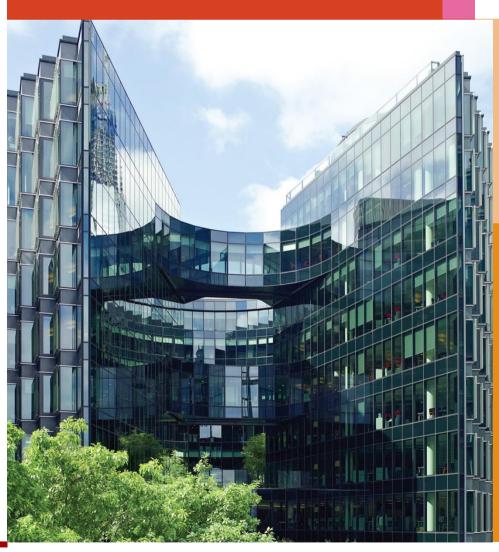
Finance matters Finance function of the future



Predictions for 2030

CFO becoming CPO (Chief Performance Officer)

Finance as an orchestrator of effective Navigation

Mining Big Data to identify performance improvements (new role for business partners)

Previously: Putting business skills into finance Now: Put finance skills into the business

CFO driving the sustainable business model agenda

Reporting data revealed to stakeholders in real time

Communicating the impact of the enterprise to Financial, Social, Economic, and Fiscal stakeholders

Finance creating an environment for external stakeholder interaction

Robotic scanning of all reports for fraud, misstatement and capital shortfalls

Shift from trying to control risks, to learning to manage uncertainty and enhancing resilience

Adaptive capacity in Finance to respond to a crisis

Disruptive technologies e.g. 100% cloud based ERPs

3rd wave for technology – harmony of man and machine in Finance

Will there even be a Finance function as we know it today?

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Forward

At a time when growth opportunities are hard to identify and execute, Finance* functions are increasingly challenged to provide their organizations with a strategic edge. The challenges from new and existing stakeholders around external communication and reporting are also putting increased pressure on Finance at a time when minimizing costs is important. Given these challenges, is your Finance function ready for the future?

Finance* – in this article refers to the activities or functions of an organization which looks after its financial management. This includes management of accounting, reporting, control, treasury, tax and other financial activities.

In the future will there even be a 'Finance function' as we know it today? Is it possible that Finance skillsets and principles will be driven into other areas of the organization that become responsible for budgeting, performance reporting and strategic decision making? If so, where in the organization does this leave Finance?

The financial skills and disciplines we know today are likely to survive but the Finance function itself, and CFOs in particular, may need to adapt to a future where organizations increasingly focus on connectivity, interaction across business units and transactional synergies to derive value from all parts of the business, not just those which are customer facing. As businesses increasingly look for analysis and data to support strategic decisions, the CFO's role is likely to embrace the principles of performance and risk management more than we currently see today. But reporting activities will also need to evolve as new stakeholder groups seek to understand not only the current profitability of organizations but the sustainability of such profits and the organization's impact on the economy and society more widely.

Finance is not a panacea.
Organizations with highly skilled,
organized and cost effective Finance
functions have also found themselves
ensnared in commercial missteps or
succumbed to macroeconomic
conditions beyond their control.
Coupled with the need to display
better business alignment, this does
not mean that Finance in its current
form is obsolete. On the contrary,
given the increasing demands placed
on organizations, Finance still matters
and perhaps more than it ever has.

In this paper we present a hypothesis and explore the potential future of Finance, not only through predictions but also by looking at ways some businesses are already enhancing their Finance functions. This paper is not a crystal ball, rather our aim is to stimulate debate and provide possibilities for further research and discussion.

Our paper explores four principles which have historically been embodied by most Finance functions to varying degrees. We'll argue that, in general, all future Finance functions will need to further demonstrate these principles in order to support their organizations.

The four principles of **Navigation**, **Mediation**, **Resilience** and **Connectivity** illustrate how Finance can make itself more effective at enabling and driving strategy, mediating external stakeholders, and making their organizations more resilient, streamlined and agile going into the future.

Case study – Future Energy 2020

Future Energy is an integrated energy and financial services company, specializing in renewables and energy financial risk products. Stella, the CFO is travelling back to work at 10:00 p.m. after hearing that trouble was brewing...

10:05 p.m.: "I parked my selfdrive hydrogen-powered scooter and logged onto the dashboard on my ultra-thin 6G tablet. It showed that three territories were coming close to breaching their capital limits. The auto analysis function was putting this down to market movements in energy prices, which were lowering the value of our derivative portfolio.

10:15 p.m.: Reaching my allocated hot desk, my colleagues Ahmed and Jake said that they had been in touch with London and Hong Kong with a view to unwinding our derivative positions and using local funding lines to boost liquidity. But the positions are locked in with a key client and they might not renew if we unwind. What are the alternatives?

10:20 p.m.: Ahmed draws in a light pulse digital signal from the office lights, thus avoiding prying eyes on easily scanned wireless waves. The query pulls up a visualization of the trading and balance sheet position. Our client is selling, which helps decrease the losses, but we still have a hole. External data on market movements and competitor responses is also pulled in showing that others are backing off from the market deflating prices.

10:50 p.m.: Decision trees come up on the virtual projector shared across Kuala Lumpur, London and Hong Kong for how we could divert contingency funding to hold onto the positions until the market settles down and the client renews. We go through the scenarios testing whether to hold or sell, and we look at the demands on funding. The scenarios are quantified live during

10:55 p.m.: We then collaborate with the various teams to create the appropriate scenarios on the central corporate document collaboration area before uploading the proposed solution to the Board's decision screens for approval. Problem resolved...not quite as the banks have already been in touch as they noticed the drop in our capital position. The team resolves that first thing tomorrow morning they will have to work through a O&A session with the banks, and provide them with an update on how we intend to get the balance sheet back in the right shape.

11:15 p.m.: When I started out in this game in 2013, this would have all taken a week to analyze and resolve and by then we could have lost millions and a key client to boot. I smile, thinking the night is still young..."

Executive Summary: Building Finance functions for the future

If we started with a blank sheet of paper, it's unlikely we would create the Finance functions we have today. CFOs often ask 'How can Finance add more value?' although too often there is a preconception that the only acceptable answers are 1) by providing greater insight, or 2) lowering costs. This model is now outmoded.

There is a much greater opportunity for Finance to contribute given the accelerating transformation in economies worldwide, the digital revolution taking place, increasing market interdependence, shifting of customer expectations, and the increased volatility of the global market place. This is coupled with the shift in focus from shareholders to broader stakeholder interests, partly driven by a more networked society, social media and the near instant and global transmission of news.

