how many people are victims, but the International Labor Organization estimates that 40 million people are enslaved right now. This is greater than all who were trafficked during the Atlantic Slave Trade (12.5 million). Human trafficking is among the three largest sources of revenue for organized crime.

Today, a large part of victims are pushed into sexual slavery: 99% of victims in the commercial sex industry are women and girls.

The life of a trafficked girl is unthinkably grim. She usually enters into prostitution at age 12-14. She is violated eight or more times a day for 365 days. Her life expectancy is seven years. She is likely to die of suicide, an overdose, disease, or violence at the hands of her trafficker or one of her customers.

To illustrate just how big the problem of trafficking is, imagine this: according to Tim Ballard from Operation Underground Railroad, with the money made in human trafficking every year, you could buy every Starbuck's franchise in the world, every National Basketball Association team in the United States, and every Target store across the globe.

What Can Be Done?

The goal of the Global Anti-Trafficking Auction is to raise both money for and awareness about anti-trafficking organizations. We'll be doing it through a celebrity auction in January of 2021.

The funds we raise will enable organizations that are fighting human trafficking to spend less time on fund-raising and more time on delivering services such as:

• Prevention
• Rescue
• Rehabilitation

What Can You Do?

You can be a part of the Celebrity Heirloom Auction at Christie's. The price of entry is, donate an heirloom with a minimum appraised value of $250,000. Ideally, your item has an attention-getting story to it.

We're looking for items with stories because we're arranging with global media outlets to cover some of the heirloom donations. Among the donations already pledged:

Atocha Emerald Ring

The Atocha Emerald Ring was part of the treasure on board the ship Nuestra Señora de Atocha. The Atocha, owned by King Philip IV, was a Spanish treasure galleon in a fleet of twenty-eight ships bound for Spain which sank along with five others in a major hurricane on September 6, 1622. The treasure, which arrived by mule in Panama City, was so immense that it took two months to record and load it onto the ship.

After news reached Spain about the loss of the galleons, the Spaniards undertook salvage operations for several years with the use of Indian slaves, recovering nearly half of the registered part of its cargo from the holds of sister ship Santa Margarita.

However, the Spanish never located Nuestra Señora de Atocha. In 1985, American treasure hunters Mel Fisher, Finley Ricard and a team of sub-contractors, funded by investors, found the ship after searching the sea bed for sixteen and a half years. The Atocha is the **most valuable shipwreck ever recovered,** as it was carrying roughly 40 tonnes of gold and silver, and 32 kilograms of emeralds.

12 Imperial Banquet Plates

These plates come from the Summer Palace, St. Petersburg, and were made in the Imperial Porcelain Manufactory during the reign of Nicholas I (1796-1855) for his son, the future Tsar Alexander II (1818-1881).

Tsar Alexander II is famous **emancipating the serfs** (unfree peasants) in Russia in 1881, allowing them to marry, hold property, and vote and thus ending

Russia's Age of Serfdom which began in 1649.

According to the census of 1857, the number of private serfs was 23.1 million out of 62.5 million Russians, or 37.7% of the population.

Marlene Dietrich Necklace

A diamond and sapphire necklace that belonged to the 1930s movie star Marlene Dietrich.

De Medici Desk

A De Medici desk with elaborate inlaid woodwork. The coat of arms indicates it actually belonged to a De Medici Cardinal.

What's in It for You

In addition to helping fight the evil and suffering of human trafficking:

- **Tax Deductions**
  Can you use a tax deduction? The Anti-Trafficking Auction may be able to transform your valuable items into tax deductions, although check with your accountant.

- **Recognition**
  Depending on what you donate and what the story behind it is, you and/or the anti-trafficking organization of your choice will receive considerable public appreciation for the gift. We also expect on-going focus on this from radio, television, YouTube, podcasts, and generally, all media outlets.

- **Make Room for Something New**
  You may have an object of value in storage or possibly you'd like to de-acquisition an item to make room for something new. You can achieve this while also creating enormous social benefit.

- **Attendance at one of the World's Most Exclusive and Fun Parties**
  There will be a *Night Before the Auction Party.* Organizer of the event Mitzi Perdue is the daughter of the Co-Founder and President of the Sheraton Hotels, and having grown up in the hospitality industry, she knows how to throw a party. As a donor, you will be invited to spend time with the other donors at one of the world's most exclusive and fun parties.

Find Out More

Please go to the GA-TA.org website. You'll learn about items others are donating. Also, sign up for our blog to learn about:

- Amazing anti-trafficking success stories
- The highest of high-tech methods for catching and prosecuting traffickers.
- What psychiatrists say about why traffickers do it
- The monstrous techniques police officers have seen traffickers use to keep their victims from escaping

One of the reasons human trafficking flourishes is because people don't know it exists. As it is, traffickers destroy people's lives, and they can do it with impunity.

By becoming more aware of the issue, you will be part of the global effort to shut them down.

Whether you're able to donate an item for the Global Anti-Trafficking Auction or not, we'd very much like to have you be a part of this team.

Matthias Knab: I was reading your site GA-TA.org and also the blog, what an eye opening resource you have built here! I recommend everyone to take a look. I am certainly getting

involved personally and will assist you and your project in any way I can.

One aspect that struck me was that it seems that in all countries, particularly young boys, girls and women are victims from human trafficking and exploitation, no matter how developed or under-developed.

Mitzi Perdue: This is correct. Traffickers are able to find vulnerable, often marginalized people in any country and region. Targets typically include run-away and homeless youth, the very poor, LGBTQ youth, children in foster care. The problem is exacerbated in areas where law enforcement has collapsed, such as in war-torn countries or areas that have experienced a natural disaster.

As Tim Ballard also explained in my blog, members of trafficking rings aren't like what you see in Hollywood, where they kidnap someone from their home. It's much easier to go into a poor area where law enforcement is scant.

For example, a trafficker might visit an impoverished village and see a pretty little girl there. He'll seek out her parents, and pretending to be a businessman, he tells the parents, "My wife and I want your daughter to be the nanny for our children. We'll pay you $500 a week."

The $500 is a fortune to the parents, and seeing how nicely-dressed he is, they believe him. The "businessman" then leaves with their daughter and neither are ever heard from again.

One particularly monstrous case was Kelly Suarez, a beauty queen who ran a modeling agency in Colombia. She'd tell the parents of pretty young girls, "I'm giving your daughter a scholarship for my modeling agency."

The parents were delighted. She led them to think, "My daughter is going to be rich and famous!"

Instead, Suarez would traffic the girls to rich people from North America. She'd tell the girls, "If you tell what's going on, your family will be killed!" None of the little girls told their parents what was happening to them.

But it can also happen in the middle of first world cities. And the internet can often be a part of the problem.

Here's a typical way it gets started. A 12-year old girl is in a chat room and finds that she's made a new friend. He's a little older, but he's interested in everything about her. They text and text, and she feels wonderful, having someone who really cares about her and who understands the problems she's having with her parents.

When he asks her to send him a picture, she quickly sends him a selfie. He tells her, "OMG, yr beautiful!" A few texts later, he tells her, "Thinking about U every moment! Pls, pls, pls, picture of U no clothes!." By this point, he's her best friend, and wanting to please him she, she sends him naked pictures.

Unfortunately for her, this was a really bad move. He tells her if she doesn't do X, Y, and Z, he'll show the naked pictures to her parents. The girl has been groomed, and it's not many steps to more explicit videos and then to being trafficked. He may say something along the lines of, "Meet me at the movie theater, or I'll show your whole school the pictures of you masturbating." She shows up, he kidnaps her and tragically, she becomes another of the millions of children who are trafficked each year.

And then there are countless schemes how traffickers initiate contact in the real world. Mindy [all names are changed] was living in Brooklyn, New York, and up to now, her mother had always insisted that someone older accompany her every time she went outside. This was true even if was just walking to school.

But today, her Mom told her, "Mindy, you're old enough to go out of the house alone now! You can take that volunteer job in the community garden you've been wanting!"

Mindy, she told me that at this time she was thinking, "This is so exciting. It's the first time I've ever gone out without a grownup watching me!"

She said that as she walked toward the mall, she was thinking, "Life is better than I ever dreamed! This is so fun!'"

Then the best thing of all happened to her. When she was at the local mall, she made a new friend! He was this incredibly cool 17-year old guy (at least he told her he was 17) and he told her he liked her!

Over the next couple of weeks, she and Darnell Waters began texting each other 20 times a day. She was happier than she had ever imagined she could be.

There was, however, a problem. Darnell was starting to press her to have sex with him. She was brought up in a strict, socially conservative home, and she and her Mom attended religious services every Sunday. She told him, "I'm a religious person. I love you, but I can't do this!"

He kept insisting, "If you really loved me, you would!" Mindy was terrified of losing the man she was madly in love with. And then one-day... she did it.

She knew how much her Mom would disapprove, but this was what was meant to be! Now she was really his and he was really hers.

She told me, "I thought we'd be together forever! I thought this would forever seal the deal!"

But then something went terribly wrong. Out of the blue, he stopped answering her texts.

This was so different from what she was expecting.

She kept desperately texting him and he never answered.

Now she was sobbing nonstop, but she couldn't tell her Mom. She was afraid her Mom would go crazy if she found out what her daughter had done.

Mindy told me she was desperate and lost. She had never even imagined such horrible pain.

Darnell was the one who was responsible for every bit of this pain, but as she told me, "I was only a little girl. I didn't know anything, and I was desperate. I went back to Darnell's place and pleaded with him. "Please love me, I'll do anything, anything if you'll keep loving me."

Darnell said he'd take her back, but there were "some things" she'd need to do.

I bet you can guess what those "some things" were.

Mindy moved in with Darnell but she soon discovered that she had to earn $500 on the streets each night and hand it over to him. If she didn't, she'd face a beating. Darnell told her that if

she tried to leave, he knew where her Mom lived and he'd kill her Mom.

Four other girls were living there, and one of them, Jazmin, became her roommate. All the girls were each trafficked seven or eight times a night.

Meanwhile, Darnell, living off his five girls had a tax-free income of more than $1 million a year.

Mindy had hoped to be the love of Darnell's life, and now she was nothing more than a terrified slave.

One night, early on she saw what happened to her roommate Jazmin when Darnell was mad at her. Darnell started pummeling and beating Jazmin until she was a bleeding mass on the floor. When Darnell left the room, Mindy saw bloody spit drooling from her roommate's jaw. The poor woman was holding onto her belly as if her guts might spill out.

Mindy's life had become an unending nightmare. One night, five men gang-raped her. She remembers crying and begging them to stop, and then suddenly she went all numb and she couldn't feel anything at all. She told me she felt so numb it was as if was both alive and dead at the same time.

Mindy hated the life she had been forced into. She was sleep-deprived, terrorized, and Darnell made sure she developed such a low opinion of herself that She. Thought. She. Deserved. This.

After more than a year, Mindy did manage to escape but it was so traumatic that she told me she can't even remember the details. The first thing she remembers about her escape is that she woke up beaten and bruised somewhere nearby in New Jersey. She had enough money to get a bus ride to the Port Authority in New York City.

A Port Authority policeman saw her and guessed that she was a victim of trafficking. His first effort was to reunite Mindy with her Mom, but Mom wasn't emotionally equipped to handle what her daughter had become.

