Insights from the FSN Modern Finance Forum on LinkedIn

The Future of Planning Budgeting and Forecasting
Global Survey 2017

FSN®
The Modern Finance Forum

Wolters Kluwer | CCH® *Tagetik*

Mike Mundis
Letter from Mike Mundis,
Vice President Finance, CFO
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Performance Solutions

In today's world we are bombarded with many amazing new innovations like artificial intelligence and machine learning. However some of these highly advanced technologies are still in their infancy and, as you'll learn in this report, can't yet be applied across the entire spectrum of financial processes. At the same time, the market itself isn't necessarily ready to embrace the most cutting-edge technology. In fact, the current processes of many of my peers in the Office of Finance are still spreadsheet-dependent and highly manual. The gap between the two feels like a jump from a vintage paper tape adding machine to the cloud without the invention of the computer in between.

It's time for software providers, CFOs and CTOs alike to meet the market where it's at.

So the question is: Where is the market at?

As you'll learn in this survey, the Office of the CFO is prioritizing the automation and standardization of BP&F processes. The market is handling these priorities in two different ways.

On one side of the coin, spreadsheet-based processes are still prolific. But executives now recognize these manual processes don't support the accuracy today's business climate requires.

Why?

- They fail to meet the complexity of BP&F faced by growing companies.
- They don't give executives the ability to respond or anticipate changing market conditions.
- They can't support the increased demand for analysis-based insights.

While dismal, the move away from spreadsheets is slow-going. Process change carries with it a world of hesitation.

Then there's the other side of the coin. Early adopters are turning to artificial intelligence and machine learning for BP&F.

The problem here is that these promising technologies are still young. While they show great potential, they're still about as far off as the self-driving car. If business processes were still based on "old fashioned" tools, with no collaboration and poor automation, executives wouldn't be able to apply them anyways.

How can companies bridge the gap from spreadsheets to artificial intelligence to fill their need for more accurate, insightful budgets, plans, and forecasts?

With a tool that:

- automates the production of budgets, plans, and forecasts, while giving finance complete control.
- extends the strategic power of planning by enabling advanced data analysis, forecasting, and visualization.
- integrates all financial and non-financial data into the BP&F process so that you can base decisions on insights gleaned from a 360° view of the business.
- uses a cloud strategy that enables agility and scalability in a fluid business environment.
- provides CFOs with deep context into the links between finance and operations.

I hope you come away from this survey report with a better understanding of how to act on the growing demands facing the BP&F function.

As always, FSN's studies and reports continue to shed much-needed light on the state of the industry and the direction the Office of the CFO is heading. We hope that this survey report influences how you choose to grow as we collectively usher in the next phase of the digital age.

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Vice President Finance, CFO at Wolters Kluwer Corporate
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Executive Summary

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The world of planning, budgeting and forecasting is changing rapidly as new technologies emerge, but the actual pace of change within the finance departments of most organizations is rather more sluggish. The progress companies have made in the year since The Future of Planning, Budgeting and Forecasting 2016 has been incremental, with a little accuracy gained but very little change to the reliance on insight-limiting technologies like spreadsheets.

That said, CFOs and senior finance executives are beginning to recognize the factors that contribute to forecasting excellence, and there is a groundswell of support for change. They'll even make time to do it, and we all know how precious a CFOs time can be, especially when basic improvements like automation and standardization haven't yet been implemented.

The survey shows that most PBF functions are still using relatively basic tools, but it also highlights the positive difference more advanced technology like visualization techniques and charting can make to forecasting outcomes. For the early adopters of even more experimental technologies like machine learning and artificial intelligence, there is some benefit to being at the forefront of technological change. But the survey suggests that there is still some way to go before machines take over the planning, budgeting and forecasting function.

In the meantime, senior finance executives who are already delivering a respected, inclusive and strategic PBF service need to focus on becoming more insightful, which means using smart technologies in concert with non-financial data to deliver accurate, timely, long term forecasts that add real value to the business.

Making headway

CFOs are making incremental headway in improving their planning, budgeting and forecasting processes, reforecasting more frequently to improve accuracy. But spreadsheet use remains a substantial drag on process improvements, despite organizations increasingly looking towards new technologies to progress the PBF landscape.

That said, respondents seem open to change, recognizing the importance of financial planning and analysis as a separate discipline, which will help channel resources in that direction. At the moment, a slow and steady approach is enough to remain competitive, but as more companies make increasingly substantial changes to their PBF processes to generate better insight, those that fail to speed up will find they fall behind.

Leading the debate

FSN's insights gleaned from across the finance function shed light on the changes happening within the planning, budgeting and forecasting function, and identify the processes that make a real difference to outcomes. Senior finance executives are taking heed of these insights and making changes within the finance function. The most important one is the increasing inclusion of non-financial data into forecasting and planning processes. The Future of The Finance Function 2016 identified this as a game-changer, for the finance function as a whole, and for PBF in particular. It is starting to happen now. Companies are looking towards data from functions outside of finance, like customer relationship management systems and other non-financial data sources.

Senior executives are also finally recognizing the importance of automation and standardization as the key to building a strong PBF foundation. Last year it languished near the bottom of CFO's priority lists, but now it is at the top. With the right foundation, PBF can start to take advantage of the new technology that will improve forecasting outcomes, particularly in the cloud.

There is increasing maturity in the recognition of cloud solution benefits, beyond just cost, towards agility and scalability. With recognition comes implementation, and it is hoped that uptake of these technologies will follow with greater momentum.

Man vs machine

Cloud computing has enabled the growth of machine learning and artificial intelligence solutions, and we see these being embedded into our daily lives, in our cars, personal digital assistants and home appliances. In the workplace, machine learning tools are being used for predictive maintenance, fraud detection, customer personalization and automating finance processes. In the planning, budgeting and forecasting function, machine learning tools can take data over time, apply parameters to the analysis, and then learn from the outcomes to improve forecasts.

On the face of it, machine learning appears to be a game changer, adding unbiased logic and immeasurable processing power to the forecasting process, but the survey doesn't show a substantial improvement in forecasting outcomes for organizations that use experimental technologies like these. And the CFOs and senior finance executives who responded to the survey believe there are substantial limitations to the effective of machine forecasts. As the technology matures, and finance functions become more integrated, machine learning will proliferate, but right now it remains the domain of early adopters.

Analytic tools

Many of the cloud solutions for planning, budgeting and forecasting involve advanced analytic tools, from visualization techniques to machine learning. Yet the majority of respondents still use basic spreadsheets, pivot tables and business intelligence tools to mine their data for forecasting insight. But they need to be upgrading their toolbox.

The survey identifies users of cutting edge visualization tools as the most effective forecasters. They are more likely to utilize specialist PBF systems, and have an arsenal of PBF technology they have prioritized for implementation in the next three years to improve their forecasts.

Even experimental organizations that aren't yet able to harness the full power of machine learning and AI, are still generating better forecasts than the analytic novices.

The survey results are clear, advanced analytics must become the new baseline technology, it is no longer enough on rely on simple spreadsheets and pivot tables when your competitors are several steps ahead.

Insight – the top trump

But technology can't operate in isolation. Cutting edge tools alone won't provide the in-depth insight that is needed to properly compete against nimble start-ups. CFOs must ensure their PBF processes are inclusive, drawing input from outside the financial bubble to build a rounded view of the organization. This will engender respect for the PBF outcomes and align them with the strategic direction of the business.