This paper sets out four principles to help envision the future of Finance, which would put the function at the heart of addressing these developments.

The new hypothesis involves the CFO and Finance leaders playing a much more dynamic and facilitative role, moving from static and rigid processes and controls to adaptive, agile and resilient models which require orchestration rather than execution and control.

Navigation:

Future Finance functions will be required to help create the conditions for effective Navigation of the enterprise, providing more flexible and adaptive processes with near realtime reporting, rapidly produced analytics and dynamic and integrated forecasting, all of which will meet the needs of the business in its pursuit of growth strategies. Finance needs to provide a process where the interaction around these accounting and reporting processes delivers the right challenge and thought processes to navigate the business. There are great opportunities, but also pitfalls created by disruptive technologies. Aspects such as Big Data and predictive analytics further add to the tools and techniques Finance can deploy.

Mediation:

Future Finance functions will be representing the organization externally by engaging with a broader set of stakeholders who are hungry for information through increasingly diverse means. This will include facilitating an interactive environment much broader than traditional reporting, in which the organization can effectively share and discuss their wider performance and overall impacts on stakeholders. This will include customers, public interest groups, suppliers, governments and society as a whole, rather than just the shareholders. This mediation principle is equally applicable for internal stakeholders.

Resilience:

Future Finance functions will be driving the business and themselves towards greater resilience, with the ability to absorb and bounce back from internal and external shocks. Finance should be at the heart of a drive towards increasing the adaptive capacity of the organization, including qualitative planning for unforeseen shocks, use of predictive analytics, and risk mitigation plans.

Connectivity:

Future Finance functions will need to use systems and pool resources more efficiently to satisfy business needs. It's the ability to find balance between man and machine, providing connectivity between different functional silos, systems and processes to create a more connected organization, which delivers what the Finance customers need in an effective wav.

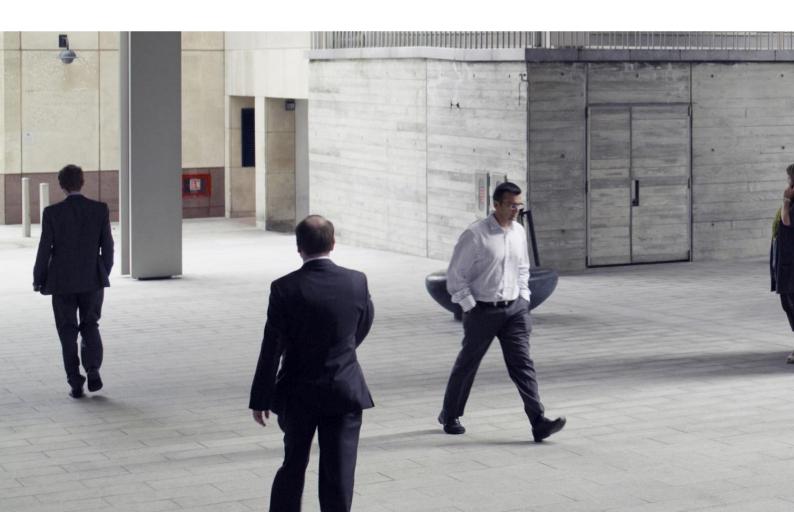
The picture that emerges from PwC's Finance benchmark projects, suggests that these principles are already present in most Finance functions to some degree. However, our hypothesis suggests that Finance functions will need to make continuing strides over the next 20 years to embed these principles.

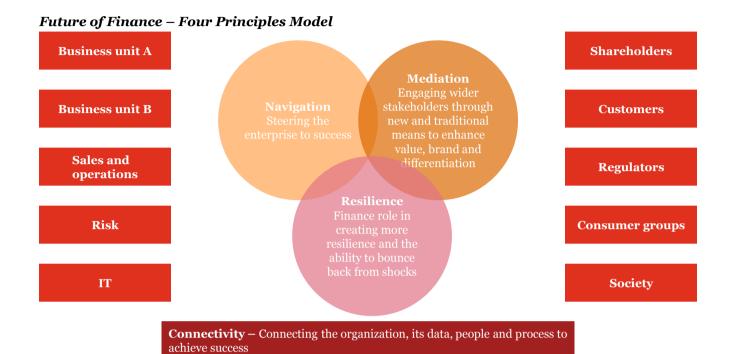
2012 Benchmarking finding¹	2030 Future provocation
Navigation	
Top performing Finance teams spend 17% less time on data gathering and 25% more time on analysis than typical functions.	Very little time will be spent on data gathering. Financial data will be available to all stakeholders in real time from a robust data source. Teams will spend part of their time on analysis but the vast majority of their time with internal and external stakeholders modelling future performance and building scenarios based on potential external events and competitor actions.
Top performing Finance teams take just 7 days to produce their forecasts. The typical function needs 19 days.	Real time forecasting will be made possible via the use of emerging technologies and the budget/rolling forecast as we know it will cease. External/environmental factors such as customer behavior, competitor activity, new market entrants and activity in other competing industries, markets or economies will be available, tracked and built into scenarios for management and shareholders to consider.
Mediation	
49% of companies have relevant metrics for sustainability reporting, with 27% reporting detailed actions on their strategic priorities and 44% reporting on a segmental level about their business model. ²	100% of companies will report on relevant sustainability metrics and in some cases this will be mandatory. Most companies will report on actions across their strategy, and over 75% will report on their business model at a segmental level.
Top quartile companies take up to 40% less time to close and report to executive management. 9 business days is the top quartile average.	The 'close' will no longer exist. Financial information will be available to management on a real time basis to allow business performance and direction to be assessed at any time and from anywhere via the latest available technology. Data will be audited real time, reducing the need for external audit.
Resilience	
Leading Finance teams have automated 70% more of their key controls than typical functions.	All controls are automated and embedded and consistent across end to end processes. The focus will shift to statistical models which raise warning alerts when certain conditions arise which could indicate fraud, misstatement or other irregularities. Dashboard reporting will be available real time for management who can run 'what if' scenarios and model in the effects of environmental and behavioral changes on their processes (e.g. systems failure, staff turnover, volume/capacity peaks) thus allowing them to plan their resource usage to best support the business and ensure resilience under any foreseeable change.
Leading Finance teams employ nearly 40% more people in 'business partnering' roles and pay around 25% more than typical functions to help attract quality professionals.	The Finance team as we used to know it no longer exists. Finance has the adaptive capacity to rally around new challenges and help the business solve them more rapidly. Finance professionals will be embedded alongside marketing professionals, operations teams, strategy and compliance teams in the business. No silos will exist and end-to-end processes will be managed across business lines and the organization.

