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Innovation and Framework for the Investment Process

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Participants

Dr. Ashby Monk, Executive and Research Director, Stanford Research Initiative on Long-Term Investing (SLTI)

Mark Steed, Chief Investment Officer, Arizona Public Safety Personnel Retirement System (PSPRS)

Yolanda Diaz, Director, Relationship Management, BNY

Podcast:

Yolanda Diaz

Hi, I'm Yolanda Diaz, relationship management director at BNY.

Rapid Insights is a series of short podcasts aimed at providing exclusive industry views and perspectives on the most pressing topics impacting asset owners.

As a global financial services company, BNY oversees nearly \$50 trillion in assets for our clients, managing it, moving it and keeping it safe, and we're excited to facilitate a platform connecting industry leaders to engage in thought provoking discussions.

The topic today is innovation and frameworks for the investment process.

I'm delighted to have Doctor Ashby Monk, executive and research director of the Stanford Research Initiative of Long-Term Investing, and Mark Steed, Chief investment Officer of the Arizona Public Safety Personnel Retirement System.

So, let's dive in Mark, as a recognized leader in the industry for innovation, what are the forces driving your organization to innovate, particularly on the framework for the investment process?

Mark Steed

Sure. Thanks, Yolanda, and first of all, thanks to the broader BNY team. It's, you know, an honor to participate in the podcast here with Dr. Ashby Monk, who's, you know, one of the foremost thinkers in the space. So, thank you again.

So, I think for me, it's relatively straightforward and simple.

You know, I believe it's fundamentally just part of my fiduciary duty to make improvements on investment returns or, and, or cost, I should say, and, or volatility. And one obvious way to do that is just make better decisions and better decisions about strategic asset management, better decisions about tactical investments.

And I think one of the hardest things to do, frankly, for any leader of an organization is to sort the good ideas from the truly bad ideas.

And I think for nearly every organization, you know, that's in a competitive environment, you want to achieve kind of proof of concept for as little money as possible, right?

You've got, you've got political risk, optical risk, capital risk. So, I think you must come up with these, these robust and simple frameworks for making improvements because I think it's an obligation. So, for me, it's about the purity of and robustness of the decision-making process that really motivates the improvement.

Yolanda Diaz

So, Ashby, is this consistent with what you're seeing across your research project at SLTI or are there any other technologies or trends you'd highlight that are driving innovation for asset owners?

Ashby Monk

Yeah, it's super fun to be here, Yolanda.

I think it's always fun to be talking about innovation in this space because we don't see a lot of innovation or at least we don't see planned innovation that much. And so it's fun to have Mark on here where as he says, he sees it as his duty to make improvements to the organization.

That's pretty rare.

I really see three areas where innovation comes through in the public pension space, the sovereign wealth fund space, and that's crises, culture and leadership. And I'll just do all three very quickly.

The crises, you know, you see them all over the place.

In 2001 we had the asset liability mismatch which led to asset liability matching. 2008 we had product categories moving together in the crisis which led us to a risk factor-based asset allocation.

These crises often unlock change in our organizations. It forces the hands of chief investment officers but most importantly boards of directors to empower those CIOs to change.

The second one is clearly goes to the Arizona style is culture where you're sort of building an organization that sees this as part of what it does, building process of challenge, of debate and of change. You know, not just taking everything as a status quo, but rather kind of looking to improve at the margin, but also eventually when you approve enough at the margin, you get transformative changes occasionally.

But the one that I see a lot is also maybe why we have Mark here, and that is leadership.

Often, we see most change happening in an organization when there's a new leader, the new leader comes in, they say, gosh, let's get different technology, let's get a different asset class, let's get something different in here. But that also sort of is just a signal that new leaders are given a longer rope to be innovative.

They sort of are given a year by the board of directors to sort of make their point on the organization. And then some leaders take career risk. They sort of put themselves on the line and do things differently. So sorry for the long answer, but those are the three big issues coming out of the research.

Yolanda Diaz

That's great. So, Mark, how are you implementing this new framework and how do you engage the board in these conversations?

Mark Steed

Sure, the, the, this ethos, as you can imagine, permeates a lot of different things that we do. But let me just focus on the investment process. Here's your question. And really one part of that, which is the investment recommendation. And so, I participated years ago back in me, gosh, this would have been like 14 years ago,

maybe almost in the Good Judgement project, which was a forecasting competition sponsored by IARPA, one of the basic amalgamations of the defense agencies that was led by Phil Tetlock. And then he later after that program wrote the book Super Forecasting, where he shares a lot of his best practices and recommendations from his program with the whole foxes versus hedgehogs thing.

So we've really implemented a lot of material aspects of forecasting as articulated by, you know, Doctor Tetlock and the good judgement project today. But I also, you know, that's his research. I, except for the fact that probably there's, there's elements of it that are not pure manifestations of his research, but I think we're still pretty close.