Most importantly though, organizations need to promote an insightful planning, budgeting and forecasting function, by using advanced analytic techniques and tools, coupled with a broad data pool, to reveal unexpected insights and pathways that lead to better business performance.

As FSN stated, today's finance organizations are looking to:

- provide in-depth insights;

- anticipate change and;

- verify business opportunities before they become apparent to competitors.

But AI and machine learning technologies are still too immature. And spreadsheet-based processes don't have the necessary functions to fill these advanced needs.

While some might argue that spreadsheet-based processes could work for small businesses, they become unmanageable as companies grow.

Thus, it's no surprise that before choosing our modernized CPM solution, 64% of CCH Tagetik customers moved off Excel as the primary manager of their BP&F process.

Why did they choose CCH Tagetik?

CCH Tagetik allows BP&F contributors to re-forecast when business climates change, adapt processes to changing business climates and replace old, legacy systems with state-of-the-art CPM technology. All the current needs of finance can be met in CCH Tagetik's single, cloud-based solution.

Making Headway:

A year of incremental improvements

Making Headway: A year of incremental improvements

As planning, budgeting and forecasting moves up the corporate agenda, its importance as a strategic contributor is becoming more apparent. Finance executives know the days of static budget preparations and a rigid finance plan for the year are waning, but the pace of change is slow. A few early adopters have embraced innovative and experimental technology through a complete overhaul of their systems and processes, but most will only commit to dipping their toe cautiously into the future of PBF.

In the year since the first Future of Planning, Budgeting and Forecasting survey, there have been some incremental improvements to forecasting outcomes, and some more substantial changes in the processes, specifically the frequency or reforecasting. That said, there are still some very fundamental processes that remain wedged in the spreadsheet era, unable to evolve beyond this relatively limited tool towards new technology and the vastly improved insight it can offer.

The good news

55% of organizations are able to reforecast within one week.

44% of organizations are able to forecast revenue within +/- 5% accuracy

In the year since PBF 2016, organizations have not made any real progress in the time it takes them to reforecast, however there were small improvements in forecasting accuracy. From a low base (3.6%), a further 0.5% of finance executives are now able to reforecast earnings to within +/- 1%, a percentage increase of 13%. Meanwhile an additional 3.5% are able to reforecast to within +/-5%, bringing that total up to 38% of the organizations surveyed, a percentage rise of 9%.

Compared with last year, revenue was a little easier to forecast and enjoyed a similar up-tick in forecasting accuracy in 2017. An additional 4.5% of organizations were able to forecast revenue to within +/-5% accuracy, reflecting an 11% year on year increase.

There was also a slight improvement in the number of organizations that are unable to forecast beyond six months, with exactly half finding 6-monthly forecasts difficult, compared with 56% last year. But the figure remains very high and indicative of the unstable economic and political climate that is limiting company's longer-term view of the future.

But more substantially, there has been a large increase in the percentage of companies reforecasting more than twice a year as businesses try to manage volatile market conditions. 71% now reforecast more than twice a year, up from 56% last year.

The bad news

Incremental improvements are the result of incremental process and technology changes, but spreadsheets, the most limiting of technologies, remain embedded in many organization's core PBF function. 70% of businesses say they rely heavily on spreadsheet reporting across all their business units, only 16% are using on premise specialist software, and just 10% have implemented specialist cloud software across all their business units. All of these numbers have hardly changed since last year.

It seems that while the processes remain unchanged, an increase in the frequency of reforecasting is having some impact on the accuracy of the forecasts. The benefits of increased reforecasting are not to be dismissed, but in isolation these incremental improvements will quickly plateau. To enjoy a far bigger step-change in accuracy and rapidness, companies need to make a step-change in processes and technology.

Recognizing the benefits

The strategic benefit of trustworthy, accurate insight cannot be underestimated. Which is why Financial Planning and Analysis (FP&A) professionals are carving out a very effective niche within the wider strategic foundation of many organizations. The evidence of this is the expectation that 71% of organizations intend to separate their FP&A function at some point. This compares to the 65% of finance executives who last year agreed that FP&A will increasingly become a separate discipline from the accounting function.

This year's survey sheds some light on what characterizes good planning, budgeting and forecasting. Companies that view their processes as insightful lead the pack in terms of accuracy, speed and forecast horizon, and the common characteristics of those companies are an understanding of the importance of non-financial data and the use of cutting edge technologies to take their analysis to the next level. CFOs who aren't there yet have something to aim for and they seem minded to make the changes. Whereas time has been a constraint on change for other areas of finance, only one fifth of respondents said it would be too difficult to change their PBF processes, and just 23% said they didn't have time to look into other budgeting processes.

It will inevitably take time for PBF trends to improve to the degree possible with innovative technology. Uptake of new technology, especially dedicated cloud solutions that can vastly improve the efficacy of the PBF process, remains slow, but, importantly, steady. Over the next year, as mounting evidence of the effectiveness of accurate insight impels organizations to seek out new solutions, there will hopefully be a more marked change in the fortunes of Planning, Budgeting and Forecasting.

CFOs are overcoming market volatility and driving small improvements in forecasting accuracy by reforecasting more frequently.

The survey results speak for themselves: the move away from the spreadsheet era is inevitable. Spreadsheet-based processes cannot ensure data consistency and value of information required by today's world of big data. Nor can spreadsheets accommodate the agility companies need to respond to changes and meet growing requirements quickly.

To boot, the legacy systems many companies are currently using lack the automation and flexibility to meet the requirements of growing and innovating companies.

To help companies achieve the speed, accuracy and forecast horizon BP&F requires, CCH Tagetik enables organizations to:

- Decrease cost of ownership and maintenance with a system that links planning, reporting and consolidation to all sources of data including CRMs, GLs and ERPs.

- Ensure standardization and auditability with a collaborative workflow and audit trail.

- Reduce planning cycle time and increase efficiency through rolling forecasts, allocations and cash flow forecasting functionalities.

- Include non-financial data in the BP&F process to improve forecasting accuracy, agility and boost reporting.

- Manage large volumes of data in a single solution.

- Transition to an agile cloud solution, with the same capabilities as an on-premises solution.

- Access advanced analysis, visualization and forecasting functionalities to gain insights and improve the strategic planning process.

