Numbers that Make Sense: Virtualizing Finance and Accounting in Life Sciences

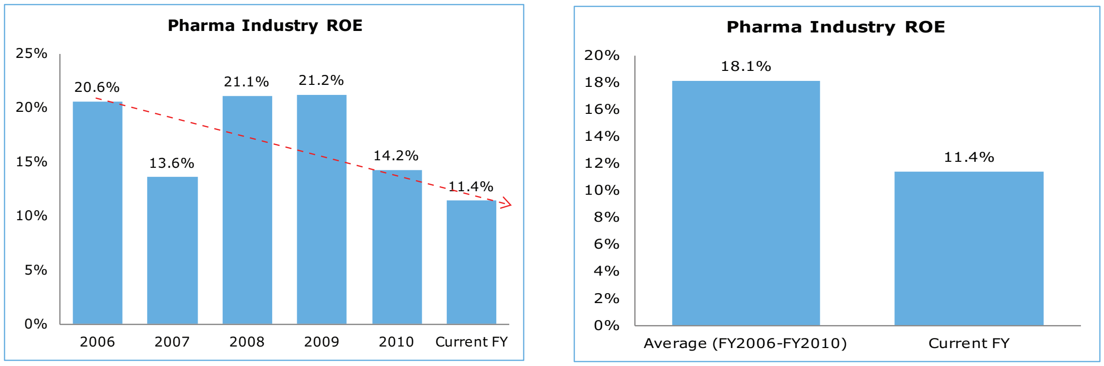
Executive Summary

The numbers — trending down from double digit revenue growth over the last decade to less than 5% in 2011 — signal the challenges the pharma and life sciences industry is confronting: expiring patents on former blockbuster drugs; long drug and therapy development cycles combined with falling returns on R&D expenses; an uncertain international regulatory environment; and increasing pricing pressures and reimbursement cuts.

To overcome these challenges, the leading life sciences enterprises are reducing costs, increasing flexibility and efficiency, and leveraging the benefits of a variabilized cost structure for increasing revenue and strengthening their competitive position and innovation. Given these objectives, the logical outcome for many of these forward-thinking companies is to virtualize selected aspects of their business model.

By virtualization, we simply mean taking a business function outside the company, that is, moving the function from an in-house function to a variable cost function performed by a third party that can be scaled up or down as needed. Almost any life sciences business function is a virtualization candidate, ranging from commercial operations, clinical data management, pharmacovigilance processes, and finance and accounting (F&A).

The Decline of Life Sciences Returns on Equity



Source: Based on results reported by Abbott Laboratories; Allergan, Inc.; Amgen Inc.; Biogen Idec Inc.; Bristol-Myers Squibb; Celgene Corporation; Forest Laboratories Inc.; Johnson & Johnson; Eli Lilly and Company; Merck & Co., Inc.; Mylan Laboratories Inc; Pfizer Inc.; Watson Pharmaceuticals, Inc.

Figure 1

As well as being a natural starting point for virtualizing business operations, F&A outsourcing provides compelling evidence for the life sciences business case for virtualization. Properly executed, virtualized F&A mirrors the industry's efforts to re-engineer the processes used to bring new therapies and products to market, from R&D through clinical trials. That is, outsourcing F&A, even at its most functional level, should offer more than simply low-cost solutions. At its best, virtualized F&A stimulates transformation of all its related processes, making them leaner and more efficient. That gives the life sciences enterprise more resources to apply to high-value strategic activities that, in their turn, are catalysts for the creativity and change needed to meet today's market challenges.

