KPMG

Practice makes perfect

How new, practice-based ITIL 4 adds value to IT operations where process-based ITIL v3 couldn't keep pace

May 2019

kpmg.com

For years, ITIL has been the world's most widely accepted approach to IT service management. As original ITIL aged and new methods to support emerging technologies, like DevOps, began to appear, subsequent revisions were seen to keep pace.

The launch of ITIL4 and its new "value system" lifecycle—its most robust iteration featuring powerful, market-driven improvements—was designed to revitalize ITIL. Most significantly, ITIL 4 shifts from its former, more rigid, linear lifecycle to a far more dynamic system. Of equal importance is a shift from a process-centric approach to a broader, far more nimble practice-driven design. However, in order to profit from these two significant improvements, IT organizations will have to recognize them, leverage them, and adapt to them.

Practice vs. Process: An example of relative strengths

Despite being vastly outnumbered, undertrained, and undersupplied, George Washington's soon-to-be-American civilian militia managed to defeat the Redcoats in skirmish after skirmish. They beat the best-trained and best-supplied army in the world. How did they do it? They adapted to the environment in innovative ways. Facing virtually impossible odds, Washington's army abandoned the precise, kneel-and-shoot drills of European tradition and instead moved swiftly and fluidly around rocks, trees, and rivers to achieve success. The nimble few defeated the rigid many by focusing on the Practice (of winning) over the Process (of regimentation.) It's a history lesson we should never forget.

Fast forward to now

In the drive to adopt the guidance offered by early ITIL (v2 and v3), IT organizations were forced to develop and integrate complicated, formal processes for controlling and measuring delivery of IT services in order to benefit from early ITIL. These formal processes served IT well at a time when large numbers of employees spent much of their time working through different types of tasks, which were ticketed in the ITSM system in which they worked. Back then, the options for automation were limited. For that reason, allegiance to strict, linear processes ensured that work was tracked uniformly across different people performing similar types of repetitive tasks—vital when turning ticket data into management information and service knowledge. Improvement always requires measurement and, at that time, standardized linear processes and procedures provided the best data for measurement.

With the rise of automation, the advent of ITIL 4

Today, at the end of ITIL v3's reign, the stage is set for ITIL 4 in a landscape brimming with technologies that have already changed the way IT organizations operate. Continuous delivery models and DevOps, paired with agile development practices, have accelerated the speed in which solutions can be built and deployed. Continuous deployment, self-healing systems, and other technologies have automated many—and in some organizations all—of the manual operations tasks IT used to focus on. Machine learning and intelligent automation have further reduced the need for the human analysis undergirding much of ITIL's guidance.

Together, ITIL and IT Operations have gained a reputation as team gatekeepers: either as a legacy system admin group or, in certain respects, a vendor and risk management function. While the ITIL v3 framework for good practices maintains a strong position in IT operations, v3 clearly shows its age as other approaches have emerged to fill gaps and add greater value. Case in point: Google's Site Reliability Engineering and Disaster Recovery Testing (DiRT), and Netflix's Chaos Testing (using Chaos Monkey). This type of failure injection testing gave Google and Netflix an advantage over their competition by exposing engineers to failures more frequently and incentivizing them to build resilient services. *Imagine if someone began randomly shutting off servers in your data center or cloud provider… how would your applications fare?* Formerly only found in "FAANG" (Facebook, Apple, Amazon, Netflix, and Google) level leading-tech organizations, these troubleshooting tools are now moving into mainstream adoption. The launch of ITIL 4 is evidence that ITIL has caught up with the times, remains relevant, and is committed to sustaining its global leadership.

