STRATEGIC INFORMATION TECHNOLOGY AND INFORMATION RESOURCES MANAGEMENT PLAN (SITP) 2018-2022
United States Patent and Trademark Office

USPTO Vision

“Lead the nation and the world in intellectual property protection and policy”

IT Vision

“Transform the USPTO with next generation technology and services”

OCIO Mission

“Deliver information and technology to enable innovation”
Message from the USPTO Chief Information Officer

I arrived at the USPTO in early 2019 at an exciting time for USPTO’s Information Technology and Information Resources Management (IT/IRM) program. To drive and manage next generation enterprise IT investments in such a dynamic, fast-paced world is exhilarating and challenging. Our Strategic IT/IRM Plan (SITP), referred to in OMB Circular A-130 as the Strategic Information Resources Management Plan, outlines the management approach and top IT initiatives that are critical to achieving our vision, mission, goals and objectives. This plan is the primary basis for justifying and prioritizing future budget requests for IT resources. Like its predecessor, this strategic plan outlines our IT agenda and prioritizes the need to operate more successfully and efficiently. Among the important agenda items is to leverage IT to enable the agency to maintain current business production and meet legislative and legal requirements, while we improve and enhance the customer experience through new digital offerings and ecommerce via next generation systems and technologies.

At the same time, our progress must be balanced with the need to maintain existing legacy systems to ensure they continue to add business value to our customers as we implement better, faster and cheaper ways to grant patents and register trademarks. While our plan forward with new technologies and methodologies is clear, I have made the decision to carefully take the time to address an urgent and important mission to stabilize our existing IT infrastructure through the following focused OCIO strategies:

1. Maximize the technical stability of and supportability for our products
2. Integrate security into current and emerging technology and services
3. Maximize the automation and standardization of our products and services
4. Maximize the usage of identity management tools and standardize access controls for products
5. Maximize the use of new technology solutions through data to solve business problems

During these stabilization efforts, we will prioritize and pause some of our current modernization projects while we conduct more research and make adjustments for the remaining FY19 projects. We will also be looking at FY20 and FY21 planning efforts, and take our Agile and DevSecOps practices further to improve operational efficiency in close alignment with the business. Throughout these changes, it is my goal in my new position is to make our vision a reality by providing an atmosphere that keeps everyone informed, and enables open collaboration for comments, ideas, and concerns.

7/17/2019

Henry (Jamie) Holcombe, Jr.
USPTO Chief Information Officer
Signed by: Holcombe, Henry
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USPTO Strategic Information Technology and Information Resources Management Plan (SITP)
2018 - 2022


This SITP provides a history of IT at the USPTO as well as overall objectives, strategies and goals, an overview of the USPTO and the OCIO organizations, and an outline of IT strategic management processes.

- “Where We’ve Been” is a quick review of the history of IT/IRM at the USPTO (pages 3 - 4)
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- “Where can I find more information?” (page 31)

Note: The USPTO implementation of its SITP activities is subject to the availability of resources.
Where We’ve Been…

The U.S. Patent and Trademark Office has been a leader in information resource management since its inception as one of the first federal agencies in 1790. Patent and trademark applications, case files and results are retained forever. Our records management dates back to Thomas Jefferson, who stored files in his shoeboxes. Patents were filed in cabinets called “shoes” for more than two centuries, until electronic records replaced them in the 1990s. We were among the first federal agencies to store historical records in bunkers below ground, use automation including microfiche and computers, and develop sophisticated classification systems. The picture on the right is one of the early Patent Office buildings in Washington DC, which now houses the Smithsonian National Portrait Gallery.

The USPTO’s move into its current headquarters in Alexandria, Virginia in 2004 eliminated the need for paper records as we switched to electronic records. In 2008, the agency created The OCIO Road Map and Transformation Plan to respond to IT infrastructure issues that risked jeopardizing the mission. This plan’s goals were to: (1) stabilize the existing infrastructure and strengthen the core competencies of the IT workforce; (2) consolidate existing infrastructure and application systems to reduce unnecessary duplication; (3) optimize to improve performance; and (4) standardize to facilitate governance, ensure compliance, and maintain and enhance services delivered to customers.

In 2013, an independent assessment of the Road Map concluded that the improved governance and management practices and tools were a solid foundation for the major modernization of core application systems. We created the Next Generation Road Map 2014-2018 to guide our continued transformation with next generation initiatives to improve the tools provided to our examiners and the public; i.e., Patents End-to-End (PE2E), Trademark Next Generation (TMNG), and Fee Processing Next Generation (FPNG). Also in the plan is an increased emphasis on pace as the OCIO made strides to increase the speed and velocity of the new tools and services delivered.

The seven initiatives in the Next Generation Road Map include: continuous organizational strengthening, continuous process improvement, so-called “enterprise-as-a service”, next generation services; legacy systems, desktop service improvements and enterprise architecture. In addition, this roadmap set the USPTO technology vision: to provide evolving services that adapt quickly to the growing needs of internal and external customers, and leverage technology industry developments within our infrastructure and organization.
With business growth, technology change, a dispersed workforce and new regional offices open across the country, the OCIO had to continue to innovate and adapt. We began to adopt Agile methodologies and DevSecOps practices to gain new efficiencies and instill a culture of collaboration, using standardized tools and processes to improve and innovate. The agency is committed to continuing to “transform the USPTO with next generation technology and services,” and the OCIO is committed to its mission to “deliver information and technology to enable innovation” around the clock, across the nation, 24/7/365.

Innovation often entails change, and the 2018-2022 USPTO Strategic Information Technology and Information Resources Management Plan outlines our course of action for continual improvement in the next four years. However, we will need to balance our plans for innovation with the ongoing need to maintain the stability and supportability (“future-proofing”) of our existing IT infrastructure. Our mission-first strategy emphasizes a purpose-driven, customer-focused approach fueled by communication and business-focused partnerships to improve trust and collaboration, so that the USPTO can sustain current business production and continue to meet legislative and legal obligations.

Federal and Department of Commerce Objectives

The President’s Objectives

The “President’s Management Agenda to Modernize Government for the 21st Century” identifies Cross-Agency Priority (CAP) goals to target those areas where multiple agencies must collaborate to effect change and report progress in a manner the public can easily track. This 2018-2022 USPTO SITP maps to the President’s goals and agenda as the USPTO strives to comply with that vision and guidance.
Office of Management and Budget Directives

Among the key federal management directives affecting the USPTO’s IT are the OMB guidance for compliance with federal legislation such as Executive Order 13800 – Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure, Federal Enterprise Architecture, the E-Government Act of 2002, the Government Paperwork Elimination Act of 1998 (GPEA), the Clinger-Cohen Act of 1996, the Federal Acquisition Streamlining Act of 1994, Title V (FASA V), the Government Performance and Results Act (GPRA) of 1993, and the GPRA Modernization Act of 2010.