Appendix 1:

Apart from time what are the biggest barriers to forecasting accuracy?
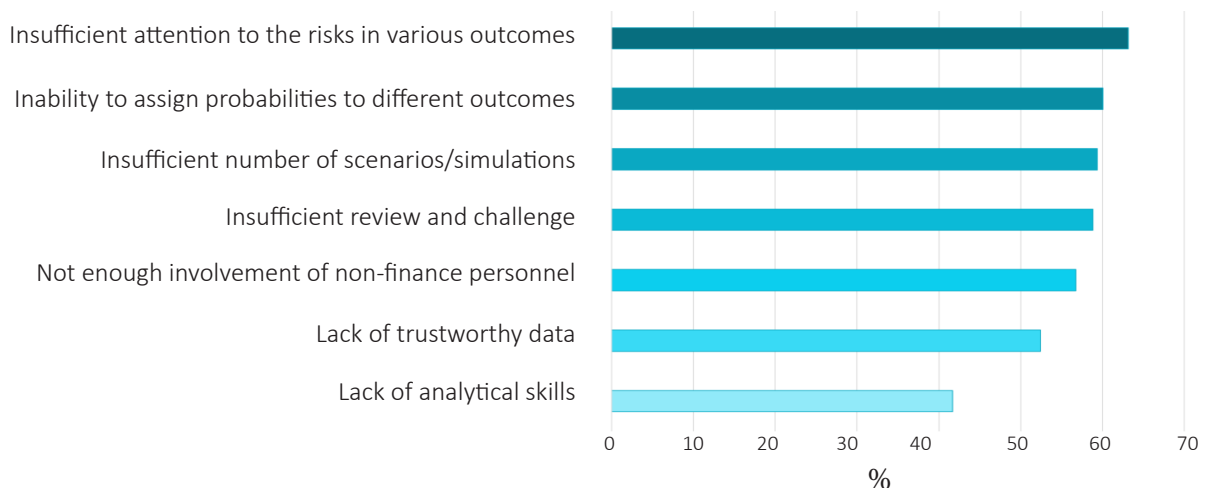
"We were working very manually. Our forecasts were not very precise. We needed to be able to provide updates monthly and weekly reports. That's why, for us, having one tool and one place for all our information was important. CCH Tagetik enables us to provide management with the required information so they can make the right business decision, on time",

Senior Manager Financial Planning, Valeant

CASE STUDY 1: Valeant

Valeant was no stranger to the pains associated with spreadsheet-based processes. Manual work and exposure to error were just the beginning of their woes. Members of their finance team felt frustrated. They had no way to manage last minute changes. They felt the pressure of mounting deadlines. Most of all, the finance team felt their skills were under-used.

This all changed when they implemented CCH Tagetik.

Watch how CCH Tagetik revolutionized Valeant's spreadsheet-based, manual BP&F process with automation and a single version of the truth across all budgets, plans and forecasts.

Leading the debate:

CFOs are taking note of the **FSN** Modern finance agenda to improve performance

Here are the top priorities you should have when modernizing your BP&F system.

Leading the debate

At the heart of all change is informed discussion. As the PBF landscape changes, FSN's surveys delve into the successes and frustrations of executives at the helm of this evolution, and they are taking heed of our insight.

Recognition for non-financial data

Last year's survey identified non-financial data as a game changer for PBF, but it was languishing at the bottom of CFOs' priority list. Now CFOs recognize it as the key to forecasting more accurately, with 78% of senior finance executives in agreement that greater use of non-financial data is the best way to improve the PBF process and outcomes. Underscoring this view, 76% of respondents recognized the importance of connecting with more stakeholders from outside of the finance function to improve the accuracy of forecasts.

Yet despite now recognizing the obvious benefits of leveraging non-financial data to provide a more well-rounded corporate view of the future, senior finance executives are still struggling to understand it fully and extract its true value.

While they recognize that there is considerable insight to be gained from non-financial data 74% of CFOs and senior finance executives are still struggling to identify all relevant non-financial data sources. A quarter say their senior managers do not appreciate the value of non-financial data and 23% delegate non-financial data tasks to more junior staff despite 43% of respondents ranking it in their top 3 sources of 'most insightful data'. Meanwhile 41% of CFOs are concerned about the integrity of non-financial data and believe it is less reliable than financial sources.

Finance executives are taking on board the evidence FSN presented that non-financial data has a substantially positive effect on PBF outcomes, but need to focus on identifying its sources, ensuring these are trustworthy and robust, and convincing senior leadership of its efficacy.

***78%** of organizations agree the key to forecasting more accurately is in the greater use of non-financial data*

***43%** of CFOs rank non financial data it in their top 3 sources of 'most insightful data'*
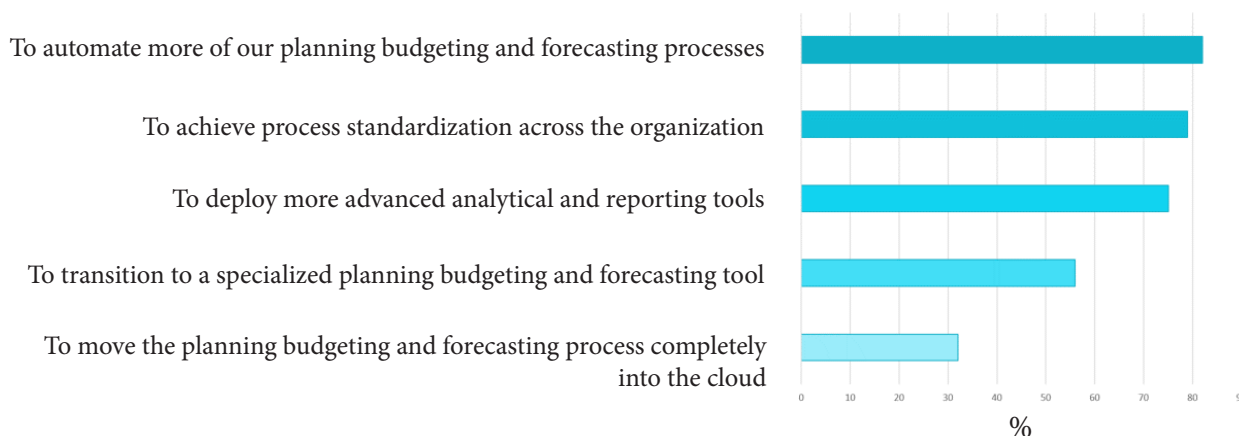
17

Automation and standardization

FSN's Future of the Finance Function survey last year identified standardization and automation as the fundamental cornerstones on which to build a modern finance function. Standardizing and automating frees up well qualified personnel for retraining into higher value roles, and allows senior finance executives to carve out time to improve their PBF processes and insights.

At the time of the 2016 survey, these two processes were also stuck, mid-table, under a growing pile of CFO priorities. But this survey points to a shift in perspective as FSN's insight gains traction. Automation tops the list of technology priorities for senior finance executives followed closely by standardization (82% and 79% respectively). There is growing recognition of the value of laying strong foundations on which to access new technology and redirect intellectual resources towards higher strategic goals.

Similarly, linking front and back-office functions was low on the priority list last year despite the data demonstrating that it improved forecasting accuracy and freed up time for executives to focus on strategic imperatives. This year, there is a growing interest in data sources direct from the front-line of customer engagement. A quarter of respondents ranked data from customer relationship management (CRM) systems top of their list of insightful data over the next three years. General ledger was understandably ahead, ranking first for 34% of finance executives, but the trend does show a keen interest linking up with the front office to reinforce the insights in planning, budgeting and forecasting.

Appendix 2:

What are your technology priorities for implementing changes to planning, budgeting and forecasting in your business over the next 3 years?

| Priority	
To automate more of our planning budgeting and forecasting processes	
To achieve process standardization across the organization	
To deploy more advanced analytical and reporting tools	
To transition to a specialized planning budgeting and forecasting tool	
To move the planning budgeting and forecasting process completely into the cloud	

%

Head in the cloud

FSN's research into the finance function, PBF and financial reporting all present strong evidence of the beneficial effects of cloud solutions, and we have not been shy to hammer this point home. It hasn't been a total epiphany but senior finance executives' understanding of cloud benefits are maturing, from a straight cost decision to one that includes agility and scalability.

