



# How Technology is Transforming Unit Pricing

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## Overview

Fund Administration software has been around for a while now, yet our customers tell us that they implemented InvestPro to address pain points that haven't really changed for 15 years. This paper, adapted from a presentation given by FRS at the 2021 Unit Pricing Forum in Sydney, explores the risks of relying on manual processes and spreadsheets versus the rewards to be gained from automating the fund administration processes.

## Feeling the heat...

Let's start with an analogy. Most of you will be familiar with the poor frog in the water. This picture is often used as a metaphor for the inability of people to react to significant changes that occur gradually or to events which have become commonplace. In this analogy, the water is heated so slowly that the frog doesn't notice it. By the time they realise the extent of the problem, it's too late. The frog is cooked.

When it comes to the fund admin process and unit pricing, we see this a lot with firms. Regrettably, they often talk to us when they are feeling the heat. As they have slowly added manual process after manual process they finally realise that they are running quite a risky operation.

This metaphor runs most true for firms who expand their fund admin business and slowly add complexity and risk to their unit pricing and admin procedures to the point where they can't see the whole risk. Or they do see the risk and believe it's quite hard and expensive to solve. They also really struggle to mitigate the risk of errors and some have paid the price with the regulator.

Ask yourself this question. How many people in your firm understand the entire fund admin process and can execute that process from start to finish? Is it 1? Two? Three? Zero? If you could only send two people into the office to manage the fund admin process end to end, would you succeed, or would the process fail?

If your answer is that the process would fail, why is that the case? Are spreadsheets part of the problem? Are you starting to feel the heat?



The Boiling Frog story is often used as a metaphor for the inability of people to react to significant changes that occur gradually or to events which have become commonplace.

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Professor Butts and the Self-Operating Napkin (1931)

## Creating complexity

As firms tack on complex and related tasks to the admin process, what starts out as a simple task can become very complex, even when the outcome is the same.

What can start out as a relatively simple task in Unit Pricing can often end up being over engineered as business expands. New products are added, more Assets Under Management (AUM) are acquired, compliance requirements change, additional layers of approval are required, data analysis takes on more importance, and new sources and destinations for data are needed, with all the reconciliation trimmings you might expect.

The result can often end up looking like the Self-Operating Napkin invented by Professor Butts. What started as a simple task can become complex, time consuming and prone to failure. Excel allows for unstructured business process in an area that strongly requires structure, simplicity and light-touch.

Further, from an audit perspective, Excel is really poor in retaining a linked history of events without becoming too large and complex. Auditors like to know who changed what.

Firms we talk to can suffer from key person risk. As spreadsheets become larger and more complex, invariably ownership, acumen and maintenance fall on one person, perhaps two. Key person risk is real here, particularly under COVID conditions where people may be working from home.

As spreadsheets become more complex more time is required to operate them, business expansion becomes risky. One cannot simply add process to a spreadsheet without adding risk.

### Some questions to consider:

- Has your firm ever introduced a spreadsheet to the process as a temporary stop-gap measure?
- How many of them are or were still being used a year later?
- How would you assess the business risk associated with the ongoing use of spreadsheets?
- Do you feel like you have a choice?
- Does the thought of implementing a robust, fit for purpose system scare you more than the current state?
- Do you feel like your firm is “too small” to invest in a specialised system?



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If your self assessment of these questions gives cause for concern, there is good news, and we'll come on to that shortly.

But it's not just risk associated with the use of spreadsheets that worries the firms we speak to. There are other concerns too:

- 1** How do we ensure that our third parties are doing the right thing? In other words, what oversight is in place to check what comes back, given it's ultimately our responsibility?
- 2** How can we automate potentially complex functions like cash allocation, rebalancing, compliance, General Ledger integration, valuations, unit pricing, tax and fee accruals, reporting, even reconciliation?
- 3** How much of our day can be completed before we log in every day?



As you will see later, InvestPro has all of this covered.

## Prevention is always better than cure

Much like going to the dentist, we would argue that prevention is better than cure in fund administration. Some firms have left technology transformation too late, resulting in very public and costly unit pricing mistakes. Given the cost of a unit pricing solution like InvestPro, relative to the cost of unit pricing errors, a lack of audit and loose and risky procedures, the case for a robust solution ranks equally with something like accurate financial reporting.

Further, real efficiency gains are experienced, allowing firms to re-deploy valuable and experienced full-time employees into add value to tasks and away from maintenance tasks that do not gain anything.

The issue has been that firms start small and bolt-on manual processes as they expand. They may not even realise when the risk has become untenable. We advise firms to think strategically early if you have plans to expand AUM and product offerings.



## Do smaller firms need a dedicated solution for fund admin?

This seems a reasonable question. Can't we just manage this with spreadsheets one may ask? To us the issue is not the firm size, as all smaller firms are on a path to be bigger. It is about doing things correctly or not. Clearly it also depends on the cost and complexity of implementing a robust solution and the risk profile of continuing to use them. This again is the same for large firms with larger migrations.

For smaller firms, we would argue that the risks associated with manual processing and inability to audit processes can be higher than a large firm. We occasionally see quite complex manual processes employed by smaller firms, but to be fair, we also have come across these on occasion in our large clients at the start of our relationship before implementing InvestPro.