A Compelling Continuum: Virtualized F&A in Life Sciences

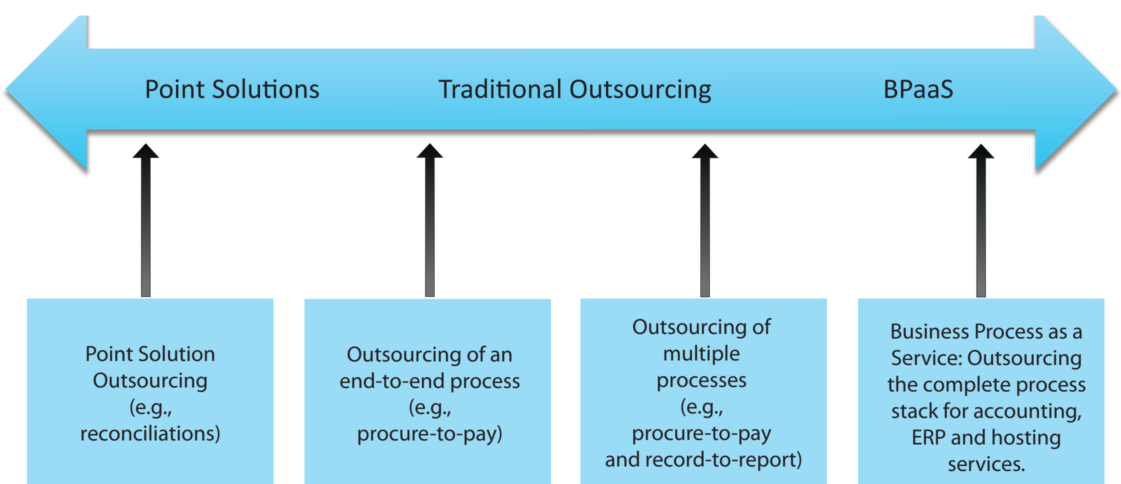
Most life sciences companies accept that many of the F&A processes are important, even critical, yet are not core competencies. Improved access to accurate information, superior analytics, financial strategy, and successful partnering between business and finance can create competitive advantage. But the execution of routine core accounting processes does not create or sustain competitive advantage, making these clear candidates for virtualization. The virtualized F&A functions line a continuum, ranging from very transactional processes to the more complex. Third party services similarly may range from transformation consulting to discrete technology or outsourcing solutions to managing multiple processes to completely assuming the client's F&A processes and associated systems.

How far a life sciences enterprise travels along this continuum depends on several key factors: its view of the risk, compliance and complexity of various F&A functions; outcomes expected from these functions (e.g., efficiency, effectiveness, end customer satisfaction, innovation, etc.); and how much interaction is associated with those functions.

Transactional work, including accounts payable, payroll, accounts receivable, general accounting, reconciliations, and fixed asset accounting are typically the first F&A processes outsourced because they are deemed low risk, require a low level of interaction with other groups, and have been delivered more efficiently by global partners at a lower total cost of ownership. Contrast that with budgeting activities, which are rarely outsourced because of their complexity, high level of ongoing internal interaction, and the view that it would be a core and competitive advantage to manage this process internally.

Yet even some complex, strategic F&A activities have components that can be outsourced to a trusted service provider. Analytics and reporting are perceived as more complex than transactional

Virtualization Continuum



The virtualization of F&A spans everything from point solutions to the outsourcing of the entire labor, applications and infrastructure stack
Figure 2

work, yet the skilled analysts required to provide data consolidation, analysis and insight can be provided by global partners and service providers. It's up to the enterprise to set the direction of the analysis, assess, and act on the analysis provided to make the appropriate real-time and critical decisions. Enterprises often outsource higher value functions like these in their second wave of outsourcing, after they've grown comfortable using a service provider for transactional F&A work.

Complementing Virtualization with Redesigned Processes

Cost reduction is only one aspect of virtualization. Today's service provider must add value by transforming processes, by redesigning them through business and industry domain expertise, and by implementing complementary technology and tools.

Service providers draw on their economies of scale to leverage investments in state-of-the-art systems and a virtualized global infrastructure that are cost prohibitive for a single enterprise to build and maintain, especially in an atmosphere of "do more with less" and cost control. For example, automated reconciliation and period-end close management tools used by a service provider typically far exceed those justifiable by one F&A department, even on a global scale. These tools typically leverage and augment a life sciences company's existing systems. Other service provider investments include best practice research, process reengineering, workflow and OCR tools.

While most ERP systems require users to log into a specific module, a good workflow and wrapper tool will insulate users from these requirements and offer menus and search features that allow users to easily access data. These tools provide a single user interface to the accounting data, insight into processes such as how many transactions are processed in a given day, and performance data as measured by service level agreement (SLA) and key performance indicator (KPI) metrics.

Additional process redesign and productivity gains on the virtualization continuum come from using business processes as a service (BPaaS). In these implementations, the service provider does more than simply augment the client's existing accounting systems: the service provider replaces the in-house ERP financial modules with cloud-hosted applications and assumes responsibility for managing the systems. Both client and service provider professionals access the cloud-hosted applications with the same user interface.

At the farthest end of the value continuum, the service provider not only assumes responsibility for many of the F&A activities but also the hosting, support, maintenance and enhancement of the full systems portfolio, excepting those considered very high risk or that require high levels of internal give-and-take such as budgeting or interpreting financial analytics for business leadership.