^{1. &#}x27;Putting your business on the front foot': Finance effectiveness benchmark study 2012', published by PwC, 2012

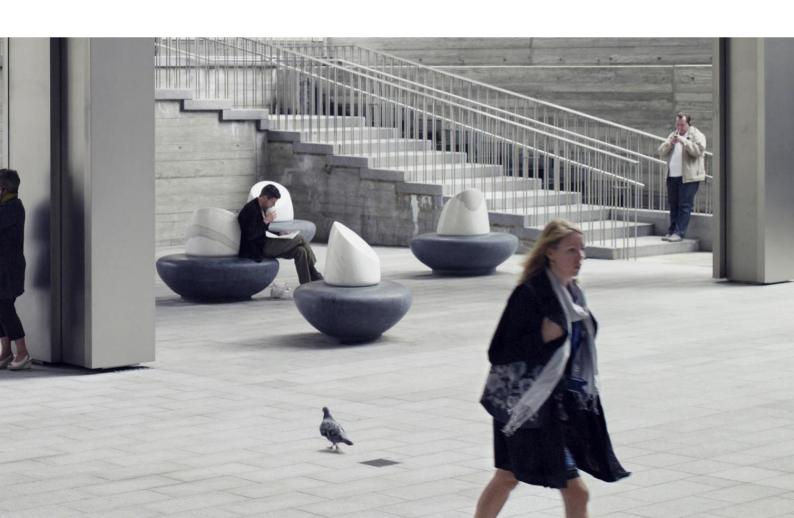
^{2. &#}x27;Trust through transparency: What does you reporting say about you?', published by PwC, 2012

2012 Benchmarking finding	2030 Future provocation
Connectivity	
Around 60% of participants still rely on manual spreadsheet manipulation for reporting.	There will be no spreadsheet based reporting. Validated datasets will be produced either internally or externally by industry wide Finance data providers and made available to inhouse finance teams and other stakeholders to manipulate using their own models.
Leading Finance teams have reduced the amount of time they spend on transactional activities by 20% in the last 3 years.	As standard, all transactional components of Finance will be fully automated and/or outsourced. Invoices will no longer exist, with organizations electronically messaging transactions seamlessly through utility hub providers. Human intervention is only to review variances and exceptions. The reduction in geographical labor arbitrage will have impacted the location of outsourced centers and brought many back on shore.
Leading Finance teams are taking a more forward- looking approach to talent management with an average of 30% more people in their talent pool compared with typical performers.	Staff across the organization will be incentivized in a very different way. Behaviors such as encouraging dialogue, challenging and innovating will be taken into account and less weighting will be given to traditional factors such as technical skill and compliance and controls.





The challenge for Finance leaders is to look beyond the often quoted clichés of adding value to the business, business partnering and efficient operating models, and to really find new ways of orchestrating better performance, offering more diverse and rewarding communication, enhancing resilience and providing a more connected and cohesive Finance offering.



1. Navigation

The commercial landscape is being transformed. The most effective Finance teams are taking the lead in steering the business through this unfamiliar terrain and orchestrating its strategic response and consequent success.

Past/current

Navigatior

- Business partner advising the business
- Prescriptive accounting rules
- Function providing answers
- Reports of increasing volume/proliferation
- View of a robust answer without appreciating ambiguity



Future provocation

- · Creating the conditions for effective Navigation
- Create flexible environment for discussion and questioning performance
- Leading on evolution of the performance framework
- · Facilitate/orchestrate in the context of uncertainty
- · Predictive analysis of opportunities

The divergent fortunes of Apple and Kodak exemplify the threats and opportunities facing many industries worldwide. Apple was on a sustained decline between 1986 - 1997, yet managed to reverse course and has become a market leader in a diverse range of products, completely transforming how people interact with personal technology. Ten years ago, Kodak was at the pinnacle of its industry until the mobile device became the preferred method of digital photography. Kodak was late to respond and was still held back by its legacy of success in non-digital products. As a result, Kodak was forced into bankruptcy. These contrasting fortunes show that the pace of change from disruptions to markets can have a binary impact and poses a real challenge for the role of Finance.

The central principle of Navigation is 'How the organization can be steered to success'. The role of Finance in Navigation is to create the effective conditions for Navigation to happen. This requires a complex orchestration of the business and Finance working together to analyze past direction, future possibilities and then to decide collectively on the correct course. In determining direction, Finance and the business are solving complex and unprecedented questions which require contribution from multiple disciplines and require rich internal and external data as inputs. We suggest that the Finance role in Navigation is to realign traditional Finance activities in more effective ways to support the business in making the right decisions.

In the case of Kodak, did Finance support the right scenario analysis and take time to assess future strategies, and was there sufficient challenge of its longer term plans? In the case of Apple, how will it continue to compete with aggressive competitors whose offerings threaten to overtake them with each new release, and how can Finance support that dialogue? As one CFO put it, 'Finance should provide a window into the future' through which an organization can best prepare itself.

2012 Benchmarking finding	2030 Future provocation
Navigation	
Top performing finance teams spend 17% less time on data gathering and 25% more time on analysis than typical functions.	No time will be spent on data gathering. Financial data will be available to all stakeholders, real time, from a robust data source.
Top performing finance teams take just seven days to produce their forecasts. The typical function needs 19 days.	Real time forecasting will be made possible via the use of emerging technologies and the budget/rolling forecast as we know it is dead.

The current picture

Finance has made huge leaps in developing better performance management over the last 20 years. These have included application of more sophisticated technology, automation of planning and management information collation, and enhanced thinking around the approach such as Balanced Scorecards, Key Performance Indicators, rolling forecasts and more integrated planning. However, the full benefits of these approaches have not yet been realized across all organizations and as the thinking has evolved, there is still evidence that further strides could be made.

The challenges include continually large volumes of management information where customers of these reports are still left unclear of the value. Budgeting processes are slow and cumbersome and scenario analysis is still underdeveloped. Business leaders continue to expect more insight and answers to come from Finance and find themselves compensating with their own shadow analysis. These expectations arise from a challenging business agenda as highlighted in the PwC CEO survey in 2012³ including such aspects as:

- Seeking out new markets and improving the positions in existing markets
- Looking for new ways to stimulate demand and foster customer loyalty
- Capitalizing on digital marketing platforms and trends such as involving customers in product and service development
- · Balancing efficiency with agility and resilience by cutting costs without eroding the quality of products and services, or leaving their organizations exposed.

For Finance to support this agenda it needs to rethink the approach it can

take and how each of its activities contributes to effective Navigation. It should also be clear about its role and how this may be one of orchestration rather than executing financial process.

A more dynamic approach

In assessing new opportunities or new markets, do the performance management processes support the organization's growth and agility or constrain it? Where a manager is faced with breaching budget to seize an opportunity, many would take the less difficult path. How can finance therefore create an effective way to allocate funds to new opportunities which can create value? Could Finance facilitate an effective Internal Capital Market for the allocation of resources to new opportunities?