ITIL with a renewed focus

With the launch of ITIL 4 and its new "value system" lifecycle replacing the old linear service model, along with favoring "holistic practices" over "processes and procedures" to defining how services are delivered, KPMG sees additional opportunities within ITIL 4 that can help IT increase its value to the enterprise.
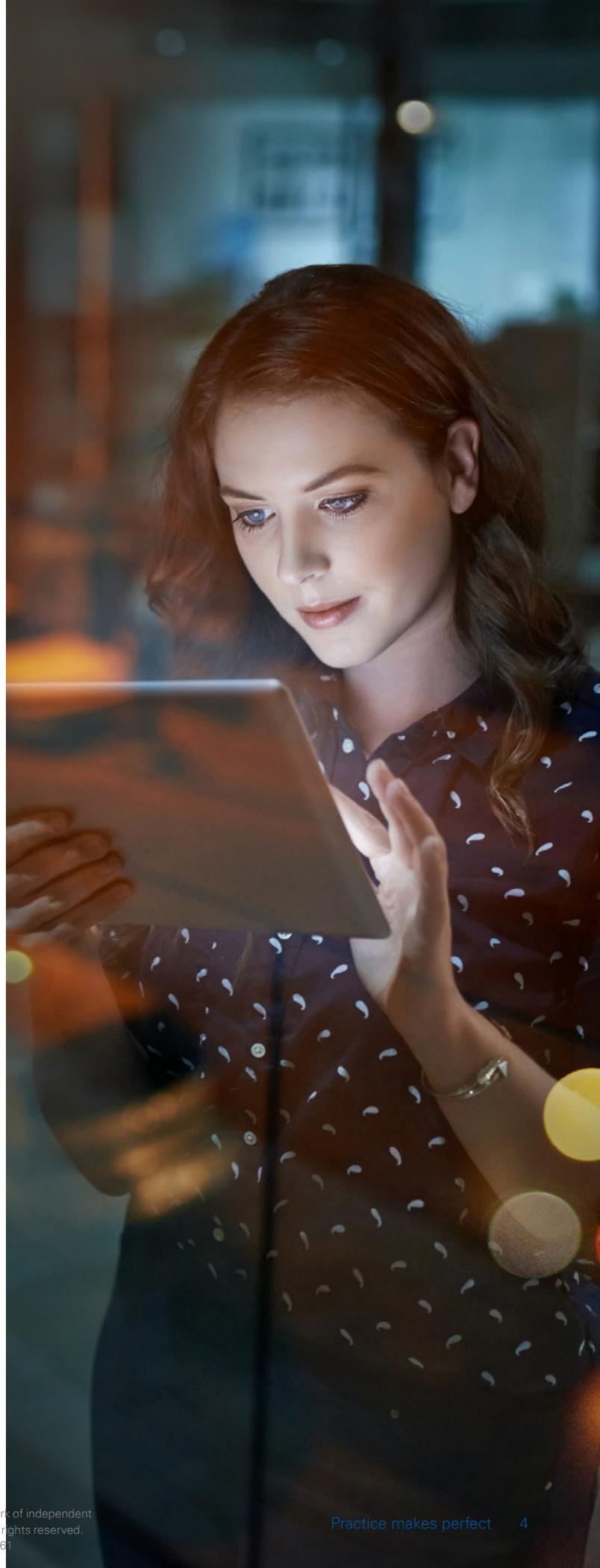
For example, by shifting from a linear process path to a value system of interlinked sets of competencies, ITIL 4 adds credence to the claim that ITIL value is maximized when used as a flexible framework of practices, not as a prescription for how to work. KPMG insights into the ITIL 4 improvements help erase the rigid, rote workstream patterns that v3 tried, but failed, to rise above.