That's just to say I, we - can't take credit. Full attribution goes to him and his team for any of the good ideas, frankly, that we share. So let me give you an example of that. The PSBRS we are, we think that every decision effectively is a forecast, and every investment recommendation really needs three things.

One, you need a really clear definition of success. Two, you need to date by which you think success will be achieved are accomplished. And three, you need a probability estimate.

Or some might think of it as like a confidence level. It's not really the same thing, but it'll do the trick for today.

So for example, I might think that NVIDIA will outperform the S&P 500 by at least 5% by December 31st, 2024 and I'm 70% confident. Another example might be I think this private equity fund will be in the top 25% of its peer group by the 16th quarter after its final close. And I'm 60% confident. So, what we do is we go and we look for all of those decisions for which somebody was 60% confident, were they 60% right? And there are a few things that I really love about this process.

So first, it encourages the use of probabilistic reasoning and really embracing uncertainty. That's number one.

Two, we can now accurately assess the outcome because we have a very clear definition of what success looks like. And that really helps with overconfidence and the flip side of that, which is underestimation.

The third thing I like is that it really requires a clear articulation of the reasoning behind the predictions or decisions, which really fosters accountability.

And fourth, it's it promotes a more egalitarian decision-making environment, which is important because that increases the odds that somebody on the team will say something that nobody else has had thought about.

So not only do individuals get better, but the collective gets better as well. So, as we think about how to communicate that with the board, we're really clear about this process.

And having that process, I think, enables them to get comfortable that they're following kind of prudent person standards, that any changes and recommendations have been objectively vetted, that this process is consistent across a number of different recommendations or changes that we might make. And ultimately, that does, I think 80% of a lot of the good governance work that we're about at PSPRS.

Yolanda Diaz

So, Ashby, can this lead to a case for organizational change to align to the unique needs of asset owners?

Ashby Monk

Yeah, 100%. I love that.

I think, you know, Mark was saying that every decision is a forecast. I think a lot of the time I say something a little different. I say every investment decision is a series of assumptions about the future.

So, we're both talking about like we're, using our crystal ball to gaze into the future.

And in general, what an investor does when they're making an investment is they're taking the deal specific facts and assumptions and they're overlaying those on top of their portfolio facts and their investment beliefs.

And if we have the right symmetry between those two, we do a deal. Then the question begins to be how did we do? Were we smart? Did we make the right decision?

Too often we revert to performance as our definition of a good decision, but I think it was Annie Duke who said that's resulting. We should actually go back and do the process that Mark is referring to and think really deeply about the quality of the decision inputs as we're evaluating whether or not we made the right decision. So, I think this process you've just described from Mark is a very well-tuned decision-making framework that will improve outcomes. It's super fun to me.

Yolanda Diaz

So final question for both, starting with Mark, what are some words and advice you'd share with other leaders and similar organizations considering innovating key components of their value proposition?

Mark Steed

My advice would be to create a decision-friendly environment. And what does that, what does that look like?

The analogy I'd like to use, which I heard in Business School, it's not mine and I think my professor heard it from somebody else's professor, but the analogy and I'll tweak it a little bit.

The analogy I like to use is you're creating an environment that feels like summer in Michigan, where I grew up. So, I'm partial to Michigan summers. Summer in Michigan is beautiful.

You have energy, you want to go for a walk, you want to go for a jog, you want to go hiking, you want to go camping, you want to go kayaking, whatever. Summer in Phoenix does not feel like that summer in Phoenix, you feel lethargic, you're tired, you don't want to go outside.

So, I think often we create a summer, a Phoenix summer effectively at our organization that really saps productive mental energy from employees by making them perform tedious, low value tasks.

There's unproductive office gossip, lack of accountability, unclear processes, decision fatigue. So, this is all problematic and really difficult, you know, sledding if you're if you're trying to improve processes. I think there's a few solutions to that and we think of it as a, you know, just a chair with four legs.

One is just to commit to streamline and optimizing investment processes.

So first take a look at your own processes and make sure that they're as clear as possible to invest in robust and scalable technology and software that removes some of the tedium of the day-to-day and can allow your team to focus on what really matters.

Belief in data-driven, data-driven insights and decisions - so really leaning in and leveraging the best of, you know, statistics and machine learning and productive analytics. And then, just commit to transparent transparency and accountability, because I don't think you could have improvement without accountability.

Yolanda Diaz

And so, Ashby, what's your perspective on how not to get fired when innovating?

Ashby Monk

Well, I'm going to, I'm getting inspired by Mark here talking about summer in Phoenix.

So, I'm going to talk about winter in Edmonton. I was born in Edmonton, AB and let me tell you, it's -50°.

And you don't want to go there.