Approaches to forecasting and planning are often overly focused on the financial outputs rather than the actions and strategies to improve results. Their effectiveness is too often judged by the accuracy of their prediction rather than the effective stimulus of innovation, tactics or strategies. For example, effective scenario planning for a 'fierce competition' scenario could help a company to break free from doing what it has always done. In the case of Kodak, could it have been the creative stimulus required to move beyond historically profitable products that were in decline?

In the future the forecast should be near real time. The relationships between different variables such as sales productivity, number of outlets and returned goods, should be parameterized into a model which is automatically updated as key drivers change. This would result in a process focused on how to adjust the trajectory, rather than a process being about creating a number.

Performance targeting and tracking should move from arbitrary internal benchmarks or comparison with previous years ('absolute') to judging objectives and performance against competitors and market movements, and hence providing a more rounded evaluation of progress and future priorities ('relative'). While this is not a new idea, it has not been widely adopted, nor has the true value of external data really been exploited as firms still grapple with refining their internal data.

An elaborate array of market research, customer data and social media insight is adding to the profusion of external and internal information already available to the enterprise. The challenge that few firms have overcome is how to draw together all this information and turn it into meaningful and actionable insights. As some organizations have grown and become more fragmented, it's increasingly difficult to measure cost and profitability across the right dimensions, and Finance has often not been ready to take on additional challenges. For example, obtaining actionable insight from Big Data (see next page).

In the future, Finance will need to be a full adopter of these areas and will have sharper analytical capabilities in the use of Big Data query analysis, social media monitoring, and real time dashboard creation. These concepts are coming to the fore with new disruptive technologies becoming available which allow queries and drag and drop dashboard analytics to be formulated in minutes rather than days. It's now recognized that these niche enabling technologies from smaller vendors are an important part of any company's toolset alongside the other more mature finance technology offerings from the major Enterprise Resource Planning ('ERP') providers.

3. '16th Annual Global CEO Survey: Dealing with disruption – adapting to survive and thrive', published by PwC, 2013

Discussion: Making the most of Big Data

In terms of the opportunities created by Big Data,4 more than 60% of the business and technology executives polled in PwC's 2012 Digital IQ Survey believe that Big Data can deliver competitive advantage.5 Yet nearly 60% believe that shaping Big Data into enhanced 'insight' is still a major challenge. While Finance teams are investing in the gathering, storing and retrieving of data, there is less emphasis on how to integrate and analyze this data more effectively. This is compounded by a lack of people with the necessary analytical skills – only around 40% of survey participants believe they have the required talent in place.

Our survey also suggests that the ability to bring data analysis to life and

turn it into a clear business case through 'data visualization' is also lacking — only around a quarter are using data visualization. Harnessing data also presents challenges and some have described Big Data as 'providing bigger haystacks'. The key to effective Navigation with increased data will be the re-skilling of Finance to understand how to investigate themes of research that will help to create value.

Key examples of recent analytics projects where finance has provided actionable insight include:

 Mining customer surveys to determine where to get the greatest return on investment with regards to spending on customer experience.

- Mining supplier data to identify which of the thousands of accounts may portray potential signs of fraudulent activity, which could then be reviewed more closely (the needle in the haystack).
- Sentiment mining of social media sites to determine how customers are responding to product launches, to marketing, and to customer service (allowing targeting of actions to improve forecasts).
- Reviewing sales data against seasonality, weather or other key events to determine sweet spots for sales and customer awareness (allowing more effective targeting of production and marketing spend).

The Chief Performance Officer

As Finance's role within the business evolves, the remit of the CFO should extend from Finance leader to creating the conditions for effective Navigation as the 'Chief Performance Officer'. This would involve not only advising CEOs on financial aspects of where the business is heading but also formulating courses of action the business may not have been able to determine alone. Culturally, this new approach would demand a readiness from CFOs and their teams to orchestrate different areas of the business and take a leading rather than an advisory or oversight role within strategic decision making. Much has been said about Finance's need to develop the commercial insight and communication skills to engage more closely with the business, but this is a

two-way process. Just as Finance may need to engage more closely with the business, sales and production teams would benefit from better financial understanding, with finance skills and evaluation criteria becoming part of the DNA of the organization.

Finally, to play the role of a Chief Performance Officer, Finance should determine which type of 'mode' is required to best manage the situation. This could involve adapting the mode of performance processes from stable and static, to being more real time and dynamic. For example, when a business hits a crisis and faces the risk of value destruction, the CFO should be moving into protective mode. This could include looking very closely at funding and liquidity, with potentially daily forecasting and scenario analysis around how to minimize the damage and keep the company going.

Alternately, companies looking to create a complex multi-channel growth strategy will need to create the right conditions for a range of different business stakeholders to come together and solve the ongoing challenge of evolving a compelling and profitable market offering. This is unlikely to be supported by rigid Finance processes with fixed KPIs and fixed annual budgets.

The reality is it requires a more dynamic process which is supported by a flexible Finance team with the skills and capabilities that help support growth and innovation. Those companies who are able to make these transitions rapidly and identify when they are required will be able to grow and protect value much more effectively than their competitors.

^{4. &#}x27;Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data', published by IBM, 2013.

^{5. &#}x27;PwC's 5th Annual Digital IQ Survey: Digital conversations with the C-suite', published by PwC, 2013.

 $^{6. \} http://www.nytimes.com/2013/02/19/opinion/brooks-what-data-can't-do.html?src=recg\&_r=1\&]$

Case Study: Prudential USA

Prudential is a US based global insurer that had been facing stagnant Western insurance markets. Profitability in this region was low, and insurance products were becoming increasingly capital intensive. From a performance perspective, this led to poor cash flow generation which, along with the initial factors, dampened investor enthusiasm.

In order to turn the tide, Prudential's leadership overhauled the group operating strategy and principles and began to target emerging markets more aggressively. Low capital and duration products were created and marketed. Aside from freeing up cash, these products had higher margins and were attractive to customers in high growth markets. Prudential did not retreat from its more established markets, rather it used its presence in established markets as an operating hedge while refining the approach to profitability in these markets through careful product refinement.

Prudential's CFO and Finance function was key to this strategy. Internal and external reporting disclosures were overhauled to clearly show management and investors the sources of earnings across different types of services provided and how financial risk was mitigated. These metrics clearly embedded the operating principles around low capital, high margin and shorter payback.

As a result, Prudential has enjoyed growth in all the key metrics in its reporting scorecard including significant growth in operating earnings and cash. Its new operating strategy has allowed Prudential to significantly outperform its sector competitors. This case study clearly demonstrates the application of the principles of Navigation, Mediation and Resilience.

Navigation

Asking the right questions:

- Are you creating the right environment to navigate, or are you executing processes (e.g. forecasting and reporting)?
- Are you creating discussions which promote agility?
- What skills are required to improve the quality of navigation?
- How can we use Big Data to enhance decision making?



2. Mediation

The approach to external stakeholder engagement and financial reporting needs updating in order to keep pace with the shift in the nature of today's enterprises, new ways of judging success and the ever more searching questions from stakeholders.

Past/current

Mediation

- · Static and voluminous reporting
- · Reporting to shareholders
- · Governance which is efficient rather than effective
- Primary focus on shareholder and regulators (fast processes, cost reduction, shareholder value)
- · Reactive and backward looking



Future provocation

- Creating an environment for effective stakeholder engagement (customers, shareholders, regulators, consumer groups, society)
- · Responding to their changing needs
- Providing interactive data
- Providing data visualization
- · Providing Q&A

We live in an era marked by increasing consumer and shareholder activism, the impact of which is being intensified by a combination of social media, streaming news and the disillusionment created by the financial crisis. Forward-thinking businesses such as PUMA (see case study insert) are providing more integrated and holistic reporting which is beginning to differentiate them to a wider group of stakeholders. However, most reporting still takes the form of voluminous static documents, albeit well thought through, which are pushed out through a labor intensive reporting and review process.

The 2013 horse meat scandal in the US is a telling example of how outmoded this kind of static reporting is. What began as a seemingly isolated incidence of contamination soon escalated into market-wide panic. Frozen beef burger sales fell by 40% in the following month.7 Similar jolts have come from toxic emissions, child labor and other such scandals – once the story is out, it can be very difficult to contain the viral spread of negative news and repair the reputational damage. Any attempts to withhold information or avoid questions can only create a vacuum, which is likely to be filled by even more damaging speculation.

2012 Benchmarking finding

2030 Future provocation

Mediation

49% of companies have relevant metrics for sustainability reporting, with 27% reporting detailed actions on their strategic priorities, and 44% reporting on a segmental level about their business model.⁸

100% of companies will report on relevant sustainability metrics and in some cases this will be mandatory. Most companies will report on actions across their strategy, and over 75% will report on their business model at a segmental level.

Top quartile companies take up to 40% less time to close and report to executive management. Nine business days is the top quartile average.

The 'close' will no longer exist. Financial information will be available to management on a real time basis to allow business performance and direction to be assessed at any time and from anywhere via the latest available technology.

^{7.} Daily Telegraph, 26.02.13

 $^{8.\ {\}it `Trust\ through\ transparency: What\ does\ you\ reporting\ say\ about\ you?',\ published\ by\ PwC,\ 2012\ published\ by\$

The spotlight under which companies operate and how this impacts consumer sentiment were highlighted in PwC's Annual Global CEO survey. More than half of business leaders view the shift in consumer spending and behavior as a threat to growth. Nearly 40% see a lack of trust in their industry as a barrier to growth (among media and financial services CEOs it's more than 50%).9 Business leaders believe that customers, governments and employees now have a bigger influence on their strategy than investors. About half see promoting an ethical culture, increasing workforce diversity and reducing their environmental imprint as key priorities for sustaining resilience and growth. Many now also recognize the importance of stakeholder communication in sustaining their ability to operate and their competitive positioning. 40% of respondents are planning to step up their corporate responsibility and other non-financial reporting.

In recent times, strides have been made in areas such as sustainability reporting. But many Finance teams are still weighed down by statutory, regulatory, financial and management reporting. This means wider stakeholder communications remain limited despite their increasing importance to the fortunes of the enterprise. Annual reports themselves are often too complex and backward-looking to give a real sense of the strength and potential of the business, or allow users to track performance against stated objectives.

Western models of governance, accounting and financial reporting developed to support the stewardship of shareholders' capital in assetintensive industries, are now looking increasingly outdated in the face of globalization, technology and more diverse sources of capital (e.g. sovereign wealth funds). The changes in the ways companies operate and

what drives success are illustrated by the fact that intangible rather than physical or financial assets now make up more than 80% of market value, compared to less than 20% in 1975.¹⁰

Bridging the information gap

If investors and other stakeholders want information that is not necessarily included in the statutory reporting, Finance functions should be providing it rather than allowing the gap to be filled by sources beyond the company's verification and control.

As stakeholders dig deeper into the relative quality of a company's products, what they stand for and how they operate from a social and environmental perspective, Finance should become the lead originator, collator, reconciler and communicator of all relevant information about the business. Rather than simply providing a record of performance, Finance should offer an environment in which stakeholders could seek out answers to particular questions and develop a dialogue with the company. Finance's role as facilitator includes reconciliation, verification and explorative queries and 'what if' analysis.

Each stakeholder will eventually want to 'find their own truth'. One of Finance's challenges is how to make sure that information is conveyed in a fresh, accessible and relevant way. By investing in a broader environment for sharing data, including numerically, visually and with interactive communication, you will be leveraging a broader range of channels (including smartphones and tablets) and allowing users to cut information for their needs.

This shift in the balance between transparency and opacity could create concerns within a corporate culture used to a high level of confidentiality and management of information. Moreover, transparency creates the trust and confidence that the business can use to build market share and secure investment. Social media has already set the pattern for these developments by forcing corporations to move from one-way messages to two-way dialogue. In a telling indication of the power of social media to shape opinions and give voice to an ever more diverse group of stakeholders, more business leaders in our latest CEO survey are looking to strengthen engagement with users of social media than either their investors or the traditional media.



9. '16th Annual Global CEO Survey: Dealing with disruption – Adapting to survive and thrive', published by PwC, 2013 10. 'Trust through transparency: What does you reporting say about you?', published by PwC, 2012

As the companies now setting the pace in sustainability reporting have demonstrated, early movers can shape patterns and expectations, which others will need to follow. Nonetheless, this will be a new departure for many companies, which could have inherent reputational risks if not properly executed. A useful transition would be to introduce and hone the new information environment internally before it is presented externally. This is an approach that has been widely used in the financial services industry, where risk and capital metrics were developed internally before being communicated externally.

Annual reports will still be essential in meeting market listing requirements and analyst expectations, but they will only be one element of a much broader stakeholder interaction. However, there are opportunities to rationalize the current reports. As companies look to reduce the weight and complexity of reporting, some have already adopted a one-in/one-out rule. If any new areas of information are added, others

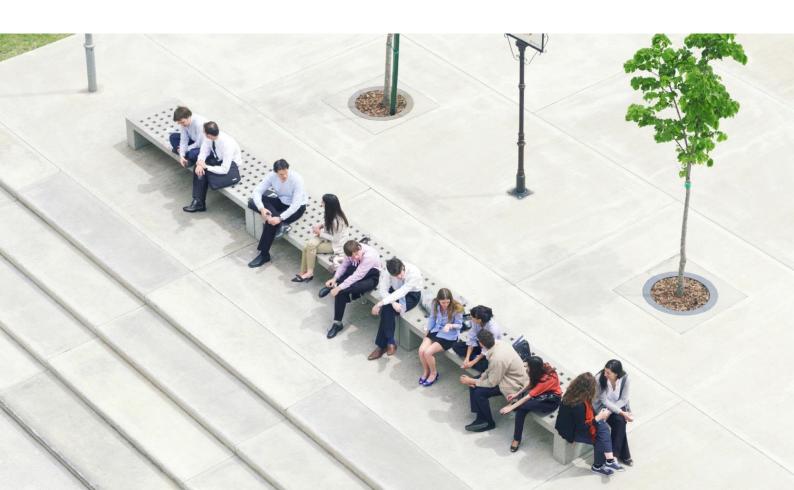
are taken out. Ultimately, there is no reason why companies could not slim down to ten-page reports or even shorter, with the interactive environment providing a gateway to any further information that would be required.

PwC has recently been working alongside a number of clients to develop thinking around an approach to look at 'Total Impact' which encompasses a broader view across Financial, Social, Economic and Fiscal (this is also relevant to the Navigation principle). To illustrate this, the environmental impact covers dimensions such as emissions, pollution, land use and water use providing quantitative (see PUMA case study) and qualitative views on each of these aspects to help stakeholders understand the true impact.

This broader type of impact analysis would seek to place both external engagement and decision making in the context of the total impact. For example, a decision by a bank to withdraw from a major European

market when a crisis hits, may be the right financial decision but it could be damaging to longer term social and brand value, and result in a loss of confidence in other markets (an impact which could not be modelled, although it can be assessed and acted upon). Paradoxically, this is an area where some government bodies are more advanced than the private sector. For example, by looking at the impact of policy on society, and looking at new measures such as GDP+ to represent a broader view of the economic and social development of a country.

In summary, the Mediation principle needs to draw from the same data set as the Navigation principle and use this broader information to make sense of the company's impact on the wider stakeholder group and to increase the overall effectiveness of communication, allowing leading companies to differentiate and enhance their market positions significantly.



Case study: PUMA

PUMA, the sport lifestyle company, has been a pioneer in the development and reporting of an 'Environmental Profit & Loss (E P&L)'. The aim is to put a monetary value on its environmental footprint across the entire value chain (material sourcing, manufacture and disposal), which is now being applied to particular products to help consumer comparison. For example, the environmental impact of its In Cycle shoe is nearly a third less than its conventional suede shoe and equivalent to \$2.95, or 3% of the retail price.

PUMA hopes that this sort of information will help aid more informed consumer choices as well as the development of more sustainable products and is exploring ways to bring this information to consumers, as has been done with calories and nutritional information on food products. It can also help in discussions with government, for example addressing areas where sustainable materials may be subject to higher import duties than more environmentally costly alternatives.

PUMA, alongside parent company Kering, has invested heavily as one of the first movers, the question will now be at what point will consumer pressure and government policy make this the norm and what dividend can companies like PUMA reap in the meantime? To illustrate this dividend, for the first time PUMA had real insight into the environmental consequences of commercial decisions and of their impact on the environment by region, by product line and by use of raw material. And in the face of declining natural resources and biodiversity, the company was able to clearly assess the environment-related risk and act upon it.

This case study highlights both the Mediation principle, as well as the Navigation and Resilience principles.

Mediation

Asking the right questions:

- Have you built something that is focused only on shareholder value?
- How are you serving the needs of other stakeholders?
- How can you broaden from conventional accounting insight to insight relevant for broader stakeholder value?
- Where could you provide a forum for external stakeholders to mine and analyze the data they want?
- Can you help stakeholders understand dynamic risk reporting, rather than static capital thresholds?

3. Resilience

Finance teams can take a leading role as 'resilience champions' within the business, not only improving the business's ability to withstand extreme or unforeseen events, but also allowing it to take advantage and respond confidently to unfolding opportunities.

Past/current

Resilience

- Presumption that risks can be managed/removed
- The diligent caretaker increasing controls in response to regulation
- · Box ticking approach to safety/control
- · Silo based controls
- · Rigid processes based on control/consistency



Future provocation

- Acceptance that resilience is as important as risk
- Creating adaptive capacity in finance and the business
- Predictive analysis of threats and mitigation
- Adaptive processes and tools
- Strong mediation capability to apply to a crisis

Established approaches to risk management are increasingly tested and outpaced by the speed, magnitude and contagion of unfolding events. The PwC CEO survey highlights that businesses are most concerned about the impact of catastrophic events, economic and political threats, and strategic disruption. The experience of Kodak also demonstrates the importance of identifying potential technological developments that could transform their markets – or 'thinking the unthinkable.'

The role of Finance leaders has historically focused on putting appropriate controls in place to ensure that Finance can report accurately and on time, as well as working with risk management to develop the risk management and control framework.

However, the notion that you can simply manage risk by putting enough controls in place is outmoded. Market shocks prove that even businesses with significant and effective controls in place can still be severely impacted.

What is really meant by resilience? The term is often used as a synonym for 'robust'- the Latin roots of which mean 'to bounce back.' But bouncing back means returning to the same position, whereas resilience in the context of the future Finance function needs to include the agility to create and seize opportunities and to transform the organization in response to shifts and shocks in its environment (as per the diagram opposite).

2012 Benchmarking finding	2030 Future provocation
Resilience	
Leading finance teams have automated 70% more of their key controls than typical functions.	All controls are automated and embedded and consistent across end to end processes.
Leading finance teams employ nearly 40% more people in 'business partnering' roles and pay around 25% more than typical functions to help attract quality professionals.	The Finance team as we know it no longer exists. There is no 'Corporate Centre' or finance floor at head office. Finance has the adaptive capacity to rally around new challenges and help the business solve them more rapidly.

11. '16th Annual Global CEO Survey: Dealing with disruption – adapting to survive and thrive', published by PwC, 2013

Resilience perspective

Survival Adaptation Transformation

Risk perspective

There are several areas where Finance can play a leading role in ensuring the business has significant resilience:

Resilience linked to Connectivity: Getting the basics right

A highly manual Finance function where staff are overstretched doing routine transaction processing and reporting are less able to support the business in a crisis. Leading Finance functions who have robust and well controlled processes can more easily release appropriate resource to deal with any impending crisis.

