Riskalyze: Risk Alignment to Help Advisors Serve Their Clients

Website: www.riskalyze.com/

Founded: 2011

Clients: Advisors, broker-dealers, RIAs, asset managers, custodians, and clearing firms

Value proposition: The Risk Number®, invented by the company, empowers investment advisors to capture a quantitative measurement of client risk tolerance and use that data to win new clients, capture and meet expectations, and quantify suitability.

Top management: Aaron Klein, Chief Executive Officer (CEO)
                  Michael McDaniel, Chief Investment Officer (CIO)
                  Matt Pistone, Chief Technology Officer (CTO)
                  Dan Cunningham, VP of Product

Riskalyze has developed a Risk Alignment System that provides a quantitative measurement of client risk tolerance, called a Risk Number, and thereby builds a portfolio that contains just the right amount of risk.

To find out what the Risk Number is all about, I went to Auburn, CA to meet with Aaron Klein, CEO, Matt Pistone, CTO, and Dan Cunningham, VP of product. They were very friendly and shared a lot of insights about the company and its offering.
The inception of Riskalyze

Aaron Klein had a career at the intersection of finance and technology, running a global product for an addition of an auctions brokerage firm.

After teaming up with Michael McDaniel, Aaron began to consider how the average investor thinks about the concept of risk and what attitude most financial advisors have toward it.

"From that conversation, we started down the road of deciding to start the company. Matt, who is still our CTO, joined us very early in building the prototype of Riskalyze. It was literally just a proof of concept of some of the core concepts around quantifying risk tolerance."

When the company was established in March 2011, there were only two people there: Matt Pistone and Aaron Klein. Michael McDaniel was working as a financial advisor and couldn't join the company in an operational role until March 2013.

Dan Cunningham joined in October 2013, initially as an engineer. He then quickly took over product responsibilities and became VP of Product.

Quantitative instead of qualitative risk assessment

Aaron says that at Riskalyze they believe that risk portfolio requires a quantitative approach.

"When you have a quantitative approach to asking the questions, which are based on dollar amounts relevant to the individual, this really brings the question of risk down to what [the client is] willing to risk [within] their personal financial spectrum. [It's] not hypothetical. That's how you get to a stable answer over and over and over again."
As an example, Aaron says that while a person may have the same Risk Number as Warren Buffett, this doesn’t mean that this investor should buy the same assets and create the same portfolio as Warren Buffett. This is because the amount of money that is trivial to Buffett would be 99% risk to the person in this scenario.

This is why Riskalyze determines the investor’s individual Risk Number and comfort zone, and helps them properly understand their risk. At the same time, the platform calculates the Risk Number on the portfolio side using the track record and the pricing data of all the securities in the portfolio.

Aaron explains that the quantitative approach shows, with 95% probability, the negative and positive numbers within which the portfolio may end up.

"[We are] largely focused on downside risk because we believe that risk tolerance truly is how far this portfolio can fall within a fixed period of time before the investor's going to capitulate and make a fear-driven emotional investing decision."
Three stages of helping advisors

Aaron says that the core value of Riskalyze is to build a “100-year company,” so the company thinks long term.

“Our goal is not to be all things to all people. We want to do a small number of things really well and make a deep impact on our customers, rather than trying to boil the ocean.”

This is why the company focuses on building deep integrations and tools to enable advisors to have meaningful discussions and engage with their clients. Riskalyze specializes in taking three steps to help advisors:

1. The company calculates the client’s risk and their portfolio’s risk. “We want to make sure the level of risk that they’re comfortable with is [in line with] how they’ve invested.”
2. The platform has a number of portfolio-analysis tools and research tools, and provides statistics to help advisors build better portfolios for their clients. “They have the ability to build model portfolios and manage their book that way and help their clients [invest] better.”
3. The company provides tools for implementing the decisions made together with their clients. “That’s where Autopilot comes into play—doing the trading, doing the rebalancing, keeping those accounts on track.”
The Autopilot engine is not a traditional rebalancing solution. It keeps each account on track, and when the Risk Number changes—whether because the portfolio has changed or the investor has added money or any other reason—the system enacts the necessary trading automatically.

