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Outlook
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A Solutions
Market
Renaissance →

n last year's prospective, **Outlook 2022: Embarking on a Journey of Unprecedented Operational Change**, we discussed why transformation programs would dominate the year ahead for the asset management industry. We were not wrong—the volume of change programs we are currently working on is unprecedented—but in recent months, the conversation has shifted to how the solutions market is addressing this trend. Over the past year, we have seen enormous change in the vendor landscape and in 2023, we anticipate technology, services, and partnerships to have a significant impact on how our clients think about operating models.

Given the broad reach of this trend and its evolving nature, we could think of no more important topic to dive into for this years' outlook. Read on for our expert thoughts on trends in services, technology innovation, challenges of interoperability, the shifting talent landscape, and how we see many of the partnerships and collaborations in the solutions market shaking out.

A Look Back on Outlook 2022

In **Outlook 2022: Embarking on a Journey Of Unprecedented Operational Change**, we discussed five trends that would drive and influence change in 2022. How did our outlook shake out over the course of the year?

1

Asset managers must prioritize the evolution of their data architectures with the concurrent evolution and modernization of industry solutions

This trend persists and will likely continue to be the basis of industry change in the next 1-5 years. The key takeaway here is more relevant than ever: organizations that have not yet defined and started to execute on a strategic cloud vision for data are already behind the curve.

2

Operations and technology leaders must look holistically at how to leverage a solution provider to build a front-to-back ecosystem, how to simplify their operating model, and how to improve upon it

We predicted that quick lift-outs and like-for-like swaps of applications would be going the way of the dinosaur. This was spot on and over the course of 2022, solutions providers took it a step further by forming their own partnerships to move innovation forward and build stronger, more integrated product suites.

3

The journey to the solution promise land must be viewed as a partnership between asset manager and solution provider

In an ideal world, asset managers would not need to know detailed specs on serviced applications, but as solutions providers continue to build out new offerings, managers may need to take on a collaborative role. We dive deep on this topic in Outlook 2023.

4

Transformation plans and roadmaps need to be built around people

Building roadmaps around people grew increasingly difficult in 2022. Because of this, we saw some interesting shifts in the talent landscape as resources increasingly moved from the middle and back office of asset management firms to the frontlines at solutions providers.

5

Asset managers must innovate their talent strategy to attract and retain in-demand resources

We had numerous conversations on talent strategy with technology leadership last year and we have more questions on the topic than ever in 2023. Will the big tech bubble offer us new talent? Is upskilling the way to drive innovation? We discuss these questions and more in this year's Outlook.

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Solutions strategy re-defined

Service providers turn focus to technology

The blurring lines between software and service providers has been a topic at the forefront of industry conversations (and in our Outlook) for a few years. The trend picked up pace after a frenzy of acquisition and partnership activity between service providers and software vendors trying to achieve a holistic front-to-back offering. While being a one-stop-shop solution provider is still at the forefront of many provider strategies, a sub-trend has emerged in this space where traditional service providers are now leading conversations with talk of technology.

Historically, the differences between an outsourced or in-house operating model were fairly black-and-white, and the subsequent procurement of services or software in support of each followed suit. If an asset manager was evaluating a service provider, they would focus on outputs: does the provider have the ability to meet data requirements, timing requirements, functional and product coverage, and—perhaps most importantly—will they be a cultural match as a partner? Conversely, if evaluating software in support of an in-house operation, they would look more at the user experience, functionality provided in the application, the underlying technology, as well as the outputs that could be achieved in the application. Recently, we have observed a shift where service providers are increasing their focus and investment in their technology, thus changing the conversation.

Looking under the hood

Service providers sharing details on their underlying technology stack with clients and prospects is not a new concept. Most request for proposals issued by asset managers to service providers do ask for the make-up of the application model they intend to use to perform the scope of functions. In some cases, however, by the time requirements are fully agreed upon and the transition has started, the proposed underlying technology may shift based on functional capabilities required to provide the *service*.

In these cases, the expectation historically would not be for the service provider to have an in-depth conversation with the client about the change to the technology; the technology used should ultimately be inconsequential to the service that has been agreed to in the contract. However, over the last year, we have noticed that service providers are openly discussing their underlying technology stacks with their clients and prospects during discovery or due diligence periods and beyond, especially when there is a new application in the model. The explanation for this shift is that the decision to outsource operations is now being made at both the technology and operations leadership levels, a shift from the past where outsourcing decisions were made mainly on the operations side.