In addition, OMB closely monitors progress towards compliance with the Federal Information Technology Acquisition Reform Act (FITARA), which changed how the federal government buys and manages computer technology. This act became law in 2015, and includes a provision for developing a streamlined plan for acquisitions and increasing authority of the CIO over all IT projects. Details about these OMB strategies and directives can be found at the White House web site. Here are some OMB initiatives that affect USPTO IT.

- The “Getting to Green” initiative requires USPTO and other federal agencies to report on their performance using a reporting mechanism of red, yellow and green lights. The USPTO now regularly reports on its IT Investments using five criteria, and strives to achieve a green rating by collaborating with stakeholders, setting measurable goals, aligning plans with budgets, tracking and managing costs and validating effectiveness.

- The “Cloud Computing” initiative requires USPTO to take steps to enable convenient, on-demand network access to a shared pool of configurable networks, servers, storage, applications, services, and other computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction.

- The “Federal Data Center Consolidation” initiative requires USPTO to take steps to migrate from dedicated data centers to consolidated federal data centers to: (1) promote the use of Green IT, reducing the overall energy and real estate footprint of government data centers; (2) reduce the cost of data center hardware, software and operations; (3) increase the overall IT security posture of the government; and (4) shift IT investments to more efficient platforms and technologies.

- The “Open Government” directive requires USPTO to establish “a system of transparency, public participation, and collaboration” in order to promote efficiency and effectiveness in Government.
Federal CIO Council Objectives

Established by Executive Order 13011 and later codified by the E-Government Act of 2002, the CIO Council is the principal interagency forum for improving agency practices related to the design, acquisition, development, modernization, use, sharing, and performance of Federal information resources. Council members include CIOs and Deputy CIOs from 28 Federal agencies, including the CIO of the Department of Commerce. The four strategic pillars of this plan are aligned to the priorities of the current administration, as defined by the CIO Council:

- **IT Modernization.** Leverage advances in technology, such as cloud and mobile, to transform how the USPTO delivers and consumes IT services, and advance the “Digital Government Strategy” to securely design systems for interoperability and openness to unleash the power of data, and reduce barriers to citizen and business interaction.

- **Cybersecurity.** Advance the technical and policy protection capabilities for IT systems in order to address the continuously changing threats on our cybersecurity defenses.

- **Technology Investment Management.** Institute an IT management framework that implements a standard IT spend taxonomy.

- **Data.** Leverage data as a strategic asset to deliver on mission, serve customers, and steward resources.

Department of Commerce (DOC) Objectives

The [DOC Strategic Plan](#) includes Objective 1.3 to “Strengthen Intellectual Property Protection” which drives the USPTO Strategic Plan. The objectives in the DOC Strategic Plan that affect this SITP are:

- **Strategic Objective 5.2: Accelerate Information Technology Modernization** which includes modernizing and consolidating IT by: (1) using commercial cloud computing, modernize and manage applications, and securely maintain legacy systems, (2) shifting resources from supporting back-office functions to improving the customer experience, (3) updating relevant network security policies and architectures to focus on both network and application security, and (4) modernizing incident detection and prevention capabilities to address the latest threats and respond to vulnerabilities. It also includes utilizing strategic sourcing to enable future network architectures by: (1) shifting on-going procurement management efforts toward a consolidated IT model, (2) employing strategic sourcing contract vehicles to acquire IT products and services that leverage buying power through volume pricing, (3) consolidating capabilities to replace or augment existing bureau-specific technologies to reduce costs, and (4) facilitating maintenance, improve functionality, and enhance cybersecurity. The metrics DOC will use to
measure progress are IT cost savings and the percentage of milestones for IT modernization met on schedule.

- Strategic Objective 5.3: **Consolidate Functions for Cost Savings**, which includes continuing to deploy enterprise service models for purchasing and human resource functions when demonstrated cost savings exist. The metrics DOC will use to measure progress are: trends in cost savings, and compliance with service-level standards.

**USPTO Mission, Organization and Strategic Goals**

**USPTO Vision and Mission**

The USPTO vision is to “**Lead the nation and the world in intellectual property protection and policy.**” The USPTO mission is to “Foster innovation, competitiveness and job growth in the United States by conducting high quality and timely patent and trademark examination and review proceedings in order to produce reliable and predictable intellectual property rights; guiding intellectual property policy, and improving intellectual property rights protection; and delivering intellectual property information and education worldwide.”

The United States is a global leader in promoting laws and policies that foster innovation and intellectual property (IP) rights and in encouraging economic investment. As Under Secretary of Commerce for Intellectual Property and Director of the USPTO Director Andrei Iancu said at the September 2018 Patent Public Advisory Committee meeting,

“. . the U.S. intellectual property system is a crown jewel of the nation’s economy, culture, and history. Protecting IP is vital to maintaining the incentives for research and development, creating quality jobs, driving our economic prosperity, and providing incredible benefits to society as a whole. The USPTO’s ability to issue timely, reliable patents—both today and in the future—is a critical part of that.”

**USPTO Organization**

The USPTO is organized to support its constitutionally mandated business function, with a Commissioner for Patents, a Commissioner for Trademarks, Public Advisory Committees, and Appeals Boards that report directly to the Director. Other offices that report to the director provide support for enterprise-wide management functions, including the OCIO, which by law oversees and manages all information technology used by the USPTO.
USPTO Strategic Goals

The **USPTO 2018 – 2022 Strategic Plan**, includes its vision and goals that reflect the importance of intellectual property protection in the global economy. The **USPTO's Strategic Plan** specifies three strategic goals and one management goal: (1) Optimize patent quality and timeliness, (2) Optimize trademark quality and timeliness, (3) Lead the U.S. and the world in improving intellectual property policy, protection and enforcement. The management goal to achieve organizational excellence focuses on the shared responsibility across offices in achieving these strategic goals. The **USPTO 2018-2022 Strategic Plan** is the foundation for our SITP. In alignment with the **USPTO Strategic Plan**, this SITP documents the role that information technology plays in achieving the USPTO’s vision, mission, and strategic goals.

