

A BLUEPRINT FOR:

ANALYTICS TRANSFORMATION IN FINANCE

Maximize efficiency and performance across your
FP&A, accounting, tax, and audit teams

“An investment in knowledge
pays the best interest.”

— BENJAMIN FRANKLIN

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THE REVOLUTION WILL BE ANALYZED.

Calculators used to be all the rage in finance, but today's top-performing finance teams don't just crunch numbers — they analyze them. Leveraging data science and analytics is the answer to revolutionizing finance processes in FP&A, accounting, tax, and audit teams. Use data wisely, and it can keep you ahead of the curve, ahead of the competition, and even ahead of schedule. It's never too late to get started. If you're already on the journey, best practices will help you build the right culture at any stage — allowing your team to stay agile and deliver insights that scale now.

Ready to join the revolution? Want to adopt analytics at scale? You're at the right place. Sit back and get ready to learn all about how modern analytics revolutionizes the office of finance, why it's important to evolve your process, and how to put analytics into action. Plus, hear from real finance pros, from analysts to the c-suite, on their perspectives and best practices.

STATE OF DATA AND ANALYTICS

Data is everywhere and knowledge is power, but viewing data in spreadsheets creates chaos and makes it nearly impossible to uncover critical business insights or enable more efficient processes.

PEEKING UNDER THE ANALYTICS COVERS

Not all is pretty when you take a closer look at the analytic processes of today. Often, you'll find unsightly fragmented processes full of analytic chokepoints between teams, technologies, and data sources.

Source:

"The State of Data Discovery and Cataloging," IDC

"Data Blending: A Powerful Method for Faster, Easier Decisions," HBR

"The State of Self-Service Data Preparation and Analysis Using Spreadsheets," IDC

Data Science Survey, Rexer Analytics

DATA SCAVENGER-HUNT TIME SUCK.

37%

of an analyst's time is spent just searching for data.

DATA. DATA EVERYWHERE!

60%

of analyst models have five or more data sources.

STUCK IN SPREADSHEETS.

\$60 BILLION

is spent on manual models inside spreadsheets.

GOING NOWHERE FAST.

ONLY 13%

of data science models ever get deployed.

LATE NIGHTS. LONG HOURS.

Due to many analytic inefficiencies, employees are stuck in spreadsheet hell trying to analyze their data — instead of using their time wisely to affect changes based on what the data reveals.

\$6
BILLION

hours per year are spent working in spreadsheets.

26
HOURS

per week are wasted working in spreadsheets.

8
HOURS

per week wasted repeating the same data tasks.

Source: "The State of Self-Service Data Preparation and Analysis Using Spreadsheets," IDC

FINANCE ANALYTICS IMPLEMENTATION

In the world of analytics, especially in finance departments, there are some common pitfalls. For instance, many teams spend time building custom solutions, deploying analytic products, or consuming analytic commodities or utilities — even when they already exist. Reinventing the wheel isn't a good use of time and it's a habit that needs to be broken.

In addition, many finance organizations lack a single “source of truth,” or one location where all data is stored that serves as the reference point for review and accuracy. This lack of a single source creates work and rework as teams are operating in informational silos.

EVOLUTION



CONSIDER THE FUTURE OF ANALYTICS IN FINANCE

BARELY
50% surveyed could access
their data consistently,
let alone act on it.

Source:

“Maximize Financial Planning and Analysis Performance with Superior Analytics,” Aberdeen Group

For years, digital processes and systems have given us better access to data-driven capabilities.

As digital transformation takes over, the value proposition will continue to shift toward continuous deployment, software automation, and the intelligent use of AI and machine learning within those processes. This is when we really start to see the gap widen between best-in-class companies and those that don't embrace the technology revolution.

In a **recent research paper**, Aberdeen Group revealed the impact of analytics against key activities within FP&A departments. The study asked how these teams connected and analyzed their financial data, how much dependence they had on traditional IT to develop their reporting, whether or not they could consolidate data successfully from multiple financial entities in a consistent way, and generally, whether data could be standardized and integrated successfully.

