Patent Public Advisory Committee Meeting

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Chief Information Officer

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What is Patents End-to-End?

- Free from constraints of legacy systems

- Flexible, scalable, and leverages modern technologies

- Utilizes open standards

- Well documented and readily supported

Improvements Every Examiner Will See in FY 2011

- PC hardware upgrades
  - Intel Core i7 CPU, 8GB RAM
- Windows 7 / Office 2010
- Broadband upgrade
  - From 388 Mbps to 2 Gbps
- Communication upgrades
  - Collaboration tool (MCS) replacement
  - Telecommunications (PBX) replacement

Progress Expected in Patents End-to-End IT in FY 2011

- Architecture
  - Prototype built
  - Plans for hardware acquisitions complete
  - Project integrator contractor selected
  - Version 1.0 of core architecture implemented
- User Experience
  - Prototype requirements completed
  - Process re-engineering proposals under consideration
  - Advanced search and classification tools tested

Progress Expected in Patents End-to-End IT in FY 2012
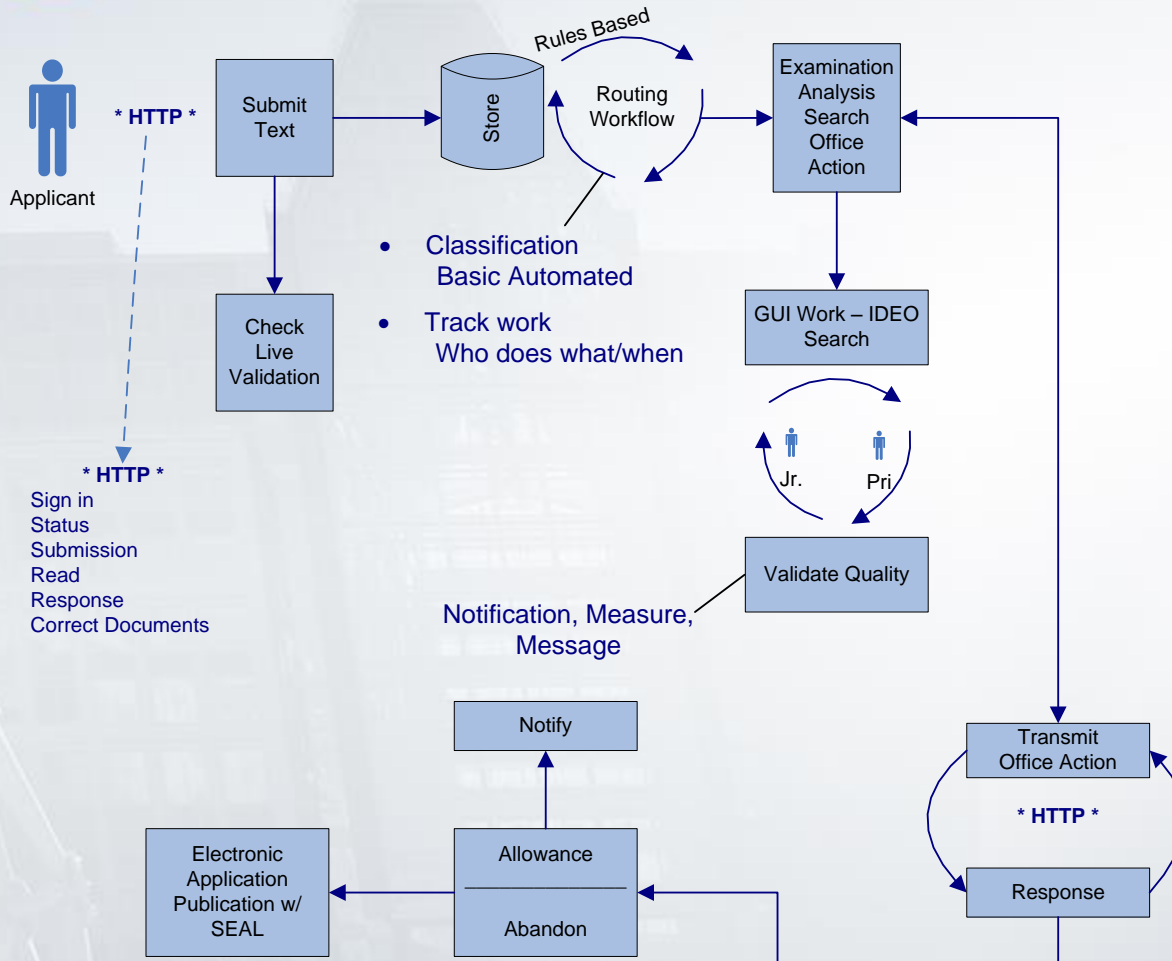
- IT system with:
  - Accept, manage, search, and publish XML-based applications
  - New text search tools and up-to-date version of EAST
  - New pre-examination tools and linguistic analysis tools
  - Plug-in financial services tools
  - Integrated collaboration tools
  - Data migration plan
  - Training materials ready, trainers hired and trained
  - Some examiners using the new system
- Important point:
  - Enhancements delivered in weeks/months rather than years!
  - To circumvent security concerns outlined in a GAO report (GAO-10-513), we'll build an internal cloud environment until a commercially viable federal alternative is available