**USPTO Strategic Goals for Information Technology**

The **USPTO 2018-2022 Strategic Plan** includes such IT objectives as delivering cost-effective and modern next generation systems, maintaining legacy systems until they can be retired, and providing advanced analytics using big data, artificial intelligence and more to enhance the customer experience. The goals, objectives and performance indicators for IT are summarized below with certain objectives and performance measures underlined for emphasis.
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<th>USPTO Goal</th>
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<td><strong>Goal I – Optimize Patent Quality and Timeliness</strong></td>
<td><strong>Objective 3: Foster Innovation through Business Effectiveness Initiatives</strong>&lt;br&gt;Enhance the patent customer experience.&lt;br&gt;&lt;br&gt;Optimize the development and delivery of information technology tools, including artificial intelligence (AI) and machine learning, for internal users of patent systems to ensure that they have the tools they need for a thorough search and examination.&lt;br&gt;&lt;br&gt;Enhance IT interfaces for external users of patent systems.&lt;br&gt;&lt;br&gt;Improve searchable access to domestic and international patent application files, including the prior art and office actions contained therein.&lt;br&gt;&lt;br&gt;Retain and leverage nationwide talent.&lt;br&gt;&lt;br&gt;Document and standardize best practices to facilitate succession planning.&lt;br&gt;&lt;br&gt;Coordinate patent outreach efforts across the patent organization and evaluate the impact of these efforts on the patent ecosystem.</td>
<td>Complete initial implementation of Patent End to End (PE2E).&lt;br&gt;&lt;br&gt;Enhance assistance to independent inventors and small businesses during the prosecution of their applications.&lt;br&gt;&lt;br&gt;Strengthen leadership values and behaviors throughout the patent organization by providing appropriate opportunities and resources for employees at all levels.</td>
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<td><strong>Goal II – Optimize Trademark Quality and Timeliness</strong></td>
<td><strong>Objective 3: Foster Business Effectiveness Initiatives</strong>&lt;br&gt;Develop innovative recruitment strategies for staffing trademark positions.&lt;br&gt;&lt;br&gt;Develop leadership programs for succession planning, knowledge management and employee engagement.&lt;br&gt;&lt;br&gt;Develop a workforce equipped to leverage IT modernization.&lt;br&gt;&lt;br&gt;Focus information technology efforts on improving efficiencies in the core business operations.&lt;br&gt;&lt;br&gt;Enhance the customer experience.&lt;br&gt;&lt;br&gt;Explore AI and business intelligence to assist trademark customers.&lt;br&lt;br&gt;Partner with customers to define and address needs.</td>
<td>Create a customer-focused organization.&lt;br&gt;&lt;br&gt;Strengthen workforce competencies (includes education in diversity, talent, skills, empathy).&lt;br&lt;br&gt;Align processes and services to improve the customer experience and efficiency.</td>
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<td>Objective 4: Enhance Operations of the Trademark Trial and Appeal Board Initiatives</td>
<td>Maintain a customer focused organization.</td>
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<td>Resolve appeals and <em>inter partes</em> matters in a timely manner.</td>
<td>Strengthen workforce competencies (includes diversity, talent, skills, empathy).</td>
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<td>Streamline processes and procedures where feasible and appropriate and ensure procedural predictability.</td>
<td>Align processes and services to improve customer experience and efficiency.</td>
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<td>Emphasize overall written quality, well supported reasoning of orders and opinions, and decisional consistency.</td>
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<td>Maintain increased internal and external engagement on Trademark Trial and Appeal Board operations to promote customer understanding of process and procedure.</td>
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<td>Document clear and comprehensive business requirements to facilitate enhancement of legacy information technology systems and prepare for next generation information technology systems.</td>
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<td>Retain and leverage nationwide talent.</td>
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<th>Mission Support Goal: Deliver Organizational Excellence</th>
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<td><strong>Objective 2. Optimize Speed, Quality, and Cost Effectiveness of Information Technology Delivery to Achieve Business Value</strong></td>
<td>Strengthen key stakeholder relationships.</td>
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<td>Involve the business unit experts in the IT acquisition source selection process.</td>
<td>Develop and implement the USPTO Data Roadmap including guidelines for data architecture and data management.</td>
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<td>Refine the agency-wide IT prioritization process.</td>
<td>Develop an IT portfolio status dashboard.</td>
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<tr>
<td>Foster IT innovation from our highly skilled workforce.</td>
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<td>Maintain effective legacy systems during their transition to retirement.</td>
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<tr>
<td>Establish agency-wide data governance. Strengthen IT development and implementation lifecycle.</td>
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USPTO Office of the Chief Information Officer (OCIO)

The offices that report directly to the Chief Information Officer (CIO) support all USPTO business areas, and manage their work through subordinate divisions and/or segmenting their resources by business area. In addition to its technology function, the OCIO’s Office of Information Management Services includes divisions that manage a constitutionally-mandated business function to disseminate information about patents and trademarks to the general public.

Chief Information Officer (CIO)

The Chief Information Officer (CIO) is the principal advisor to the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office on the application of IT to support and improve the USPTO’s business processes. As an advisor, the CIO:

- Develops strategic and operational IT plans and operating budgets
- Develops and maintains USPTO automated information systems
- Leads the transformation of IT at the USPTO, developing next-generation technology and tools for patent and trademark systems while maintaining the agency’s legacy systems
- Operates the USPTO’s computer facilities, equipment, and telecommunications network
- Develops, maintains and disseminates patent and trademark information to the public
- Serves as the USPTO's senior information resources management (IRM) official
- Provides technical direction for the re-engineering of USPTO's business process
- Provides administrative policy direction to the organizational elements reporting to the CIO.

Deputy Chief Information Officer (DCIO)

The Deputy CIO provides administrative and policy oversight to all OCIO offices with particular emphasis on day-to-day IT operations. The DCIO leads major IT initiatives that span across offices and serves as the executive sponsor for USPTO-wide committees and boards. The DCIO provides administrative and policy oversight to and coordinates the activities of all subordinate OCIO offices.
Office of the Chief Technology Officer (OCTO)

The Office of the Chief Technology Officer (OCTO) is responsible for the management and oversight of the USPTO’s enterprise IT architecture, and evaluating and applying emerging technologies to USPTO’s changing business needs and strategic direction. The office is responsible for technical planning to insure OCIO follows a consistent framework using best-fit technologies, as it continuously identifies and moves OCIO towards its target architecture. Additionally, the office has primary responsibility for the Federal Enterprise Architecture activities for the agency. In that role, OCTO serves as the documenting and governing body for all architectural activities accomplished throughout the OCIO. OCTO consists of three divisions: Enterprise Data Architecture, Advanced Solutions, and Enterprise Architecture.

Among the most significant recent OCTO accomplishments is the implementation of a Big Data repository (BDR) that provides advanced analytics and data mining so users can extract and analyze large amounts of data to make informed business decisions. The BDR greatly simplifies access to the voluminous data for patents and trademarks, making it easier for internal and external users to find and download data they need.

Office of Organizational Policy and Governance (OOPG)

The Office of Organizational Policy and Governance (OOPG) provides the management and oversight of enterprise IT strategies, guidance, policies and agency-wide cybersecurity. The office implements and assesses the organization’s compliance with enterprise IT processes and standards. This office also serves as the primary coordinator for OCIO strategic planning efforts to maximize process efficiency and cost-effectiveness through the development and deployment of quality products and services to OCIO customers. The office is responsible for the institutionalization and governance of quality practices throughout OCIO through planning, quality assurance, education and training, and formal technical reviews. OOPG reviews OCIO processes and methods, and coordinates all review activity, translating findings and recommendations into action plans to improve quality. OOPG also serves as the focal point for IT security, and ensures USPTO adherence to United States laws and policies. OOPG consists of four divisions: Process Performance and Planning, Cybersecurity, Software Quality Assurance, and System Configuration and Delivery Automation.