The results? The teams not on a digital transformation journey were predictably behind the curve.

THE NUMBERS DON'T LIE. MODERN ANALYTICS DELIVER.

FP&A teams that used modern analytics, however, experienced an uplift that was quite astonishing, but still left room for improvement. **The results from the Aberdeen research** also revealed that analysts using modern analytics showed 74% greater improvement than non-users in the time it takes to complete a forecast, and 25% greater improvement in the time-to-decision over the most recent two-year comparison. In addition, modern analysts have a 16% higher accuracy rate on their financial reports.

Source:

“Maximize Financial Planning and Analysis Performance with Superior Analytics,” Aberdeen Group

CONNECT + ANALYZE FINANCIALS

76%

of analytics users can work with the data they need.

CREATE SELF-SERVICE REPORTS

72%

don't need IT assistance to create insight.

CONSOLIDATE MULTIPLE ENTITIES

66%

can connect and consolidate in a repeatable process.

AUTOMATE DATA IMPORTS

66%

can standardize and integrate source data for analytics.

FOUR MAJOR ANALYTICS TRENDS IN FINANCE

- 1 DISPARATE DATA**
Answers to business questions are rarely in a single place, but often spread across multiple data sources — from the enterprise data lake to dreaded spreadsheets.
- 2 COMPLEX MODELS**
Analytics has moved beyond data prep and blend. Modern analytic leaders are looking to unleash advanced analytics across their business processes.
- 3 CULTURE CRITICAL**
Building a sustainable analytics culture is key to your organization's potential with analytics. Bring others with you, share insight, and collaborate often.
- 4 DEPLOY ANYWHERE**
The days of saving to the desktop are done. Enterprises are now saving and sharing their information on the cloud to secure a scalable future.

EVOLVE YOUR OPERATIONAL AND ANALYTICS PROCESSES. IT'S AS EASY AS 1-2-3.

START SMALL AND BUILD UP

You don't have to build the full system right from the start. Start with the basics and evolve. Begin with an optimized routine that works at least once for you. Then go from there.

This will not be without disruption to your current analytics process. But disruption in this case is good. Empower your analytics team to automate their once-manual process. Start taking advantage of everything now available to you. Make changes that will improve your future. Because if you don't, you're already losing.

LEAD AWAY FROM LEGACY

Established companies often fall back on legacy approaches, making it hard to evolve. As a leader, this is your time to step up and away from the old ways of doing things. Go into the great unknown. Establish an evolving analytics process to reap its benefits and solidify a successful future.

1 EMBED ANALYTICS EVERYWHERE.
Technical systems in the analytics toolset is just the start. Operational analytics should integrate across all business processes to get the information and results you're after.

2 DON'T SETTLE FOR DESCRIPTIVE. PUSH FOR PREDICTIVE.
Descriptive is analyzing and reacting to what's been done in the past, but looking in the rear-view mirror doesn't help you move forward. Predictive analytics helps you achieve your ideal future.

3 MAKE TIMELY DECISIONS.
Operational analytics across the business enable you to access insights and make decisions on the spot. In a real-world example, operational analytics enable you to do fraud checks on the day's transactions. Just run a report and instantly investigate the ones that look suspicious. It's that easy.

SECTION 3

1 BEGIN WHEREVER YOU ARE

There's no good that can come from standing still or staying complacent. If you're unclear how to operationalize the results of data-driven efforts, remember, it's all about evolution. Your goal is to reduce the cost of waste. This happens by learning, iterating, and failing fast. Then, rinse, wash, repeat until you figure it out.

2 EMPOWER YOUR BEST PEOPLE

Companies that have seen the most success have moved away from labor-intensive processes like VLOOKUPs, manual interventions, and custom-built processes. With a modern analytics platform, they enjoy repeatability, consistency, and predictable outcomes.

So, say goodbye to fragmented cultures and compromises. It's time to establish an end-to-end self-service solution that empowers your best people.

3 CONSIDER THE RISKS AND CHARGE AHEAD

Before you make your analytical plan of attack, be considerate of any perceived risks. That's why it's important to establish monitoring and quality checks. The sooner you accept a "good enough" mindset in the beginning, the better off you'll be. It doesn't have to be perfect right away. Good enough still gives you incredible value — and it's affordable.

4 EVOLVE YOUR ANALYTICS PROCESSES

Bill Franks, Chief Analytics Officer at the International Institute for Analytics, offers key advice in evolving an analytics revolution: adapt, build on existing foundations, address deployment from the start, monitor, and capture on small gains.

HEAR FROM BILL FRANKS, CHIEF ANALYTICS OFFICER, AT THE INTERNATIONAL INSTITUTE FOR ANALYTICS, AS HE SHARES WHY ANALYTICS IS THE NEXT INDUSTRIAL REVOLUTION IN FINANCE.

5 PUT ANALYTIC HARMONY INTO ACTION WITH A MODERN PLATFORM

Self-service analytics is key to speed. It puts the power and data in the hands of hundreds of business domain experts, not just one. In turn, it empowers analysts who no longer have to rely on data scientists for analysis and results. And it creates the ability to deploy insights and make them repeatable. You build the process and automate it so analysts can take over and increase the level of value.

SHIFT TO SELF-SERVICE



ANALYST



Find the right data asset



Data Cleansing



Prep and Blending



Spatial Data



Predictive and Prescriptive



Production and Output



NEW INSIGHTS, BETTER DECISIONS, MORE VALUE

6 LEARN FROM REAL RESULTS

Real success stories happen every day. Take a look at these companies, across departments and industries, who switched to a modern platform and used analytics to their advantage:



Before: Labor-intensive process with a mish-mash of tools

After: Repeatable, consistent, and concise with time, including fewer manual points of intervention

[READ MORE ▶](#)



Before: Decision support based on VLOOKUPS

After: Predictable and consistent outputs to fuel business decisions with the potential for custom apps that allow business users to self-serve



Before: Trouble translating processes across teams and geographies

After: Share and collaborate on a global basis with repeatable, predictable results via visual repeatable workflows

[LEARN MORE ▶](#)

7 EVOLVE AS YOU GO

To solve data analytic challenges, look to cutting-edge solutions that package together:

- Open-source machine learning and AI seen in computer vision, natural language processing, and deep-learning techniques found in R or Python languages
- Drag-and-drop repeatable workflows
- Self-service analytics application that uses and automates augmented capabilities like fuzzy matching to resolve complete data issues

You'll see analytics really start to change your organization's culture when these advanced insights are inside your products and services.

Through a modern approach, analytics acts transparently across the office of finance — just like any other utility or service like electricity, water, or cloud computing. Just flip a switch, and it's waiting for you.

8 DRILL DOWN INTO FINANCIAL OPERATIONS

FP&A

Forecasting newfound freedom.

We're in an era when manual processes should be a thing of the distant past. Manual processes can take more than 50 hours to run due to end-user computing and manual interventions across systems. The end result then necessitates a manual review and a vital cleanup before end-user calculations can be approved and posted.

With operational analytics, those 50 manual hours can now happen in just one hour due to process automation. These calculations can be performed consistently and transparently. Data quality checks can be automated, with a final human approving and posting step, if required.

That means you have a clear schedule and 49 extra hours each month to do what's really important like dedicating time and effort to business strategy, long range planning, and analysis.

