SLW INSTITUTE
Building Extraordinary IP Assets

Digital Transformation of the Legal Industry Webinar Series

SLW Digital Transformation Case Study: Application Preparation – Disclosure Intake and Docketing, Application Drafting Tools, Production Management

Webinar Series

Episode 01 – What is Digital Transformation for Law Practices?
Thursday, February 11th, 2021at 12:00 PM CT

Episode 02 – SLW Digital Transformation Case Study: Overview of SLW systems, tools, data lake, processes, teams and personnel.
Thursday, March 11th, 2021 at 12:00 PM CT

Episode 03 – SLW Digital Transformation Case Study: Application Preparation – Disclosure intake and docketing, application drafting tools, production management
Thursday, April 8th, 2021 at 12:00 PM CT

Episode 04 – SLW Digital Transformation Case Study: Prosecution I – Receiving & Reporting PTO Correspondence – docketing, data/document storage, work packets, drafting and filing papers and responses; reporting to clients
Thursday, May 13th 2021 at 12:00 PM CT

Episode 05 – SLW Digital Transformation Case Study: Prosecution II – Claim tracking, reference analysis tools and reports, prosecution landscape tools and reports, examiner/prosecution analytics, IDS management
Thursday, June 10th, 2021 at 12:00 PM CT

Episode 06 – SLW Digital Transformation Case Study: Due Diligence, Freedom to Operate Studies, Landscape Studies, Portfolio Curation, Portfolio Analytics, Landscape Analytics, Examiner and Attorney Analytics
Thursday, July 8th, 2021 at 12:00 PM CT

Before We Get Started...

Recording

A link to the recording and slides will be emailed to all registrants.

Questions

Type in the question box and we will answer in real time or during the Q&A.

Social

Follow us on LinkedIn or go to SLW Institute on slwip.com to see upcoming and on demand webinars.

Today's Presenters…

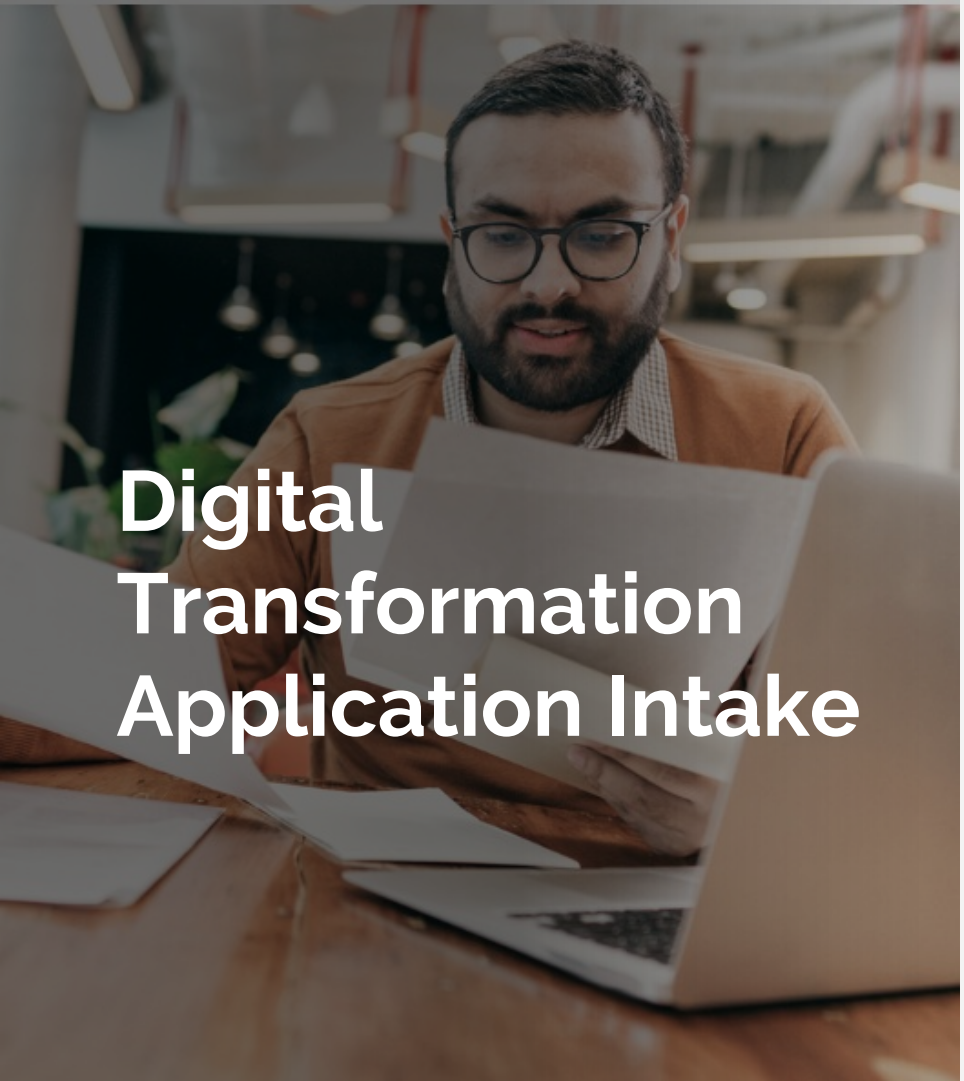
Steve Lundberg
Principal & Chief Innovation Officer
Schwegman Lundberg & Woessner

Andre Marais
Principal
Schwegman Lundberg & Woessner

Greg Rabin
Senior Attorney
Schwegman Lundberg & Woessner

Bill Kalweit
Principal
Schwegman Lundberg & Woessner

Chris Palmisano
Principal
Schwegman Lundberg & Woessner



Digital Transformation Application Intake

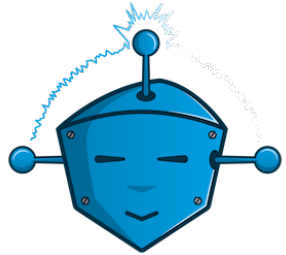
- Error prone process
- Requests for application work typically provided by e-mail
- Data rekeyed every time – easy to make mistakes, expensive, slow
- Every client has different process and different form

SLW Solution to Application Intake

- SLW has developed data extraction tools that analyze client forms and e-mails and extracts the data into a structured format like an XML file
- XML file can be parsed into our FoundationIP system and also into our data lake
- Also, each large client has customized process templates that launch in FoundationIP to provide the milestones we need to meet for filing on time per client instructions
- Developing automated analytics process to provide key analytics data to drafting attorney in addition to any information provided by client

Drafting Tools

- Rowan Patents/ TurboPatent
- Patent Draftr (Harrity)
- Patent Bots
- Clorganize
- Claim Master
- Patent Optimizer® & Patent Advisor® (Art Unit Predictor) (LexisNexis®)



ClaimMaster

HARRITY

TURBO PATENT

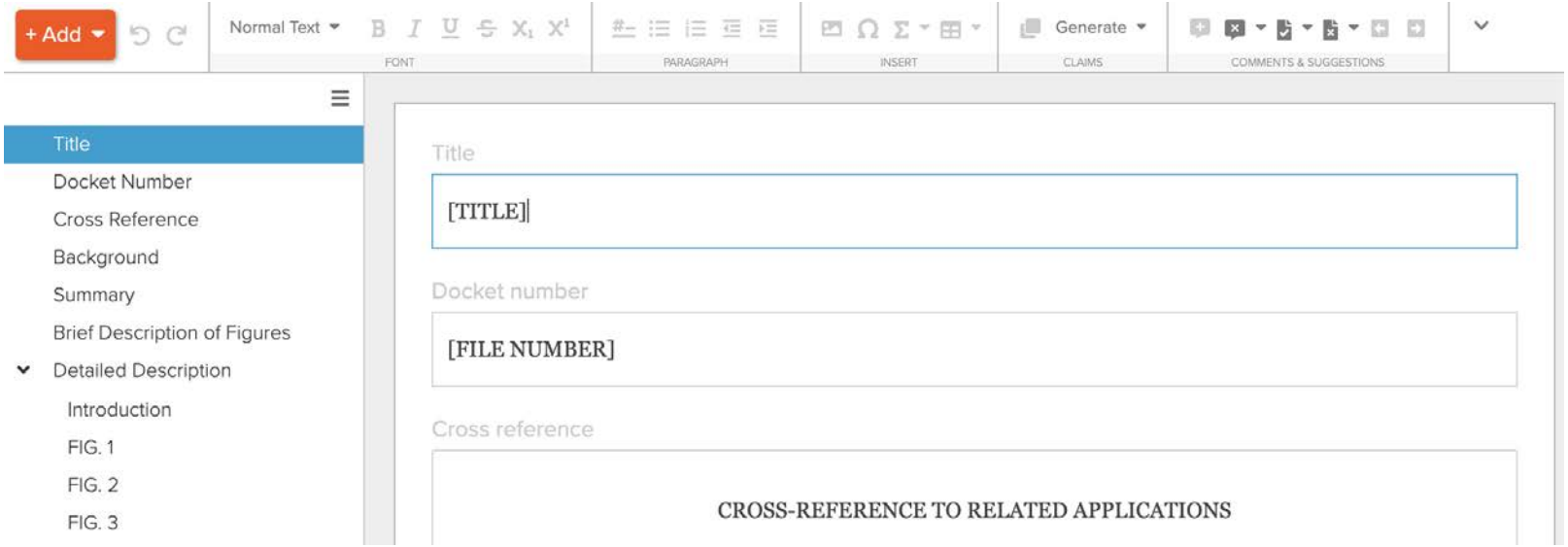
Drafting Tools: Rowan Patents aka TurboPatent