Only 4% of respondents disagreed that scalability is a key benefit of moving PBF to the cloud, while three quarters agreed it was. Agility also scored highly, with just 6% unable to extol the benefits, but 76% wide open to this advantage of cloud technology.

Senior finance executives are beginning to recognize the benefits of preparing their finance function through standardization and automation,

Appendix 3:

From your experience what would you now regard as the benefits of moving to the cloud?
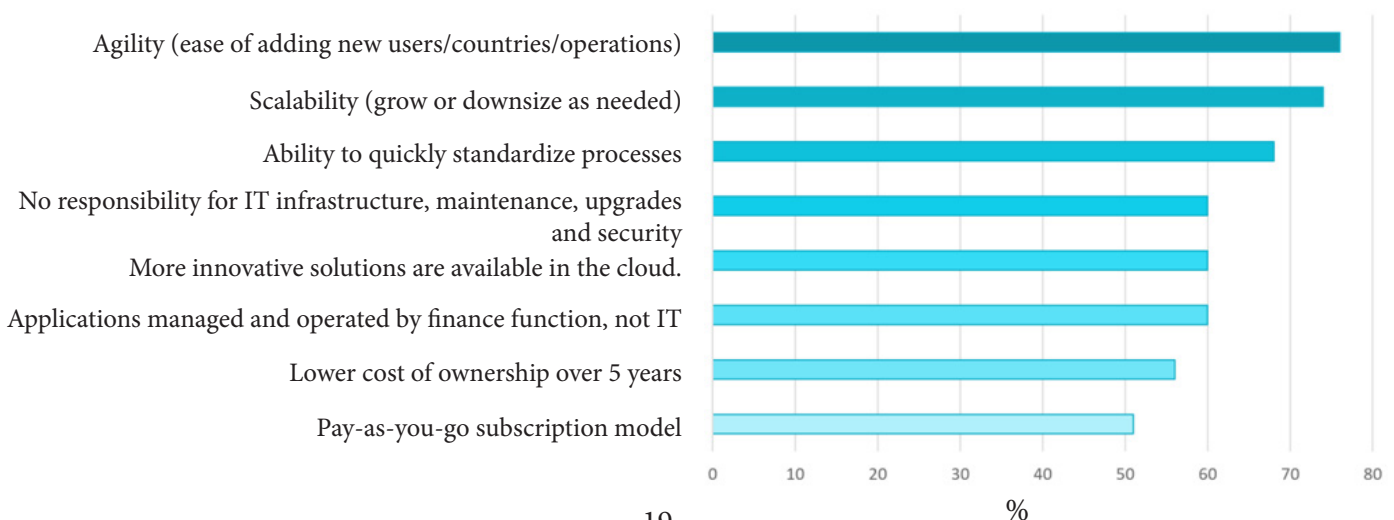
Ready to act on the power of integrating non-financial data, automation and the cloud? With CCH Tagetik, you can.

Here's how:

Data automation through ETL: CCH Tagetik extracts, transforms and loads data from any source.

Process automation: CCH Tagetik combines automation with collaboration to reduce the manual effort involved in BP&F. Process workflows keep contributors on track. An audit trail automatically captures all changes made in the system. This allows the CFO to take charge of the full chain of data and information.

Custome BP&F process: Through a top down or bottom up approach, create plans your way based on unique business drivers, products, divisions or LoBs. Choose from a different library of industry specific drivers and templates.

Quick, enhanced analysis through rolling forecasting technology: Quickly build periodic (including 13 month or 53 week) and rolling forecasts that combine data from plans, budgets and actuals automatically to quickly respond to market conditions as they emerge. Update your plans with the latest financial and non-financial data, link narrative and show the last cases quickly

More than financial data: The innovative CCH Tagetik Analytical Workspace enables you to manage, slice and dice large amounts of financial and non-financial data at any depth.

Cloud agility with no compromise: CCH Tagetik gives you the flexibility to choose your deployment, on the cloud or on-premises. Whichever deployment you choose, you don't sacrifice any functionality.

CASE STUDY 2: Scotch & Soda

Leading global fashion company, **Scotch & Soda's** grew into its omnichannel strategy. Omnichannel retailing has many benefits when it comes to sales. However, it also complicates the budgeting and planning process. Seasonal campaigns, marketing activities, inventory, production, digital sales, storefronts, distribution, sales, and logistics; each of these facets influence the others. The spreadsheet-based system Scotch & Soda was using for BP&F made it next to impossible to see how activities interlinked.

To get the full picture, Scotch & Soda got CCH Tagetik. Learn how they modernized their BP&F processes in this **case study.**

"It's really hard to model and see how activities interlink in Excel or Excel-based processes."

Financial Reporting Analyst, Scotch & Soda

'Man versus Machine':

Early adopters unconvinced by AI and Machine Learning

Man vs Machine

At the heart of all change is informed discussion. As the PBF landscape changes, FSN's surveys delve into the successes and frustrations of executives at the helm of this evolution, and they are taking heed of our insight.

People have been using machines to take the drudgery out of repetitious finance tasks for decades, but as those machines have become more powerful, their role in the process is increasing. Automation it's the most basic of machine processes, and its proliferation has made it a necessity just to survive in today's business environment. But to thrive, companies must make sense of the growing volume of data being generated in every corner of a business. And to manage that level of analytical complexity within the planning, budgeting and forecasting function now requires a far more complex machine.

Artificial intelligence (AI) is no longer a pipe-dream, or a buzzword. It has become a reality in many situations, from Siri to Alexa to Nest smart thermostats. They all use behavioral algorithms to get smarter and improve the accuracy of predicting what we want, when we'll want it. Machine learning allows computers to find hidden insights in vast data stores, without specifically being asked where to look.

Its' application within planning, budgeting and forecasting is still relatively nascent. Only 14% of respondents said their approach to analytics included machine learning and AI. The number of dedicated machine learning technologies that substantially enhance PBF is growing, but uptake is still in its infancy, perhaps held back by a wider delay in the transition to cloud applications.

Uptake may be low but there is keen awareness of the latent potential for these more experimental technologies. 56% of CFOs and their senior finance executives agree or strongly agree that we will become more dependent on machine learning to drive more accurate forecasts. They know that humans bring innate preference and partiality to their decision-making, and half the respondents believe that we are introducing too much of that bias into forecasting.

But despite the foresight to see a future with machine learning in it, 64% believe that humans will always play a greater role than machines in forecasting. They see global uncertainty as a hindrance to computational prediction, with 56% citing this as a limit to the usefulness of machine prediction. Therefore only 29% think we should rely more on machine generated forecasts.

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56% of CFOs agree or strongly agree that we will become more dependent on machine learning to drive more accurate forecasts.

At the moment, they might be right. Those small number of CFOs that already use AI and machine learning in their PBF process are no more likely to be able to forecast beyond one year than those who use less advanced technology like spreadsheets, pivot tables and advanced visualization programs (17% vs 18%).

There is some impact on the time it takes to reforecast, with 61% able to reforecast in under a week compared with 55% who don't use AI or machine learning, and there is also a modest improvement in accuracy. 45% of organizations that use AI and machine learning can forecast earnings to within +/-0-5% accuracy, compared with 40% using less advanced technology.

Considering the fanfare with which machine learning and AI are presented in the press, the fact that there wasn't a hugely significant difference in forecasting outcomes could be taken as a victory for naysayers. But there are many possible reasons for the lack of substantial impact.