Recent announcements from several major service providers serves as an example of this shift—many firms have announced

new partnerships with software vendors that are driven by the service providers' desire to address functional gaps or limitations in their legacy technology stack. Innovation through partnership is certainly the path of least resistance when trying to meet client demand.

Changing the approach to transformation

With tech innovation driving solutions strategy, vendor and service provider models are being re-imagined and transformed. This puts their new offerings at the early stage of the maturity curve which in turn, influences all phases of the transformation lifecycle from strategy to partner selection, through to the outsourcing transition and implementation timeline.

The onus is now on asset managers to understand not only the promised capabilities of a new solution, but where the provider stands with respect to adoption, client pipeline, development roadmap, and ability to execute. The simple fact is that regardless of whether the solution is being natively developed or is an amalgamation of packaged underlying platforms, the transformation for both

the asset manager and the provider will involve significantly more resources for discovery, design, and development than in previous transformation cycles.

In the years elapsed since first generation outsourcing offerings were introduced, service providers have refined and enhanced their standard service definitions, operating models, data models and delivery options, workflows, and transition approach. However, with recent developments in platform and service strategies, these definitions and models are, in many cases, a moving target. While the burden of documenting the requirements, market data standards and sources, data consumption layers, and controls still lies with the service provider, the importance of validation of these by the asset manager is much higher now. To aid this process in the past, providers were able to offer basic documentation, templates, and samples as an input to these activities, however many of these artifacts simply aren't available or fully developed relative to the new solutions currently being incorporated into service provider offerings.

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and clients are triggering a heavy flow of activity into product development queues. The net result is that more time is required for implementation in order to accommodate the discovery phases, joint design of operating and data models, and identification of solution gaps. Experience tells us that this may extend an implementation by 1.5x to 2x historical norms until solutions exit the early adopter phase of maturity.

Embracing the role of the early adopter

There is significant upside to planning transformation at the early adopter phase when it comes to gaining a competitive edge, negotiating financial terms, and ensuring that third party solution design will be influenced by an early adopter's goals. However, there are also new challenges introduced and more resources required during the implementation phase.

Executive management must understand that they are embarking on a journey with their providers to jointly design and deliver target state solutions and operating models. At the end of this journey, asset managers will optimally realize increased efficiency, improved data quality, a reduction of their technical and application footprint, and cancel years of technical debt accrued from workarounds, bespoke solutions, complex integrations, and ungoverned data architectures. But there is no out-of-the-box solution for this. It is incumbent on asset managers and solutions providers to jointly solve these

problems through discovery, design, and development of the holistic platform functionality, the data integration model, and the business operating model.

Organizations that place the burden of design and delivery disproportionately on the provider and expect the existence of "standards" to drive the transformation (whether pertaining to the definition of the technology, services, or implementation methods) will experience elongated implementation cycles, missed objectives and expectations, degraded organizational commitment, scope creep, and a deterioration of the relationships with their selected partners. Firms that acknowledge the maturity curve and embrace the opportunity to build a collective and mutually beneficial solution with their provider will experience greater success in meeting their objectives on a realistic timeline. It is nonetheless important to acknowledge that few asset managers have the resources to dedicate to fully shared co-development and must therefore set their goals and expectations with this in mind.

Expansion of services in custodial market

Outsourcing sentiment shifts

As the services market has evolved to embrace a tech-driven market strategy, it has also expanded. Driven by client demand, several custodians known more for back office services have been making a play to move up market into non-commoditized services. The driving force behind this shift seems to be a major uptick in outsourcing interest within asset management—the pie is expanding, and more service providers are angling for a slice. The question of what's driving this increased appetite can be traced back to the events of the last two and a half years—in particular, changes to operations driven by the pandemic.

Legacy, on-premises investment technology isn't efficient in an operating environment where IT and operations teams are working entirely remote. The pandemic-driven rise of remote workplace norms has been difficult to reconcile with operating models that rely on in-person oversight. Striking the right cultural balance has not been easy and this challenge has been magnified by the tight talent market. Asset managers are faced with a self-feeding issue: firms want to upgrade to a modern technology stack, but they need manpower to do so—and lack of manpower is a difficult issue to surmount.