BEFORE



MANUALLY EXECUTED



EXCEL CALCS, MULTIPLE SYSTEMS (9+)



MANUAL REVIEW, APPROVAL + POSTING

AFTER



PROCESS AUTOMATION



AGGREGATION + REPEATABLE CALCULATIONS



APPROVAL + POSTING

GENERAL ACCOUNTING

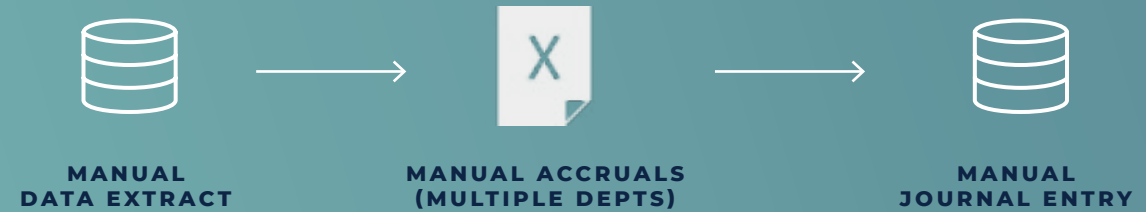
Calculate a better way.

What's more fun than performing hundreds of hours of manual data extraction, manual accrual calculations from multiple departments, all handled in an inconsistent way — and all to create a journal entry? Turns out, pretty much everything, really.

Modern analytics makes it easier to find technologies that integrate together to solve these types of challenges. **Automation around data extracts and accrual calculations creates transparency at review, but analytic workflows also make it easier to document the steps in the process — should issues arise.**

By having strong data connection options, the accounting details can be seamlessly passed through to the journal after the approval has been made. This makes it more consistent, more accurate, and frees up business information workers to do more with their skills.

BEFORE



AFTER



TAX

Uncle Sam needs a plan.

The tax industry is increasingly data hungry. And with constantly evolving tax laws and new legislation introduced every year, it seems we can never feed this beast enough. Studies have shown this is an area in need of innovation. But with fewer than 5% of departmental budgets allocated to digital transformation technology, it's not going to innovate anytime soon. In fact, **77% of tax functions are without a future roadmap for tax technology.**

If you're currently stuck in spreadsheets, you'll quickly see the value of evolving to a visual, repeatable workflow process. From worksheets to workflows, using effective tax analytics around tax-rate calculations, cash-tax forecasting, tax provisions and returns, book-tax reconciliations, and audit-ready reporting is the solution for a robust strategy.

TAX IS INCREASINGLY DATA-HUNGRY

RIPE FOR AUTOMATION

95%

likelihood of jobs being automated in this area

LIMITED INVESTMENT

<5%

of departmental budget allocated to innovative tax technology

DIVERSE DATA SOURCES

50%+

of tax function time spent gathering data

AUTOMATE DATA IMPORTS

77%

of tax functions do not have a tax technology plan

Source: Maximize Financial Planning and Analysis Performance with Superior Analytics, Aberdeen Group

TAX ANALYTIC PAIN-POINTS

INCREASED TRANSPARENCY

including stricter regulatory reporting requirements

TAX DATA IS EVERYWHERE

ERP, consolidation systems, billing systems, commerce platforms, etc.

MANUAL INTERVENTIONS

like reviews, reconciliations, and manipulations are needed to make data useful for tax analysis

SUBSTANTIAL WASTE

because of inefficient collection and review of non-integrated data

Let's look at the tax world. Inconsistent eliminations may be due to acquisitions within the company. More of the same, manual extracts from ERP's in this case, hugely complex intercompany transactional rollups, followed by — here we go again — manual review, and manual documentation. With a modern analytics approach, that offers true enterprise connectivity, you get systematic identification through repeatable visual business rules, and the automated delivery of process documentation — taking the process from 26 hours to less than one.

LEARN MORE ABOUT MODERNIZING TAX PROCESSES IN "A BRIEF GUIDE TO INNOVATING TAX WITH ANALYTICS."

AUDIT

Uncover the unknown faster.

The same applies in the world of audit as well. **20% of chief audit officers use advanced analytics to drive 75% of their audits.**

That's only the beginning. Huge growth is expected in this area over the next three to five years. What's behind the growth?

For starters, analytic transformation in audit makes the process faster, cheaper, and offers better coverage in testing. Constant evolution continues to push what's possible with the latest AI and machine learning techniques available across audit use cases. Everything from anomaly detection through more advanced risk classification.

FASTER

Perform the same audit faster with automated analytic workflows

CHEAPER

Use advanced analytics for anomaly detection and risk classification

BETTER COVERAGE + SCOPE

Use advanced analytics for anomaly detection and risk classification

INNOVATION AT THE CENTER

Apply the latest machine learning techniques across audit use-cases

Unleashing advanced analytics in audit means new capabilities for your department like text analytics, recognizing specific assets on printed balance sheets. It might mean using technology like Robotic Process Automation (RPA) to reconcile balances in multiple sub-ledgers, freeing up human capital for other tasks, particularly in audit. It also means whole population testing in order to reduce risk — the reason we're in this game to begin with. All these new capabilities are achievable when you evolve your analytics, and start thinking about your analytic platform as a true utility.

By adapting to a self-service analytics workbench, it's easy to perform end-to-end process testing and control validations, and lower existing and future audit costs through scheduling and automation of data collection, preparation, and analysis. You'll produce earlier identification of high-risk patterns in spending, codes of conduct, and across a network of partners and suppliers, leading to enhanced audit coverage and better management of risks and controls.

AUDIT'S CASE FOR ADVANCED ANALYTICS



TEXT ANALYTICS

Recognize assets and liabilities on printed statements and balance sheets



ROBOT AUDITORS + ANALYTIC APPS

Use automation to reconcile balances in multiple sub ledgers, freeing up human capital for insight and decisions



WHOLE-POPULATION TESTING

Reduce risk by analyzing complete transactional data sets rather than samples

9 BUILD NEW CAPABILITIES THROUGH UTILITIES

Innovate your way to great.

As you evolve, modern analytics processes allow you to create brand-new capabilities, through innovation programs, that allow for a new axis to emerge. This helps you deliver products and services that closer support your needs and those of your customers. This new capability evolves as well. It becomes better understood, more ubiquitous, and more certain. Then, the process begins all over again.

10 EMBRACE THE POSSIBILITIES

Plan for the worst. Celebrate the wins.

The key capabilities of automation and augmentation are driving smarter transformation in finance. Champion small gains and watch your progress evolve to entirely new capabilities that allow you to innovate faster than competitors.



DIVE RIGHT INTO WORKFLOWS INSTEAD OF WORKSHEETS. DOWNLOAD FREE TRIAL.

Q+A ON FINANCE ANALYTICS IN ACTION

Q: WHAT SKILLS OR EXPERTISE DO YOU LOOK FOR IN A MODERN ANALYST? HAS THAT CHANGED OVER THE YEARS?

A: Historically, I looked for a top MBA grad who has strong financial statement analysis experience. While that's still important, people now have coding experience like Python or R. The type of profile now in the FP&A is becoming more technical because the team is now more business advisors and consultants versus a core finance person.



AMAR JANI
SVP Finance & Analytics, Alteryx

Q: FROM THE C-LEVEL PERSPECTIVE, HOW DO YOU BUILD THE CULTURE?

A: It starts at the top. The c-suite needs to demonstrate and behave the way you expect your teams to behave. It's about communication, clarity, and making sure that as you're pushing down through your organizations, expectations are crystal clear to your organization and adjacent organizations.



KEVIN RUBIN
Chief Financial Officer, Alteryx

Q: WHAT ADVICE WOULD YOU GIVE FINANCE LEADERS RELUCTANT OF CHANGE?

A: Look at classic business intelligence tools. Just 15 years ago, basic SQL computations allowed you to scale the push out of the reports. Now, we have the BI concept of wrapping up, packaging and making widely available today — just like what SQL did years back, but elevated. So, really, it's not that much different. It's just evolved.



BILL FRANKS
Chief Analytics Officer, IIA

Q: WHAT WILL THE OFFICE OF FINANCE LOOK LIKE IN FIVE YEARS? WILL THERE BE NEW TECHNOLOGIES, TECHNIQUES, OR CAPABILITIES TO CONSIDER?

A: Finance is in the middle of a transformation. We're going to see repeatable tasks we're just now trying to figure out how to get people out of. Systems will be able to standardize and automate highly repeatable tasks so we can focus human power in areas that impact business and make a difference.



KEVIN RUBIN
Chief Financial Officer, Alteryx

Q: WILL THE OFFICE OF FINANCE EVER UTILIZE NEW TECHNIQUES LIKE AUGMENTED ANALYTICS FOR AUTOMATED DATA JOINING, DATA CLEANSING, AND NATURAL LANGUAGE GENERATION?

A: Absolutely! It's all part of the journey. Once you have a data strategy, you can use that data in a platform like Alteryx and infuse that into machine learning, natural language processing, even block chain.



ZARA MURADELL
Partner, Tax Reporting, Grant Thornton

WATCH THE ENTIRE NYSE PANEL DISCUSSION ABOUT THE STATE OF ANALYTICS AND HOW TO IMPLEMENT ACROSS THE OFFICE OF FINANCE IN TAX, AUDIT, AND FP&A.

Q: HOW DO YOU TRACK THE IMPACT OF AN ANALYTICS PROJECT? HOW DO YOU ENSURE IT IS ATTRIBUTABLE TO A SPECIFIC MODEL AND NOT JUST EXTERNAL FACTORS?

A: Track use cases and the ROI coming back. We have examples of a previous four-month process that our analyst got down to less than eight hours. And that's with all approvals and everything else! A lot of tax processes are over 90% savings in time. We even track data issues, data challenges, and metrics with actual workflow use cases. Then, we document our findings it and share them within the company.



KELLY LEAR

Enterprise Leader, Thomson Reuters

Q: WHAT RESISTANCE DO C-SUITE EXECUTIVES FACE IN ADOPTING ANALYTICS?

A: We are at a point where the concept of how to use data within an organization is everywhere. Some companies have processes that are tried and true, and they're implemented. But, they're being pushed to think about business process differently. It's just change management, but I believe there isn't much resistance since companies need to utilize data to be competitive.



KEVIN RUBIN

Chief Financial Officer, Alteryx

Q: HOW DO I GET STARTED?

A: Work out your organization's processes and frustrations. Look for the customs as those functions try to overlap where there is a gap between the two. Tap into the innovation experience within your organization. Or, dedicate an innovation team or people already dealing with data. Remember to celebrate every success — no matter its size.



NICK JEWELL

Director of Product Evangelism, Alteryx

FINANCE BLUEPRINT KEY TAKEAWAYS

- Start improving right where you are
- Turn shared responsibilities into opportunities
- Understand risks, keep moving forward
- Adapt and overcome
- Value a common platform over fragmentation
- Test. Fail. Redo. Succeed. Repeat.
- Evolve. Evolve. Evolve.
- Spend your time more effectively

ABOUT ALTERYX

Revolutionizing business through data science and analytics, Alteryx offers an end-to-end analytics platform that empowers data analysts and scientists alike to break data barriers, deliver insights, and experience the thrill of getting to the answer faster. Organizations all over the world rely on Alteryx daily to deliver actionable insights.

+1 888 836 4274



**VISIT ALTERYX
FINANCE**

MODERN FINANCE WITHIN REACH

With data as the new currency, the ability to leverage it for success is crucial to your organization's future. Don't just survive, thrive in the newest industrial revolution in finance with an end-to-end modern analytics platform. It's quite the thrill taking the ride to adaptation.

CHOOSE YOUR OWN FINANCE ADVENTURE

ACCESS ALL NYSE FOOTAGE:

Open up the possibilities for insight across the office of finance. Hear from top finance experts to learn how to automate, optimize, and deliver the results you crave.

**ACCESS ALL
NYSE FOOTAGE**



PUT FINANCE ANALYTICS INTO ACTION WITH FREE TRIAL:

Ready to move beyond crunching numbers all day and start analyzing? Jump right into workflows instead of worksheets.

**PUT FINANCE ANALYTICS INTO
ACTION WITH A FREE TRIAL**