The most powerful effect of machine learning will come when it is integrated fully into an organization's wider systems, incorporating financial and non-financial data to be able to learn from scenarios and events with the richest source of information. This will only come in time. Basic standardization is not even effected across all business units, whereas AI and machine learning require richly linked data repositories. Until the right foundations are in place, the effects of machine learning will be limited by the quality and quantity of data from which it learns.

Today's CPM market is not ready for AI. And AI technology isn't ready for the market either. AI will come into its maturity when companies can apply it to all systems, processes and methodologies.

With this in mind, we've got to ask: If AI and machine learning is the future, what is the now?

Today, your focus should be three-fold:

- extracting value out of data
- improving your data use
- taking steps to advance the quality of your decision making

To do this, you must begin analysing both financial and non-financial information at a granular level. This means connecting information from all processes and departments in a single tool for analysis.

Unification enables you to create budgets, plans and forecasts based on your organization's activities at a 360° level. CCH Tagetik's solution gives you the power to do just that thanks to:

- a modern, single, unified platform that brings together all data and information across the organization. CCH Tagetik links consolidation to budgeting, planning and forecasting and reporting. This way, all processes are connected to an accurate, single source of truth.

- an enhanced platform that elevates your BP&F process and profitability analysis through advanced modeling and fast forecasting.

- a data refinery platform that allows you to extract, manage and process huge volume of data at a very granular level without adding any additional layers or complexity to the business.

CASE STUDY 3: Unicredit

In the face of data complexity, **Unicredit** reviewed their entire BP&F process and found that they needed to reduce the number of systems in use. From here, they knew they needed to extend the BP&F system across all divisions, improve control and find a more effective way to analyze profitability.

Today, Unicredit uses CCH Tagetik across all subsidiaries. Top management has the ability to monitor the business at every level. Their financial systems have been unified in a single solution. They have achieved their goal to reduce complexities across all their financial systems. How did they do it? Watch their success story **here**.

"We've used CCH Tagetik to set up different dimensions, produce reports and collect numbers all in a single place",

CFO, Head of Data Governance, Unicredit

Advanced analytics: Are your tools too basic?

Organizations that use "cutting edge" technology are more likely to be insightful

Advanced analytics – Are your tools too basic?

Most finance executives believe their analytic tools are a step up from the baseline spreadsheet analysis, but even 'advanced' tools like pivot tables and business intelligence lag well behind the cutting edge visualization techniques and experimental machine learning that make a real difference to forecasting accuracy.

In this year's survey, CFOs and senior finance executives were asked which tools formed part of their PBF arsenal, and half said they used basic spreadsheet analysis in at least some of their processes. 81% described their analytics as advanced, incorporating pivot tables and business intelligence tools, while 42% said they used cutting edge tools like advanced visualization, charting and graphs. Only 14% described their tools as experimental, incorporating machine learning and artificial intelligence.

While these descriptors weren't mutually exclusive, the responses show a trend towards advanced tools and a sharp drop off at the experimental end of the scale. This is to be expected, as new technology will always take time to mature and plateau. What is telling, is how these companies performed in terms of forecasting accuracy, agility and forecast horizon.

42% said they used cutting edge tools like advanced visualization, charting and graphs.

Appendix 4:

CFOs were asked how they would describe their approach to analytics...

BASIC:	ADVANCED:
use spreadsheet analysis tools only. **50%**	using pivot tables, and BI tools to mine for additional insights. **81%**

CUTTING EDGE:	EXPERIMENTAL:
using advanced visualization, charting and graphing. **42%**	using machine learning and Artificial Intelligence to drive analytics. **14%**

27
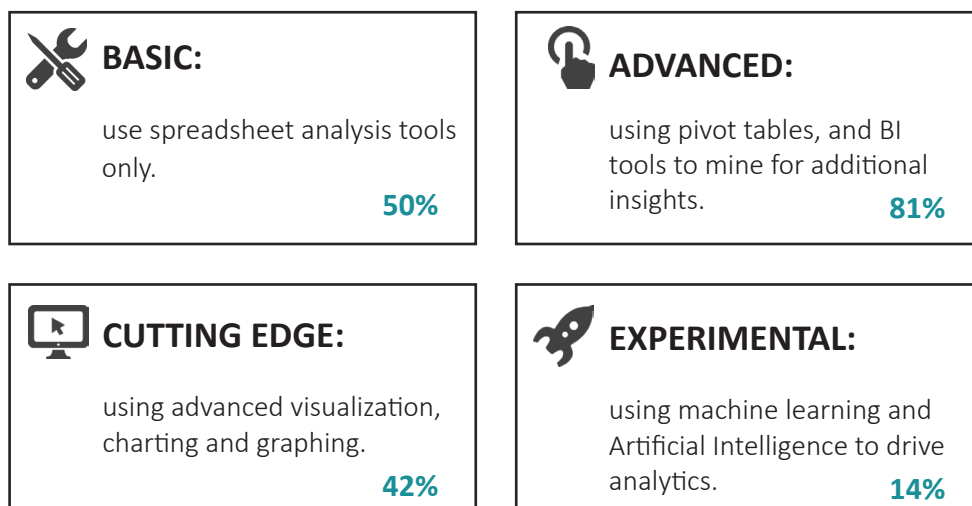
Making the cut

The expectation might be that using the newest and most advanced tools would elicit the best outcomes, but in two of the three key performance indicators, cutting edge companies came out ahead of their counterparts, while experimental companies performed better in one key KPI.

Companies with an experimental approach to PBF technology won out on speed, where 61% were able to reforecast within a week, compared with the 55% who did not describe their tools as experimental.

Cutting edge companies though were more accurate, with 47% able to forecast to within +/-5%, compared with 34% who were not cutting edge. And foresight, while marginal, still showed that cutting edge companies edged in front of experimental ones in their ability to forecast out beyond a year.

New developments in technology are an essential part of progress- the digital revolution has made this clear. But new technology is not always a panacea. In the case of machine learning and AI, there is clearly still some way to go before businesses are ready to take advantage of these powerful tools.

Meanwhile cutting edge companies are managing to extract the best value out of their PBF tools. Their profile is of a tech savvy organization that understands of the importance of the cloud and generates its cutting edge insight from specialist PBF systems. Cutting edge companies are more likely to prioritize specialist planning tools, deploy more advanced analytical tools and move the PBF processes into the cloud in the next three years than their less cutting edge competitors.

Some are already there. 40% use specialist PBF software in the cloud, compared with 27% of the remaining respondents, and are also more likely to use specialist PBF software on premise (13% vs11%).

Appendix 5:

Impact of an organization's approach to analytics on their performance...