Mindy had been so beaten up, so emotionally traumatized, she was now so different, that her mother just couldn't deal with it. The police officer took her to a home for victims of trafficking. It's called GEMS, Girls Educating, and Mentoring Services. For the next four years, Mindy was with people who helped her recover.

Mindy is 28 now, dresses nicely, her hair is smoothly-styled in a ponytail, and she holds a responsible job. If you were to meet Mindy in person, you'd never ever guess her story.

In this story, Mindy was able to escape. In my blog I also wrote about the archetypical story Dr. Andrea Nichols, author of Sex Trafficking in the United States, has experienced countless times where the victimizer has been able to manipulate the victim to the point she wouldn't want to leave her victimizer. Even if she's found and put into foster care or juvenile detention, "she may run away the first chance she gets. She'll return to her boyfriend/trafficker even though her trafficker has several other girls that he's 'turning out.'"

We already mentioned that trafficking rings aren't like what you see in Hollywood. We've all heard of kids locked in basements or abducted from their neighborhoods, but these are a minority of the cases when it comes to real world abuse and human trafficking. You see, this is why in our campaigns we also focus so much on helping the public to become more aware of what child trafficking usually looks like.

The good news, though, is that the research is getting better, we know more about identifying people who are being trafficked, and that we know more about preventing the situation in the first place.

Matthias Knab: I was also fascinated to read about the Guardian Group in your blog.

Mitzi Perdue: Correct, the Guardian Group is a "Team of Teams," comprised of former special operations military, law enforcement and intelligence community professionals, working to disrupt sex trafficking in the United States.

The Guardian Group fills an important gap in law enforcement. One of the obstacles to disrupting sex-trafficking rings is that law enforcement personnel in general are already over-burdened. They universally want to help address the atrocity of human trafficking, but unfortunately, traffickers can make themselves invisible by:

- Hiding their activities behind the dark web
- Using untraceable burner phones
- Registering traceable items in the victim's name, not their own
- Using force, fraud, coercion, & terror and typically moving their victims every few days from one geographic area to another
- Intimidating the victims not to turn evidence

Local residents and citizens may not be aware of trafficking, or may not know how to recognize it. Law enforcement in general doesn't have the specialized resources to find the bad guys and may lack budgets. This is particularly true since the bad guys are a moving target and often continuously move from one jurisdiction to another.

The Guardians, however, have a real-world equivalent of "super powers." With their sophisticated military and intelligence skills, they can find people who otherwise might be invisible to law enforcement. Guardians use things like search algorithms, facial recognition, and the ability to find suspicious patterns that might never be recognized by people who lack the Guardians' technical skills.

The Guardian Group, like most non-profits, struggles to maintain sufficient funding to maintain maximum efficacy. There's a line out the door of retired special ops professionals interested in joining this team, but they need additional funding to hire them. Their skills could save many thousands of innocent girls and boys from a life as close to Hell as anything we'll see in this life.

Again, what we try to communicate to the public is that human trafficking is a humongous problem, and that it must end. 40 million enslaved is more than the entire population of Canada (37m), Poland (38m) and California (39m).

It is an "industry" which is taking on ever more absurd and murderous forms such as putting humans into shipping containers to move them around the globe by the thousands. If the victim happens to survive the storms, the heat (temperatures in containers can rise to 50C (122F) or even 60C (140F)), the ship will eventually make land and the victim is finally in America! Or Saudi Arabia or Britain.

The container is next winched off the ship and onto a waiting truck. The victim may think the ordeal is over, except it isn't: Human traffickers await them. They were set up for this even before they left their country, and the person who did the setup was the

same smuggler who took all their money. The victim is in most cases not able to speak the language – sick, hungry, scared, demoralized and in no condition to resist and with no papers, it's once more the perfect prey and the trafficker acts with impunity because he knows that no one knows to look for them.

We are proud and excited to be able to support organization such as The Guardians and many others that you can read about at GA-TA.org and we hope that as many people as possible will join and support us.

Mitzi Perdue is the organizer of the Global Anti-Trafficking Auction. She's a businesswoman, author, and speaker.

Contact her at: Mitzi@AntiTraffickingAuction.com.

The Red Sea Miracle that could save the world's coral reefs

Anders Meibom

Since 2012, Anders Meibom has been a full professor in the Institute of Environmental Engineering at the Swiss Institute of Technology in Lausanne (EPFL) and is also professor at the University of Lausanne, in the Faculty Geology and Environmental Sciences. His research group focuses on understanding metabolic processes in marine organisms, corals included, under environmental stress.

Over the past three years alone, coral reefs around the world, notably Australia's Great Barrier Reef and in Hawaii, have seen up to half their living coral damaged or destroyed through mass bleaching. Their prospects for future survival remain dire. Many of the world's reefs, including 29 UNESCO World Heritage sites from the Pacific to the Caribbean, can expect further annihilation with drastic impact on local economies, such as ocean tourism, before 2050. Anders Meibom, a Danish scientist based in Switzerland's Federal Polytechnic University in Lausanne has launched a unique cross-border research initiative in the Red Sea involving at least eight different countries that could provide hope for the future of our coral reefs.

The effort is based on the stunning discovery in collaboration with colleagues from Israel, Saudi Arabia, Egypt, and the United States, which showed that the coral reefs in the Northern Red Sea and the Gulf of Aqaba are extremely resistant to the stress of global warming.

This is a small miracle against the backdrop of devastation of coral reefs across the planet. In most parts of the world, corals are dying at an incredibly depressing rate. Entire marine ecosystems are disappearing from year to year right before our eyes.

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As critical sources of marine biodiversity, coral reefs host millions of species. They are also crucial to economic survival, whether as a food source, tourism or protection of coastal areas and disaster risk reduction, for up to 500 million people living in tropical countries worldwide. And yet, this extraordinary natural heritage is in the process of rapidly dying from the effects of global climate change, primarily the steady rising of water temperature caused by increased atmospheric CO_2 levels.

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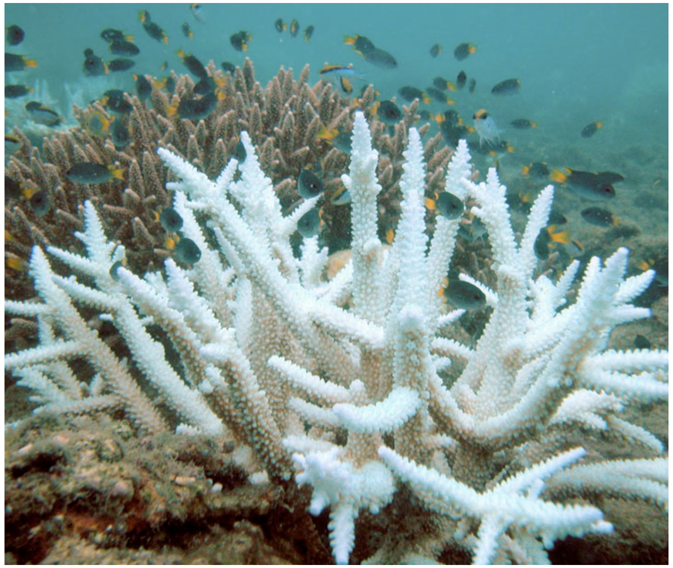
Destruction by coral bleaching

Take for example the Great Barrier Reef, the Earth's largest coral reef structure (with a surface area the size of Italy). During the past four or five years alone, upwards of 30 per cent of this immense reef structure has come under direct threat of extinction, or has already died off, as a result of global warming. More precisely, the thermal stress caused by global warming coupled with increasingly frequent heat waves on these fragile organisms cause a disease-like condition known as *coral bleaching*, which eventually kills these corals.



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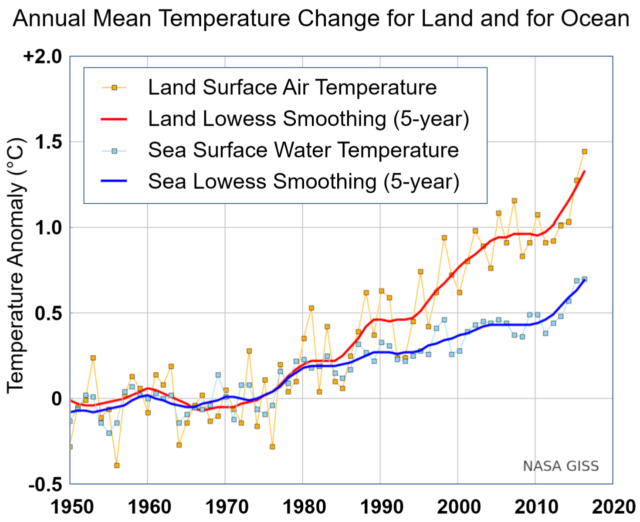
The picture above shows how these bleached corals look – white as snow. What happens is that as waters warm, the coral starts losing its population of millions of little single-cell organisms, small algae, that live in symbiosis inside the coral cells and give the coral its vibrant colors.

And while the white, bleached corals may initially have a beauty of their own, they are in fact in a death process. Because corals are at the base of the reef ecosystem, when they die the result is a dramatic decimation of other biodiversity in the reefs, such as the fish population.

The Red Sea Coral Survival Factor

Meibom and his collaborators have now discovered (and confirmed through numerous controlled experiments) the presence of at least one region on the planet capable of harboring large and highly biodiverse coral reefs that are much more resistant to the effects of global warming, notably the Red Sea – in particular the Northern Red Sea and the Gulf of Aqaba

For the moment, despite the Paris Agreements on curbing CO_2 levels coupled with the refusal of many governments to act, it is highly likely that global warming will lift planetary water temperatures by 2-3 degrees C by the end of the century. When this happens, as current indicators and recent extreme weather conditions suggest, all major coral reefs outside the Red Sea are likely to be dead or greatly diminished.



If we manage to ensure that the Red Sea corals are properly protected against local environmental stress, then this region could still host a fully functioning coral reef ecosystem. This, in turn, would serve as an immense benefit to the countries harboring reefs off their coasts. These reefs could also serve as an enormous repository of healthy, heat-resistant corals that, with further advances in science, might enable reefs around the world to be renewed.

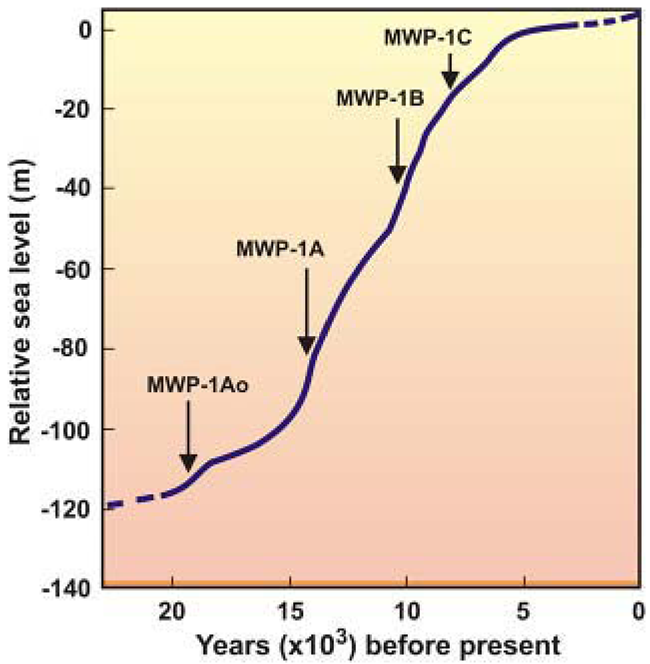
The fact that the Red Sea corals are likely to survive when other reefs are dead, gives scientists a unique opportunity. But, pollution knows no boundaries and effective environmental protection requires international collaboration, coordination and planning. It is for this reason that Meibom's team, together with the support of scientific colleagues from the Red Sea region, decided to create the *Transnational Red Sea Center* (TRSC). Significantly backed by Swiss diplomacy, the center is now in the process of pulling together an initiative that will eventually involve at least the eight countries bordering or otherwise linked to the Red Sea (i.e., Jordan, Egypt, Saudi Arabia, Israel, Sudan, Eritrea, Yemen and Djibouti) as part of a long-term 'cross-border' scientific collaboration on the Red Sea coral reef ecosystem.

The concept of international scientific collaboration is not new, of course. CERN on the outskirts of Geneva has for years been engaged in 'quiet' engineering diplomacy on issues ranging from water to nuclear research involving specialists from all over the world, including countries in open conflict with each other.

An Unexpected Gift From The Last Ice Age

Almost all corals in the world are able to live within a defined and narrow temperature threshold. There is a temperature range they can support or exist in, but when the water gets warmer than that they get stressed and they bleach and eventually die. But in the Gulf of Aqaba, in the northern part of the Red Sea and then the Gulf of Aqaba, the corals there are able to withstand and survive higher temperatures, and it turns out that this is because of a gift of nature which goes back to the last ice age about 20,000 years ago.

What typically happens during an ice age is that enormous amounts of water from the ocean evaporate to eventually precipitate as snow and ice around large parts of both the northern and the southern hemisphere. Gigantic glaciers are formed over time. But this also means that the global sea level drops a lot. The last time we had an ice age, the global sea level, all oceans were 120 meters below where they are today.



And, as it happens, the opening of the Red Sea towards the Indian Ocean between Yemen and Eritrea has a water depth of only 120 meters. So, when the global oceans dropped, the Red Sea became isolated like a lake as a consequence. But this of course was the kiss of death and ended up killing all life in the Red Sea because of the continuing evaporation of water, the salinity skyrocketed, a bit like the Dead Sea today between Jordan and Israel. When that happened, nothing could survive.

But if we go then a little further forward in time to say 15,000 or 12,000 years ago, we started to get out of the ice age. The melting ice started to raise the sea level of the oceans again, and now fresh seawater was flushed into the Red Sea and renewed the water there. The salinity dropped and organisms began to come back into the Red Sea. The fish migrated back, and the corals were coming back as well, but very slowly because corals are migrating much slower. The main way they move as a population is that an adult colony sends little larvae out that swims a small distance and finds a spot where it forms a new colony. It will then take 10 to 20 years for that colony to become sexually mature and able to form new larvae that may make a new colony another 25 meters down the 'road'. And so, slowly, also the corals migrated back into the Red Sea from the South after the last ice age. But the waters in the southern Red Sea just by Yemen and Eritrea are some of the hottest waters in our oceans. And so only the corals that could adapt to a very warm water made it through into the Red Sea and then from there migrated further into the Gulf of Aqaba.

Today, corals in the Northern Red Sea and Gulf of Aqaba are living in waters are 5-6 degrees cooler compared with the waters the passed through in the Southern Red Sea when they migrated back. But in their biology, they still remember how to live in warmer waters. So, what is happening today as global warming heats up the oceans, in most places the corals die because the temperature is over the limit that they can tolerate. But in the northern Red Sea, in the Gulf of Aqaba, the corals there are able to survive because they still remember the times when they traversed some of the hottest water on the planet. These corals have a much bigger buffer before they bleach and die, and that is really just by chance and a wondrous gift from nature because the Red Sea has this peculiar geological history.

Matthias Knab: I would think that you would already have tried to take some Red Sea coral larvae out to the Great Barrier Reef or other dead or dying corals trying to bring the super-powered Red Sea species there so that they may form new colonies there and bring back life?

Anders: The question if we can transplant the Red Sea corals to other reefs is of course the million-dollar question, and there's very serious research going on to figure this out right now. At the moment, I think it's fair to say that the answer is generally 'not yet'. What happens now is that we can move some species to other places but either they die or they are not happy meaning that they don't really take root because the conditions are different. For example, the salinity in the Red Sea is higher than the Great Barrier Reef, the microbial fauna is different, the entire ecosystem is different. Corals are very sensitive and not easy to transplant. But with all the progress we have in biology and life science, in for example gene manipulation, who knows what we can do in 10-20 years? It might work, but we cannot transplant anything to anywhere if it is dead. This is why at the moment we must do all that we can to make sure we can preserve any coral ecosystem that has come under stress. This is one thing. Another thing is that the global community must by all means work together to protect the Red Sea coral reefs that, because of their unique evolutionary history, are our best change for preserving a large-scale reef ecosystem, because they can tolerate much more global warming.

But the Red Sea corals will only survive if they are protected from local pollution and stress. It's one thing that they are resistant to global warming, which we probably cannot do much about on short time

© Maoz Fine

Healthy Red Sea Corals

scales. CO_2 keeps going up and global warming is happening – and the temperature goes up, also in the oceans. It seems almost impossible that we don't hit at least two or three degrees Celsius more at the end of this century, and most other coral reefs will die from that. But the corals from the Red Sea will not. However, as we said, corals are extremely sensitive and they can still be killed by local pollution, and a lack of environmental protection and mismanagement.

Protecting those corals is of course a regional task. The reality is that if one of the countries in the Red Sea region is messing it up, they mess it up for everybody.

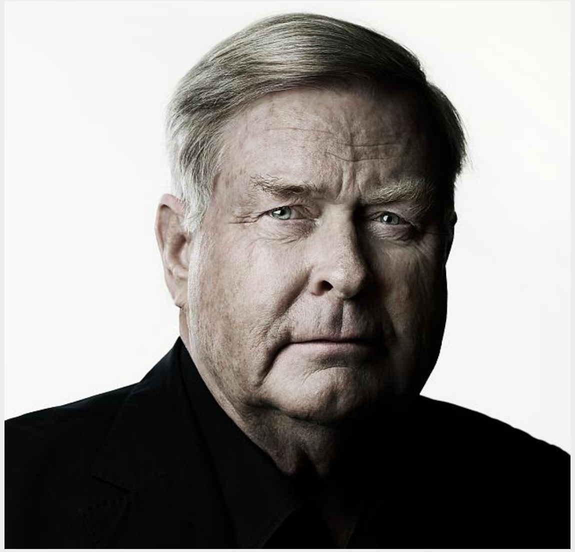
It is therefore very important that we have a transnational effort backed by science and by diplomacy. But the good news is that it is starting to happen and the countries have started to collaborate about something that they all have a shared and strong interest in, both from an ecological and preservation perspective, and because there are also major economic interest at stake here.

For example, Egypt has enormous income from their Red Sea tourism. And so, if those corals die, like they are doing it now in the Great Barrier Reef on a really massive scale, it is going to be devastating to the Egyptian economy. A very large number of people are going to lose their jobs and their livelihood. Right now, the coral reefs in the Red Sea are very understudied, we need to know a lot more about them and the entire ecosystem. This is why we organize international and regional collaboration of scientist to find out more about the fragile points and

what are their major sources of pollution. We also want to help develop strategic plans and support the decision-making process from politicians and law-makers.

We think this is a chance and an opportunity to bring every country from the Red Sea region to the same table, to work towards a shared interest – the preservation of their coral reef. Science is based on international collaboration and the creation and use of synergies, and also here we are dreaming and will hopefully see soon a boat in the Red Sea carrying scientists from different countries working together as an example of collaboration and peacemaking in a region that really needs it.

Shipping: How to play a part in the life and blood of the global economy



Peter Lorange

The international shipping industry is responsible for the carriage of around 90% of world trade. And it offers investment opportunities that can be very rewarding if you apply the strategy that is suited to your liquidity levels, says economist Peter Lorange. He explains how in this interview.

Peter Lorange started his academic career in Norway and at Harvard Business School in the 70s, and has lectured and written books on business management, entrepreneurship and shipping investments ever since. He has also been the head of a shipping company and a board member for several multinationals. He recently founded the Lorange Network, a learning and sharing platform for family office principals and family business owners. And he still invests in shipping.

Opalesque: Please tell us about the market cycles of the shipping industry at the moment.

Peter Lorange: The various segments of shipping, for instance the smaller versus the larger tankers, the smaller versus the larger bulk carriers, or the chemical tankers, tend to follow slightly different cycles.

Tankers are basically a little better off cycle-wise and they are starting to follow an upward trend, while bulk carriers, both large and small, are at the bottom of the cycle. It's a matter of supply and demand. It is also about the expectations of the ship owners. There can be orders for too many bulk carriers for example.

In terms of cycles' lengths, typically, you have three to four bad years, and then it shoots up for a year or so, and then it is back to three to four bad years. But these cycles are becoming slightly different in shape because the ship building industry, i.e. the yards, are able to put together new ships much faster now than before. That's why the bottom of cycles tend to be longer and the peak shorter.

Among the long bottoms and the short peaks, there are small valleys and hills along the way. I tend to buy cheap and sell high even though the basic cycle is at the lower end, because there are these small variations.

"In the short-term asset play strategy, you try to buy cheap, wait it out for one to three years, and then sell high."

Opalesque: You have two basic strategies for shipping investments. Could you explain the first strategy, which tends to be more short-term?

Peter Lorange: The first is what I call short-term asset play. Basically, that means that you try to buy cheap, wait it out for one to three years, and then sell high.

There are perhaps three issues above all, to pay attention to with this strategy. First of all, you should make sure you buy relatively standard ships – I would call it, "Volkswagen +". You don't want to buy ships with gold plating, extra air-conditioning or other frills. The ship would typically be four to five years old and in good shape.

The second issue is, in order to lessen the financial burden of holding the ship from the time you buy it to the time you sell it, it's often advisable to put the ship into a so-called 'pool'. So for instance if you buy a bulk carrier, and you put it into a bulk carrier pool, you may make some money during the holding period, sometimes, enough to break-even. In any case, you lose less than if you didn't do that.

The third issue is, to do this strategy, you must have a lot of cash, and you must not borrow a lot on the ship. It's important. This is not a good strategy if you have no liquidity.

In the industrial shipping strategy, you get a long-term charter contract from an industrial company.

Opalesque: Could you explain your second strategy, which tends to be more long-term?

Peter Lorange: The second strategy is called industrial shipping. You try to get a long-term contract, say, with a chemical company or a trading company or another kind of industrial company, to carry their goods for, say, a period of 10 years. This company gives you a long-term charter, typically what we call a bareboat charter: they buy the right to hire the ship from you, but they have their own crew, their own maintenance, their own fuel, etc. so it's up to them how they run the ship.

And the ship should be financed very heavily. You can borrow a lot and thus make even more money. Typically you try to borrow, say, up to 70% on the ship.

After 10 years or when the bareboat charter is over, you sell the ship, typically to scrap value, as it will tend to be worn out by then. If you are going for details, you could have a put-call option at the end of the bareboat period so that if the scrapping price of steel is high, you call, take over the ship, sell it to the scrappers and make some extra money. If the price of steel is low, you put, the bareboat holder will have to sell the ship to the scrapper and make a loss.

There is one more variation of this: there are still some big family-owned shipping companies around. These families in general do not in fact own all of their ships. They may order, say, four new ships in China and hold on to two of them. Investors like I buy the other two and charter them back to the family-owned company at a long-term bareboat charter. These ships will carry the name of the family-owned company, their colours, etc. You cannot see that the ships do not actually belong to them. Many of these family-owned companies like this arrangement.

There are four main areas of innovation: regulation, cost-reduction, related to climate change, and management.

Opalesque: What are the most recent innovations in shipping and logistics that investors should not overlook?

Peter Lorange: I have just completed a book called Innovations in Shipping that is coming out on Cambridge University Press next year.

There are perhaps four main areas of innovation.

The first one is regulations from the public sector, like the United Nations and the IMO (International Maritime Organisation). There are two new important regulations. One, which started in 2018, requires that water that is dispatched from the ships must be clean. That means many companies have had to install clean water treatment machines onto their ships. The other one is even more dramatic and was implemented because of global warming. Shipping companies must install scrappers in their ships, which clean the fuel so that no CO2 is released. But if the ships are relatively small, they may have no space for scrappers. So they will have to use light fuel, like diesel fuel, which is more expensive (though it does not affect the efficiency of ships). Some shipping companies are speculating that oil refineries will change their refining mix capabilities, so that there will be more reasonably-priced light fuel in the future, and so they are not installing scrappers.

The second one is related to cost-reduction. The industry is constantly trying to innovate on cost management. There are three important changes here. The first is a new generation of underwater paint coating for ships. These new coatings release anti-particle growth for a period of three to four years. So, the ships run better for longer. The second is better propellers, rudders, and better dynamic structures. The third is better and faster loading and unloading equipment.

The third area of innovation is related to climate change. For example, the ocean to the North of the Russian Arctic used to be covered with ice which is now melting. We are now building ice-reinforced ships that can go through those areas (the Northern Sea Route). As there is a bit of ice left, these ships are strong, with powerful engines, and designed for the shallow waters we find there. And then you have innovations in the navigational equipment, to better predict weather and pick more optimal routes as a result.

The fourth area is within management. There are computers now which allow ship owners to manage entire fleets of, say, more than 100 ships. That means they are optimising the use of the fleet relative to various cargos and routes. It is almost like running an airplane fleet. The other aspect of that area of innovation is integrated logistics chains. You do the shipping, the storage and then the transportation, all as one function. So if you are, say, Adidas, you produce the sports gear in China, you send it with Maersk, you store it in Rotterdam, and then it's driven by truck to various store facilities. Interestingly, Jim Hagemann Snabe, the new chairman of A.P. Møller - Mærsk (the largest container shipping company in the world) happens to be the former CEO of SAP, a large German software company. So Mærsk may be thinking of themselves more like an IT firm than a shipping firm.

"When shipping is part of your investments, speed is important. Family firms are generally much better equipped to act fast than publicly traded companies."

Opalesque: What are your observations with regards to shipping investing within the family office environment?

Peter Lorange: If you want to invest in shipping only, the problem is that it is probably too capital-intensive. For example, I used to own a fairly big shipping company and I never had any free cash. I could hardly even take a vacation. All the money I made went into buying new ships. They easily cost $100m a pop. So you tend to be cash-strapped. For that reason, I would say, family firms should generally stay away from shipping.

On the other hand, I think that a part of the activity in the family office portfolio might be in shipping. For instance, I own parts of a number of ships and I have made a lot of money on them. My investments are in four types of ships: small bulk carriers (from 10,000 to 40,000 tons), chemical carriers (around 25,000 tons), small tankers (60,000 to 80,000 tons) and car carriers.

When shipping is part of your investments, speed is important. You need to decide to get in or out fast. Family firms are generally much better equipped to act fast than publicly traded companies.

Also, the risks are often quite high. Family firms may be more ready to take such risks. So they can be well equipped to focus on shipping for these reasons.

Digital assets: When dipping their toes into digital assets, family offices often start with something they know

Dr. Lidia Bolla

Digital assets are the new technology slice of portfolios, in addition to shares in tech companies. Family offices are making small investments in digital assets to test the waters, and these digital assets are usually backed by something they know: real estate and fine art. Furthermore, even if digital assets are novel, you do not need to pay for them with novel currencies.

Your regular currencies will do. And your bank will likely have the infrastructure to enable you to invest in digital assets.

In this interview, Dr. Lidia Bolla, managing partner at [vision&](), explains investments in digital assets and in blockchain technology, and Domenic Kurt, CEO at Liechtenstein-based [Crowdlitoken]() AG, describes his company's digital real estate products, or "tokens".

vision& is a Swiss based, SRO-regulated asset manager facilitating the access to innovative blockchain investment opportunities. Before co-founding vision&, Dr. Bolla was managing partner of a Swiss advisory boutique specialized in quantitative finance. Previously, she worked for major investment firms (J.P. Morgan, Swiss Re, Man Investments) in various asset management roles in Zurich, London and Hong Kong.

Opalesque: Lidia, what is your background?

Lidia Bolla: I have a science background with a focus on technology, and I have always been interested in the intersection of finance and technology.

We started building vision& in 2017 with the goal to facilitate the access to blockchain investments to investors. We started with some very interesting blockchain projects, and one of which I am currently involved in is called Crowdlitoken.

Opalesque: Describe the two types of blockchain investments you are involved in?

Lidia Bolla: You have to differentiate two kinds of blockchain investments:

1. There are investors who would like to invest in blockchain technology, so here we look for companies that work with blockchain technology, and invest in them. It can be done via equity for example.

2. Then blockchain can be used to actually invest. With blockchain, we can invest digitally in any kind of assets. For example, investing in real estate, private equity or fine art today involves many physical paper documents to be signed. Additionally, we lack liquidity on those markets. With blockchain, we can make the investment into those assets digital, simplifying not only the investment process but also making those assets tradable.

We are involved in both types of blockchain investments: we have investors who invest in blockchain technology itself, and investors who invest in digital assets.

"Blockchain is changing the world of investing."

Opalesque: How do you facilitate access to blockchain investment opportunities?

Lidia Bolla: Facilitating access to investments is different for both areas too.

In the first group, it is traditional business: we look at tech companies, evaluate traditional measures such as team, technology and regulatory aspects and assess the companies' chance of success for investors.

On the digital asset side, we also have to do due diligence on the underlying business, but there we also have to look at how the digitalization of the assets has been done. That's a really interesting space because having digital assets allows you to create new business models.

You can combine different aspects into one investment product, as for example in the real estate sector where we work together with the company Crowdlitoken. Here, we take the benefits of investing directly into real estate, such as selecting your properties, and combine it with the benefits of investing indirectly into real estate, such as having a financial product that is liquid and tradeable. A digital asset opens up entirely new opportunities and brings the world of financial products into the digital age. That is totally new, and it is enabled by blockchain. Blockchain is changing the world of investing.

"Family offices are most often investing in digital assets backed by something that they know, such as real estate and fine art."

Opalesque: What trends have you been observing among family offices and HNW investors when it comes to such investments?

Lidia Bolla: We have seen over the last 12 months a strong increase in interest in the space.

Before that, blockchain was almost always linked to cryptocurrency. Cryptocurrency is not something that generally interests family offices and HNWIs, due to the large price swings and low fundamental value.

Now, we are seeing the first few projects that bring blockchain technology into the world of financial products where the underlying are well-known assets with fundamental value. Many investors are trying those new products out by making small investments – often just to make a first try in this new world of digital assets. Family offices are most often investing in digital assets backed by something that they know, such as real estate and fine art.

Also very importantly, on the banking side, we are seeing a big move where banks are setting up infrastructures for family offices to enable them to invest in digital assets, examples are the SIX Swiss Exchange or the Swiss bank Swissquote.

"Only invest in projects that run the extra mile to comply with all regulations."

Opalesque: What recommendations would you give investors regarding blockchain and any other innovative forms of investments?

Lidia Bolla: The most important thing is to conduct proper due diligence. There are many projects out there which are still at the early stage. A handful of projects are very solid and professionally set up. And a few products are ready for institutional investors.

Family offices should only invest into a digital asset that is fully compliant with regulatory frameworks. Because this is very costly and requires a deep legal understanding, not all of the projects fulfill that requirement. Financial products often have to be approved by financial market authorities. Whether such an approval exists is a good indication when investing. As a family office, only invest in projects that run the extra mile to comply with all regulations. Then you should look at the team. Usually, you would want to have a mixture of knowhow and backgrounds. To have a young and innovative tech nerd on the team is as important as having a senior and highly experienced investment banker.

A more general recommendation I would give is to just try out that space through a small investment. That helps to understand it very quickly.

Opalesque: How do you work with Crowdlitoken?

Lidia Bolla: With vision&, we have a good network of investors interested in the blockchain space. As Crowdlitoken is one of the best structured products we have seen in a long time, we discussed the project with a couple of our investors. They liked it a lot as it is the first digital asset that gives them access to something they know – real estate – and allows them to enter this new space. So we decided to involve ourselves more intensively with the project.

I entered the company as a member of the management board and I am currently responsible for building up the sales structures. With Crowdlitoken, we now managed to build the first digital real estate asset that got approved for public distribution throughout Europe.

Opalesque: Domenic, please explain what Crowdlitoken consist of, and what digital real estate assets are.

Domenic Kurt: We use blockchain technology to develop a new kind of financial product which builds a bridge between direct and indirect real estate investments. The benefits of direct and indirect investments are put together in one product called a security token.

Domenic Kurt

Similar to directly investing into real estate, investors can select their own properties, allocate their tokens to the real estate of their choice and so create an individual risk-return strategy and an individual portfolio. At the same time, the product is based on a digital bond structure. This means that, similar to indirectly investing via real estate funds, the product is tradeable and bankable, has an ISIN number and its prospectus is fully approved by the financial market authority FMA.

Opalesque: Could you give us a concrete example of such an investment?

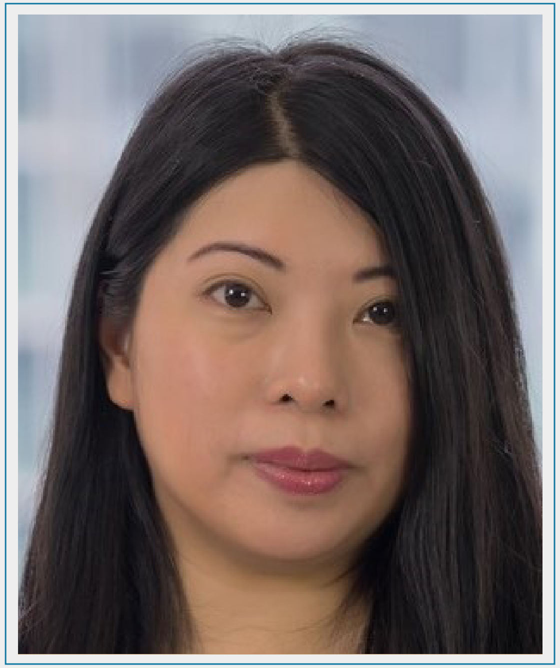
Domenic Kurt: Sure, happy to do so. Let's say an investor purchases 100,000 Crowdlitokens. In the currently ongoing private sale, the investor pays CHF 75,000 ($75,380) for that. It is a CHF denominated product, but the investor has also the option to select euros or Ethereum as currency.

He can then take those 100,000 Crowdlitokens and allocate the tokens to specific real estate properties that have been purchased by us: for example 50,000 tokens to a property in Berlin, 25,000 to a property in Vienna and 25,000 to a property in Zurich. He can change that allocation at any time.

The investor then receives the net returns of those individually selected properties on a monthly basis, paid out either in cash – again the investor can choose between the currencies CHF, EUR and ETH – or paid out in new Crowdlitokens to reinvest. At the same time, he benefits from a minimum interest rate of 3% p.a. from year four onwards. At end of the maturity of the product, the investor receives as repayment his share in the property portfolio value.

To summarize: the investor participates on the income stream as well as a potential value appreciation on the real estate, while benefiting from a minimum interest rate.

Love & Care: The Greater Role of a Family Office



Patricia Woo

Patricia Woo is Partner of Squire Patton Boggs in Hong Kong where she is also co-head of the firm's global family office cross-practice team with around 60 partners from different offices.

Patricia is a fund, trust and tax lawyer noted for her practice in helping global ultra-high-net-worth families set up, restructure and operate investment-centric, service-centric, and comprehensive value-centric family offices.

She is also a Chartered Alternative Investment Analyst, Certified Tax Advisor, member of the Academy Community of the Society of Trust and Estate Practitioners and Certified Islamic Finance Executive. She is Adjunct Associate Professor at the Faculty of Law of the University of Hong Kong, and Adjunct Assistant Professor at the College of Law of the National Chengchi University of Taiwan. She is also honorary fellow of the Asian Institute of International Financial Law.

Patricia Woo is listed in CityWealth Leaders List TOP 10 China & Hong Kong 2019, The Legal 500 Asia Pacific 2019, Who's Who Legal: Private Client 2019 and CityWealth Leaders List 2019. She is also ranked in Chambers HNW 2019 and recognized in 2017 IFC Powerwomen Top 200.

Most of the family clients I work with are on the rich list. For these wealthiest of the wealthy families in the world, many of them have established or are looking to set up their own single family offices to organise their affairs, financial or otherwise.

Family office is no longer just a hype word in the private wealth sector. Many of them are reported to be overseeing internal funds of the families, investing in a wide array of financial instruments and backing the most innovative ventures. Usually less visible is the family office's functions related to the creation, management of the asset holding structures and the planning of the succession of such assets according to the wishes of the family in a tax efficient manner.

All these technical aspects matter, but there is another intangible aspect of a family office representing perhaps the most important, secret ingredient in the formula for its success. This secret ingredient is love. I touched on this topic in an article entitled "A New Dimension to Family Office Success". (Woo, 2016)

A key question I have been considering since the publication of such article is how love, being such an abstract concept, can be instilled in the family system. Family members should have love for each other, but what does it really mean? Why is love so important? What negative impacts the lack of love can create in a family? How exactly can love be brought or brought back to the family? What exactly should family offices do?

A trusted family office is like a traffic control tower. Many planes are in the sky and the pilots trust that the family office can provide them with information on things that they cannot see themselves and they are communicative through the family office to each other.

Like the pilots, family members can have their own directions and destinations, but if there is a family office they can trust, they will always come back for advice and information and, by doing this, the bonding will always be there. This bonding is what one calls love.

Psychosynthesis: A framework

Conventionally, wealthy parents believe that to provide for the children's financial abundance is the ultimate expression of love. But authentic, non-material love goes a long way beyond just money. Could a family office be an institution to provide a favourable environment for authentic love to be expressed? Yes, but a framework backed by solid theory and which is implementable is called for.

Perhaps there is no one single best way to approach this, but I would like to discuss how psychosynthesis as discussed by Firman and Gila (2017) can help ultra-high-net-worth (UHNW) families. I am also setting out a non-exhaustive list of reflective questions based on such approach to aid family office in the process of application. Professional psychologist and psychotherapist would be required. It usually takes consistent and persistent effort of the family to adapt to a new approach but this is a starting point worth considering.

Psychosynthesis was developed by Italian psychiatrist Roberto Assagioli as a psychological theory and methodology of human development. The core theory of psychosynthesis is presented in the Egg Diagram (Assagioli, 1958). We will refer to in this article a variation of the Egg Diagram as depicted in Diagram 1 below (ie. the Changed Egg) subsequently modified by Firman in 1995.

Our everyday, ongoing awareness is depicted as the central field of consciousness. Immediately surrounding such field of consciousness is the middle unconsciousness. Within this area of unconsciousness, which is in direct association with and accessible by one's awareness, is the person's way of thinking, feeling and behaviors "structured" or "conditioned" by the environment faced by him (including his roles within the family). Subpersonalities exist in this layer of consciousness and could be in conflict.

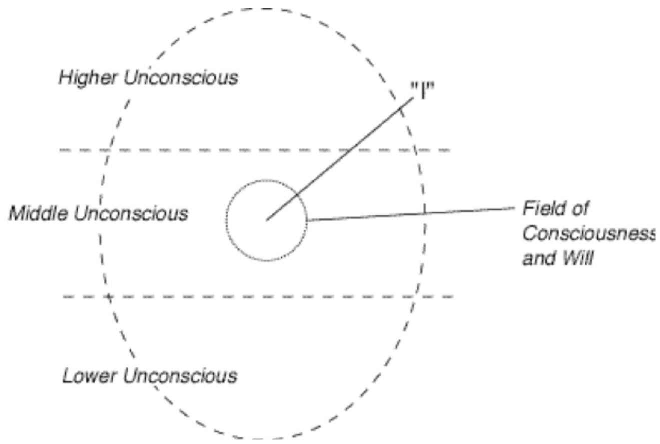


Diagram 1: The Egg Diagram

If a person is in a non-empathic environment where he is not treated as an "living, conscious human beings" but as "objects" and "things" (Firman and Gila 1997, 93), he would develop a survival personality which suppresses such experiences and suffer from primal wounding.

To survive primal wounding, one has to "disown" the experience of pain and suffering by splitting it off from the ongoing awareness. Such hidden wound becomes a person's inaccessible lower unconsciousness. Also hidden are not only the wounds but also the positive aspects rejected by the non-empathic environment, constituting the higher unconsciousness which is also inaccessible.

Relevance and importance to ultra-high-net-worth families

Psychosynthesis is about the process of self-realisation where one might experience both personal and transpersonal developments. (Firman and Gila 1997, 183). The once disowned parts (in both the lower consciousness and higher consciousness) are re-discovered and the middle consciousness of the person is broadened. In other words, the hidden gifts can be embraced and hidden wounds can be healed.

The important questions a family office could ask are: what are the conditions that enable such process? Are the members of UHNW families, with all the resources in the world, in a more favourable position to experience the process of unfoldment and actualisation? How can a family office resolve the potential conflicts between the family members pursing their authentic selves and contributing to the family system as a whole?

Some people would imagine members of UHNW families grow up with fewer primal wounds compared to those from a modest background. This is not true. Issues arising from high expectation and conformity with family requirements (or the cultural/family superego in psychotherapeutic language) are often observed. In some family offices, the leader or the family rules might have a strict way with how the family should be organized, and this might create resentment. In some extreme cases, it is mandatory under family rules that members have to work for the family business. Some families even prescribe in the family constitutions that divorce is not allowed. Suppression might also be experienced by the family leaders who have to take up the responsibilities due to family situations or pressure from the earlier generations. There is no or little room for the family members to express their own individuality and uniqueness unless they break themselves free from the family (as the source of wealth).

The true picture is hardly visible from outside. As observed by Firman and Gila (2017, 39), "more hidden are the situations in which we seem, both to ourselves and outside observers, to be receiving healthy nurture when in fact we are but reassured objects conforming to a role needed by the environment". This is very typical of an UHNW family environment.

Reflective Questions for Family Offices

A visionary family office seeking to help the family members unfold and self-actualize themselves should consider the following reflective questions. This is not meant to be an exhaustive list, but can serve as a good starting point. These questions could be tailored to suit the specific situation of the family.

1. How can the family office serve as an external authentic unifying centre? Does it encourage family members and institutions to be such an unifying centre?

Self-realization is a process of finding one's own sense of direction in life and nurturing one's authentic personality. A family office could take on the role as an external authentic unifying centre to provide an environment in which the family members are acknowledged, accepted and given genuine "love" as they are (even though they want to pursue a passion totally unrelated to the family business or publicly support a belief that is not in line with the family's belief system) and their paths to freely develop the unique authentic personality are supported. This is a sensitive issue a good family office should be mindful of since some families might see that being their authentic selves the family members would not support being part of the family system or contributing to the tangible return-maiximising aims of the family system.

Practically, the family office should, through the inclusion of appropriate provisions in the family constitutions, letter of wishes of fiduciary structures and internal investment documentations, permit the flexibility for family members to be their authentic selves yet remain part of the system and provide an expansive breathing space for each of them to "bring diverse inherited abilities and acquired learnings into a unified sense of identity and self-expression." (Firman and Gila, 2017: 33) The family office could also encourage and facilitate the individuals and institutions associated with the family to take on and appreciate the importance of such role.

2) Has the family office acquired the capability to identify primal wounding and deal with survival behaviour in family members? Does it have the awareness that it might behave as survival unifying centre?

It is as essential a role for a family office to identify whether the family members have developed survival personality and whether the existing family system is in any way a non-empathic environment that leads to primal wounding. "Positive" parenting driven by the parents' need for the child to be successful, talented, or intelligent (Firman and Gila, 2017, 39) is typically observed amongst UHNW families where a culture of expectation and achievement is prevalent, and competition and comparison are common between families and branches within the same family. The pressure can even come from having to marry up or at least to an equal to maintain or elevate the social and economic status. If the patriarch has multiple "spouses" and "mistresses", the children from each spouse might have to suppress their feelings and experience to "survive". A family member on whom such expectation or environment is imposed might be treated as an object, a non-human and suffer therefore from primal wounding.

Each family office has to, for the sake of management of family affairs with consistency, lay down many rules on how family affairs are to be run and this will potentially create a survival environment. The family office therefore has to find the right balance and if appropriate bring such issue to the attention of the relevant family members and help them understand the impact of a potentially non-empathic environment and what can be done. Sensitivity is required in this respect as it usually involves complex family situations where no solution can please everyone. Likely the prioritisation of wealth creation and maintenance has been already developed as a powerful defence against authenticity of persons and symptomatic of fear of it. Authenticity tends to require courage to let go of such defences. There could, therefore, be some powerful incompatibilities between the two aims. Unless handled with care and professional help (such as psychotherapeutically-informed analysis), it could result in negative feelings and unwanted conflicts.

3) How can the family office encourage self-awareness among family members?

The family office can arrange education on psychology and spirituality for family members in order to improve self-awareness. The Egg Diagram can be used by experienced practitioners to the help the family members understand their own personality development. The concepts of unifying centres, when applied effectively, would help them become mindful of external and internal forces that shape their personality and interaction with others. More often than not, self-identify of members of a UHNW family is largely defined by the family and its public image. Disindentification is an essential skill the family office can consider to introduce to the family members as an exercise to first detach from the part of such identity given by the family and social environment and then to see their own uniqueness and create a stable sense of identity. (Whitmore 2014, 56) When the family members' sense of personal power arise as "I", they are freed to see beyond mere survival and begin to actively explore their own, independent identities and purposes with more freedom and awareness (Firman and Gila 2017, 115).

4) How can the family office assist the family to cultivate a culture to encourage Self-Realization?

Self-Realization is a process that has to be undertaken and experienced by the family members themselves (even though they might have a family office which understands how to and is ready to create a favourable environment) because only they can drive the development of their very own self-awareness in the power of "I" (for example, to quieten their inner critical voice) to open the door for deeper quest in the Self. The Self occupies a position of utmost importance in the process as it is the source of altrusic love and spiritual empathy without which "I" cannot be realized fully. The family office as the external unifying centre can be a "channel", providing "an indirect but true link" for the family members to achieve such Self-realisation (Firman and Gila 2017, 89). At a practical level the family office would be in a good position to support such exploration by bringing in education and professional help when required.

5) Does the family office encourage the family to believe in the power of love?

To encourage the family to believe in love and its power is perhaps the most valuable, fundamental contribution a family office can give to the family as "human being flourishes within an empathic, respectful communion with others, a communion that we believe can be called love." (Firman and Gila 2017, 2) The family office can help design and implement a family system which acknowledges explicitly in the documentations and during family meetings the power of love and provides a safe environment for the family members express and feel the altrusic love and spiritual empathy.

This love transcends romance, desires and materialism. Rather, it is an unconditional, all-embracing love coming from the Self regardless whether the family member is the eldest or the prettiest, controls the family assets or receives the largest inheritance, has been educated in the best school or has done anything special to stand out. Only a deep presence of such love can cure primal wounding and survival personality.

6) Can the family office assist the family members to deal with their challenges from crises of transformation?

Expansion of the middle unconsciousness is a positive movement along the path of personality development where one releasese the unhealthy attachment to a survival unifying centre and connects to one or more authentic unifying centre(s). It is a tricky, challenging process with all the discomfort and emotional distress leaving a comfort zone. When a family member opens up to a band of previously inaccessible unconsciousness, a range of new experiences and feelings surfaces. It happens usually by "installments" from with family history and behavioural patterns retrieved, primal wounds and subpersonalities unveiled and explored, hidden and long-suppressed transpersonal qualities reintroduced, and new identity acquired. (Firman and Gila 2017, 103 & 107)

Is the family office able to maintain an empathic environment in the process? Is it capable of or prepared to help the family members get the right help in meeting these challenges? When a family member moves from survival to authenticity, he might have been awakened by a crisis and exposed to painful feelings before healing and growth take place. Other family members might also be affected. The family office should notice the needs for professional help and encourage the family members to receive such help when needed.

7) Does the family office have a mechanism for regular unifying centre review?

A well-managed family office has in place regular review of investment strategy and implementation, family system design, legal structures and documentations to ensure they are up-to-date with the family's evolving situations and can thrive through changes in economic, tax and regulatory environments.

Another type of review that is important is related to psychotherapeutic self-exploration and the exploration of the family's psycho-emotional cultural change so that the family office and the family can improve by "continually discovering new and unique" authentic unifying centres. (Firman and Gila 2002, 119).

On the other side of the coin, such review is essential also because *"even today's authentic personality can become tomorrow's survival personality".* (Firman and Gila 2017, 149)

A successful family office should strike a balance between enabling the family members to be the best of themselves and over time becoming overly protective or restrictive especially when a system has proven to work and no change has been made to match the evolution in personal and transpersonal needs when the society modernises. The family office might turn out to be an unintentional external survival unifying centre. Self-review should be instituted.

Conclusion

One of the biggest challenges of a family office is how to respect the individuality of the family members while providing consistency and predictability in how the family manages its wealth, succession and relationships. A psychosynthetical approach emphasizing the power of love provides a framework the family office can incorporate into the family system and implement at the most practical level. This approach goes to the fundamental layers of unconsciousness and brings in both the personal and transpersonal aspects to augment the offering of a family office in bringing genuine value to the family it serves.

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Cybersecurity: Don't ever think you're "too small" or not relevant

Keith Garner

Keith Garner, VP of International Business Development of Stealthcare LLC, a Cyber Intelligence firm in Cleveland, OH.

Stealthcare developed the world's most complete cyber threat intelligence and aggregation platform, Zero Day Live. Zero Day Live PREVENTS cyber threats before they weaponize and cause damage to organizations – reducing cyber risk by more than 50% – adding value and protection your current security vendors lack.

Matthias Knab: Every week I get at least one email from a person or a company, and it's clear to me that I received the email because that person or the company got hacked.

In some cases, the hacker took over the ENTIRE email infrastructure of the firm. When you then email back asking, "Hey, all good? Your email system seems hacked!", you sometimes get a reply FROM THE HACKER, who now sits on top of the company's IT and email, telling you, "No, all good, that link I sent you is secure, you can go ahead and (open the file | download the document) – whatever."

You don't want to go through such an experience. This is why I believe we have to walk the extra mile and get the extra protection which is available with PREDICTIVE cyber intelligence.

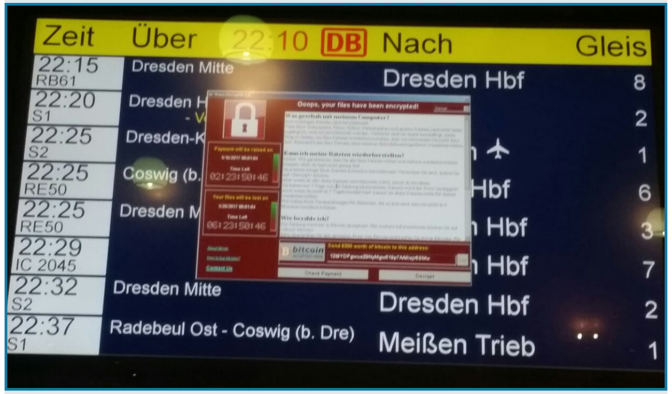
Banks, hedge funds, investment management firms and also family offices fall victim to cyber-attacks 300 times more than other industries. So, *don't ever think "you're too small" and that nobody would be "interested in what you are doing"...*

Stealthcare is the leading Cyber intelligence company that I have come across. What we are going to talk about is very important for all corporations and individuals. Today, corporations spend, each year, millions on cyber security solutions to protect their organizations from intrusion, but still, bad actors continue to breach defenses time and again. We will explore why this is happening and what can be done about it.

Keith Garner: It is true that companies do spend millions each year on cyber security, and unfortunately, they are still getting breached. Why is that? The truth is that 90% of today's branded security products – hardware that every company has to have, like firewalls, email security or endpoint security – can only do so much. They only protect organizations from "known threats" via "signature based" technology. What that means is, once a cyber threat has been identified as a "known bad" (signature is known), then the branded security product can identify it and can prevent it from gaining access to the corporate network and causing damage. It's vital to have these security controls in place. These tools and the "signatures" and "patches" that come with them, decrease the attack surface and keep organizations safe. All companies invest in these technologies today.

The challenge is that 42% of today's threat actors exploit and weaponize non- signature based, or zero-day threats. Meaning, modern threats are so new they are unknown by traditional branded security products. Since these products have no "signature" to use to block the threat, these non-signature, based threats continue to breach defenses. Stealthcare specializes in threat intelligence that solves this signature problem. We discover the non-signature threats and layer that intelligence into the existing security products companies already own. By automatically pushing this new intelligence into these products, the unknown becomes known, enabling these branded security products to prevent an attack that would otherwise be invisible to them.

An example that probably everyone knows is the Wannacry ransomware, which in 2017 infected hundreds of thousands of computers in more than 150 countries. Organizations impacted included The UK National Health Service (impacting hospital computers, MRI scanners and blood-storage refrigerators), Nissan Motor Manufacturing, Renault (both stopped production at several sites in an attempt to stop the spread of the ransomware), Spain's Telefónica, FedEx and the national railway of Germany, Deutsche Bahn.



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While WannaCry's impact was unprecedented, Stealthcare clients were spared the devastation. How is that possible? The Zero Day Live platform identified Wannacry 15 days before it was known and were able to secure their clients' systems.

"Zero Day Live" also uncovered LockerGoga, a more recent, major malware strain, 46 days before the ransomware shut down aluminum manufacturer Norsk Hydro, causing the firm to lose $69MM, to date, dealing with the breach.

Matthias Knab: This is indeed impressive. Coming back to the challenge firms and individuals have to protect themselves against cyber-crime, what else is going wrong or what other observation would you like to share?

Keith: Well, we understand that currently 85% to 90% of the market is focused on what we would consider to be the back end of the problem, which also is the most expensive end of the problem.

I'll explain. Let's say your organization experiences a cyber breach, and hopefully you have a roadmap/plan developed on how to deal with it and who to call when this happens. Unfortunately, a lot of organizations still don't have that, or they don't update it enough, so they are scrambling around to fix the problem while in crisis mode. Now, since they are likely not prepared, they are vulnerable – operations have been shut down, systems are not accessible, and they need help, now! They reach out to the first cyber security firm they can find and are now at the mercy of that firm in the hopes they can solve the problem. Not a great way to do business.

If they are a large enough organization, they also have to hire a strategic communications firm to come in and develop messaging and a communication plan to share this embarrassing and brand staining event with their affected customers, clients, partners and the public. At this point, they likely are not even sure what sensitive customer or company information has been compromised or stolen. Then a cyber forensic firm is hired to assess where the failure occurred and try to get operations up and running again and determine what data was stolen. Next, attorneys are hired to council on upcoming lawsuits and potential government inquires. The list of expenses goes on and on. As you can imagine this whole process can get out of control quickly.

In fact, an average to medium size organization is looking at a $2MM price tag to manage the breach. We built Zero Day Live (ZDL) to avoid the back end of the problem and instead focus on the front end, prevention.

Organizations, the progressive and forward thinking ones, are starting to focus on the front end of the problem. As the saying goes, "An ounce of prevention is worth a pound of cure." In other words, a little precaution and preventative maintenance before a crisis occurs is preferable to a lot of cleaning up afterward.

We see the smarter organizations starting to say, "What if we had the ability to prevent these breaches before they occur?" They do this by investing in threat intelligence via ZDL. Threat Intelligence eliminates the common refrain we hear when bad things happen, "I wish I would have known about this threat before it hit me."

What is obvious too, this is the much cheaper end of the problem to focus on. Threat intelligence platforms, like Zero Day Live, are added as a layered security approach, on top of your existing infrastructure. This will drastically reduce the chances of a cyber breach event happening to your organization. Based on industry research, and what we've seen in working with our clients, we reduce our clients overall threat risk by more than 50% above and beyond the protection their current products offer.

Banks, hedge funds, investment management firms and also family offices fall victim to cyber-attacks 300 times more than other industries. Allow me to add a bit more color to this. One of our clients is a North American hedge fund. Each month we send each client a threat detection report, detailing the intelligence we've delivered into their infrastructure to protect them from zero day and unknown threats (non-signature based).

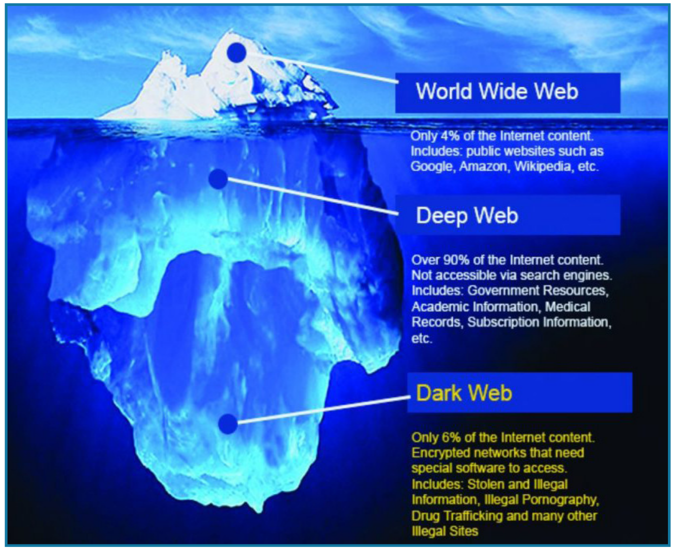
In the case of this particular hedge fund, our Zero Day Live intelligence was responsible for over 20% of the overall blocked traffic in a typical, recent month. So, just to make that clear, without our protection, that 20% of inbound threats – primarily from hosts located in Russia (13.5% from a single IP), China, and the United States – were not picked up by the fund's existing branded security provider, leaving them vulnerable to attack. As we prove via our analytics, implementing a predictive threat intelligence application, like Zero Day Live is a wise investment.

Every industry can benefit from Threat Intelligence. Another example is Insurance. Imagine you are an insurer offering a cyber insurance policy. The goal is to offer protection in the event your client suffers a cyber-attack. As an insurer you offer the policy because you want the premium and you hope you don't have to pay out (because it's going to be a big pay out if you do.)

Before writing the policy, what if you knew your client was 50% less likely to be breached because that client has a cutting edge predictive cyber threat solution in place? For an insurer, that client is a much better risk than the client who is not investing in threat intelligence. We're engaged with a number of insurers exploring the impact of this technology on their business.

Matthias Knab: Can to share with us where your intelligence is actually coming from?

Keith: We have a unique tradecraft based on over 18 years of experience in this field. The way I like to share how this works is to think of us as the undercover cops of the deep dark web. We source about 60% to 65% of our intelligence from deep dark web sources, where most zero day or non-signature based threats are born. Along with our sensor networks, social media scanning and monitoring of surface web threats we provide a collection of intelligence, offering rich context and a complete picture of a threat and how to stop it. This includes the attack vector, the impact and its potential to do damage to your organization.



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Every company is unique so the threat that matters to your company might not be as impactful on another firm. Why? Threats are targeted by industry, network technology, (like the different hardware, firewalls, email security tools, and human resources each organization already possesses.) We call this the CyberDNA of a company. Some large enterprises might have a security operations center or SOC, a team of 20 or more people that work on security, while another firm might have one person, or none, dedicated to security. Stealthcare takes all of this into consideration as we build a preventative cyber threat intelligence solution for our clients that is automated and eliminates the need for human capital expenditures.

Everything we've talked about, I think up to this point, has been focused on what do you do about your own organization, but the unfortunate reality of today's interconnected world is that you also have to worry about the security of third parties to which you are connected. You may remember the Target breach in 2013, where the cyber attackers gained access to Target's computer gateway server through credentials stolen from a third-party vendor. Using the credentials to exploit weaknesses in Target's system, the attackers gained access to a customer service database, installed malware on the system and captured full names, phone numbers, email addresses, payment card numbers, credit card verification codes, and other sensitive data of 41 million customer payment card accounts and contact information for more than 60 million Target customers. This attack began by exploiting one of Targets third party vendors, in this case it was a heating, ventilation and air conditioning company.

This is a very important topic to consider when you're thinking of cyber security. What are the potential third-party risks I have, perhaps not fully in my control? Do I rely on a third party software vendor to do my accounting or financial services work for my clients? Are they secure? If they are breached how does that affect my business?

Consider doing third party assessments that allow you to assess what security measures your partners have in place – starting from basic things like what branded security products do they use and where do they store their very sensitive customer data, financials, credit card information, intellectual property - and is any of that information tied in to your systems. You have to know where, how and what data is connected to ensure your partners have their security in line with your expectations.

Matthias Knab: What do you see on the horizon from a threat perspective, what's coming?

Keith: Unfortunately, threat activity is on the rise. Branded security products can't keep up with modern threat actors and their tools, tactics and procedures. Threat actors know how profitable these crimes are and they also know they can remain anonymous while they wage these attacks. The only way we see to start winning this fight is to change the way we go about protecting our environments. We must change our focus, moving aware from reactive and toward preventive measures. If we don't, how can we expect any real change?

For the sake of this conversation, let me point to three different types of threats we see on the rise. First, the world's geopolitical situation encourages more **state-sponsored threat activity.** These threat actors use very advanced malware, ransomware, and other tools for espionage. They want to disrupt operations with DDoS attacks, stealing top secret information and intellectual property theft. They are very focused on critical infrastructure. Think public utilities, government entities, defense contractors and major manufacturers as prime targets. These state threat actors are very sophisticated and specialize in developing zero day threats because they understand modern defenses and ways to bypass them.

The second area of concern are certain **criminal syndicates** that work together to basically try to blur the lines and look like a state sponsored threat actor. By mimicking a Chinese or Russian threat group they trick investigators into thinking it's state sponsored, when in reality it's actually a sophisticated criminal syndicate. They are typically financially motivated. It's not about politics but financial gain. They use similar malware and ransomware strains to obfuscate attribution. We think of this network of criminals as a kind of cyber mob.

The third growing trend is **ransomware and malware being offered by threat actors on the dark web "as a service".** <u>While it might be hard for the average person to imagine, threat actors sell commercial malware and support it like a legitimate company might sell a software package. They offer reseller arraignments, customer service support and details on how to weaponize the threat.</u>

Today most **teenagers** are computer savvy enough to understand how networks operate. Most of these networks come with basic usernames and passwords – factory settings that are never changed. It's very easy for anyone with limited knowledge to gain access and cause disruption. From there, they deliver a payload they purchased on the surface web or a dark web and exploit their victims for financial gain. This is much less risky than robbing a bank and the financial rewards are much greater as they get paid in cryptocurrency and no one is the wiser. With the rise of IoT devices in homes, governments and businesses of all sizes, these threats will continue to grow in sophistication and impact.

The challenges in modern cyber security are great, but just like in every business, information is power. If you have the information, the intelligence, then you have the power. Wouldn't you rather know what is happening and how to deal with it and take the power away from the threat actor? That is the value offered by Stealthcare. Together, we can change the course of cyber security from a reactive, losing battle, to a proactive winning proposition.

Watch the full video interview here: https://www.opalesque.tv/hedge-fund-videos/jeremy-samide-stealthcare/1

The Stealthcare team has offered to Horizons readers a free cyber security consultation – reserve your spot here: https://calendly.com/cyber_review

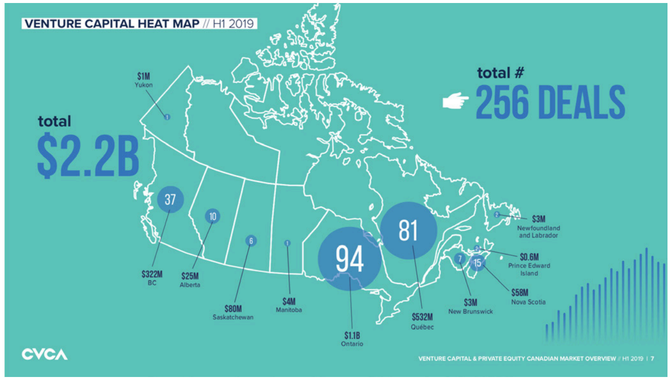
Spotlight: VC & PE boom in Canada expected to continue

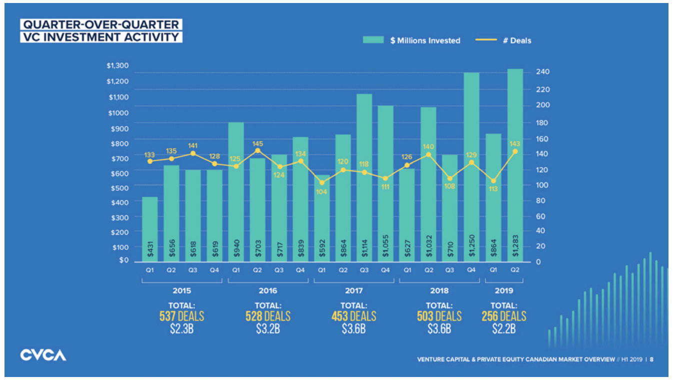
Mike Woollatt

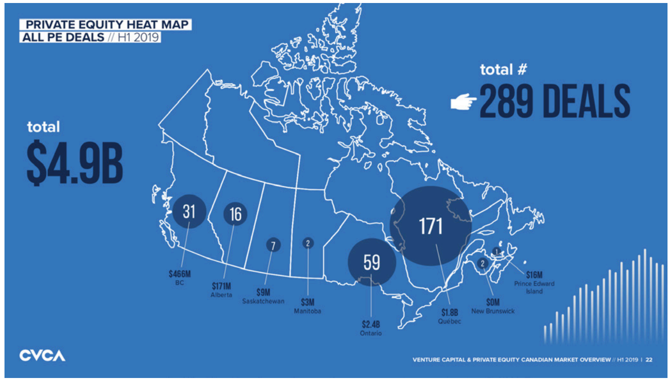
Mike Woollatt is Principal - Fund Investments and Co-Investments at Hamilton Lane and leads the firm's office in Toronto. He has more than 20 years of professional experience, including as the CEO of the Canadian Venture Capital and Private Equity Association (CVCA) from 2014 to 2018. Most recently, he was the Director of Strategic Partnerships at OMERS.

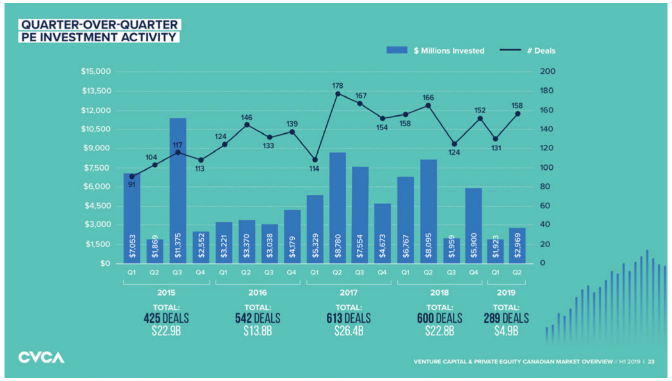
Mike Woollatt: Hamilton Lane has been investing in Canada for some time now, though historically more so on the private equity side. However, over the last decade or more, we've become much more active in the venture capital and growth equity space, having invested several billion dollars in the last decade alone. And while most of that is in the US, we have been seeing more and more strong opportunities outside the US.