Here it's worth pointing out that as the life sciences enterprise grows more comfortable with virtualization, its definition of "high risk" may change. A close partnership with a trusted service provider may eventually encompass some of these functions. Within the health arena, leading

How BPaaS Differs From Other Service Models

	In-House	BPO	SaaS	BPaaS
Labor	In-House	Provider	In-House	Provider
Bolt - on Tools	In-House	Provider	Provider	Provider
ERP	In-House	In-House	Provider	Provider
Infrastructure Hosting	In-House	In-House	Provider	Provider

Figure 3

companies are beginning to outsource end-to-end services including analytics along with outcome-based service-level requirements (e.g., cycle time reduction, business process re-engineering, reduced total cost of operations, increased quality / compliance, etc.).

The Value of F&A Virtualization

As life sciences companies pursue global trials and newer markets to develop safer and more specialized products, they need to be more virtualized and nimble in real-time decision-making. At the transactional end, virtualization not only reduces the cost of those functions but makes them available on an "as needed" basis. The enterprise only pays for resources consumed, so that operating expenses are no longer fixed but become variable. This ability to scale up and scale down resources with a phone call is especially critical within the life sciences industry as business cycles ebb and flow and as acquisition and divestiture activity increases.

The value of virtualization increases as life sciences and biopharma companies move along the outsourcing continuum.

Because the enterprise can rely on the strength of the third-party service provider to offer and maintain current technology and resources that support this scalability, it avoids capital investments in software and hardware systems that support noncore functions, giving it more financial flexibility. This virtualization also has a virtuous effect on financial ratios such as return on assets (ROA) and productivity measures: as companies shed systems and resources, lower costs, and improve margins, both the numerator and denominator of these financial ratios are positively impacted.

Similarly, life sciences enterprises increasingly are competing and operating on a global scale, yet must meet a variety of local compliance and reporting requirements that can require expensive local personnel and systems. A third-party service provider can invest in the language translation tools for handling multiple European languages or regional Asian dialects as well as incorporate these into process design. The service providers are therefore able to deploy a hub-and-spoke model, leaving only the truly required local presence and leveraging a regional or global capability for all other support.

The transformed F&A processes themselves can uncover new potential for savings and effectiveness improvements. These include improvements in working capital from reduced days sales outstanding (DSO) in accounts receivable work and enhanced discount capture in accounts payable work.

Some companies equate financial control with having accounts payable clerks, general ledger and report preparation staff in a nearby physical office. Yet a service provider offers true control improvements: better audit trails from increased automation; better separation of duties; more comprehensive and up-to-date documentation of processes; disciplined performance level monitoring; and improved data integrity by using automation that reduces manual input and the opportunity for errors. This improved visibility and accuracy can help identify potential fraudulent activity, such as duplicate or fraudulent payments.

While improved productivity on tactical activities nets great cost savings, the more strategic, high-value F&A functions offer still greater returns on virtualization. First, the human resources performing higher value work tend to be the more expensive resources, such as senior financial analysts. Second, when virtualizing these resources, enterprises can afford more of them at a lower cost, so an enterprise can commission more high value work for the same or lower budget.

The goal of the CFO should be twofold: 1) shrink the overall cost of the finance function and 2) shift the mix of work by compressing routine operations such as AP and AR and growing high value-add work. With basic functional and high-value transactions being handled by a service provider, retained personnel are free to focus on strategic issues such as improved controls, monitoring trends, business analysis, planning and business partnering.

Virtualized F&A in Action

Top life sciences and biopharma companies around the world already are embracing F&A virtualization. A sampling of case studies includes:

Leading Manufacturer of Laboratory Products

- **Challenge:** A leading manufacturer of laboratory products needed effective tracking and routing of all e-mail orders received in a group mailbox and scanning center.

- **Solution:** A BPaaS-based document/image workflowthat automatically creates transactions for every e-mail scanned and file received. The workflow manages work allocation, prioritization and work distribution based on business rules. Order entry and invoice processing run on the manufacturer's systems while transactions are tracked and process metrics captured using the service provider's cloud-based workflow tool.

Leading Pharmaceutical Company

- **Challenge:** A leading pharmaceutical company needed to streamline its purchase order (PO) processing, accounts payable and vendor data management systems and workflows to improve productivity, vendor relations and reduce costs.

- **Solution:** On-site management by the service provider, revised PO handling, and workflow tools have streamlined the company's PO processing functions. Discount rate capture has increased from 39% to 100%, and vendor relations have improved with timely order processing, accurate data and adherence to TAT standards. Accuracy rates, formerly unmeasured, are now at 98%. Through reducing the total cost of ownership by 70% and increasing discount captures, virtualization has effectively eliminated costs associated with the PO processes.