These factors are driving asset managers to increasingly examine their entire operations ecosystem and to identify those functions that add value for their clients vs those functions that don't. Outsourcing contracts are now several generations deep, but increasingly, asset managers are looking to outsource more of their operating model in order to shortcut staffing issues and minimize conversion risk. Service providers are not only helping asset managers meet these existing challenges—they're also promising to help them leverage modern technology to accommodate new investment strategies and perform sophisticated analytics.

Custodial banks reassess their offerings

This shift in sentiment towards outsourcing has prompted many custodial banks to reassess their strategy and increasingly view holistic, front-to-back outsourcing as a necessary part of their offering. This evolution is pushing custodians to move up the value chain to a more lucrative margin business, especially as they foresee headwinds from legacy profit centers such as foreign exchange processing, securities lending, and core custody services.

Front-to-back outsourcing is now the new battleground for service providers; however, how each provider is playing the game is different. Essentially, three models have come into play: proprietary, partnership, and open architecture. Each model has its strengths and weaknesses, and service providers are quick to point out the benefits of their approach. Asset managers need

to fully understand these offerings to assess which model best supports their business needs based on their investment strategies, data requirements, integration, and existing technology stack.

Service providers that are back office focused tend to have partnership and open architecture models which allows asset managers more customization. Conversely, several services providers known better for front-to-back services are leaning into proprietary models. Proprietary models provide simplification while partnership or open architecture models require more inputs but offer greater flexibility.

Challenging the incumbents

The flexibility of service models is not the only way that service providers known for the back office stand to gain ground in the outsourcing market. With some exceptions, asset managers tend to prefer to work with a single service provider for middle and back office. This is due to a number of factors—cost efficiency, better integration, and ease of maintaining fewer relationships, among others. Outsourcing providers that have historically serviced a significant

share of the global back office have not always provided a compelling option for middle and front office needs. However, this is changing as back office custodians are maturing their front and middle office services through new partnerships, licenses, and overall technology investment. For their existing back office clients, this provides a viable option to extend services upstream and also poises them to go head-to-head with middle office incumbents.

Despite competitive pressures, the question may not be whether back office custodians will be taking a slice of the incumbents' pie but how big the pie

will grow in coming years. Regardless of the scale of market expansion, recent investment across outsourcing providers will likely reinforce a competitive market and provide more options for asset managers over the long term.

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Service Provider Models

A **proprietary model** is a fully-owned solution that focuses on creating a single source of investment data throughout the entire investment management lifecycle. It makes the general assumption that the asset manager is technology agnostic as long as it gets the data it needs to run the business functions left behind.

A **partnership model** provides flexibility to the asset manager as the service provider has created alliances/partnerships with leading software providers for key components of their solutions to allow for flexibility and interoperability to the asset manager platform.

An **open architecture model** takes the partnership to the next level of flexibility, allowing asset managers to switch software providers and add components (business functions) from the service provider as times change and the asset manager's future state operating model evolves.

The collective cloud journey

Cloud momentum challenges the status quo

One of the major challenges to understanding the cloud is that there is no standardized approach to cloud transformation. While the industry may collectively agree that the move to the cloud is a foregone conclusion, alignment of solutions architectures to an asset manager's strategic priorities and internal architecture is still being defined.

How this evolution will play out is up for debate, but there's no doubt it will drive agendas in 2023 as cloud promises a future where asset managers are able to scale quickly with limitless data storage and compute power, achieve lower cost of maintenance, and benefit from the flexibility of cloud architecture to enable development and application interoperability.

Asset managers have been hesitant to move installed or in-house applications to cloud providers for decades. Reasons for this are complex and multi-layered—security concerns, stickiness of applications, cost consciousness, and the lack of cloud applications in the solutions market. Many of those concerns have dissipated in recent years as cloud has proven its value and reliability. However, there has perhaps been no greater catalyst driving cloud momentum than the push amongst solutions providers.

Over the past several years, nearly every major software vendor or service provider in our space has been marketing their cloud capabilities or plans to incorporate cloud into their offering. When asset managers undergo a search and selection, cloud is now a key part of their decision criteria. With so little clarity and standardization around what cloud *means* for technology and operations, this is a difficult process—and one that is evolving alongside technology maturity.