Smaller firms may also run the risk of failing "checks and balances" requirements as a small team is responsible for broad sections of the process. Key person risk is often prevalent and oversight thin.

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Auditors have little patience for errors in fund admin, particularly where fixing them requires additional manual checks. Often the risk is just being compounded.

Implementing a robust unit pricing solution with oversight and reconciliation features is much easier than other transformations we've seen in the wealth space, yet it mitigates one of the key business risks.

If you are a small to medium firm looking to launch innovative products you are not alone.

All of our clients want to stay competitive, and our large ones work hard to stay in the market number one position and importantly they list InvestPro as a key system in doing so while keeping auditors and regulators happy. Some of these firms are small and entrepreneurial. They recognise the opportunity to expand using a lean team, staying agile and mitigating risk.

It would be remiss not to mention that a good number of our worldwide clients are large multi-national operators – we serve all shapes and sizes and have configured InvestPro to suit specific use cases.



## Move fast, like a herd of elephants



InvestPro Scalable Sustained Low Risk Growth



Elephants are big! However, for some reason they can run exceedingly fast. At a pace of up to 25 miles per hour, you will never outrun an elephant. Imagine being a 4-tonne animal racing across an uneven landscape at that speed. You might think running that quickly at that size would be risky. However, Elephants have found a way to mitigate the risk. They are the only mammal that can't jump and the only ones where one foot is always on the ground when they travel. You could say they have found a secure method to safely move through a complex environment quickly!

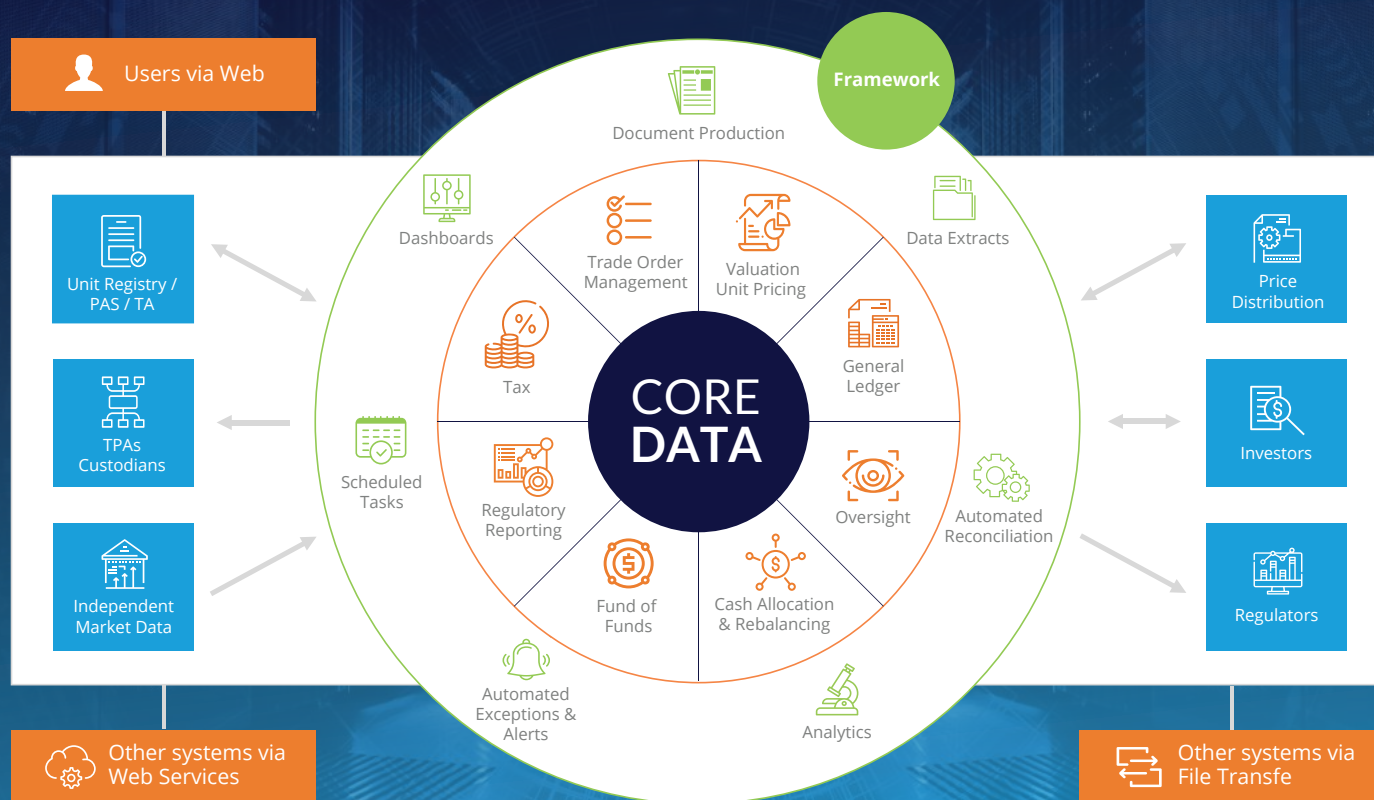
**The same can be said for using InvestPro to handle complex fund administration.**