Legend:
- Ability to reforecast in under 1 week
- Ability to forecast earnings accurately +/- 5%
- Ability to forecast beyond 1 year
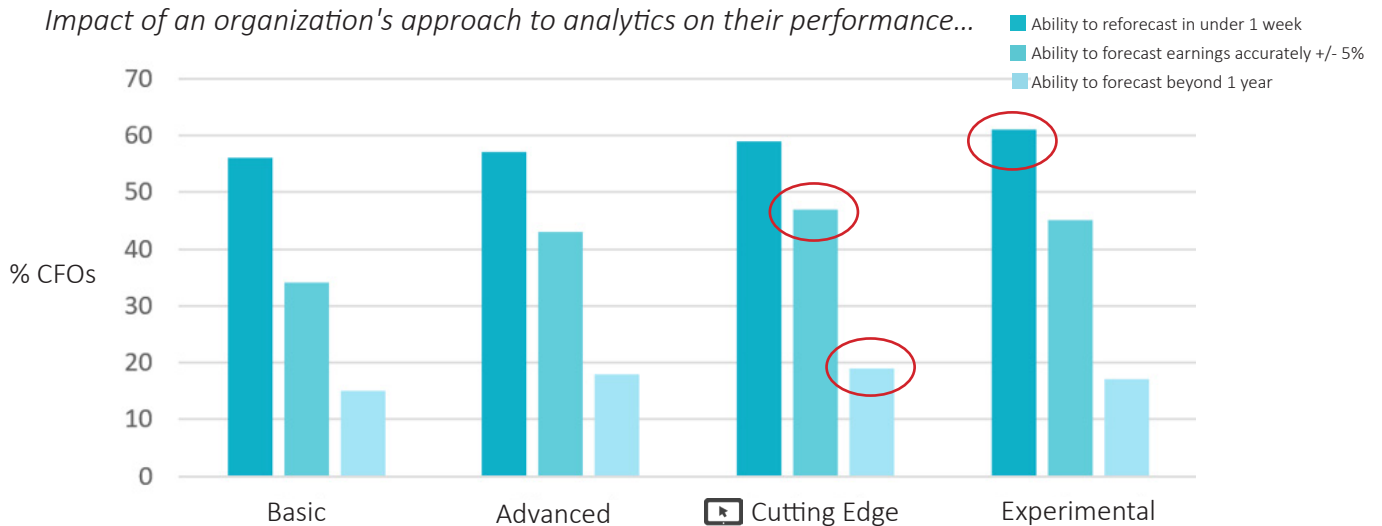
Aim for insight

Cutting edge technology is all very well, but it's not the final word on planning, budgeting and forecasting. In a straight showdown against companies that describe their PBF process as insightful, cutting edge fell short on all three key KPIs. The message is – it's better to be cutting edge in your PBF tools rather than relying on spreadsheets and pivot tables, but it's even better to be insightful, which incorporate elements of cutting edge technology, but also a recognition of the value of non-financial data.

Having the right technology is only part of the solution. Insightful organizations set themselves apart in terms of their ability to handle non-financial data. As we have seen from the Future of the Finance Function research, mastering non-financial data is the key to being able to forecast accurately and further into the future.

Technology is a vital part of the evolution of the planning, budgeting and forecasting function, but it cannot work in isolation. Organizations must strive to become insightful, using their cutting edge tools to get there.

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When it comes to BP&F, advanced technology is only helpful if it's developed for finance. And that's the CCH Tagetik difference. CCH Tagetik's technology was built to enable finance teams to tackle their specific business requirements in a financial context.

How? CCH Tagetik provides the basic, advanced and cutting edge technology, in a single solution built to elevate strategic plans and analysis through:

- Ad hoc reporting, real-time interactive, custom dashboards, ad-hoc pivoting and drill-down.

- The ability to slice, dice and drill into data to unearth underlying trends.

- Drag and drop functionality, heat and geo mapping.

- Driver-based and waterfall allocations.

- Financial, statistical, historical and custom drivers across multiple levels so you can monitor profitability on multiple levels.

- Advanced visualization through a powerful integration with QlikSense.

"Whether you're going from a legacy tool or nothing at all, the transition would be great with the team they (CCH Tagetik) have",

Corporate Accounting
Supervisor, Nelnet

CASE STUDY 4: Nelnet

Before CCH Tagetik, **Nelnet** was long using a legacy system that had a pricey renewal fee. They started looking for different options and saw that their current legacy system was falling short in a number of ways. They needed to modernize their BP&F process. Then, they found CCH Tagetik. Using CCH Tagetik for consolidation, budgeting and planning, NelNet:

- Cut the manual work. CCH Tagetik saves their finance team four to eight hours a month logging entries. Now, entries are completed in an instant and validated automatically.

- Creates budgets the way they want to with the ability to slice and dice data.

- Has different segments of the company collaborating within a single CPM system.

- Connects consolidation with budgeting and planning.

- Compares results side-by-side without creating any additional, out of the box reports.

Learn more about Nelnet's journey to modernized CPM with CCH Tagetik. Watch the **case study.**

"Insightful" organizations drive better all-round PBF performance

Respected, Insightful, Inclusive, Strategic – How does your PBF process stack up?

Respected, Insightful, Inclusive, Strategic – How does your PBF process stack up?

When does a forecast gain the respect of the whole organization? When it is trusted by all levels of management? When it engages with many stakeholders to provide the most inclusive view? When it uses advanced analytical techniques to reveal unexpected insights? Or when it is closely aligned with strategy to underpin decisions at the heart of the business?

Just 40% of organizations claim their PBF process is insightful.

In a perfect world, planning, budgeting and forecasting would encompass all these traits. In reality, at least some of them are being realized. 70% of senior finance executives believe their PBF processes are respected, 72% believe they are inclusive and 74% believe they are strategically aligned. But, and it is an important but, only 40% characterized their PBF process as insightful, defined as the use of advanced analytical techniques and tools to reveal unexpected insights that lead to better performance.

That's not to diminish the achievements of the respected, inclusive and strategic CFOs. It remains vital to ensure organizational buy-in for plans and forecasts, by including all stakeholders. This in turn leads to trust and respect in the process and helps to focus the outcomes on the organizations own strategy.

Appendix 6:

CFOs were asked how they would describe their planning, budgeting and forecasting process

RESPECTED:	INCLUSIVE:
all levels of management trust the outcome.	we engage with a wide number of operations and non-finance personnel to improve the richness of our plans, budgets and forecasts.
70%	**72%**

STRATEGIC:	INSIGHTFUL:
our plans are closely aligned with our strategy and form the basis of appropriate decision making across the business.	as with strategic but we use advanced analytical techniques and tools to reveal unexpected insights and pathways to better performance.
74%	**40%**

Inside an insightful mind

But companies with insightful PBF processes do better on three key forecasting outcomes – the ability to reforecast in under a week, the ability to forecast earnings accurately within +/-5% and the ability to forecast beyond a year. Accuracy, agility and forecast horizon are key indicators of a robust PBF process yet less than half of respondents believe their own processes are insightful.

65% of insightful companies can turn their forecasts around in under a week, compared with 48% who did not consider their process insightful. Insightful companies are more accurate, with 55% reforecasting to within +/-5% compared with 31%, and 23% are able to forecast beyond a year, compared with 13% for non-insightful companies.

There are many indicators of insightful success. Insightful companies have a strong tendency to use rolling forecasts (43% vs 29%), they are more likely to depend on specialist software in all their business functions (29% vs 14%) and they are less likely to depend on spreadsheet modeling (67% vs 76%).

Insightful CFOs also put more emphasis on improving accuracy through the use of granular models, with 52% agreeing that deploying larger more granular forecast models would be the best way to improve the accuracy of forecasts, compared with 42% of non-insightful respondents.

Their approach to analytics was more cutting edge, with 59% using advanced visualization, charting and graphs compared with 26%. And 22% of insightful finance executives also said they used experimental technologies like machine learning and artificial intelligence, compared with just 5% of respondents who didn't identify as insightful.