Among the most significant recent OOPG accomplishments is the System Configuration and Automation Division’s (SCDAD) developing a system called Continuous Integration Configuration Management (CICM) that houses software images for development, testing, and production environments. The images can be automatically loaded by the development teams, rather than depending on manual loads from SCDAD. CICM also tracks results of automated functional, performance, and security tests on the software releases managed by OOPG’s System Quality Assurance Division (SQAD). CICM fully supports the Fee Processing Next Generation (FPNG) systems,
and partially supports other next generation systems. Automated configuration management and automated testing are critical to fully achieve DevSecOps capabilities for faster releases of new systems and fixes.

Office of Program Administration Organization (OPAO)

The Office of Program Administration Organization (OPAO) is responsible for the management of the overall USPTO IT program. The office is responsible for the program management of IT efforts that support OCIO customers, and helps ensure that business requirements are met. OPAO is responsible for registering work requests, project planning, coordination and monitoring, updating the project repository and tracking issues and risks, and recommending or applying corrective actions when necessary to enforce OCIO processes and standards, address status issues, and respond to customer concerns. The office is also responsible for ensuring that appropriate budgetary, contractual, and human capital resources are in place to support planned OCIO investments. This office also develops, maintains, and oversees OCIO’s budgets and ensures compliance with guiding fiscal regulations, policies, and procedures. OPAO manages the oversight, collaboration and feedback of the vendors that provide IT support and services to the OCIO. This office also drives workforce strategy, planning, development, and support programs for internal OCIO resources. Finally, OPAO consists of four divisions: Program Management, Financial Resources Management, Vendor Management, and Workforce Management.

Among the most significant recent OPAO accomplishments is the OCIO Data Driven Dashboard. With transparency as a key OCIO goal, the Program Governance and Support Services (PGSS) Portfolio team developed enhanced tools that monitor performance measures and provide visibility into the OCIO organizations’ progress and efficiency. This dashboard is a highly visible tool for quarterly reports on metrics across OCIO related to business and infrastructure plans. OPAO also established a strategic approach to building and maintaining a strong base of technical employees, by promoting online how the agency explores new technologies, and building position-based employee development plans. OPAO is also leading the organization in the shift toward product-focused planning and management.

Office of Application Engineering and Development (OAED)

The Office of Application Engineering and Development (OAED) is responsible for the full life cycle management of the USPTO’s automated information systems, consistent with the USPTO’s strategic IT plans and supporting technical architecture. The office designs and develops systems that meet business functional and performance requirements prior to delivery to operations for production testing and deployment. OAED consists of four divisions: Product Design and Development, Patent Systems, Trademark Systems, and Corporate Systems.
Among the most significant recent OAED accomplishments are multiple enhancements and upgrades to systems for Patents End to End system (PE2E), Trademarks Next Generation and Corporate systems.

- Patents systems milestones included: the development and introduction of DAV as the replacement for eDAN; CPC IP Collaboration and the Global Dossier systems for greater collaboration and work-sharing across the IPS; the introduction of Office Correspondence (OC) as the replacement for the Office Action Correspondence system (OACS); and the implementation of the One Patent Service Gateway data abstraction layer as the first step in the stabilization and upgrade of the PALM systems.
- Trademarks systems milestones included: the separation and virtualization of the Trademarks (TM) systems infrastructure; the development and roll out of the TM Electronic Gazette, TM ID Manual and Case Content Viewer; the migration and continued synchronization of all content and data from TM legacy systems to NG, and a service for abstract delivery of TM content from NG to legacy systems.
- The implementation of an eDiscovery initiative for the Background Investigation Tracking System (BITS) that allows interagency data flow automatically.
- The release of the first Big Data production infrastructure with end-to-end data injection and a visualization toolset.
- The release of the developer.uspto.gov site, an open data hub that allows the public to download information instead of scraping USPTO applications.

**Office of Infrastructure Engineering and Operations (OIEO)**

The Office of Infrastructure Engineering and Operations (OIEO) provides product control, infrastructure, enterprise platform, and software services for USPTO-developed and commercial software applications on a 24x7x365 basis. The office maintains local and satellite USPTO data center facilities, production and lab servers, storage and the telecommunications infrastructure. This office also leads the definition and evolution of the architecture for the enterprise-wide IT infrastructure, ensuring proper development, enforcing controls for new systems and applications, conducting upgrades, and integrating new technologies. Principal focus areas include: controlling the migration of systems to an established architecture, developing common or standard infrastructure components, establishing and enforcing appropriate security measures, enhancing system availability, performance and reliability, selecting IT and electronic commerce standards, leveraging Internet technologies to support USPTO business functions, establishing remote access capabilities, and providing pre-production acceptance smoke testing, and conducting systems performance management of USPTO’s computer resources. OIEO consists of four divisions: **Product Control, Infrastructure Services, Enterprise Platform Services, and Enterprise Software Services.**
Among the most significant recent OIEO accomplishments is in the consolidation of user authentication and authorization for external customers, employees, and contractors. Now, users need to authenticate once to gain access to more than 25 USPTO systems. Known as Role-Based Access Control (RBAC), this technology affects systems for fee collections — approximately $3.5 billion annually — and, new in 2018, all systems for patent filings. Approximately 75 additional systems are slated for similar integration during the next three years. Prior to these integrations, the user would have had to maintain separate credentials — PKI certificates, user IDs, and/or passwords — and apply the correct credentials to each authentication challenge to gain system access. This new single identity permits users to authenticate once within USPTO systems, and move seamlessly between filings, payments, and other activities. USPTO’s user base for RBAC has grown significantly since its 2015 launch, increasing from 64,303 external customers in October 2017 to nearly 94,000 in October 2018.

**Office of Information Management Services (OIMS)**

The Office of Information Management Services (OIMS) delivers quality IT products and services to meet the needs of internal USPTO customers, the public and stakeholders in the intellectual property community. The office provides access to collections of patents, trademarks and related information through multiple channels, and promotes the dissemination of information to the public on the use of patent and trademark systems. The office also provides service desk support across the USPTO for software, hardware, network, and desktop and web services to support USPTO’s mission. This organization also provides agency support for configuration management and Information Technology Service Management (ITSM). The office maintains the configuration item data for the agency’s application information systems. The office also provides leadership and oversight for web and collaboration systems, and directly supports the users of those systems. Finally, OIMS manages the OCIO Telework Program, providing program oversight and guidance for OCIO supervisors and teleworkers. OIMS consists of the Public Information Services Group with its three divisions: **Electronic Information Products, Public Search Services, and Public Records**; and three OIMS divisions: **Service Desk Operations, Desktop Services, and Collaborative Services**.