Additionally, having highly automated and reliable information becomes even more important when external scrutiny increases during a crisis and where management will be demanding the right information to make urgent decisions.

Resilience linked to Navigation: Capabilities required to steer through the crisis

Finance in the future, alongside the risk function, should consider where it can deploy capabilities to best support the business in a crisis scenario. For example, a lack of analysis resource, rigid reporting processes, inflexible planning systems and data structures, could prevent Finance from effectively assisting when the leadership of the business most need support and rapid data inputs for Navigation.

In the insurance industry, the initial shock of 9/11 was soon accompanied by a requirement to understand how much exposure of property, business interruption, liability and life coverage was likely to unfold. Some insurers struggled to determine their exposures leaving them unclear about where their businesses stood and whether they could remain solvent.

As extreme one-off events sometimes become sustained (i.e. the 2008

financial crisis), attention inevitably turns towards understanding the emerging financial loss and potential strategies to reduce this impact. From a Navigation perspective the organization will require a flexible information architecture, which allows the rapid assessment of new queries. It also might require forecasting models which are nimble enough to be run on a daily, or more frequent, basis. For example, during the credit crisis many banks turned to daily cash forecasting to monitor liquidity.

Finance should also play a leading role in appropriate scenario analysis techniques such as reverse stress testing. This technique looks at the breaking point for an organization and what could be done qualitatively to mitigate and bring it back from the brink, without trying to predict the precise extreme event. This is a highly valuable way to enhance resilience as the organization has a 'turnkey' series of ideas it can draw from, rather than starting from scratch in a crisis where time to think is limited.

^{12. &#}x27;Prospering in an era of uncertainty: The case for resilience', published by PwC, May 2012

Finance should also provide guidance to the business on appropriate financial contingencies. Contingencies can support adaption and transformation, as well as survival. Apple has recently captured many headlines as its cash and equivalents balances approached \$100 billion. In the past there would have been calls for the company to return this cash to shareholders. However, there is now widespread recognition today that Apple's 'war chest' potentially enhances its ability to move quickly into new markets. At the same time it can make game-changing investments in rapidly evolving technologies and customer markets as well as providing a resilience buffer.

The other role that Finance can develop is an adaptive approach to resource allocation. Most companies who have moved to a more flexible approach (rather than the annual budget) have demonstrated greater agility and improved performance against their peers. Companies who have adopted these techniques arguably have greater agility in responding to opportunities or risks which require additional spend.

Finance can also guide the business in terms of its corporate structure, operating model and international strategy. For example, the drive for efficiency of global or regional shared service centers has in some cases made businesses more vulnerable to threats including business interruption or economic shifts, e.g. the erosion in the last ten years of salary arbitrage benefits for offshoring. Additionally, the CFO should advise the business on the impact of resilience on corporate and international structures. For example, Prudential plc are very clear about their strategy of four business units across three continents and how this 'four-legged stool' will allow greater stability compared to a 'threelegged stool'. In the event of a market shock or bubble burst in Asia, this would place

Prudential in a much stronger position than a regional Asian competitor who may struggle to recover, presenting various M&A opportunities for organizations with appropriate reserves.

Resilience linked to Mediation: Capabilities required to communicate how you are responding to the crisis

During a crisis, the impact of the Mediation principle is often the difference between success and failure. Those companies who mediate effectively and broadly can generally be in a better position to recover from a crisis but can also emerge much stronger than those who were ineffective. Financial counterparties will want to understand their credit exposure, shareholders the impact on value, customers the action to rectify product flaws, and regulators the impact on consumers and market stability. This requires a sophisticated and targeted approach to external communication. The case study opposite provides an example of how new communication methods such as social media are now playing a part in this type of mediation.

Additionally, regulators are more on the front foot and are ready to intervene and increase scrutiny, with an increasing range of tools at their disposal. For example the SEC has recently made headlines¹³ related to automated devices designed to scan through a firm's financial information and identify irregularities. These techniques could also be adopted by firms themselves to determine where these issues might arise, ideally so they can be addressed and managed before coming to the attention of the regulators.

13. http://www.telegraph.co.uk/finance/financial-crime/9869517/SEC-launches-RoboCop-to-fight-against-accounting-fraud.html



4. Connectivity

Spending time on Navigation, Mediation or Resilience requires the rest of Finance to be working well to free up capacity. The endless push to deliver more value for less cost, to automate, offshore and reorganize has not delivered all the answers up to this point. Finance functions are experiencing challenges in respect to capacity, keeping teams connected and motivated, and in finding the right harmony between technology and people.

Past/current

Connectivity

- · Doing more for less
- Endless push for efficiency, automation, ideal operating model
- Presumption that technology has all the answers

Future provocation

- Creating connectivity between processes, departments and finance and the business
- Creating the right interplay between man and
- machine (automation versus the human touch)
- Determining what does the customer really value from finance

One of the consistent findings from our annual Finance benchmarking surveys is the fact that some Finance functions are managing to deliver 'more for less.' ¹⁴ But this success is not widespread, and many companies find that efficiency has challenged value add, or that restructuring Finance has created a distance between Finance and the business, or within Finance itself.

Finance needs to focus on creating a more connected organization, where there is a better connection between teams, better connection between man and machine, better connection between staff and their work place and data

2012 Benchmarking finding	2030 Future provocation
Connectivity	
Around 60% of participants still rely on manual spreadsheet manipulation for reporting.	There will be no spreadsheet based reporting.
Leading finance teams have reduced the amount of time they spend on transactional activities by 20% in the last 3 years.	As standard, all transactional components of Finance will be fully automated and/or outsourced. Invoices will no longer exist; organizations electronically message transactions seamlessly through utility hub providers.

^{14. &#}x27;Putting your business on the front foot: Finance effectiveness benchmark study 2012', published by PwC

Connectivity: Between teams and their customers

Those who have worked with shared services or outsourcing find this often presents communication challenges and can overly emphasize managing service quality rather than adding value to the business. Some leading organizations have tried to fix this by looking across their working practices using techniques more often seen in manufacturing, like Lean, to develop an in-house improvement capability. The techniques involve creating more fluid communication lines between teams, empowering them with improvement methods and using highly visual practices such as visual scorecards. Collaboration methods such as daily huddles are also used, where staff stand for short periods to resolve the day's issues on the project. These Lean approaches dissolve many of the typical barriers to change around creating buy in, creating a relevant solution, managing stakeholders, and communicating clearly.

One major global bank recently applied these methods and created their own in-house capability and a Lean environment where the Finance team could continue to evolve and improve value to their customers and continuously eliminate waste. The team used an approach where they did not try to make the processes Lean, rather they made the environment and the team Lean. This was done by enabling the Finance team with the appropriate skills and a tool kit allowing them to continuously review processes and implement a series of ongoing improvements. As a result, the organization was then empowered, not only to maintain itself longer term, but also to train other parts of the business in these techniques, showing that the improvements became embedded.

A key concept in these types of approaches is how workflows within organizations are arranged. Take the example of a relay race and the passing of the baton. The successful team will do a lot more than just pass the baton. Baton handovers are done in a medium where both runners inhabit the same territory of the track and harmonization of their respective speed takes place during the exchange. Where interfaces occur between areas of Finance, there is a need to understand what is the ultimate goal (e.g. winning the race) and understanding each other's challenges (harmonizing the speed and coming into each other's territory) in order to create an effective handover with no wasted effort. This is equally applicable to the boundary between Finance and the business where Finance needs to understand what the business values and then focus on delivering that. The important point here is not that there are boundaries and silos, (these will always be present), more how Finance orchestrates the right interactions across these boundaries to create value overall. See the case study insert for an example of redefining who the customer is and the refocusing on what they require.

Connectivity: Man and machine/zero cost Finance

In the future, Finance's relationship with technology holds the potential for much greater harmony between man and machine. There is real potential for automated front-to-back transaction processing which would drive costs for these activities closer to zero.

For many start-up businesses or highly web-enabled services this is a reality today. The transaction processing is in many of these cases linked to the provision of the service by a single seamless digital operation with only physical fulfilment being left to the physical world. Third generation digital supermarkets in Australia and Korea are examples of this, where customers order supermarket products on the train platform by scanning them with smartphones. Their orders are then fulfilled by the time the commuter returns home. This type of business model should then allow a seamless flow of data from the transaction through to Finance.

In the future, this same approach could apply to certain types of reporting as well, particularly reporting where judgment is less critical. For example, flash sales reports in many cases could be automated based upon front-end transaction systems.

In the future this trend will continue and the role for the machine will be to complete routine tasks that don't require judgment, emotional intelligence or perception. This would allow Finance people to remain focused on relationships, interpreting the future requirements for the organization and how to encode these as evolving business rules for the machines to execute.

Connectivity: Finance staff with their workplace and data

In the future technology will continue to enhance access to the workplace and to its data, allowing Finance processes to take place at any time, location and by means of several interface platforms. Digital convergence and digitization have provided a powerful range of tools available in the office, on the road, at home, on the train. The mobile device, the tablet, the cloud, virtual meetings and software and hardware offer a real alternative to the Finance employee always being at their desk or in their traditional place of work. Today's mobile devices are over 10,000 times more powerful than the personal computers that were available in the 1980s, and the way that content is consumed, collaborated upon and developed is changing rapidly. Online collaboration to create ideas and improvements to Finance processes or outputs could save significant travel time and external consultancy as organizations become better at sharing and solving problems across territories. Crowdsourcing where large groups of people are harnessed to contribute to solving a problem could have numerous applications in Finance. For example, harnessing a global community of reporting participants, to feedback on the efficiency of a particular process or

This increasing power and connectivity could open up the way to more flexible working, to more opportunities for working mothers, the immobile, the elderly or other people who would ordinarily be constrained to commute to the traditional office setting.

The revolution being provided by the cloud and by software as a service is also reminiscent, albeit in reverse, of the move from the mainframe to the client server model. The cloud is the new mainframe, with a range of software as a service offering, security and back up services which enable the business to focus on what they are good at and take away much of the IT burden. This is both a revolution for businesses but also for Finance functions.

Connectivity: Finance and the business

Finance functions often underplay the value-adding role of their work, and the level of interaction with the business is often understated by association with the concept of business partnering. The work of Paolo Quattrone of the University of Edinburgh highlights the conventional wisdom of accounting as an 'answer machine' - providing automated answers for decision making. He then challenges this, suggesting that accounting is actually more complex as it provides a basis for stakeholders to work together to question, to assess risk, to think about the future and what might happen and to encode this into a series of accounting outputs.

For example the budget, which is often out of date before it is completed, takes significant time to produce, and the numbers can be of questionable value. However the budgeting process sets aside time from the day-to-day activities for management to think about risks to the plan, strategies to develop growth and to reduce cost the process can add value, even if the output does not. If the 'incidental value' of a process is recognized, but the output is of lesser value, perhaps Finance should consider what alternative output could be created that would be more valuable in itself, while still capturing the incidental value.

Case study: Pharmaceutical Industry

One shared service center manager in the Pharmaceutical industry was achieving top quartile benchmark performance and was frequently visited by peer organizations to see how they achieved this. However, this individual was not satisfied, and took a completely new approach which was to really understand what the customers of the shared services operation wanted. They realized that their CFO customers wanted above all else no distractions, lower costs and ideas on how to add value to the strategic aims of the organization, which included speed of new drugs to market. The shared service center manager set

about transforming their approach having realized that the only people who cared about shared service center benchmarks were shared service center managers. The resulting approach was a radically different model where the shared service center manager and the CFO jointly worked with the business to provide a combined service, rather than the shared service center manager being purely a provider to the CFO. Additionally many new adaptations were made which helped contribute to the strategic aims, for example monitoring transaction patterns to identify clinical trials which slowed speed to market and reporting by exception upon these.

Connectivity

Asking the right questions:

- As automation approaches the maximum, what is the role for Finance leaders to play (and how do you still maintain the feel for the numbers)?
- What is the incidental value of a process in creating collaboration, stakeholder interaction, risk and opportunity analysis, and how can Finance redesign processes to achieve this in a less wasteful fashion?
- How can you review what the customer of each process really wants and remove what is redundant? (thus freeing time for Navigation, Mediation, Resilience)
- How will you balance intuition and the automated machine?
- What opportunities are created by Big Data, real time queries and dashboard creation?



Conclusion

The future is here

Finance needs to innovate in order to remain relevant. Business teams are not always getting the insights they need to compete in complex, uncertain and fast-shifting marketplaces and this needs to be addressed by both the Finance function, and the Finance profession. Businesses, customers, shareholders and other key stakeholders are asking more probing questions and will soon start taking their money elsewhere if organizations are unable to produce the information people 'really' want and need.

By creating a more informed and interactive environment of analysis and communication both internally (Navigation) and externally (Mediation), Finance would partly bridge this widening expectation gap, and also create a more relevant and rewarding role within the modern enterprise. Business teams would gain an important edge and disclosures would provide stakeholders with the information they require to judge the business in a more dynamic and relevant way.

The challenge for Finance leaders is to look beyond the often quoted clichés of adding value to the business, business partnering and efficient operating models and find new ways of orchestrating better performance, offering more diverse and rewarding communication, enhancing resilience and providing a more connected and cohesive Finance offering.

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