> **The shift from viewing IT capabilities as linear processes to considering them as more fluid practices is significant beyond just the terminology. First, a practice is more dynamic than a process—this sounds intuitive but was often lost during implementation of ITIL v3. Second, a well-functioning "practice" may have multiple processes within it, each with permutations to account for different delivery scenarios. Third, shifting focus from a rigid process definition exercise to, instead, adopting good practices, ensures that practice objectives are met even when the linear flow is disrupted.**
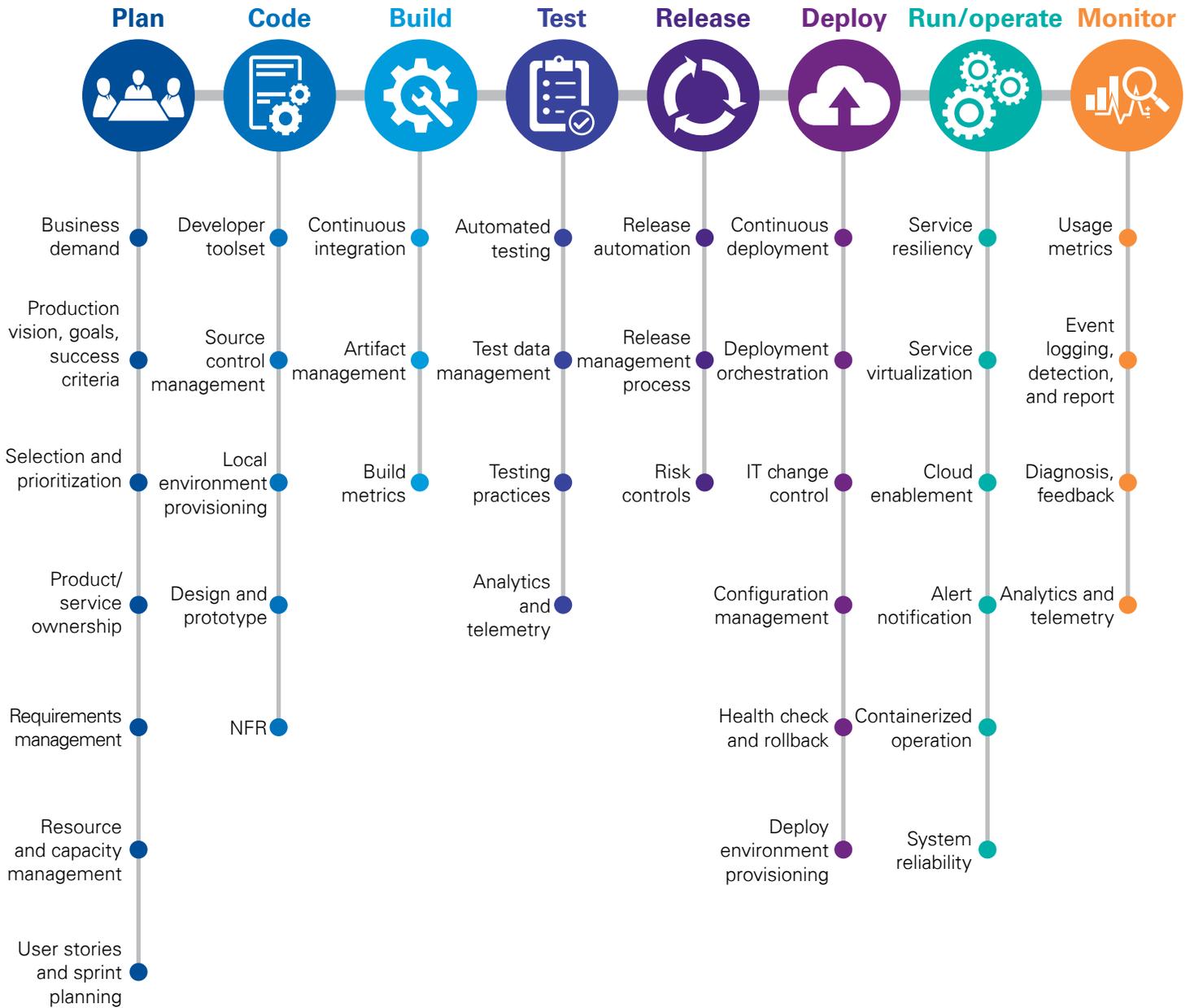
For example, if your *process* is to Get To The Airport On Time *in your car*, and your car breaks down, you don't get to the airport on time. However, if your *practice* is simply to Get To The Airport On Time, and your car breaks down, you can take a cab, bus, or Uber or ask a friend to drive you—and you get to the airport on time. Success through flexibility—that's the difference.

"There's a new sheriff in town with ITIL 4's emphasis on 'practice' over 'process'. Once you understand how to use it, the fluidity of this new platform … and to me, it's an entirely new platform … gives companies the ability to search and solve for a virtually infinite number of failure modes without impeding speed to success one bit."

—Adam Hutton, Director of Digital Enablement, KPMG

"At KPMG we understand the backfilling that needs to be done in order to realign IT departments from ITIL 3 to ITIL 4. We've done it and we know how to do it efficiently. It's not as daunting as it sounds. You will see positive results very quickly as you bend away from the rigid IT processes of the past and embrace a more holistic, practice-driven IT culture."