Among the most significant recent OIMS accomplishments is the migration of more than 90% of USPTO’s 3,600 plus intranet sites from SharePoint 2007 to SharePoint Online, which enables sharing files, data and news, and seamlessly provides linking with Outlook, OneDrive, Office, etc. The FedRAMP-certified cloud-based SharePoint Online does not require infrastructure and administrative maintenance. The software provides new updates, improvements and features automatically, thus eliminating the need for manual updates.
IT Management Processes of the USPTO

USPTO’s IT is managed using a prescribed framework of IT portfolios and programs. Major investments are controlled through a Capital Planning and Investment Control (CPIC) process with all IT spending planned through a rigorous annual cycle. The OCIO employs an Agile methodology for systems development, and strives to increase the rapidity of development and deployment of new features using a DevSecOps methodology. Our IT vision focuses on software reusability and high-availability, along with rigorous governance strategies for IT program management, infrastructure, application, and data. Details about each of these topics is below and on the following pages.

IT Framework

As a key element of our ongoing continuous improvement efforts, the USPTO established a Framework for Organizing and Managing IT Portfolios, Programs, Projects, Products and Services (“the IT Framework”). OCIO administers its IT initiatives tied to the USPTO’s strategic goals through a framework that provides absolute transparency for all efforts through structured mapping to the goals and internal and external reporting requirements. This framework also defines roles and responsibilities for those charged with achieving our desired results laid out through defined scopes of work through a matrixed organizational structure. OCIO staff approach portfolio and program management through a strategic and vertical oversight role from centralized resources, while project execution is or is a decentralized function across OCIO offices.

The OCIO/OPAO Program Management Division (PMD) serves as the Program Management Office (PMO) for establishing, implementing, facilitating and administering processes and tools related to management of USPTO IT portfolios, programs, and projects as defined in the framework. IT program managers work with portfolio managers, USPTO business unit representatives known as IT Liaisons, project management leads, project managers and technical leads to ensure IT requirements are met. Program managers implement best practices and are responsible for providing leadership and oversight at the program level.

Capital Planning and Investment Control (CPIC)

The USPTO Capital Planning and Investment Control (CPIC) process is a systematic approach to selecting, controlling, and evaluating IT investments as envisioned by the Clinger-Cohen Act of 1996 (CCA), the Office of Management and Budget’s (OMB) Circular A-130 (Management of Federal Information Resources), and other related guidance and regulations.

The USPTO, as an independent agency under the Department of Commerce, published its CPIC Process through USPTO Administrative Order (AAO) 212-05. This AAO establishes a CPIC process for maximizing the value and assessing and managing the risks of the agency’s IT investments. The process provides for a decision-making framework for selecting, controlling, and evaluating USPTO’s
portfolio of IT investments. This CPIC process is built on a foundation of strategic and operational IT planning linked to the USPTO’s enterprise architecture, IT security and privacy, IT accessibility, electronic government, and other domains of IT management responsibility, such as the budgeting and acquisition processes. Investments that meet specific criteria are identified through the annual IT planning process and submitted for consideration, and once approved, are overseen via the USPTO CPIC process.

IT Planning

Each year, from January through April, the USPTO conducts an extensive IT planning process. Using the framework, the IT planning process is accomplished at the portfolio level. The annual planning process revalidates existing product plans, and portfolio goals and objectives, and identifies specific IT projects to be undertaken over the next two fiscal years. Projects are directly linked to the USPTO Strategic Plan. The USPTO’s annual budget submission contains additional information regarding IT Program objectives planned to be met for specific fiscal years. There are different levels of planning at the USPTO: strategically at the USPTO level; at the business unit level, strategically and tactically for IT, and separately for OCIO’s unique business needs. The following graphic depicts the relationship among these planning processes and their outputs:

How IT All Fits Together... the levels of IT planning

Presidential / Federal Guidance

- President’s Management Agenda
- OMB Circular A-11
- OMB Circular A-130
- CIO Council Guidance

Agency Strategic Plans -- updated every four years

- Department of Commerce Strategic Plan
- US Patent and Trademark Office Strategic Plan

USPTO Strategic Information Technology & Information Resources Management Plan (SITP) -- updated every four years

- Strategic IT/IRM Objectives aligned to USPTO Strategic Goals
- Structure for success: the IT Framework

OCIO Business Plan provides two-year cycle of Operational Guidance -- updated yearly

Annual cycle of budget and project planning provides Tactical Project Plans -- updated yearly

- Project Plans are stored in the Enterprise Program Management System (EPMS)
**Agile Systems Development**

The USPTO uses a Systems Development Life Cycle (SDLC) process for IT project management. The SDLC provides the necessary information and supporting tools to assist project managers and teams in following best practices for project management and product development, while they comply with regulatory requirements and adhere to internal and external policies, standards and practices.

The USPTO has made an informed, proactive decision to invest substantial resources, time and money in its Agile transformation efforts with the goal of increasing the efficiency, effectiveness and quality of the products and services it delivers to customers. Like other organizations on enterprise Agile transformation journeys, the objective is to enable and achieve targeted business results while providing consistent value to customers.

In an effort to effectively strengthen and scale the current Agile processes and practices, the USPTO is adopting the Scaled Agile Framework (SAFe). By adopting the SAFe framework for our Agile transformation, the USPTO has a solid roadmap to follow as it implements and drives consistent Agile practices. This approach to Agile will facilitate our ability to deliver consistent results, and provide the flexibility that project teams need to meet their customers’ business objectives. Currently, OCIO is assessing the SAFe framework to identify the tailoring required to provide the most benefit to the organization now and in the long term.

**DevSecOps and Continuous Delivery**

The real, tangible value of software development lies in delivering products that end users can successfully operate in their environment. To ensure a swift flow of value to users, organizations need mechanisms to integrate development and deployment operations. One route is to integrate personnel from the operations team into the Agile teams in the Agile Release Train. An organization must also continuously maintain deployment readiness throughout the feature development timeline. Such readiness gives the enterprise the ability to deploy incremental software or product improvements more frequently, and thus deliver more value to customers regularly.

The USPTO follows an industry model known as “DevSecOps”, an approach where teams incorporate security requirements into the software development process. To succeed, DevSecOps relies on the development (Dev), security (Sec) and operations (Ops) teams to collaborate continuously, supported by tools and practices that result in software built in incremental versions, and released to production at any time. Known as Continuous Delivery, this practice enables software to continuously pass through several stages or gates from development to automated testing to ensure error-free performance before a deployment. Such DevSecOps
collaboration is vital to an organization’s ability to meet customer needs in an era of rapid change. Having security checks in the development pipeline can result in higher quality products since automated security is woven into the development process, and not an afterthought. The cultural and technical shifts required in DevSecOps result in the ability to proactively address security threats effectively, in real-time. This approach recognizes the security team as a valuable asset to help drive up quality, rather than considering it a hindrance to agility.