Base System – Core Infrastructure

Applicant

* HTTP *

* HTTP *
Sign in
Status
Submission
Read
Response
Correct Documents

Submit Text

Check Live Validation

Store

Rules Based

Routing Workflow

- Classification
  Basic Automated
- Track work
  Who does what/when

Examination
Analysis
Search
Office
Action

GUI Work – IDEO Search

Jr.   Pri

Validate Quality

Notification, Measure, Message

Notify

Allowance
———
Abandon

Electronic Application Publication w/ SEAL

Transmit Office Action

* HTTP *

Response

- Cloud
- Redundant
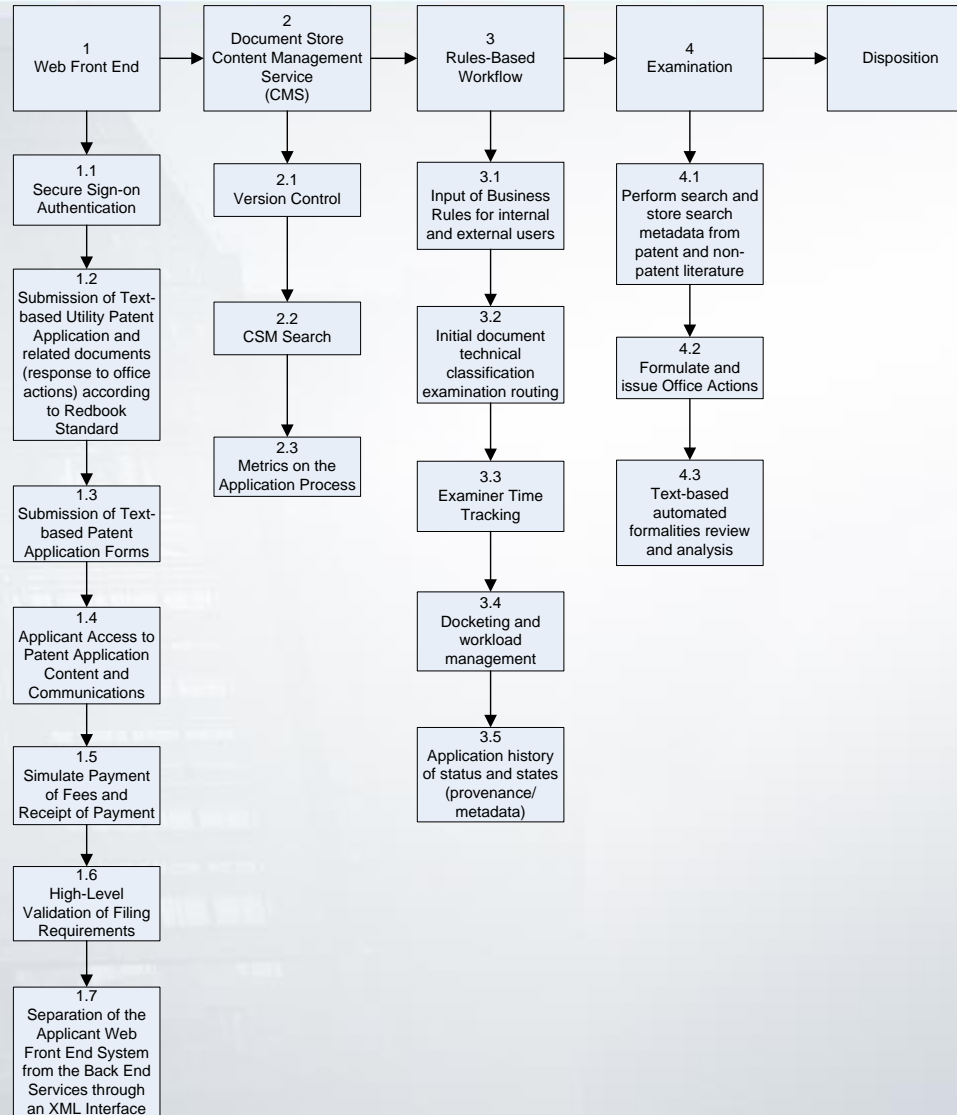- Distributed
- Scalable

Solicitation Status

- Request for Quotes (RFQ) solicitation will seek proposals for developing Patents End-to-End
- RFQ will result in proposed prototypes for the infrastructure foundation for future iterative development of additional functionality
- Prototype design will provide for a text-based submission/processing/publication solution known as the "Happy Path"

Happy Path – Core Infrastructure

1 Web Front End → **2** Document Store Content Management Service (CMS) → **3** Rules-Based Workflow → **4** Examination → Disposition

1.1 Secure Sign-on Authentication

1.2 Submission of Text-based Utility Patent Application and related documents (response to office actions) according to Redbook Standard

1.3 Submission of Text-based Patent Application Forms

1.4 Applicant Access to Patent Application Content and Communications

1.5 Simulate Payment of Fees and Receipt of Payment

1.6 High-Level Validation of Filing Requirements

1.7 Separation of the Applicant Web Front End System from the Back End Services through an XML Interface

2.1 Version Control

2.2 CSM Search

2.3 Metrics on the Application Process

3.1 Input of Business Rules for internal and external users

3.2 Initial document technical classification examination routing

3.3 Examiner Time Tracking

3.4 Docketing and workload management

3.5 Application history of status and states (provenance/metadata)

4.1 Perform search and store search metadata from patent and non-patent literature

4.2 Formulate and issue Office Actions

4.3 Text-based automated formalities review and analysis
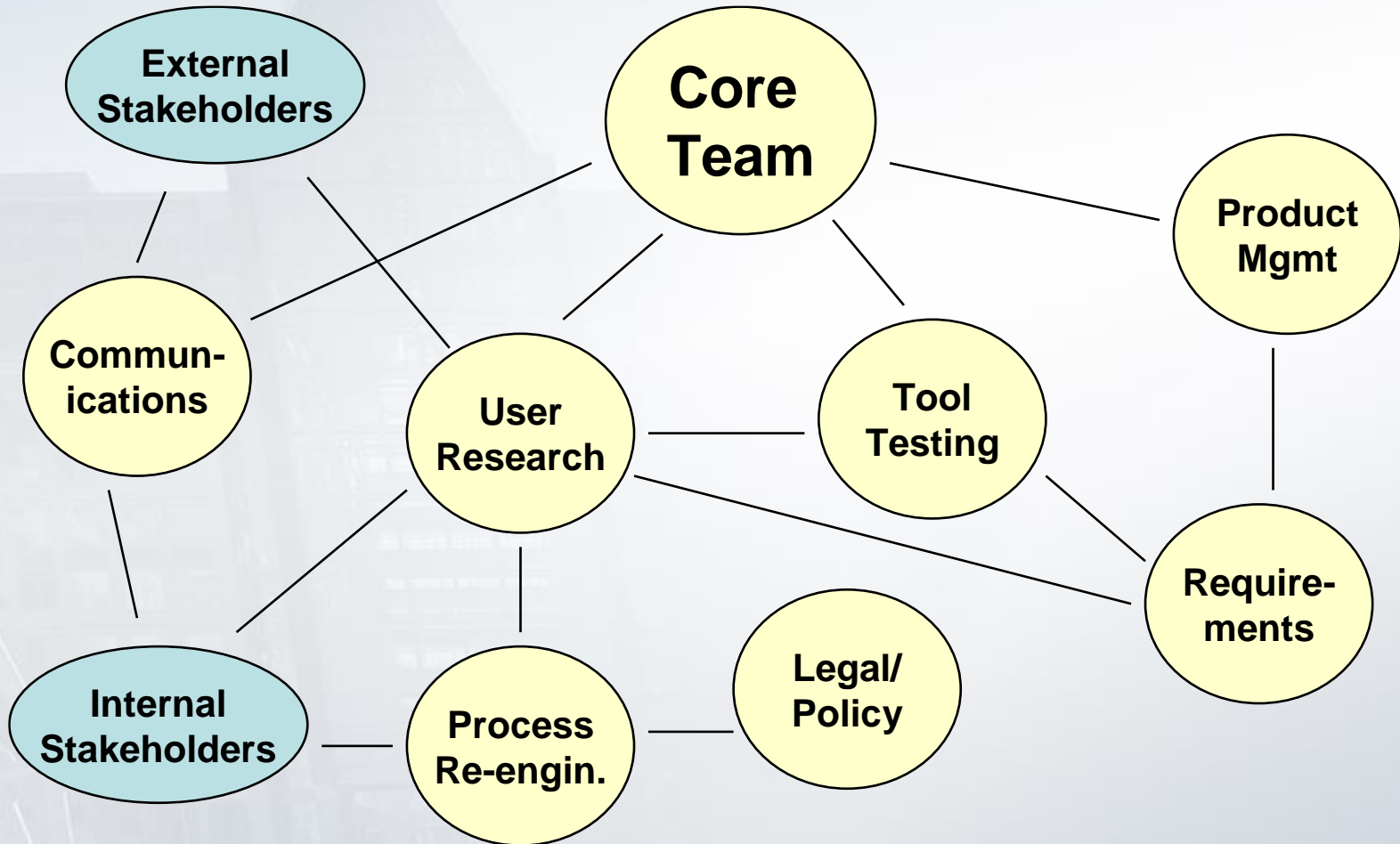
Team Overview

- Nine essential teams have been identified to collaborate on product delivery

- Team leads for each team have already been identified and key team members assigned

- Team charters have been written to define the scope, responsibilities, and delivery dates for each team
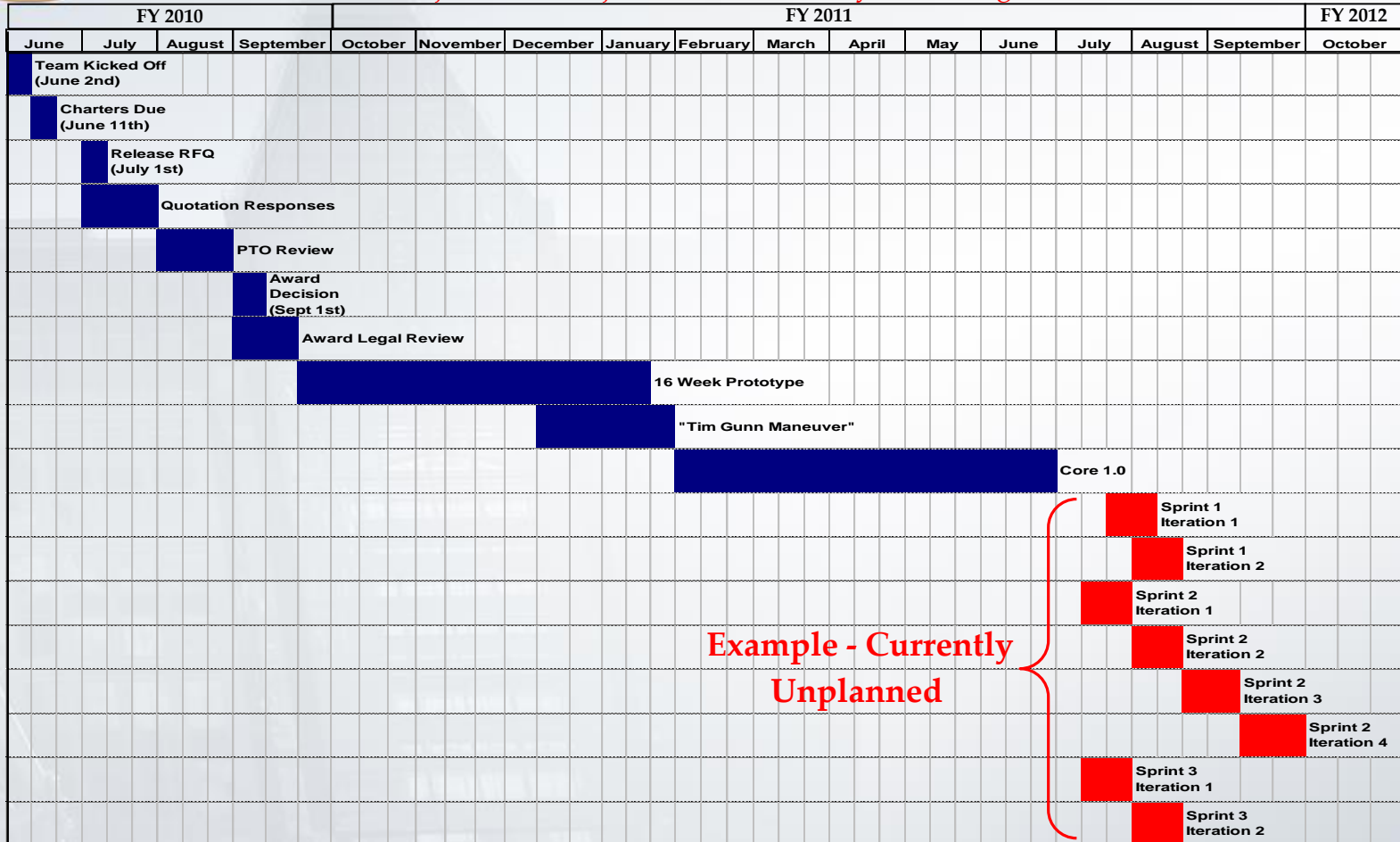
Core Team Members

Team	Leader	Description
Core	John Owens II	Executive guidance/communication; resource management/control
User Research	Marti Hearst	User research analysis; identification of needs; research publication; requirements management; interface testing
Technology & Test	Greg Gabel	Fund/install/run/configure request technology; apply legacy data/scenarios to test solutions; test technology using published data
Requirements	Heather Herndon	Manage business/system/non-functional requirements; enforce/manage format/style requirements
Business Requirement Analysis	Heather Herndon	Map business request to requirements; understand impacts/risks/implementation to statue/rule/policy
System Requirement Analysis	Heather Herndon	Map system requirements from business/non-functional requirements; understand impacts/risks/implementation to system requirements; understand/data/tech/architectural target for implementation of system requirements
Program Management	William Stryjewski	Release management; configuration/change management; procurement writing/awarding, and schedule/resource/scope management
Communications & Implementation	Bert Roepe	Web site management; manage office notices (Official Gazette/Union Notices)
Process Re-Engineering	Jim Dwyer	Identify process/procedures needing re-engineering to align with Under Secretary's Direction in examiner relations/pendency/quality; feeds the requirement team
Legal Rule and Policy	Robert Clarke	Identify/work through legal issues with automation/re-engineering activities
Usability Council	Marti Hearst	Leverage stakeholders to identify future functionality and needs

Timeline

Project dates subject to the availability of funding

FY 2010				FY 2011												FY 2012
June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October

Team Kicked Off (June 2nd)

Charters Due (June 11th)

Release RFQ (July 1st)

Quotation Responses

PTO Review

Award Decision (Sept 1st)

Award Legal Review

16 Week Prototype

"Tim Gunn Maneuver"

Core 1.0

Example - Currently Unplanned

- Sprint 1 Iteration 1
- Sprint 1 Iteration 2
- Sprint 2 Iteration 1
- Sprint 2 Iteration 2
- Sprint 2 Iteration 3
- Sprint 2 Iteration 4
- Sprint 3 Iteration 1
- Sprint 3 Iteration 2

- **2011 – Examiners Use Current Tools**   -   **Data Migration Plans Start**

- **2012 – Examiners Use Current Tools**   -   **Date Migration Plans Continue**

- **2013 – Migration to New Tools Begins**