Discerning cloud native, cloud capable, and the gray area in between

When it comes to the solutions landscape, new technology is nearly always built on a cloud code base. The reasons for this are simple: 1) the cost and time involved in developing a cloud application is a mere fraction of an installed application, and 2) the industry is inexorably moving in this direction. A cloud native solution can deliver on the full promise of cloud: lower fixed costs, greater computing power and scalability, improved application interoperability, better data accessibility, enhanced security and reliability, and faster time to market for application development. With benefits like that, one might wonder: why aren't all applications re-built on a cloud code base?

The answer to this question is not so simple as it boils down to cost, time, and the inflexibility of existing technology. Most asset managers perform several critical day-to-day functions on technology that ranges from 20 – 30 years old. Though anything can be "moved" to the cloud, the resources involved in re-writing code to function in a cloud environment are

substantial if not insurmountable. For most applications, this is a slow, piecemeal process of optimizing certain elements for cloud capability and de-prioritizing others. Enter the cloud *capable* solution.

Most major applications in the middle and back office are cloud capable, not cloud native. For some vendors, this may mean the flexibility to use data as a cloud (DaaS) solutions as an add-on to their standard software. For others, this may mean hosting client data in AWS. For a few, this may mean painless upgrade processes. What's important for asset managers to understand is that all cloud capable solutions are not equal.

If undergoing a search for a new platform, it is not enough to ask: "does your solution have a cloud-enabled open architecture?" because that will mean something different to every vendor. Asset managers should instead ask "can I plug in this DaaS platform of choice and be able to run this daily report as soon as we go live?" This puts the onus on the asset manager to understand what they want to keep, how they want to operate, and where their priorities lie. At this point in the industry's journey toward cloud maturity, there can be no assumptions—it

takes a level of discernment, granularity, and vision to align a firm's cloud-enabled goals with a vendor's. That is not to say asset managers need to scrutinize every technology stack or application, they simply need to be clear on their requirements and communicate those upfront.

How cloud is re-shaping the solutions landscape

Cloud native solutions may be the standard bearer, but they are few and far between in a solutions landscape that is dominated by trusted incumbents—many that offer technology built in the 80's and 90's. The age of this technology is, in many ways, an advantage. Solutions that have stood the test of time are functionally rich and have nuanced capabilities that work extremely well for the complexities that large, global asset managers face in day-to-day operations. Not only is this functionality critical to the business, but it comes with the knowledge that this software can be relied upon and has been trusted by peers and colleagues for decades. A cloud native solution may offer numerous benefits, but proven and time-tested functionality is not yet one of them.

Solutions providers know they must move

At this point in the industry's journey toward cloud maturity, there can be no assumptions.

toward the cloud but face an uphill journey to get there. What has emerged recently is a middle path: collaboration with cloud native vendors. Many of the partnerships and collaborations we are seeing in the industry are driven by a need to innovate with cloud-enabled technology. The hope is that by working together, solutions providers will continue to advance cloud enablement with the build out of robust functionality and a lesser degree of technology risk. This evolution will no doubt be a long road, but we look forward to seeing how it re-shapes the solutions landscape in 2023 and the years ahead.

The shifting talent landscape

Fighting industry perception

Regular readers of our thought leadership will be familiar with our views on talent and its importance to our industry. Our opinion has been blunt at times and evolved with the industry—in 2015 the hot topic was the millennial generation and its impact on fintech, this year it was the war for talent. As we wade into 2023 and beyond, talent trends remain top of mind, and finding the right talent is arguably the biggest challenge the industry faces in propelling asset management forward.

The financial services industry, and more specifically, asset management has fought a perception problem for several decades—think wood paneled walls, tired dress codes, and Gordon Gekko. Much of this perception is well deserved and extends even beyond these tropes. Asset management technology and operations has also suffered from an array of labels that has seldom helped asset managers brand themselves 'hot' destinations for those breaking into financial services. These factors have contributed to an astonishing lack of innovation for an industry that relies so heavily on technology.

As underscored throughout this paper, large swaths of asset management firms are still reliant on legacy applications and platforms built 20+ years ago. This has had a direct effect on our industry's ability to lure the best and brightest from the most selective tech-oriented sectors and universities. As much as we'd like to think that we compete for talent with Big Tech or "GAFA," the fact is that we have not, regardless of how many data scientists larger firms in our space have hired in the last decade.