DevSecOps and Continuous Delivery are characterized by an organization’s ability to provide:

- Continuous and frequent delivery of new products and or capabilities
- Integrated security to address threats more effectively in real time
- More reliable releases
- Better product quality
- Improved productivity and efficiency

With DevSecOps and Continuous Delivery practices, developers and operations staff closely collaborate with one another to release and operate software to achieve business goals. Such tight collaboration allows developers to understand the operations staff’s pain points in running systems reliably and securely, while operations teams better understand the unique issues developers face.

**Technology Vision**

The USPTO technology vision starts with understanding the USPTO’s business needs and establishes a high level direction for technology that will meet both present and future needs. The USPTO technology vision is to *provide evolving services that adapt quickly to the growing needs of our internal and external customers and take advantage of technology industry developments within our infrastructure and organization*. In order to reach this technology state, the OCIO must move not only its technology forward but also people and processes that support the USPTO core mission to ensure the agency does not fall behind. To meet the technical challenges, the USPTO will:

- **Choose to reuse services and build services to be shared** to refocus resources on mission needs and quickly provide better capabilities that can themselves be reused and take full advantage of technology industry developments.

- **Build services that are always available** to support geographic expansion of customers worldwide and examination nationwide with 24x7x365 operations and zero customer impact to downtime.

- **Make everything like a website** to improve the accessibility and management of all information on all devices and in all locations.
• **Provide searchable information** to improve IP research by accepting and converting all information into searchable technology formats for USPTO and other systems to be built upon.

• **Write code once and deploy wherever** to improve portability, stability, and cost effectiveness of solutions by increasing the technology choices available with vendor neutrality.

• **Take an Agile approach to everything** to improve the customer value delivered by incorporating continual customer and industry feedback into solutions iteratively before it is too late.

• **Provide Mobility and Collaboration** to improve the individual user experience and leverage collaborative technology to better share knowledge and work together towards business results.

**Foundational and Enabling IT Priorities**

OCIO management established the following priorities for improving OCIO services:

• **Maximize the technical stability of and supportability for products.** The OCIO will accomplish this by establishing and maintaining a technical debt heat map (OIEO, OCTO), maintaining proper versioning of desktop applications (OIMS, OIEO), stabilizing our non-production environments (OIEO, OIMS, OOPG, OAED), stabilizing our audio visual and conferencing capabilities throughout the USPTO campus and satellite offices (OIMS, OIEO), maintaining the enterprise architecture (EA) lifecycle management of product/technology (OCTO), reclaiming system resources and optimizing utilization (OIEO, OAED, PfM), promoting code reuse and best practices (OAED, PfM), maintaining assets and optimizing the Configuration Management Data Base (OCTO, OIMS, OAED, OIEO, OPAO), and exploring hybrid cloud usage further (OCTO, OIEO, OAED, OOPG).

• **Integrate security into current and emerging technology and services.** USPTO’s data is a strategic business asset. To ensure the integrity and availability of that data, the OCIO will implement appropriate security measures (OCTO, OOPG). The OCIO will implement continuous and automated security at the early stages of software development and throughout the whole cycle (OOPG, OAED, OIEO). Additionally, the OCIO will ensure a cyclical practice of identifying, prioritizing, remediating, and mitigating known vulnerabilities of all IT assets through the implementation of the Risk Management Framework and improved security operations capabilities (OCTO, OOPG, OIEO, OIMS).

• **Maximize the automation and standardization of products and services.** OCIO will accomplish this by maintaining and enhancing the automated deployment pipeline (OOPG), expanding usage of containerization and consolidation (OIEO, OCTO, OOPG, OAED), standardizing test
data management practices and procedures (OOPG, OIEO), exploring the use of bots for server management (OIEO, OCTO), standardizing the vocabulary used across products (OCTO), and ensuring the usage and integration of common components (OCTO).

- **Maximize the usage of identity management and standardization of access controls for products.** The OCIO is implementing projects to simplify access to USPTO systems while increasing the cybersecurity associated with that access. These include maintaining and enhancing role based access control and integration (OAED, OIEO, PfM, OOPG), and enhancing resiliency and governance (OIEO, OAED, OCTO).

- **Maximize new technology solutions through data to solve business problems.** The OCIO is implementing projects to make USPTO data more accessible and usable to internal and external users and the general public. OCIO will undertake projects intended to explore the use of new technology solutions and establish guidelines on usage (OCTO, OAED, PfM, OIEO), and to establish and maintain data governance / strategy / security / standards (OCTO, OAED, OOPG, OIEO, PfM).

Successful implementation of these automation and standardization strategies will:
- Increase automation, standardization and operational efficiency to ensure we deliver business value with consistency and high quality products and services.
- Improve the ability to make data-driven decisions through data-as-a-service (resulting from data governance and data management).
- Improve the quality of engineering services (development, deployment, system monitoring, recovery, etc.).
- Improve efficiency (time, cost, value) to meet current and future business needs.
- Improve the cybersecurity posture through stronger version control, lifecycle management, configuration management, identity and access management, and integrated data security.

**IT Governance**

The following governing strategies guide USPTO IT initiatives and fuel the quality of IT support provided to USPTO business areas and customers.

updates to OMB A-11 (Preparation, Submission and Execution of the Budget), and Section 508 of the Rehabilitation Act of 1973.

Project Management. The key management, control, and resource allocation tactics for IT projects are:

- Manage IT projects as investments;
- Emphasize agile development and incremental delivery of products and services;
- Provide IT products and services in a timely manner and in a useful format;
- Encourage end-user involvement;
- Plan and manage cost and schedule performance; and
- Select appropriate solutions with a focus on providing value.

Information Technology Infrastructure. The following key tactics pertain to on-going operations, modifications, augmentation, replacement, and maintenance of computer and communications equipment, network facilities, and system and data base software:

- Implement robust architecture;
- Ensure compatibility with the USPTO and federal Technical Reference Models, which define the IT standards, services, interfaces, supporting data formats, and protocols;
- Implement robust systems and networks;
- Implement a comprehensive end-user computing support environment; and
- Implement appropriate security controls and continuous monitoring to minimize and manage agency risk and comply with FISMA 2002 & 2014, Public Law 107-347 and 113-283.

Application Software. The key tactics pertaining to the analysis, design, development, deployment, operation, maintenance or enhancement of application software are:

- Focus on improving business processes before automating;
- Clarify requirements, including use of prototyping when appropriate;
- Leverage proven assets, including software re-use and the use of Commercial-Off-The-Shelf (COTS) software; and
- Apply appropriate software security mechanisms.

Data. The key tactics pertaining to the standardization, control, and integrity of data stored or manipulated are:

- Facilitate data sharing among USPTO systems by standardizing and re-using data whenever possible;
- Use standard data elements by complying with applicable USPTO, federal, national, and international standard data;
• Share data with customers by pursuing additional electronic data interchange agreements with foreign and international intellectual property patent organizations and selected private sector organizations;
• Use of “intelligent data” (i.e., XML) rather than images and pictures of text;
• Provide data for analysis through an enterprise data warehouse separate from operational databases; and
• Apply appropriate data security mechanisms by limiting access to authorized users.
OCIO Strategic Management Process Mapping

The OCIO manages IT activities with prescribed processes based on the framework under which all IT work is organized for planning, budgeting, and other management purposes. All projects to build new IT capabilities, as well as the operations and maintenance of IT capabilities in production are based on the framework. The OCIO management processes and IT portfolios are mapped to the federal, DOC, and USPTO goals which they primarily address.

<table>
<thead>
<tr>
<th>Federal Strategies</th>
<th>DoC Goals</th>
<th>USPTO Strategic Goals</th>
<th>OCIO Management Processes</th>
<th>IT Portfolios to Meet Goals</th>
</tr>
</thead>
</table>
| IT Modernization   | Legacy systems replaced by Next Generation Systems in the Cloud | Patents 3: Optimize development and delivery of information technology tools, including artificial intelligence and machine learning, for internal users of patent systems to ensure that they have the tools they need for a thorough search and examination. Patents 3: Enhance information technology interfaces available to the external users of patent systems. Patents 3: Improve searchable access to domestic and international patent application files, including the prior art and Office actions contained therein. Trademarks 3: Focus information technology efforts on improving efficiencies in core business operations. Trademarks 3: Explore artificial and business intelligence to assist trademark customers. Trademarks 4: Document clear and comprehensive business requirements to facilitate enhancement of legacy information technology systems and prepare for next generation information technology systems. Mission Support: Maintain effective legacy systems during transition to their retirement. | Agile Development | Next Gen:  
- PE2E  
- PTAB  
- TMNG  
- CFS  
- EBS  
Legacy:  
- PLIC  
- PTAB  
- TLIC  
- Policy LIC  
- Admin LIC |
| Cybersecurity      | Enhance the Nation’s Cybersecurity | [All IT/IRM products and services include technical and policy protection capabilities for IT systems in order to address the continuously changing threats to our cybersecurity defenses.] | All | Enterprise IT Infrastructure |
| Technology Investment Management | Cost Avoidances and Savings | Mission Support: Strengthen the information technology development and implementation lifecycle.  
Mission Support: Refine the agency-wide information technology prioritization process.  
Mission Support: Involve the business unit experts in the information technology acquisition source selection process. | IT Framework  
IT Planning  
CPIC | • CHRP  
• PGSS  
• TS |  |
| --- | --- | --- | --- | --- |  |
| Data | Provide Accurate Data | Mission Support: Establish agency-wide data governance. | IT Governance | • Dissemination  
• DSBD |  |
Overview of IT Portfolios and Portfolio Goals

The framework specifies the current portfolios that support USPTO business areas. Each portfolio team has identified one or more goals that guide the identification of projects and investments to be undertaken within the portfolio. Below are the portfolio goals identified during the 2019 Annual IT Planning Process.

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Portfolio Goals</th>
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</table>
| Patents End-to-End (PE2E)                      | • Expand upon initial end-to-end processing capability to include “specialized” processing required for the Patent Business to phase out legacy systems and existing IT capability.  
  • Expand the amount and use of “intelligent data” (i.e., structured vs image) in end-to-end processing.  
  • Develop additional tools for sharing patent processes and work products among global IP stakeholders. |
| Patent Legacy IT Capability (PLIC)             | • Ensure the stability of legacy IT Systems to meet internal and external user demands.  
  • Improve the scalability of legacy IT Systems to support increasing user base and data requirements, when necessary.  
  • Upgrade legacy IT Systems to meet legislative, federal mandates, and international treaty agreements.  
  • Develop legacy IT system retirement plans.                                                                                                               |
| Patent Trial & Appeal Board IT Capabilities (PTAB) | Maintain the Patent Trial and Appeal Board’s (PTAB) ability to provide timely and high quality decisions.                                                                                                           |
| Trademark Next Generation (TMNG)               | Modernize IT systems by developing and implementing the Trademark Next Generation (TMNG) system to create full electronic workflow and state-of-the-art IT resources for external and internal users.                             |
| Trademark Legacy IT Capability (TLIC)          | • Ensure the stability of legacy trademark systems to meet both internal and external user demands.  
  • Plan for and retire legacy trademark systems.                                                                                                           |
<p>| Dissemination (Diss)                           | Provide public access to both patent and trademark information and services.                                                                                                                                       |</p>
<table>
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<tr>
<th><strong>Policy IT Capabilities (POLICY)</strong></th>
<th>Deliver high-quality IT capabilities to support the policy goals of the USPTO.</th>
</tr>
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<tbody>
<tr>
<td><strong>Digital Services and Big Data (DSBD)</strong></td>
<td>Deliver an advanced analytics platform, AI and data science to support data-driven decision making in a rapidly changing IP world.</td>
</tr>
<tr>
<td><strong>Administrative IT Capabilities (ADMIN)</strong></td>
<td>Invest in the business management systems and IT capabilities necessary to support managerial, legal, administrative, communication and workforce needs.</td>
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</tbody>
</table>
| **Consolidated Financial Systems (CFS)** | • Replace the current fee collection system with 21st century technology that supports other USPTO next generation investments and helps implement fee collection business process reengineering recommendations.  
  • Achieve efficiencies through the automation of financial management processes based upon business process reengineering recommendations, and keep pace with advancements in technology. |
| **Capital Hardware Replacement (CHRP)** | Provide continual management of IT obsolescence in order to maintain a standards-based, supportable, optimized IT infrastructure. |
| **Enterprise IT Infrastructure (EIP)** | Provide the infrastructure foundation for the next generation efforts. Take advantage of emerging technologies to retain and improve the IT infrastructure, and ensure compliance with IT mandates. |
| **Program Governance and Support Services (PGSS)** | Provide the management and oversight of enterprise IT policies, processes, OCIO budget and workforce development efforts. Develop tools for measuring and providing visibility into the OCIO organizations’ progress and efficiency levels. |
| **Technology Sustaining (TS)** | Sustain the technical standards necessary to deliver high-quality IT products and services to our customers. |
| **Enterprise Business Systems (EBS)** | Increase efficiency and availability by pursuing Enterprise IT solutions that meet business requirements, for multiple business units, not already covered elsewhere in the framework. |
The OCIO Business Plan

As shown in the diagram, the OCIO provides details on the initiatives, objectives and metrics for the upcoming two years in the OCIO Business Plan that is released annually. IT projects to achieve objectives for USPTO’s business areas are formulated during the annual budgeting cycle and stored in EPMS. Metrics are mapped to the initiatives and objectives, and tracked with quarterly updates in the OCIO Dashboard’s “Business Metrics” page. Below are the OCIO goals and performance measures from the *USPTO OCIO Business Plan 2019-2020*, which will directly support the first two years of this SITP.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Description</th>
<th>Performance Measures for Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL 1: Operations</td>
<td>• Maintain IT operations at current service levels or higher.</td>
<td>1-1. Critical systems availability percentage.</td>
</tr>
<tr>
<td>GOAL 2: Dissemination</td>
<td>• Provide public access to both patent and trademark information and services.</td>
<td>2-1. Number of patents validated, loaded and disseminated.</td>
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<tr>
<td></td>
<td></td>
<td>2-2. Number of patent pre-grant publications validated, loaded and disseminated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-3. Percentage of certified copy orders filled within goal.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-4. Number of certified intellectual property document copies provided.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5. Number of patent assignment documents recorded.</td>
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<tr>
<td></td>
<td></td>
<td>2-6. Number of Trademark assignment documents recorded.</td>
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<tr>
<td></td>
<td></td>
<td>2-7. Monthly Universal Public Workstation (UPWS) Session Hours.</td>
</tr>
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<td></td>
<td></td>
<td>2-8. Percentage of USPTO call center calls answered within established timeframe (e.g., 20 seconds).</td>
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<tr>
<td></td>
<td></td>
<td>2-9. Average number of USPTO call center calls handled daily.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-10. Percentage of Dissemination projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year.</td>
</tr>
<tr>
<td>Goals</td>
<td>Description</td>
<td>Performance Measures for Goals</td>
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<td>-------</td>
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<td>-------------------------------</td>
</tr>
</tbody>
</table>
| GOAL 3: Digital Services and Big Data (BD) | - Establish a coordinated, agency-wide commitment to using 21st century business intelligence at each operational level of USPTO to create operational efficiencies, develop new products, and improve the discoverability, usability, and accessibility of USPTO. | 3-1. Number of open data products and tools developed for civic / industry / citizen groups (Objective #3, 4, 5).  
3-2. Number of advanced analytic tools, modeling and composite datasets developed for USPTO business units leveraging data science and AI (Objective #1, 2, 3, 4).  
3-3. Deploy production Hadoop Distributed File System (HDFS) environment with several key data sources from patents and trademarks with advanced open analytics platform (Objective #2, 5).  
3-4. Percentage of Digital Services and Big Data Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year (Objective #1, 2). |
| GOAL 4: Capital Hardware Replacement | - Enterprise Infrastructure Foundation—Sustain and optimize security, quality, service management, and performance levels of the combined set of IT hardware, software, network resources, services, and facilities to meet federal mandates, and avoid obsolescence.  
- Enterprise Infrastructure Services—Improve the efficiency and effectiveness of the IT infrastructure services.  
- Enterprise Infrastructure Integration—Integrate infrastructure-related people, processes and technologies for next generation IT systems development and operations. | 4-1. Percentage of Physical Servers over 5 years.  
4-2. Percentage of User Laptops Older than 4 years.  
4-3. Percentage of Servers Virtualized.  
4-4. Percentage of Capital Hardware Replacement Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year. |
| GOAL 5: Enterprise Infrastructure | - Enterprise Infrastructure Foundation—Sustain and optimize security, quality, service management, and performance levels of the combined set of IT hardware, software, network resources, services, and facilities to meet federal mandates, and avoid obsolescence.  
- Enterprise Infrastructure Services—Improve the efficiency and effectiveness of the IT infrastructure services.  
- Enterprise Infrastructure Integration—Integrate infrastructure-related people, processes and technologies among and between NextGen IT systems development and operations. | 5-1. Percentage of Enterprise Infrastructure Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year.  
5-2. Level of IT Systems Security across the Enterprise.  
5-3. Percentage of Platform Virtual Machine (VM) servers provisioned within 1 business day after approved through Express Lane program. |
<table>
<thead>
<tr>
<th>Goals</th>
<th>Description</th>
<th>Performance Measures for Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL 6: Program Governance and Support Services</td>
<td>• Provide the management and oversight of enterprise IT policies, processes, OCIO budget and workforce development effort.</td>
<td>6-1. Percentage of Program Governance and Support Services Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year.</td>
</tr>
<tr>
<td></td>
<td>• Develop tools for measuring and providing visibility into the OCIO organization’s progress and efficiency levels.</td>
<td></td>
</tr>
<tr>
<td>GOAL 7: Technology Sustaining</td>
<td>• Sustain the technical standards in OCIO to deliver high-quality IT products and services to our customers.</td>
<td>7-1. Percentage of Technology Sustaining Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year.</td>
</tr>
<tr>
<td>GOAL 8: Enterprise Business Systems</td>
<td>• Modernize IT capabilities to improve quality and service delivery by pursuing enterprise-wide solutions that meet business requirements for agency business units.</td>
<td>8-1. Percentage of Enterprise Business Systems Projects that kicked off within the same quarter as originally planned at the beginning of the fiscal year.</td>
</tr>
</tbody>
</table>
Where can I find more information?

This SITP provides a high-level, four-year overview of the USPTO IT/IRM Program. More specific, detailed information – over shorter timeframes – can be found:


The IT Dashboard provides Federal agencies and the public with the ability to view details of Federal IT investments. This website provides information on thousands of Federal IT investments.

USPTO Budget and Financial Information – located at the USPTO website, www.uspto.gov

Each fiscal year, as part of the US Federal budget process, the USPTO publishes a detailed document containing plans for the upcoming fiscal year. The website contains current and prior year budgets.

USPTO Performance and Accountability Reports (PAR) – located at the USPTO website, www.uspto.gov

At the conclusion of each fiscal year, the USPTO publishes a comprehensive PAR document, which provides an overview of USPTO’s mission, planning process, internal structure and strategies implemented to achieve the prior fiscal year’s goals. The PAR also includes detailed performance and financial information.

Reports from USPTO's two Public Advisory Committees – located at the USPTO website, www.uspto.gov

Two Public Advisory Committees for the USPTO were created by statute in the American Inventors Protection Act of 1999 to advise the Under Secretary on the management of patent and trademark operations. These committees consist of United States citizens chosen to represent the interests of the diverse stakeholders of the USPTO. These committees review the policies, goals, performance, budget, and user fees of patent and trademark operations, and advise the Director on these matters. Appointments to the public advisory committees are made by the Secretary of Commerce.

OCIO Dashboard – located at the USPTO Intranet website at “https://ociodashboard.uspto.gov/”

The OCIO maintains an on-line dashboard available on the USPTO Intranet that displays organizational metrics for all OCIO offices, including the OCIO Balanced Scorecard, service desk performance, business metrics and development metrics.