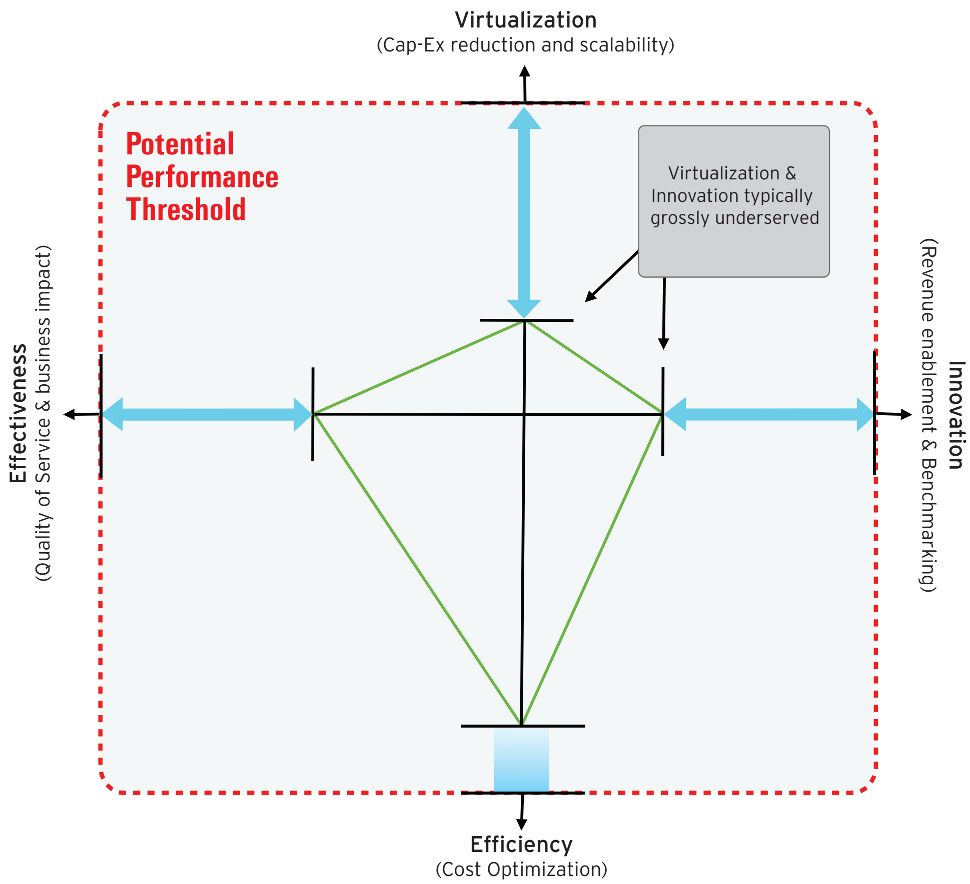
Clarity on F&A Virtualization

We manage F&A services for more than 25 large companies around the globe. More than 45% of our work in these engagements goes beyond the transactional to higher-value, strategic functions. Our approach to F&A virtualization combines IT, deep life sciences industry knowledge, a flexible relationship model, and business process and F&A expertise to stimulate innovation as well as deliver cost-effective high-quality services.

Our BPaaS offering is built around the best F&A platform offering in the business, a cloud-hosted Oracle PeopleSoft ERP combined with solution integration tools, supplier and customer portals, automated workflow, and a state-of-the-art wrapper tool providing a single user interface.

Beyond tools or technology, we deliver the transformation your business requires to thrive in today's demanding environment.

Measuring F&A Outsourcing Success



Traditionally, the health of finance organizations has been measured on a two-dimensional scale: efficiency and effectiveness. Our unique framework measures the health of finance organizations on a broader four-dimension scale: efficiency, effectiveness, innovation, and virtualization.

Figure 4

About the Authors

Paul Nowacki, CFA, is the Global Leader of the Finance & Accounting Center of Excellence at Cognizant. In this role, he oversees worldwide F&A service delivery for our existing clients and solution design for prospective clients. Paul also serves as a thought leader in F&A and helps identify market trends and shape new Cognizant offerings accordingly. By combining his industry experience in IT and finance, along with his experience as a transformation consultant, Paul is able to look holistically at finance and accounting organizations including process, systems, and organizational design perspectives. Paul can be reached at Paul.Nowacki@cognizant.com.

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Krishnan currently manages Life Sciences BPO Practice globally for Cognizant, providing transformative solutions across all key areas of the value chain, including clinical, safety and commercial operations, finance and accounting and procurement / strategic sourcing. Previous employers include PA Consulting Group, Infosys Technologies and Mitchell Madison Group.

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About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and 130,000 employees as of September 30, 2011, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world.

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