—John S. Roy, Agile Strategy Leader, KPMG

One of our banking clients recently launched a new host of digital products that exceeded their expectations in the market. Being caught off-guard by the product's success, its product team had to both scale and rapidly accelerate their pace of output. They leveraged DevOps practices and an elastic cloud-based infrastructure, but also paired these with a practice of change control that included automated change management, release management, and business services-based monitoring. KPMG helped them manage and sustain fast growth by helping ensure that resilient, robust, and adaptable practices were put into place. We championed practices that could swiftly scale—taking into account the rapid pace of automation and need for increased throughput.

The value of switching from a rigid progression of lockstep processes to a more fluid menu of methods within practices becomes clear when you consider the task of change control in an organization practicing continuous delivery. The goals of change control remain consistent: assessing and mitigating risk, coordinating the execution of the change, monitoring during and immediately after the change. Yet, the way in which these objectives are met is likely to be very different in a fully automated deployment path to production. Many of our clients leverage Agile and DevOps to release new content and features weekly, daily, or even multiple times per day; however, to accomplish this in a governed manner that also mitigates risk, they also trigger automated Requests for Change at each major build, followed by automated testing, then by an automated Release Management workflow.

ITSM must be part of an end-to-end delivery chain

Plan
- Business demand
- Production vision, goals, success criteria
- Selection and prioritization
- Product/service ownership
- Requirements management
- Resource and capacity management
- User stories and sprint planning

Code
- Developer toolset
- Source control management
- Local environment provisioning
- Design and prototype
- NFR

Build
- Continuous integration
- Artifact management
- Build metrics

Test
- Automated testing
- Test data management
- Testing practices
- Analytics and telemetry

Release
- Release automation
- Release management process
- Risk controls

Deploy
- Continuous deployment
- Deployment orchestration
- IT change control
- Configuration management
- Health check and rollback
- Deploy environment provisioning

Run/operate
- Service resiliency
- Service virtualization
- Cloud enablement
- Alert notification
- Containerized operation
- System reliability

Monitor
- Usage metrics
- Event logging, detection, and report
- Diagnosis, feedback
- Analytics and telemetry

Compounding sluggish processes are human-centered Change Advisory Board (CAB) meetings and static, questionnaire-based risk analyses that are doomed to fail because they are simply too frequent. Instead, a specific set of activities such as a meta model implemented by any CI/CD service in a callable API can result in more efficiency. It can reduce risk and schedule and coordinate, all while facilitating automated execution of change and release IT that enables persistent improvement while continuing to meet service delivery objectives, succeeding more efficiently than the old assess-and-react method of spending time on ticket-punching.

Additionally, the move from processes to practices allows IT professionals to focus more organically on what exactly their IT is tasked with delivering. While the role of an incident analyst is to diagnose disruption of services, their quest is not to ticket them—it's to restore service and provide remedies that will prevent the same issue from ever happening again.

Look beyond the certifications

Some may see the launch of ITIL 4 as little more than an opportunity to gain new certifications, learn some new terminology, and update their internal training content. But that small thinking misses the point. The real benefits come from considering in a broader context how IT must persist in adapting to current and emerging technology trends while continuing to fight for relevancy in a business environment that can, and will, outsource IT management if in-house resources aren't up to the task.

If you lead an IT organization and want it to thrive in the next decade, look beyond the terminology changes and consider the reasoning behind those changes. Use practice-over-process reasoning in your rollout strategies and ITIL 4 as a framework for more efficient practices in your organization. Identify what needs in your company drive demand for the services your team delivers. Then imagine how practice-based thinking can improve outcomes.

KPMG recognizes that today's IT Infrastructure and Operations Executives face an increasing number of demands and exponential complexity. We can help you become the strategic partner that the business requires. KPMG offers an experienced viewpoint and independent advice, and our IT Service Management and Modern Delivery practices bring extensive experience, lessons learned, tools, and accelerators to help IT Executives run high-velocity technology organizations.

For more information on ITIL4 and how KPMG can help you gain strategic advantage, please visit: read.kpmg.us/ModernDelivery

Contact us

Adam Hutton
Director of Digital Enablement
T: 212-954-2291
E: ahutton@kpmg.com

John Roy
Agile Strategy Leader, CIO Advisory
T: 617-988-1329
E: johnroy@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia