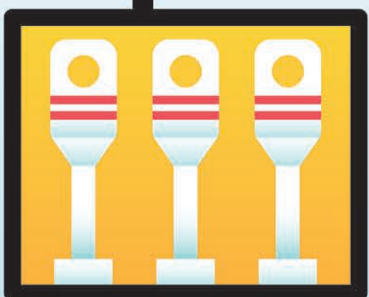


011100110
100010001
010111011

01010101010101010
1011101111011110111
10001000100010001
00010101010110001
10111010101010101
01010101010101010
10111010101010101



Core renaissance

Revitalizing the heart of IT

Organizations have significant investments in their core systems, both built and bought. Beyond running the heart of the business, these assets can form the foundation for growth and new service development—building upon standardized data and automated business processes. To this end, many organizations are modernizing systems to pay down technical debt, replatforming solutions to remove barriers to scale and performance, and extending their legacy infrastructures to fuel innovative new services and offerings.

INVESTING in technologies that support the heart of the business has been IT's emphasis since its earliest days—policy administration, claims management, and billing in insurance; order management, resource planning, and manufacturing for consumer and industrial products; inventory management, pricing, and distribution for retail; and universal needs such as finance and human resources. Core systems drive process and data automation, standardization, and intelligence—and represent decades of investment in buying packages, building custom solutions, and integrating an increasingly hybrid environment.

It's not surprising that on average, 80 percent of time, energy, and budgets are consumed by the care and feeding of the existing IT stack.¹ Within the core, unwanted technical debt² and complexity likely exist, with systems at various stages of health, maturity, and architectural sophistication. But the core can also be a strategic foundation that enables experimentation and growth.

Leading organizations are building a roadmap for a renaissance of their core—focused not on painting their legacy as the “dark ages,” but on revitalizing the heart of their IT and business footprint.

Business first

Amid continuously evolving business pressures and technology trends, several questions arise: How will the core hold up? (Consider, first, the business angle.) How well do existing solutions meet today's needs? (Consider not just functional completeness, but increasingly relevant dimensions like usability, analytics insights, and flexibility to respond to changing business dynamics.) Does the core IT stack help or hinder the achievement of day-to-day goals across users, departments, processes, and workloads?

Of course, underlying technical concerns are also important. But their impact should be quantified in business terms. Translate the abstract specter of technical debt into business risks. Technical scalability can be measured in

terms of limitations on growth—thresholds on the number of customers, orders, or payments that can be transacted. Reliability concerns translate into lost revenue or penalties for missing service level agreements due to outages or service disruptions. A lack of integration or data management discipline can not only delay the backlog of projects aimed at improving existing services, but also result in opportunity costs by constraining efforts to build upon the core for new mobile, analytics, social, or cloud initiatives.

Most IT leaders understand the looming importance of addressing issues in the core. In a Forrester survey of software decision makers, 74 percent listed updating/modernizing key legacy applications as critical or high priority.³ But the challenge is shifting from acknowledging a potential issue to making an actionable recommendation with a supporting business case and roadmap.

More broadly, consider the organization’s evolving business strategy, be it organic growth, new product innovation, mergers and acquisitions, or efficiency plays. What role does the core play in seeing that strategy unfold? Also consider how to revitalize and extend current investments by using existing assets as foundational elements in the future.

One size does not fit all

Core renaissance efforts are born from this combined view of business imperatives and technical realities—balancing business priorities and opportunities with implementation complexity. Approaches will vary from wholesale transformational efforts to incremental improvements tacked on to traditional budgets and projects. But regardless of how systematic or tactical they are, core renaissance responses typically include a combination of the following five approaches:

Approaches to core renaissance



Replatform

- ▶ **MODERNIZE** the technology footprint of infrastructure to improve performance and ability to scale.
- ▶ **CONSOLIDATE** instances and environments.
- ▶ **UPGRADE** to current releases of applications and underlying technologies (libraries, platforms, databases).

Remediate

- ▶ **ENCAPSULATE** data, interfaces, and business logic into reusable, extendable services.
- ▶ **REPAIR** technical debt by addressing development issues and architectural concerns.
- ▶ **CLEANSE** data quality issues, security, and compliance risks.

Revitalize

- ▶ **RESHAPE** the business’s transactional layer with digital extensions (Web, mobile, social) and user-centric process redesign.
- ▶ **IMPLEMENT** visualization and discovery tools to improve reporting and analytics on top of underlying systems.
- ▶ **INNOVATE** new ideas, products, and offerings, using core foundation.

Replace

- ▶ **MIGRATE** fulfillment of some functional areas to custom, best-of-breed apps or cloud services.
- ▶ **REDEFINE** business processes and “core” in the solution footprint, removing unnecessary dependencies.
- ▶ **RETIRE** superfluous or aging pieces of the technology landscape.

- **Replatform:** Replatforming efforts typically center on upgrading the core application or implementing new solutions on the underlying platform upon which the application runs. For ERP, replatforming could involve technical upgrades, migration to latest software releases, or instance consolidation. For any software solution, it might also include moving to modern operating environments (server, storage, or network), adoption of in-memory databases, or shifting to cloud infrastructure or platform services. While it may appear less invasive than other approaches, replatforming is rarely a simple “lift and shift” exercise. It typically requires a workload-by-workload analysis and surgical intervention to prepare for and achieve the shift.
- **Remediate:** Similar to replatforming, remediation shifts attention to the internal workings of systems. For custom solutions, this could involve rewriting chunks of code to reverse technical debt. For ERP, it might include unwinding customizations for capabilities now handled by out-of-the-box software, or updating modules to better manage master data by pointing to a common system of record instead of having everyone maintain a separate version of customer, product, or supplier data. For all software, it might involve rewriting or wrapping interfaces to promote reuse, making the necessary logical and architectural changes to allow core data and transactions to be exposed via mobile, social, or cloud apps.
- **Revitalize:** In some cases, the internal business logic and transactional capabilities are rock solid, but the usability of the systems causes pain points—for instance, because of poor user experience design, long response times, or a lack of mobile versions to support business when and where it actually occurs. Both analytical and transactional solutions can benefit from revitalization. Approaches start with a user-centric, persona-based focus—understanding customer, employee, and partner needs by observing them in the field. Existing processes, reports, or screens shouldn’t constrain new solutions. Instead, they should be built around how individuals actually should and could do their job, empowered by technology. Well-designed front-end solutions allow existing back-end services to be hooked into them without much effort; in many cases, however, some degree of remediation will be required to support revitalization goals.
- **Replace:** Sometimes, the right answer is to recast the solution landscape by replacing parts of the portfolio with new solutions. In industries like insurance and public sector, large-scale custom solutions were often necessary decades ago because of a lack of commercially viable packaged solutions. New entrants and offerings have closed many of these gaps, giving institutions a chance to revisit “build” versus “buy” decisions. Similarly, cloud offerings can be attractive to companies looking for improved agility and the potential to reallocate capital expenditure to operating costs. Importantly, IT needs to be a part of these discussions; otherwise, lines of business may make their own isolated investments.
- **Retrench:** Retrenchment, simply put, means doing nothing. This is likely a part of any core renaissance journey, especially for non-differentiating parts of the business and IT footprint. Being passive can be strategic, especially if not taking action is a deliberate decision made after careful analysis. This is not the same as ignoring an issue; it is weighing the risks, communicating the recommendation (and potential repercussions) to key stakeholders, and then deciding to focus on other priorities.



Beyond technology

For any of the techniques described above, the technology implications are only part of the renaissance of the core. Business processes need to evolve in line with modernized solution stacks, potentially requiring new talent with new skills as well as the development of existing staff. Likewise, IT organization structures and delivery models may need to change to put in place mechanisms to support new technologies and maintain commitments to modernized solutions. Every new system or bit of code can either be on-strategy or create the next generation of technical debt. IT should invoke a mantra of institutionally “doing no

harm” while also raising its game to help drive innovation and growth. Adoption of DevOps,⁴ agile, and industrialized approaches to fostering innovation can help. But just as essential is the alignment to broader business objectives—for even nuts-and-bolts technology investments to have some grounding in business priorities and outcomes. CIOs operating as chief integration officers⁵ should have that grounding. They can use core renaissance as a platform to manage the IT portfolio with eyes wide open, revitalizing and extending their existing assets to not just better meet the needs of today, but lay the groundwork for tomorrow’s breakthrough ideas.

Insurance Industry Perspective

Amy Sherman and Ted Epps

Core renaissance is a salient, timely topic for the insurance industry. Looking internally, in both the L&A and P&C sectors, insurers are looking for ways to increase efficiency and reduce costs; looking externally, a more advanced and simplified platform is critical to achieving growth and agility.

The heart of the business

Policy, billing, and claims represent the “heart,” or core, of the insurance business. Given the investment patterns of the past, the highly fragmented nature of the industry’s products, and the new capabilities available in the marketplace, these core systems represents the greatest opportunity to truly transform how insurers manage their business.

Many insurers are now even more focused on meeting internal and external customers’ expectations for a highly evolved, digital customer experience. This is a significant influence on P&C carriers’ willingness to undertake the momentous task of pursuing an advanced core business platform. Similarly, the increasing sophistication and importance of advanced and predictive analytics is one of the most frequently cited reasons by P&C companies for cleaning up the current data environment, and laying the foundation to better capture, manage and gain insights from data. These two trends are enabled by the proliferation of highly configurable software package options that have been tried and tested in P&C companies over the last several years.

Although the package system solutions in the L&A sector are less evolved, the need is great as these insurers seek to develop more advanced and varied products. While a single platform is not necessarily the end-state, a significant reduction in complexity is necessary. In designing their new platforms of the future, some L&A insurers are launching new products in new, separate environments, while gradually retiring legacy assets.

Additionally, the use of third parties to handle fewer core business lines can also simplify the architecture.

Eliminating the decisions of the past...

Each insurer’s story is slightly different; however, the large majority of the industry is grappling with a fragmented and redundant portfolio of core systems. The portfolio’s complexity drives a need for consolidation.

A leading financial services company’s portfolio of more than 20 policy administration systems revealed thousands of interfaces to non-core systems and utilization that ranged from a few thousand policies to well over a million policies. Each system, regardless of utilization level, required licensing, monitoring, storage, disaster recovery, interfaces, and the associated knowledge to support operational capabilities. The cost to “keep the lights on” in this environment was well above industry peers. In addition, many in-house support resources were nearing retirement, and strategic investments, such as customer and distribution self-service, were unnecessarily complicated and expensive.

To transform this unsustainable environment, a simplification of the company’s core technology platforms was deemed a necessity if IT and business agility were to be achieved. When the simplified core system strategy is fully realized, the company expects to benefit by increasing policy servicing efficiency through a simplified user experience. Additionally, the reduction in technology complexity will translate to reduced technical risk and a reduction in IT “run the business” costs. The simpler environment will provide opportunities to reduce the cost and turnaround time of business driven strategic investments.

...and consolidating the present

Large insurance companies are frequently saddled with the inefficiencies and technical debt of years of acquisition and unfinished consolidation. When time is of the essence and business units must go to market together in short time frames, the right technical decision is frequently overridden by the expeditious technical decision.

A solution to this problem not only fixes the current state, but also helps avoid future occurrences. For example, by consolidating legacy systems into a single, revitalized platform, one P&C insurer identified the opportunity to more efficiently assimilate future acquisitions. As another example, a Midwestern L&A insurer was created as a result of a merger in the early 2000s; in the heat of the merger, the organizations were combined, but the technology was never integrated. Operating within two separate technology environments increased costs and risk. The organization embarked on a system modernization and upgrade to integrate distribution, policy, and customer interaction, the hallmark of which was the implementation of a single policy system.

A TPA focus

There is an accelerating interest in leveraging L&A third party administrators (TPAs) to help address environmental simplification and retirement of legacy systems. In the prior example, the insurer observed how private equity firms and other investors were acquiring blocks of business and then moving them to TPAs for both technology and business operations support. By following the “smart money,” the insurer sought to optimize per policy management costs and introduce a variable cost structure, in addition to the traditional benefits of legacy simplification.

This TPA theme is continued at another leading L&A carrier in the Midwest. Facing a similar story—a complicated environment with more than twenty policy systems—the insurer investigated all potential options to reduce servicing cost and address legacy system risk. The insurer settled on a strategy that made extensive leverage of TPAs to manage nonstrategic business and dramatically simplify

their environment. Perhaps more importantly, the insurer is planning to invest in modernizing a complex and brittle point-to-point integration environment that makes launching new products and strategic investment, such as customer service enhancements, exceedingly difficult.

Driving towards business growth

Insurers of all sizes are predominantly investing in heart-of-the-business systems, such as policy, billing, and claims. Their goal: to expand business growth and enhance customer experience. It's a competitive market, and ease of doing business increasingly becomes a leading purchasing decision.

One global insurer undergoing a core policy administration system upgrade described the need not only to reduce IT costs, but also to shorten lead time to introduce new products, currently 18 months on average. This same organization noted the current expense to roll out product and rate changes, particularly across multiple states. By revitalizing the policy system, this organization is seeking to better customize offerings and enable greater segmentation in the market.

In a similar example, a worker's compensation carrier struggled as it made inconsistent decisions in the processing of simple claims and policies due to lack of a real-time customer-focused model. In addition, the overhead associated with routine tasks meant less time was available to process complex claims and policies. With a core suite implementation, the insurer streamlined all claims, policy, and billing processes, while providing self-service capabilities for employers, workers, and providers.

Each example reflects the drivers behind CIOs making major investments in altering their market-facing business capabilities and the underlying technology infrastructure that supports it. Initiating a core systems transformation takes patience and persistence, and a strong leader to explain the rationale and defend it during the inevitable challenges. Successfully completing a core system transformation—as depicted by the examples above—can yield, with the right leadership, the type of game-changing capabilities that brings upon a renaissance within your insurance company.

Lessons from the front lines

Delivering the future

Sysco, a leading food marketing and distribution company, delivers more than a billion cases of food, equipment, and supplies each year to restaurants, hospitals, schools, and other customers. Like many businesses today, Sysco aims to execute its mission of providing fast, consistent, and reliable deliveries while simultaneously pursuing new growth opportunities made possible by emerging technologies.

“Building upon the company’s existing IT foundation in ways that support growth while maintaining critical services requires planning and balance,” says Wayne Shurts, Sysco’s chief technology officer. Shurts describes Sysco’s approach to core revitalization as resembling a triangle, with core systems forming the base. Sysco has dozens of systems that support everything from warehouse operations and delivery truck logistics to ERP and CRM. The company’s IT organization focuses on maintaining the reliability of core operations by minimizing the technical debt within these core systems through regular upgrades and routine “care and feeding.” Reliability and performance are IT’s mantra, given Sysco’s mission-critical, high-velocity operations. Moreover, these core systems yield a plethora of transactional data that can fuel new, strategic initiatives.

The second side of the triangle provides agility—the ability to react quickly to business and customer needs. Using a variety of cloud-based services, Sysco applies iterative development techniques to rapidly develop and deliver mobile and social apps to warehouses or restaurant floors. These apps are created specifically to add value where the work gets done. Because of this, speed is important: IT needs to test concepts quickly, discard those that don’t pan out, and rapidly scale those that do.

The third side of Shurts’s triangle provides analytics that help generate the insights needed to improve operations—spanning the company’s warehouses to its customers’ kitchens. By combining and analyzing data sourced from its own systems as well as from partners, customers, and third parties, Sysco is able to generate new insights across customers and markets, sales and marketing, and business operations. For example, the company helps restaurant owners better organize their menus, manage inventories, and run their operations. A company’s ability to deliver value-added services increases when its core systems are modernized and revitalized.

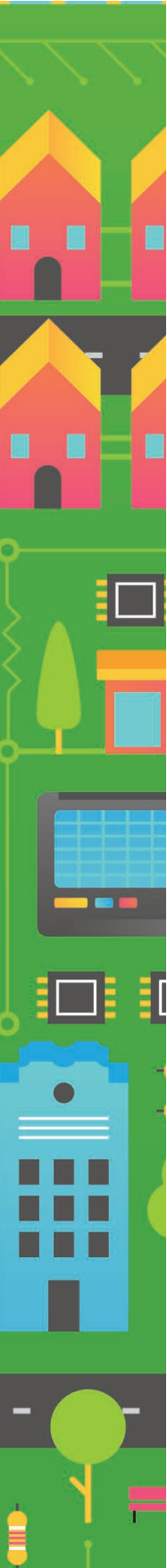
To help Sysco employees keep their skills current amid technological and operational changes, the company has developed a formal program that maps out competencies for current and future positions and helps workers create personalized development plans. It also provides training to help them better execute their current jobs and to prepare for future roles. Finally, the company emphasizes college recruiting to introduce new talent with different approaches into the workforce.

Shurts’s triangle strategy for core revitalization is delivering results. For example, using the agility side of the triangle, IT has built solutions used by the shared services organization to improve credit and dispute processing across multiple operating entities. And analytics is helping Sysco improve transportation logistics by improving fuel use and the selection of routes its trucks travel.

Engraving, printing, and modernization

The Bureau of Engraving and Printing (BEP) is the largest producer of security documents in the United States, printing billions of Federal Reserve notes, portions of US passports, materials for the Department





of Homeland Security, and naturalization certificates. The legacy technology at BEP resulted in operational inefficiency—a challenge made more difficult by non-unified systems that provided limited visibility into end-to-end operations. The bureau also used manual processes to reduce spoilage and improve accountability.

In 2009, BEP launched a multi-year, enterprise-wide transformation initiative, referred to as the BEP Enterprise Network (BEN) program, to retire and modernize its older mainframe technology. Leadership saw this project as an opportunity to team with IT to introduce the latest capabilities in diagnostics, intelligence, and automation across the manufacturing spectrum at BEP.

The BEN project team took a mixed approach to modernizing its core systems. Team members replaced the mainframe manufacturing and financial systems with a set of open, tightly integrated, and scalable commercial off-the-shelf business applications. They also enhanced printing presses with embedded intelligence and instrumentation capabilities. These enhancements provide a custom front-end application to the production floor employees that includes automated dashboards with alarms and notifications for printing press status. Additionally, the centralized data warehouse reduces the time required to collect data across production areas, and has brought historically unavailable data online. With better data coming from these applications, the team was also able to introduce predictive analytics and near real-time data analysis.

The BEN project has enabled stronger collaboration among working teams and streamlined operations in a number of ways. For example, BEP has retired 23 disparate legacy applications while introducing industry-standard business processes and tools. The time required to report monthly financial results has been significantly reduced. Automated data entry processes

and preventative maintenance schedules have boosted the productivity and reliability of bureau resources. Finally, new security measures have improved the overall accountability and transparency of reports and production status.

Through what has been a truly transformative program, BEP has realized its goal of modernizing its systems while advancing the vision of becoming a more information-driven, 21st-century organization. Moreover, BEP plans to maintain its current momentum with BEN by introducing more features that can help uncover hidden data trends and produce graphically rich analyses.

Filling the gaps with best-of-breed

A leading semiconductor company realized recently that its core systems needed to be modernized in order to meet changing needs. The company's business had evolved considerably over the past several years, but many of its systems and processes relied on ad-hoc operational environment and suboptimal solutions.

To create greater consistency and efficiency across systems and processes, leadership set a goal of achieving 15 percent more efficiency and 15 percent less overhead. The company approached this and other strategic goals by adopting technologies like cloud, analytics, and mobile; by streamlining reporting processes; and, importantly, by revitalizing infrastructure to create a platform for adopting future technologies that could drive further optimization over the next decade.

As the company began drawing up plans for meeting leadership's targets, it identified four major areas that could, if upgraded with new technologies, potentially provide significant value: operations planning, supply chain, B2B customer service, and warehouse operations. Yet planners realized that a single enterprise solution likely would not meet all

requirements in these and other critical areas. Project leaders decided that, rather than be tied to one vendor, they should deploy several best-of-breed cloud-based solutions from boutique vendors to fill ERP functionality gaps in CRM, distributions, and demand planning, among others.

To revitalize its existing infrastructure, the company could easily have spent tens of millions on servers, databases, and other infrastructure components. Instead, project leaders opted to create a private cloud and to

virtualize much of the needed infrastructure capabilities, which cut the price tag roughly in half.


When the newly revitalized core and the other systems become fully operational later this year, the company expects they will provide the consistency, optimization, and efficiency it set out to achieve. Moreover, these components, working in tandem with an infrastructure that has been transformed by virtualization, can serve as a platform for future innovation efforts.



My take

**Terry Milholland, chief technology officer,
Internal Revenue Service**

2014 saw one of the smoothest filing seasons ever for the IRS. It's an encouraging sign that our efforts to turn the agency's IT department into a world-class organization are paying off. Beyond supporting the IRS's customer-centric transformation, we wanted to evolve IT to deal with the complexity of our operations. Budgeting processes are complicated and unpredictable. Tax implications of legislation like the Affordable Care Act need to be codified for the hard deadlines of the tax season. Decades-old technologies require modernization. But our team has risen to the challenge, and we're seeing tremendous results.



We've created a vision for IT to be on a par with *Fortune* 100 organizations, and that affects our people, process, and technology. At the center of the technical vision are data and services—allowing our core systems to interact with each other and keeping teams from repeating their efforts. We now have a logical and physical data model for the full submission process—more than 30,000 attributes manifested across our core. Coupled with a service-oriented architecture, we're creating a repeatable approach to building on top of our core—to be able to add new technology in a transformational way, responsive to mission needs.

Which is where process comes in. We're committed to an agile methodology—using our new standards to modernize and grow. We have selected a set of technology standards that the organization follows to increase productivity and quality; we're already at level 3 for CMMI and ITIL.⁶ The impact on quality has been very real, and has helped break down barriers between the different teams and pieces of the technical stack.

But it comes down to our people. I don't lead with a "thou shalt" attitude. Instead, we enlist leaders in the organization—the men and women who have influence in the work environment and can pave the path for others. We solicit their feedback on our direction, working with them to iron out the details, and being open about issues, ideas, and concerns. These "guild masters" can help convince their teams to believe in the vision, to do things differently, and to positively impact the culture. Openness has become part of our organization. On projects, anyone can raise an objective. We record it, then we disposition it. Their opinions are listened to and the "Oh, they never ask" attitude doesn't exist.