About the Partner Store and integrated partners

Riskalyze is not a strategy company itself, but it partners with a number of different firms to enable advisors to access its strategy models. Among its partners are Morningstar, BlackRock, First Trust, American Funds, and Swan Global Investments.

Advisors can subscribe to those strategy models and add them to their accounts to make their services more valuable. However, Aaron stresses that Riskalyze does not push products on advisors.

The company also has about 30 integrated partners, most of which are interacting with clients’ data. Advisors can see that data, visualize it, and put it into reports. They can also push the data into strategy models to update them manually, or can update their models daily, weekly, or (most typically) quarterly.

Riskalyze has integrated with a number of custodians. Aaron says:

“We have an Account Opening engine. It is a product that is focused on TD Ameritrade and TCA. We haven’t really built it out with the other custodians quite yet. But if you think about the Autopilot Trading product, which is really trading automation for advisors, that’s integrated with seven custodians at this point.”

Retirement map to help financial advisors

Riskalyze doesn’t build financial planning software. For this purpose, the company partners with MoneyGuidePro, eMoney, RightCapital, and a number of other companies.

However, it often happens that an investor doesn’t understand how much they need to invest monthly to meet their retirement goal, or doubts that they will be able to invest enough for retirement if they have to make other significant purchases, such as buying a house. Aaron Klein says:

“That’s the kind of multivariable analysis that we should do for a full-blown financial plan. What we hear from our advisors who do financial planning is that it has actually helped them drive that part of their business and got more of their clients to do financial plans in MoneyGuidePro, eMoney, or RightCapital because the retirement map helped the client to start thinking down that road.”

The core of the retirement map is the deterministic probability engine built by Riskalyze. Matt Pistone, CTO, explains that they didn’t want to make a complicated system. They intended to make it simple and quick. Matt says:

“What we put together is not using Monte Carlo, but getting at the same outcomes that Monte Carlo will give you, which is to be able to paint that picture of probability range out into the future of how [...] in different outcomes to not run out of money during retirement. So we use error propagation and a fairly simple model of the portfolio you’re invested in, the assumptions you have going into it, the market outlook, the inflation, maybe half a
dozen inputs, and that plays out into what you see in retirement maps, which is the swathe of your 95% probability of outcome at the end of retirement.”

The company structure

The three original co-founders, Aaron Klein, Michael McDaniel, and Matt Pistone, decided to split up their responsibilities. Aaron says:

“Matt makes [the product], I sell it, and Mike delivers it. That's not consistently true across everything, but it's fairly close.”

The R&D organization reports up to Matt. This includes product design, product development, engineering, QA, data center, operations, and core tech teams. According to Matt, the R&D organization accounts for about a third of the entire company.

The customer experience team reports to Michael. This team encompasses everything from support to customer access, coaching, enterprise account management, training, etc. Michael also leads the strategic business development and partnerships function.
Aaron also has a number of teams and people reporting to him. They include the VP of sales and of the sales organization, the VP of marketing and communications, the CFO, and the admin team.

**Client acquisition**

Riskalyze has built a leadership position in risk alignment. According to Aaron, the company sees a lot of inbound interest from advisors who want to figure out a better way to talk about risk with their clients, and this interest accelerates when the markets go down.

In addition, the sales team is expanding relationships with wealth-management enterprises. In July 2018 the company integrated with **LPL Financial**, and this brought about 2,500 new users in the form of LPL Financial’s advisors. Aaron says:

“I think it’s amazing, but we built a 2,500-user base in LPL with zero integration, just with advisors manually updating the product. So that speaks to the strength of the product, but we’re excited to see what we can do with great data integration as well.”

At the beginning of 2018 Riskalyze partnered with Parkland Sigma, and almost 1,000 advisors now roll out Riskalyze’s risk-alignment and Autopilot services.

**Product management**

**Dan Cunningham**, VP of Product, shared some insights into how the platform is being created.

“We have 20,000 advisors using our product, and they're not shy at telling us what they think about things.”