And most of the innovation and pension funds, it feels like you're entering that -50° weather.

It's like not an environment that's suitable for human life.

But we need to do it occasionally.

We need to go outside.

What I'm really trying to say, Yolanda, is that you need to prepare these organizations for innovation and you need to set things like rules and boundaries and design governance structures and even incentive structures in order to make true useful innovation happen.

You actually need to set a bunch of rules in order to do that.

And so when you show up to your board of directors with an innovation, the board of directors can say, oh, I was expecting you to come to me with an innovative idea because four months ago you presented the need for innovation in technology or human resources or decision making.

And so the fact that you're arriving now with an actual innovation tells me you're literally doing what I told you to do.

So creating that environment that is welcoming for the innovators, I think is a real important thing.

And again, your question will help people avoid getting fired for sure, but will also help drive more innovation, which I think we're all after.

Yolanda Diaz

Well, thank you, Ashby and Mark for the very engaging session on what innovation means for asset owners. Thank you for all joining and hope you enjoyed the session.

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Participant Biographies

Dr. Ashby Monk, Executive and Research Director, Stanford Research Initiative on Long-Term Investing (SLTI)

Dr. Ashby Monk is currently a Senior Research Engineer in the School of Engineering at Stanford University and holds the position of Executive & Research Director of the Stanford Research Initiative on Long-Term Investing.

Ashby has more than 20 years of experience studying and advising investment organizations. He has authored seven books and published 100s of research papers on institutional investing that have been read by tens of people. His latest book, [The Technologized Investor](#), won the 2021 Silver Medal from the Axiom Business Book Awards in the Business Technology category.

Outside of academia, he has co-founded several companies that apply advanced analytics to drive better capital allocation and investment decision-making, including RCI Navigator (acquired by [Addepar](#)), [FutureProof](#), [NetPurpose](#), [D.A.T.A.](#), [GrowthSphereAI](#), [SheltonAI](#), Long Game Savings (acquired by [Truist](#)), and [KDX](#). He is also a member of the CFA Institute's Future of Finance Advisory Council and was named by CIO Magazine as one of the most influential academics in the institutional investing world.

Ashby received his Doctorate in Economic Geography at the University of Oxford and was a member of Christ Church college. He holds a Master's in International Economics from the Université de Paris I - Pantheon Sorbonne. And he received his Bachelor's from Princeton University, where he tells people he majored in rowing.

Mark Steed, Chief Investment Officer, Arizona Public Safety Personnel Retirement System (PSPRS)

Mark Steed began his work for PSPRS as a portfolio analyst in 2007. During his ensuing rise through the ranks, Steed has managed each of the PSPRS portfolio asset classes, including private equity investments, venture

capital, fixed income, absolute return, private credit and global trading strategies. In 2019, Steed was promoted to Chief Investment Officer following a national search for candidates.

Steed was named by *Money Market Intelligence* as one of the U.S. public pension sector's "Rising Stars." He has played an instrumental role in transforming PSPRS's \$11 billion in investments from a traditional, stock-heavy portfolio to a modern, highly-diversified set of investments built to withstand market volatility while delivering significant returns.

Steed holds a Master of Science degree in Predictive Analytics from Northwestern University and a Master of Business Administration from the Thunderbird School of Global Management. He earned his Bachelor's degree from Brigham Young University, where he majored in Latin American Studies with a minor in Business Management.

In 2014, Steed concluded a four-year project as a forecaster for the distinguished Good Judgment Project, led by prominent behavioral economist Phil Tetlock. Prior to joining PSPRS, Steed worked in banking for JP Morgan Chase.

He serves as an advisory board member to the Investment Institute and the Institutional Limited Partners Association, and has the honor of publishing the [first guest column on Farnam Street](#), a prominent investment industry blog and newsletter.

Yolanda Diaz, Director, Relationship Management, BNY

Yolanda Diaz joined BNY in 2017 and is a Director in Asset Servicing located in California. She has over 30 years of Financial Services experience and serves as a Relationship Manager in the Asset Owner segment covering large Corporate, Endowments and Foundations and Public Fund clients. . She has overall accountability for the seamless delivery of the Company's comprehensive suite of asset servicing products and services. Through fostering relationship growth and effective client advocacy, Yolanda influences product development and helps direct strategic priorities to promote and ensure long-term relationships with clients.

Prior to BNY, she spent 15 years at State Street in a similar capacity, focusing on Public Funds and Corporate Treasury clients representing over \$250B in assets. Before joining State Street, she was with Deutsche Bank where she served as Relationship Manager and Consultant Relations for Trust & Custody services. She began her career in Bankers Trust's Management Training program in New York, where she held various operational and client relationship roles.

Yolanda earned a Bachelor of Arts degree from Trinity College in Hartford, Connecticut.

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