Whether private or public sector, IT departments face constraints when it comes to taking on projects—let alone modernizing legacy systems and tackling their technical debt. If I look back on the past fiscal year, we started with a 16-day government shutdown that meant we had 90 percent of our workforce out and created uncertainty about our annual budget. But we continue to push forward with our strategy to transform our legacy systems. We've only just begun our journey toward modernization. We are going to keep adding new technologies in a transformational way—despite, and in some cases because of, people and fiscal constraints. Our focus on technology, process, and more importantly, people will get us there.

Cyber implications

SOME organizations treat ownership and control as a proxy for managing risk. Because the “core” is often software built on-premises or bought, this approach suffers from a twofold misconception. The first is that the existing stack is reasonably secure. The second is that moving to new technologies, be they mobile, social, or cloud, inherently raises the risk profile. Neither is universally true, and both raise the need for strategic handling of cyber security concerns.

The notion that today’s IT footprints are secure enough is a dangerous one. Legacy projects may not have considered compliance, contractual, or risk-based requirements adequately, if at all. A lack of strategic focus and budget has relegated many security initiatives to compliance and control activities—adding scope or causing rework to address vulnerabilities discovered late in the development cycle. Reactionary measures are taken when high-profile breaches occur, typically targeting known threats linked to particular incidents. A more comprehensive approach to cyber security is needed, acknowledging that it could be exorbitantly costly to protect against every potential attack.

Organizations should identify the cyber “beacon” that is likely to attract threats. Resources should then be directed against assets that potential attackers may likely find most valuable, or those that, if compromised, could cause greatest damage. Beyond securing against attack, organizations should monitor emerging threats and potentially reallocate resources as their cyber beacons change—practicing vigilance, not just security. They should prepare for how to detect, contain, and respond to potential incidents. There may be no such thing as a hacker-proof organization, but you can still be resilient in the face of an attack. Hope and luck are not strategies; even if the core has not been compromised, that does not mean it is secure. Building out cyber security capabilities can help close the gap.

The misconception that emerging technologies are inherently riskier than legacy assets is common, as is the myth that on-premises solutions are always more secure than cloud alternatives. Privacy concerns typically dominate discussions around social—requiring policy, training, and monitoring to guide appropriate behaviors. Mobile concerns fall between security and privacy, especially as enterprises are embracing “bring your own device” and “bring your own app” strategies. The approach described above can help, with a mindset anchored in probable and acceptable risk. Prepare for strategies to secure information at the device, application, and, potentially, data level while being sensitive to the overall user experience. Security tops concerns about public cloud adoption, with the rationale that large infrastructure-as-a-service, platform-as-a-service, and software-as-a-service providers are obvious and lucrative targets for cyber criminals. But with the escalated potential bounty, public cloud vendors also typically have highly sophisticated security tools, procedures, and personnel that can be more effective than many company and agency in-house cyber defenses. Who is better prepared to win the cyber arms race? Cloud providers whose livelihood likely depends on their ability to prevent and respond to incidents? Or organizations that have historically had trouble justifying security and privacy budgets as a priority? Either way, the obligations of the organization as the acquirer and custodian of data do not go away. Leverage providers to help outsource risk if cyber isn’t a core strength, but recognize that your organization still retains responsibility for its security.

Again, there is no universal answer. Security and privacy should not be a blanket objection that curtails core renaissance, but they should be baked into the overall approach—setting the right foundation for a revitalized core and guiding new investments in areas that will form the core of tomorrow’s business.

Where do you start?

SPARKING a renaissance of your core can be a daunting pursuit for value—potentially expansive in scope and ripe with risk—that will likely require effort to put in terms the business will understand. Fearless leaders might savor the opportunity for legacy-building. But for the rest, is the payoff worth the strife?

The fact is, CIOs don't have a choice. As the stewards of the technical footprint, they are responsible for the core's care and feeding. Whether expressly labeled as “modernization” efforts or responses to unplanned incidents and outages, or embodied in extra project cost and complexity due to unforeseen technical debt, the core will continue to demand attention. The question becomes how proactively it will be addressed—and whether it will be enough. Here are some specific areas in which to potentially undertake initiatives:

- **So you're saying there's a plan.** Core and legacy concerns are found wherever IT investments exist. They inspire a sense of universality and inevitability—the enterprise equivalent of “death and taxes.” But they are not irreversible—and they don't have to be seen as an albatross. Aikido is a form of martial arts that uses the mass of the attacker to one's advantage. Core renaissance can trade off of the magnitude of existing investments in similar ways, but it will not come across surreptitiously. It requires an informed, thoughtful position that balances business needs with the limitations of existing systems and the potential of emerging technology.
- **Spark a light.** Massive investments can be tough to stomach, especially if the “so what” seems limited to behind-the-scenes machinations. Find a lingering opportunity or burning platform—ideally, one that resonates with a part of your business

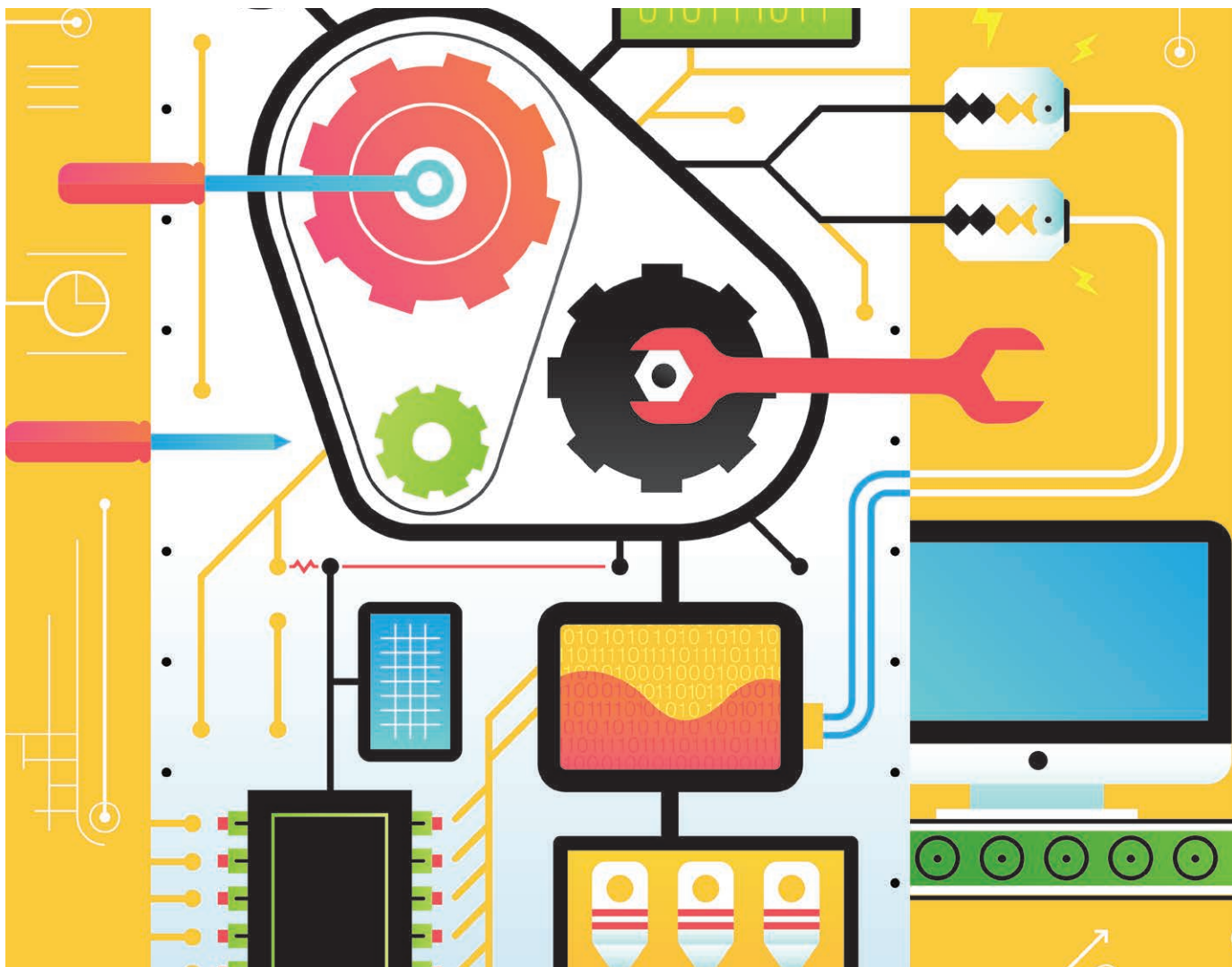
that is likely to become an advocate for broader goals. A bottom-up approach to new organizational structures, processes, and skill sets is an effective plan of attack—assuming enough of a direction has been established so that experiments are pointing toward where you want to go.

- **Plant the seed.** In Deloitte Transition Labs with newly appointed CIOs, leaders report that 63 percent of their time is focused on the care and feeding of the technology footprint. The complexity embedded in the core perpetuates the cycle. These same leaders desire the inverse, believing they could better serve their companies by focusing 66 percent of their time on being a strategist or catalyst for growth and innovation.⁷ Deliberate investments in revitalizing the core can help close this gap. It may take time, but will likely lead to lasting effects.
- **Don't go it alone.** Large enterprises have developed a healthy skepticism around emerging technologies. Vendor fatigue and aversion to “shiny object syndrome” are partially to blame. The age-old practice of circumventing IT to sell directly into the business is also still being felt, leading to “shadow” IT organizations and even more complexity in the core. But resistance to change is in many ways futile. Hunkering down will likely just reinforce the shadowy end run directly into the business. The cruel irony: New solutions will likely eventually find themselves back at IT's doorstep, either for enterprise-level support or because business processes require integration with the core. Instead, pick a few strategic vendors to partner with to enable core renaissance. This may involve co-investment (for example, sharing risk or

product roadmaps), proactively prototyping new ideas, providing briefings on industry (and cross-industry) leading practices, or brokering introductions to interesting new solutions for specific business scenarios.

- **Verbs, not just nouns.** Technical components are rightly critical parts of core revitalization, but pursuing core renaissance is also an opportunity to transform how you build and support solutions. Aim to embed design as a discipline⁸ into everything you do, working back from the user

experience, not up from the systems and data. Look to embrace pieces of DevOps: automated environment provisioning, requirements management, continuous build/configuration management, testing automation, one-touch deployment, and systems maintenance and monitoring solutions. Finally, create a living approach to architecture—guiding not just the solutions and platforms that are blessed, but their usability, integration, data, and security considerations.



Bottom line

DISRUPTIVE forces are reshaping industries: globalization, emerging technologies, new customer engagement requirements, diminishing competitive barriers to entry, evolving regulatory and compliance requirements, and persistent threats around security and privacy. All of these are inextricably linked to technology, moving the core to center stage. Some modernization will no doubt be needed to keep the lights on as the business scales up. But beyond table stakes, a revitalized core could become a strategic differentiator. A renaissance of the core amid an elevation of IT to support the heart of the business can lay the foundation for the organization to experiment, innovate, and grow.

Authors



Scott Buchholz, director, Deloitte Consulting LLP

Buchholz is a director with Deloitte Consulting LLP in the Systems Integration practice. He is a technology leader with 20 years of experience in the areas of solution, enterprise, and data architecture; program management; and IT service management. Buchholz leads technology-enabled business transformations, from optimization efforts to full life cycle implementations.



Abdi Goodarzi, principal, Deloitte Consulting LLP

Goodarzi is a principal with Deloitte Consulting LLP, and leads Deloitte's SAP technology services group in the United States and India, where he focuses on developing leading practices around innovative and emerging technologies. Goodarzi has more than 20 years of experience, specializing in global ERP transformation, process optimization, IT strategy, in-memory computing, cloud computing, enterprise user experience, and mobility. He has deep experience in global delivery models. He is also an avid soccer fan.



Tom McAleer, principal, Deloitte Consulting LLP

McAleer is a principal with Deloitte Consulting LLP and leads the Enterprise Digital Engagement practice within Deloitte Digital, where he manages the go-to-market relationship with leading technology vendors. He provides strategy and vision to help clients adopt solutions that improve business performance. With over 24 years of experience, he specializes in business transformation, strategic planning and execution, system integration, custom application development, and enterprise software.

Endnotes

1. Bob Evans, "Dear CIO: Is the time bomb in your IT budget about to explode?," *Forbes*, January 22, 2013, <http://www.forbes.com/sites/oracle/2013/01/22/dear-cio-is-the-time-bomb-in-your-it-budget-about-to-explode/>, accessed January 14, 2015.
2. Deloitte Consulting LLP, *Tech Trends 2014: Inspiring disruption*, chapter 6, February 6, 2014, <http://dupress.com/periodical/trends/tech-trends-2014/>, accessed January 14, 2015.
3. Paul D. Hamerman, Randy Heffner, and John R. Rymer, *Don't just maintain business applications, raise business responsiveness*, Forrester Research, Inc., October 17, 2014.
4. Deloitte Consulting LLP, *Tech Trends 2014: Inspiring disruption*, chapter 10, February 6, 2014, <http://dupress.com/periodical/trends/tech-trends-2014/>, accessed January 14, 2015.
5. Deloitte Consulting LLP, *Tech Trends 2015: The fusion of business and IT*, 2015, chapter 1.
6. Capability Maturity Model Integration (CMMI); Information Technology Infrastructure Library (ITIL).
7. Deloitte Consulting LLP proprietary research based on interviews with 150+ IT executives, November 2014.
8. Deloitte Consulting LLP, *Tech Trends 2013: Elements of postdigital*, 2013, chapter 4.