Changes in the solutions landscape drive talent shift

The war for talent is often characterized as one between financial services and tech giants , but the war between industry players is equally important to our industry's evolution. One of the pervasive themes in this paper is the growing shift from in-house to outsourced operations. There are many factors contributing to this change, but perhaps the most significant one is the re-allocation of industry talent. As asset managers grapple with a talent war and seismic changes to workplace culture, the difficulties of finding and retaining staff have never been more acute. In an industry that needs to re-architect technology en masse, this is compounding operational challenges and preventing forward progress. Enter the service provider.

Talent has been moving from in-house operations to service providers at an unprecedented pace. One factor that has contributed to this is the desire for staff to move from operations cost centers to revenue-generating roles. Another, more multifaceted factor, is new investment in software, technology, and innovation by service provider and vendors. For some readers, this claim may prompt the question: why would we put faith in a culture of innovation now given our lack of progress

thus far? After all, this is an industry that has ridden the various waves and hype curves associated with Y2K, T+1, big data, blockchain, robotic process automation, artificial intelligence, and machine learning, all with dismal to middling results.

This is a fair question and what we believe has changed—and is poised to revolutionize our industry—is the widespread embrace of cloud technology. Software vendors and service providers are making massive investments in front-to-back platforms in an effort to transform the systems architecture that underpins and supports the front, middle, and back office. With this cloud-enabled transformation comes new challenges that are enticing the brightest minds, changing perceptions of the importance of technology teams, and offering the promise of real impact on an industry that is ripe, and finally ready, for change.

Heeding the call for talent upskilling

Coinciding with the widespread adoption of cloud-based technologies in asset servicing is a downshift in the mainstream digital technology economy. Headline after headline has captured pervasive layoffs

at blue-chip technology companies, once seemingly insulated from such turmoil. The massive job cuts from the likes of Meta, Twitter, Amazon, among others has been labeled the "Patagonia Vest Recession" in some circles and has the potential to enable a vast redistribution of tech talent across several industries.

In recent years, some of the larger names in our industry have lamented their inability to hire the technology skillsets required to move the needle in financial services; the allure of Big Tech's high salaries, considerable benefits, flexible working hours, and relaxed dress codes seemed insurmountable at times. We've seen first-hand our industry's lack of experience and expertise working with cloud technology, which has resulted in project overruns, missed deadlines, and poor delivery. There is a pressing need to upskill talent across asset management and bring non-domain professionals with technology acumen into the industry.

So how do we get there? Admitting that technology in our industry has raced out ahead of the resources required to deploy it is a good start. It will take top-down vision and leadership to lure the dynamic resources necessary to turn the tide and wash away the perception that has plagued

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financial services and fintech over the past several years. Service providers, big banks, and blue-chip asset managers all need to realize that they are essentially running technology companies, and they need to bring in the requisite tech talent to take advantage of the present opportunity. It will always come down to the people, and the talent wars will not abate any time soon. It's past time to switch the company logos on those Patagonia vests from Big Tech to fintech.

Collaboration will push the industry forward in 2023 and beyond

For many years, we have opined on how asset management would meet the modern digital era, and it now seems clear that this evolution will be led by the solutions market. As we look to the year ahead, we anticipate solutions market leaders will continue this trajectory of innovation, partnership, and the continued integration of software and services across the investment management value chain.

Many of our clients are taking heed of these changes and planning their operational and strategic priorities around the new and promised offerings available to them in the solutions market. Forward-looking managers are also helping shape roadmaps and drive forward new technologies. We view collaboration amongst industry players—from vendors to asset managers to consultancies—as the biggest story in 2023 and a critical component of pushing our industry into the next era of technology advancement.

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About Citisoft

Since 1986, we've solved complex technology and operations challenges for the investment management industry. With a team of over 85 dedicated consultants in North America and the UK, we're committed to working with asset managers and asset servicers globally on projects of every scope. From guiding complete business transformation programs to on-the-ground delivery, our team is equipped to fulfill any strategic or tactical need.

To learn more about our Advisory and Delivery Services or to leverage the legacy scale in your organization, contact us at insights@citisoft.com or visit us at *www.citisoft.com*.

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