We have seen a lot of opportunity in the venture and growth equity market in Canada. For some time now we've heard that Canada is "having a moment," but the moment has been going on for long enough that at this point, it's more adequately labeled as a fundamental shift. Canadian VC and growth equity has seen a substantial ramp-up in dollars invested – growing rapidly over the past five years.

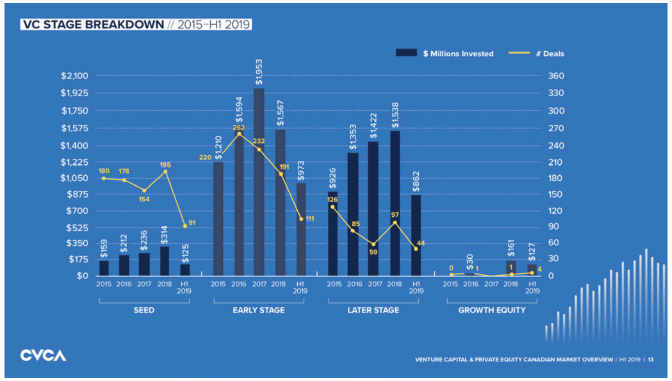


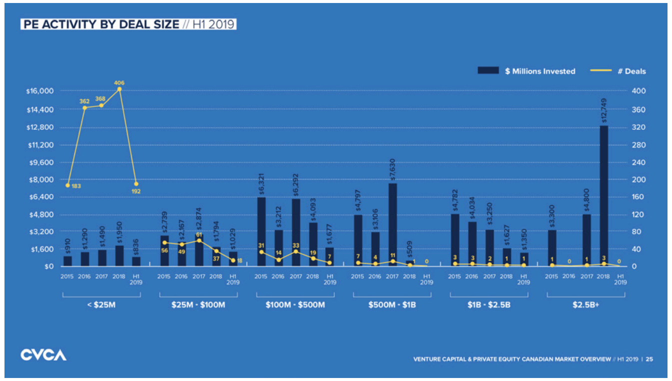


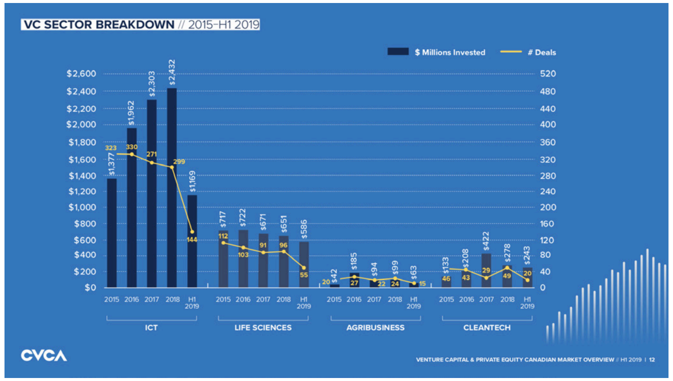




There are a number of factors that could make Canada quite attractive from a venture and growth equity perspective. It has one of the highest educated populations in the world; it's a relatively cheap place to start and build a company; has large tech job growth; leads the G7 in economic growth; has preferential access through trade agreements to several countries; and is a diverse and inclusive population. As well, it's proximity to the US market can be a big advantage as well. In terms of sectors, it has gained a substantial reputation in the fields of AI, biotech and fintech, amongst others - all of which have drawn a good deal of interest and capital.





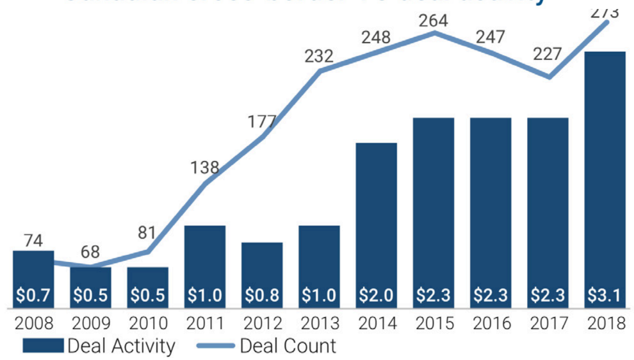


Another factor why Canada may be attractive is that despite all this attention that this market is now getting, it is still slightly less competitive on the investment side. As a result, there are still pockets of value-based opportunities in Canada in a world of higher and higher valuations.

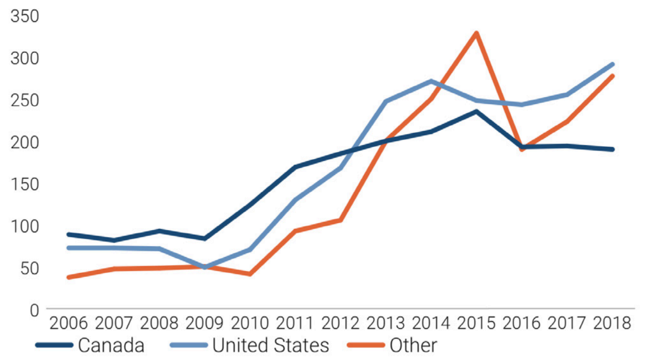
When you look at the dollars invested in Canada, roughly half is from US venture funds, which we think demonstrates that the ecosystem in Canada is robust and may attract top caliber investors. It's also due to the fact that Canada tends to be dominated by smaller-sized funds than in the US, leading them to fill the later rounds, writing the larger checks. Some of the strongest Canadian funds work this proactively and are partnering routinely with the same US funds with the aim of getting their companies to scale.

International VCs Are Taking Note of Growth in Canada

Canadian cross-border VC deal activity



Canadian VC unique investors in VC deals by location



Source: PitchBook's Annual 2018 Canadian PE & VC FactBook Report

Matthias Knab: Canada also has world-class pension funds which are recognized for their investment acumen. Have they gone into the venture side as well or are they thinking about it?

Mike Woollatt: We are blessed with world-class pensions for sure. And yes, a few of them are now quite active in the venture space. In fact, some have been there for a quite a while albeit mostly on the global stage as they have largely been outsized for the opportunities in the Canadian market until recently.

As I mentioned, the Canadian venture funds have tended to be smaller than US funds, creating a size mismatch with some of the globally large Canadian pension plans – but this appears to be changing.

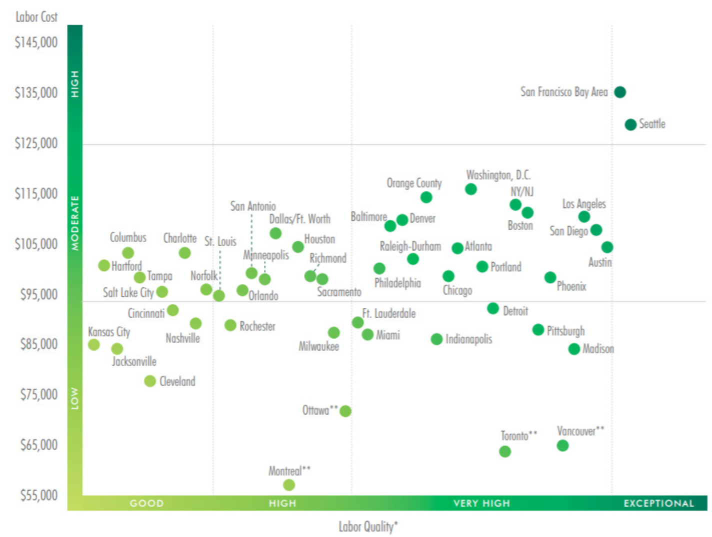
Matthias Knab: Let's look at the other side of the equation – the exit from a VC investment. What has Canada going there, is the country standing out somehow?

Mike Woollatt: Canada, like virtually everywhere else, is seeing longer hold periods for sure. That said, the number of quality exits is increasing, similar to what we are seeing the US of late. Companies like Shopify, which went through their IPO in 2015 may be seen by some as the shining beacon of Canadian exits – perhaps even globally given what has happened to its market cap since then. But there are a number of other recent Canadian company IPOs including Zymeworks, Clementia and Lightspeed and M&A exits such as SkiptheDishes, Bitstew and Luxury Retreats amongst many others that demonstrates Canada's strong exit environment.
It is this robust M&A environment, along with world-class artificial intelligence research, amongst other sectors, that have caused companies like Google, Cisco, Amazon, Microsoft, Uber, Samsung to all open offices and tech hubs up here, while also looking for buying opportunities. This has helped improve the liquidity in the Canadian ecosystem.

> To us, Canada feels like the Israeli venture and growth equity market did say 10 years ago or so. There is a real opportunity from that perspective for the Canadian market to grow, but most importantly has the potential to provide positive returns for investors.

Here is an interesting slide from a CBRE report that also backs up what I have been saying on Canada and tech talent - look at the standouts of Vancouver and Toronto particularly. On this graph, bottom right is the best place to be: low cost, highly skilled labour.

FIGURE 13: TECH TALENT QUALITY VS. COST ANALYSIS
Average Annual Salary for Software Engineer (US$)



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Learn how PREDICTIVE cyber intelligence prevents cyber threats that bypass traditional security products

Companies spend millions a year on cyber security, however, 42% of today's cyber threats bypass traditional security products. Jeremy Samide, a highly-sought after, global cybersecurity expert specializing in cyber threat intelligence and next-generation security threats, knew there was a better way to deal with this problem.

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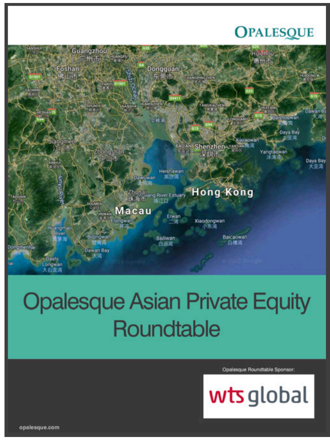

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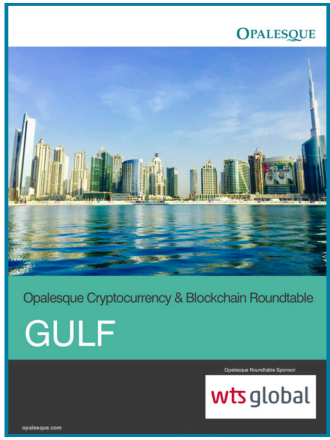

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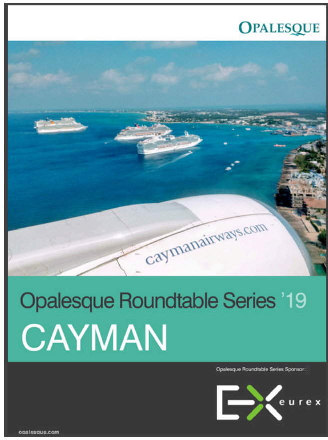

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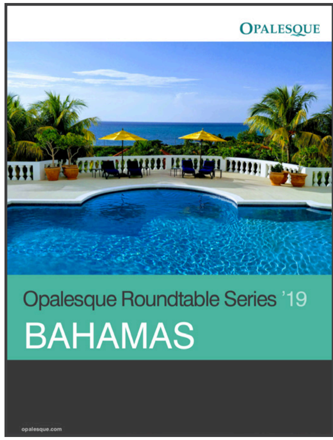

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