When the product team sets out priorities for the next year or two, they always think about what problems advisors and institutions of different sizes may face. They talk to advisors, preview their ideas, and validate everything with them. Dan says:

“The way we segment our product team is we have the core product team, the questionnaire proposal portfolio analysis product team. And then we have our autopilot trading automation team. And then we have an enterprise team working on products like compliance cloud, enterprise user provisioning, permissions, all the kind of advanced features there.”

Aaron adds that to identify opportunities he and the product team meet with customers, listen to them, and watch advisors work:

“What we’re trying to do is go [where it’s going to] make the most sense.”

**Engineering team**

Matt Pitstone describes how the engineering teams are organized.

Most of the teams are split into squads across product lines. Typically, each squad has a product manager, who manages several squads; about four engineers; and a QA technician. The main goal is to make the work of each squad autonomous. Matt says:
“[They] take projects and take design mocks and the inputs from outside of their team, lay out a plan, go build it, ship it without a lot of cross-team blockers and dependencies.”

According to Matt they are moving towards a microservices architecture, and this team structure works well with it:

“[One] team might spend a month building some service or some new functionality and then that serves as input to another team’s upcoming project, so that’s generally how our teams are structured.”

Matt says that only DevOps are not split.

The engineering team is distributed across Auburn and Atlanta, though two thirds of the engineering heads are in Auburn.

**Tech stack**

For product management, the team uses **Productboard**. It allows them to pull together all the components, features, improvement ideas, and updates. The company uses **JIRA** for project management and tracking issues.

The frontend of the platform is built using **Node.js** and **React**. The backend is built in **PHP**, **Python**, and **Java**. The database used is **MySQL**.

Aaron Klein comments:

“That's the beauty of microservices. [They involve] a lot of engineers with a lot of different backgrounds.”

**Knowledge transfer**

To ensure their software engineers understand the industry, the company implements the following steps:

- Software engineers periodically shadow training and support calls.
- Michael McDaniels provides “The Day in the Life of an Advisor” where he lays out, over the course of about four hours, how the industry works from the advisor’s side.

Matt believes that this helps advisors get the domain context, obtain industry knowledge, and understand their customers’ needs.

**Company culture**

Aaron points that in the last 18 months the company has grown from **90 to 240 people**:

“The challenge for us is to maintain the culture of our company and of our people as we grow in scale.”

From the very start of the company, Aaron has personally taught the company mission and values to new employees.

“I like to look all these new people in the eye and make sure they really understand that the values that you see up on the wall around here and that you can see on our website at [riskalyze.com/values](http://riskalyze.com/values) are not just stuff that we throw on
the wall, but we actually live by, day in and day out. That's been a big source of why we've grown so quickly.”

Aaron believes that this is very important because Riskalyze has built a great brand and reputation with advisors and gets good feedback, and it’s extremely important for the company to pursue the product roadmap and innovate the advisor–client engagement experience with what the company does.

One of the main values is to delight their customers. Aaron states:

“We don’t think that the customer is always right. If we did everything our advisors told us to do, the product would be completely unusable. It would have a million dials and switches and knobs and they wouldn't be able to figure out how to use it. So our job is to have a really strong core vision for where the industry needs to go, where advisors need to go, where investors need to go. Listen carefully to our customers, but listen not for their prescriptions, but for their interests.”

If they understand advisors’ interests, Aaron reasons, they will end up creating a truly delightful experience for advisors and ultimately for their clients.

Other things that are critical for Riskalyze include open and direct communication, accountability, and objectivity. The company creates a high feedback culture. Aaron believes that this is what has made a lot of their innovation possible.

**WealthTech Club takeaways**

Riskalyze is an extremely interesting, fast-growing company that offers financial advisors valuable help. They can do more than just attract clients, as they improve advisors’ services and enable end investors to clearly understand what may happen with their investments and to avoid needless risk. This becomes possible due to quantitative methods implemented by Riskalyze for risk alignment concerning both investors and their investments.

*Written by Vasyl Soloshchuk, CEO and co-owner at INSART, FinTech & Java engineering company. Vasyl is also the author of WealthTech Club, which conducts research into Fortune and Startup Robo-advisor and Wealth Management companies in terms of the technology ecosystem.*