**As our clients grow, they can do so without increasing operational risk. This is where we hit our straps, so let's take a closer look.**





## Realising Operational Alpha with Automated Fund Admin



### We have talked about the challenges faced with fund administration and unit pricing, but how does InvestPro help?

You can see in this diagram an integrated solution that covers the functions required in fund administration that matter the most, all integrated in a single system and a single database:

- The blue boxes show source and destination systems, integrated with an available suite of APIs. Inbound examples are unit registry, administrator and custodian data, plus market data.
- The green functions represent the framework in InvestPro. Examples here would be task scheduling, automated alerts, analytics, automated reconciliation and document production.
- The orange functions provide the fund administration workings within the system. Examples include data oversight, trade order management, unit pricing, tax, regulatory reporting and general ledger.
- The centre of the universe is one normalised single source of truth in the core database.



All functions are in the same system and our customers use InvestPro to manage their fund administration across the entire process from start to finish. We have a range of tools that automate most processes.

One automated system, fully integrated, a single source of truth which - automatically handles regular processes. Exception-based intelligence to make sure the right data crosses the right desk, and everything else is taken care of automatically. Reduce risk, grow your business without growing your team.

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## What is the result?

Apart from the automatic controlling and management of data in this environment, a real proof point is the impact to the operations team when a firm implements InvestPro.

Client Type	Staff Count (FTE)	Multi Asset Funds	Fund of Funds	Mirror Funds	Individual Accounts	Funds per FTE
Pensions Fund Admin	6		6,000	1,000	800	1,300
Third Party Administrator - Life Funds	5		9,000			1,800
Life and Pensions Organization	3	150	2,500			716
Wealth Manager / International Life Co	4		350	150	11,000	2,875

The accepted adage is that people focus on what you measure. This is true for FRS itself. We regularly measure the volume of funds being administered by our clients along with the number of staff in the fund admin team.

A sample of the results of this analysis from our user conference are above.

This scorecard not only helps us stay focused on ensuring real world operational efficiency for our clients, but it also gives us a lens through which to analyse or measure every modification and enhancement to the system.

What you are looking at are real statistics from key FRS clients using InvestPro. The full time employee (FTE) numbers are for the entire operations team, including reconciliation. The last column shows funds valued and priced per FTE. These are the real benefits being experienced by our clients today.



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## Getting started

You may be saying to yourself – that's all very well, but how difficult is it to implement InvestPro?



We view this in two ways:

- 1 The speed and efficiency of the implementation project
- 2 The stability of the product

Significant investment has been made by FRS to develop a lean and agile project methodology that gets clients up and running in as little as 3 to 6 months, start to finish.

FRS has a large suite of automated tests that run nightly. That may be nothing new, but we run them across each client's database, every night – all this is part of the ever-flowing continuous deployment process you see above. We think that is unique. Further, the testing includes an upgrade of the client database to the latest version of InvestPro, also every night. When we do release the upgrade to our clients, it carries much less risk. This continuous deployment is welcomed by our clients as it means fewer issues are experienced.

### In summary

While it's easy to get caught up in day-to-day operations and make small adjustments to your processes to handle increasing fund numbers and investment activity, we'd encourage you to take a step back and review your entire operating model. Identify the bottlenecks and dependencies and assess the risks of using spreadsheets and legacy technology.

Upgrading to modern fund administration software, like InvestPro, is quick and easy when features like automated testing and continuous deployment are built into the solution. Let the software do the heavy lifting, while you focus on growing your business.



## About Financial Risk Solutions Ltd (FRS)

With over 20 years delivering Investment Administration software, Financial Risk Solutions Ltd (FRS) is a trusted technology partner to life assurance, wealth and asset management firms worldwide. Led by an expert team of actuaries, compliance and IT specialists, clients license FRS software to help navigate the ever-changing challenges of growth, regulatory pressures and competition in the industry.

The award-winning\* InvestPro™ platform is relied on by blue-chip financial services and BPO clients to reduce operational costs, increase efficiencies and mitigate risk in the manufacture and management of investment products. More than 150,000 funds are managed on the Invest|Pro™ platform today.

Delivered on-premise or cloud-hosted, Invest|Pro™ securely automates multiple complex fund administration processes including unit-pricing, cash allocation and rebalancing; oversight and validation of operational activity performed by outsourced partners; and in Europe monitoring and reporting for PRIIPs, KID requirements, and Pillar III asset reporting for Solvency II.

FRS is part of the Constellation Software Inc. group and headquartered in Dublin, Ireland, with offices in London, Hong Kong and Sydney.

For more information visit [frsltd.com](http://frsltd.com) or follow FRS on LinkedIn at [www.linkedin.com/company/frs-ltd](https://www.linkedin.com/company/frs-ltd)



\*2020 - GRC Product of the Year - Asia Risk.Net Awards, 2019 - Best Solvency II Tech Solution - Insurance Asset Management Awards, Pensions Technology Provider of the Year - Irish Pensions Award



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