Crucially, senior management are more likely to appreciate the importance of non-financial data, which the Future of the Finance Function has shown is critical to improving forecasting accuracy and agility.

Appendix 7:

Impact of an organization's PBF process on their performance…

Legend:
- Ability to reforecast in under 1 week
- Ability to forecast earnings accurately +/- 5%
- Ability to forecast beyond 1 year

Y-axis: % CFOs

X-axis categories: Inclusive, Insightful, Respected, Strategic
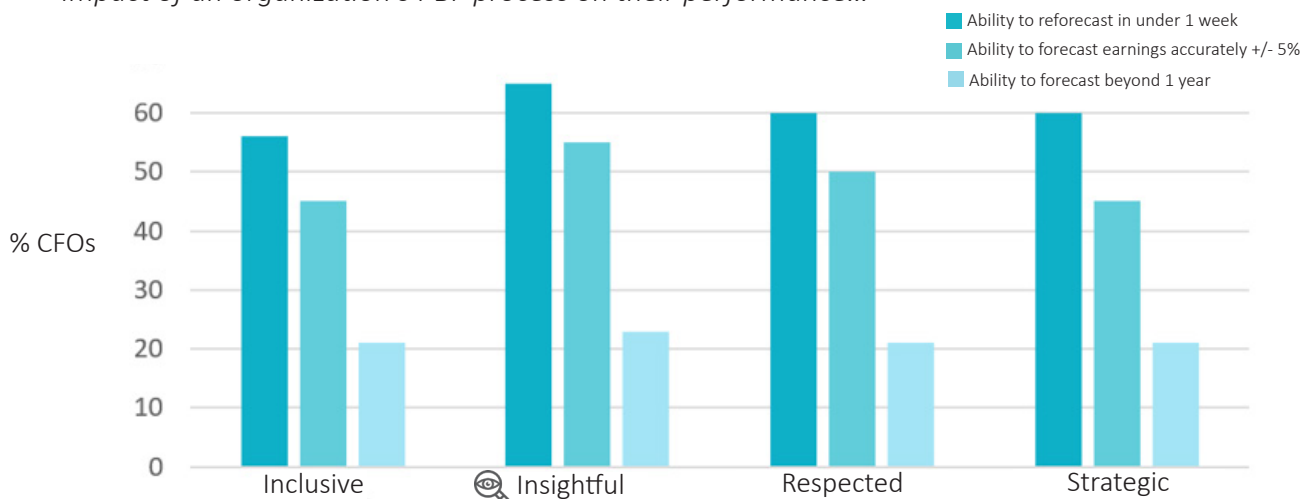
Working together

It's clear that the smart use of analytical techniques has a positive impact on forecast outcomes, and organizations should aspire to moving towards these gaols. But it's also clear they don't work in isolation. Analytics requires the most relevant data, which demands inclusivity, and the outcomes need to be trusted and respected in order to underpin the group strategy. The survey suggests that senior finance executives are most often achieving their PBF goals in combination. 28% of respondents believed their PBF process were all these – respected, inclusive, insightful and strategic. A further 28% identified with three of these elements, and only 13% agreed with just one element.

Just 28% of organizations believe they met the criteria for respected, inclusive, insightful and strategic

The most common pairing was inclusive and strategic, with 60% of respondents choosing those two elements in tandem, which supports the idea that getting the right stakeholders to contribute to forecasts helps align the outcomes across the entire organization.

Equally revealing, the least common pairing was insightful and inclusive, with just 33% choosing these two elements together. This suggests that you can't gain real insight unless you include information from outside the finance function, but equally that without advanced analytical techniques, inclusive information won't reveal its hidden insights.

It's unrealistic to expect organizations to be all things to all people. In planning, budgeting and forecasting there is a strong movement towards inclusivity which is having a positive impact on strategy and respect. And while this is laudable, more needs to be done to add insight into the mix to improve outcomes and find pathways to better performance.

The recipe for insights is a combination of many ingredients including:

Accuracy
Flexibility
Depth
Automation
Integration
Data variety
Visual presentation

Here's how CCH Tagetik sets up BP&F processes to deliver insights using these ingredients:

Data validation and vetting: Be confident data is accurate. Upon upload, CCH Tagetik automatically validates and vets data.

Transparency: See the lifespan of every figure. CCH Tagetik provides you with an audit trail, down to the metadata.

Automated, single version of the truth across the organization: When a figure changes, that change updates everywhere the number appears. A single database of performance data connects plans, budgets and forecasts.

Financial and non-financial data: See the impacts of data on the bigger picture. CCH Tagetik houses a variety of data, integrated from any number of sources, like CRM, ERP, and the GL.

Strategic planning at your fingertips: Integrated, strategic, financial, operational and collaborative, CCH Tagetik Budgeting, Planning & Forecasting gives you access to deeper performance insights and enables a full spectrum of planning.

Strategic planning tools include: advanced modelling, customizable reporting templates, flexible BI dashboards, scorecards, ad hoc reporting and analytics.

CASE STUDY 5: Johnston Press

"CCH Tagetik has helped us develop a rhythm in our business cycle. It has supported our need to gain more insight and information from our data, and we're using it to make decisions that positively impact our strategic goals",

Head of Performance Management, Johnston Press

Johnston Press wanted to execute their strategy more effectively and with better results. To do this, they sought to simplify and standardize operations. Their goal? Get deeper insights into performance. Johnston Press began using CCH Tagetik's Budgeting, Planning & Forecasting tool. These included management reports, BI dashboards, scorecards and ad hoc reporting analytics, all on the cloud.

Johnston Press can now:

- Track and analyze daily performance.

- Gain powerful insights into their customers' behavior.

- Accelerate strategic planning and budgeting processes.

- Adjust field tactics to improve performance based on data analysis.

Learn more by reading Johnston Press's CCH Tagetik **case study.**

Methodology

METHODOLOGY

The survey drew responses from 849 international senior finance professionals from our 50,000 strong FSN Modern Finance Forum on LinkedIn.

This survey covered finance professionals across 23 different industries. 80% of these professionals were considered to have senior job titles and above.

Geography of Respondents
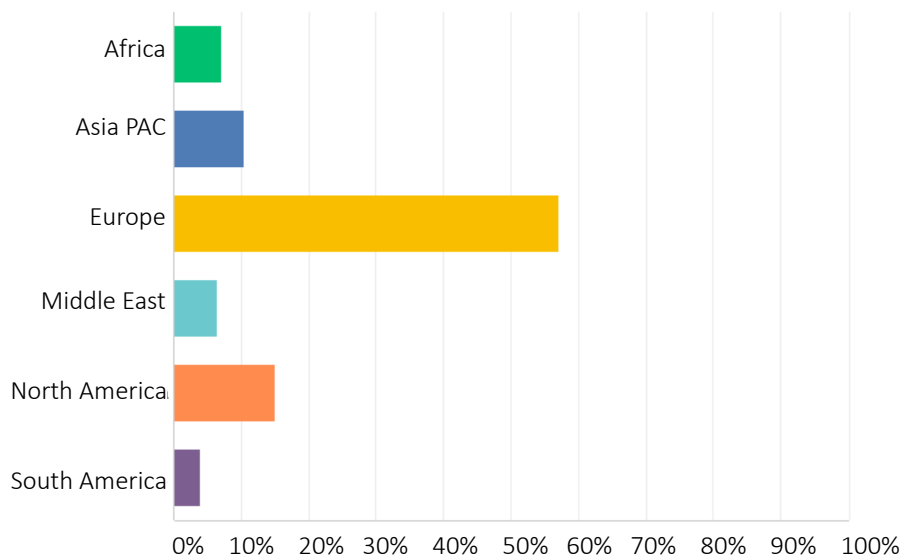
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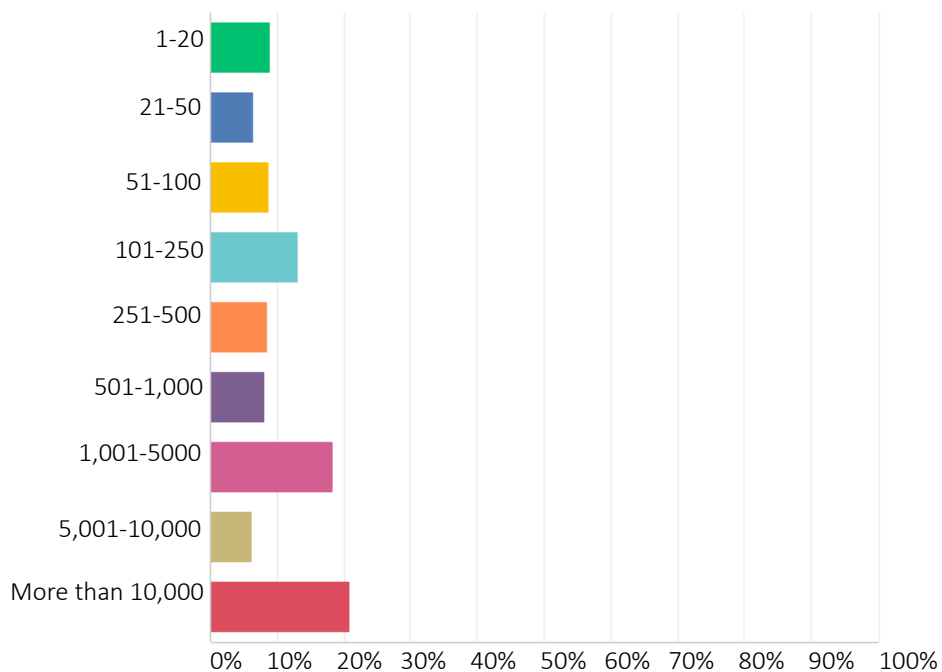
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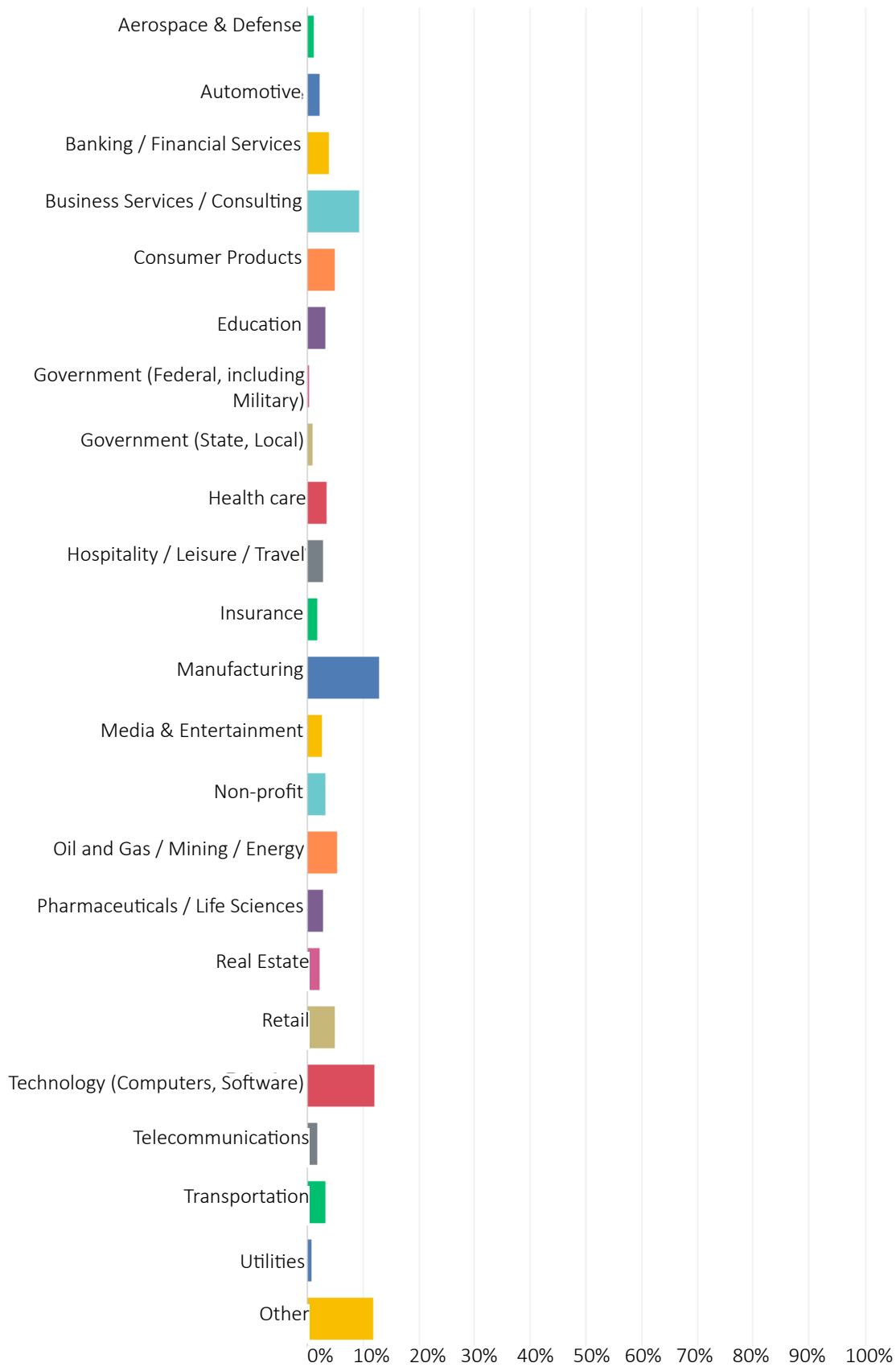
ABOUT CCH® Tagetik

Wolters Kluwer (AEX: WKL) enables finance, legal, tax, and healthcare professionals to be more effective and efficient. We provide information, software, and services that deliver vital insights, intelligent tools, and the guidance of subject-matter experts.

We understand the complex challenges that face the Office of the CFO and translate that knowledge into intuitive, enterprise-scale CCH® Tagetik performance management software solutions that drive business results.

With over 180 years' experience in the markets we serve, Wolters Kluwer is lifting the standard in software, knowledge, tools and education.

For more information, visit www.tagetik.com and www.wolterskluwer.com.

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ABOUT FSN

FSN is a global publisher of thought leadership, research and "must-have" content for CFOs and senior finance professionals around the world. FSN's highly popular and active Modern Finance Forum on LinkedIn has a membership of more than 48,000 readers in more than 23 countries and across every major industry segment. It is also the publisher of the popular www.fsn.co.uk website and regularly holds networking dinners and events for its members.

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