What is Rowan Patents?

“Rowan Patents uses automation and AI to unburden patent practitioners from time-consuming duties so they can focus on drafting claims, capturing the invention, and generating a quality work product.”

Drafting Tools: Rowan Patents aka TurboPatent

- A robust **word processing tool** integrated with a **drawing tool**
- **AI for issue spotting in completed draft**



Drafting Tools: Rowan Patents aka TurboPatent

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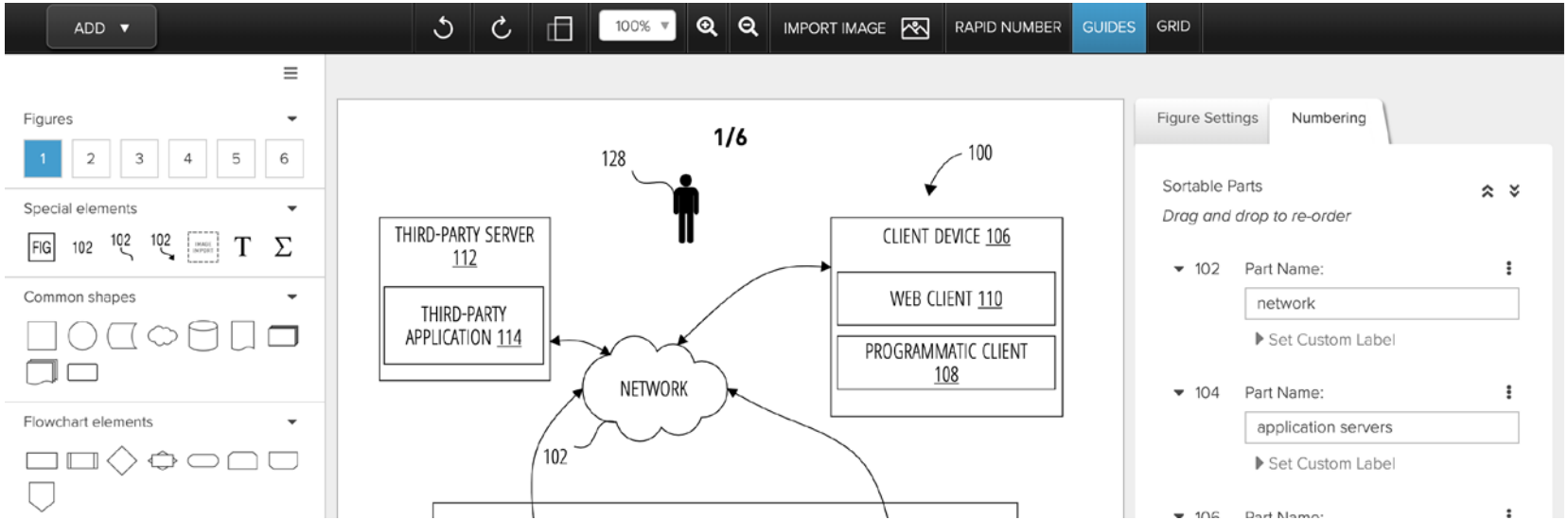


Drafting Tools: Rowan Patents aka TurboPatent

Why is it helpful for text and drawing tools to share information?

- More consistent term usage throughout specification
- No numbering errors or duplicates
- Better textflow, correspondence between texts and figures (more efficient inventor review)

Most importantly…

- On-the-fly rearrangement of text and figures with automatic re-numbering

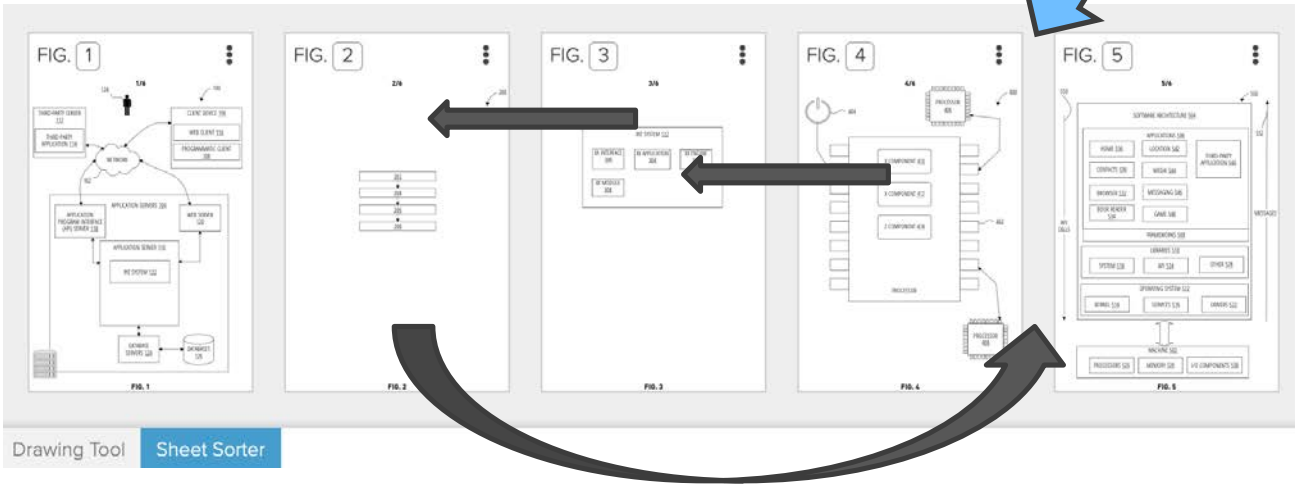
Drafting Tools: Rowan Patents aka TurboPatent

Easily add / move / remove Figures and Text:

Client-Specific Templates

(2) Fig. 3 becomes Fig. 2

(3) Fig. 4 becomes Fig. 3



(1) Move Fig. 2 to become Fig. 4 (e.g., References 2xx become 4xx)

Drafting Tools: Rowan Patents aka TurboPatent

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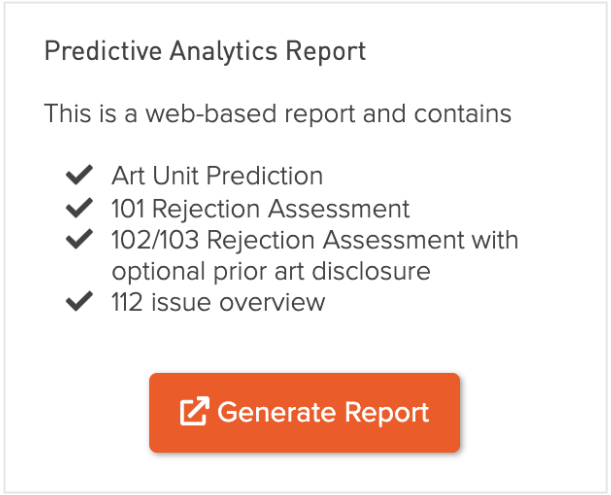
- AI for issue spotting in completed draft



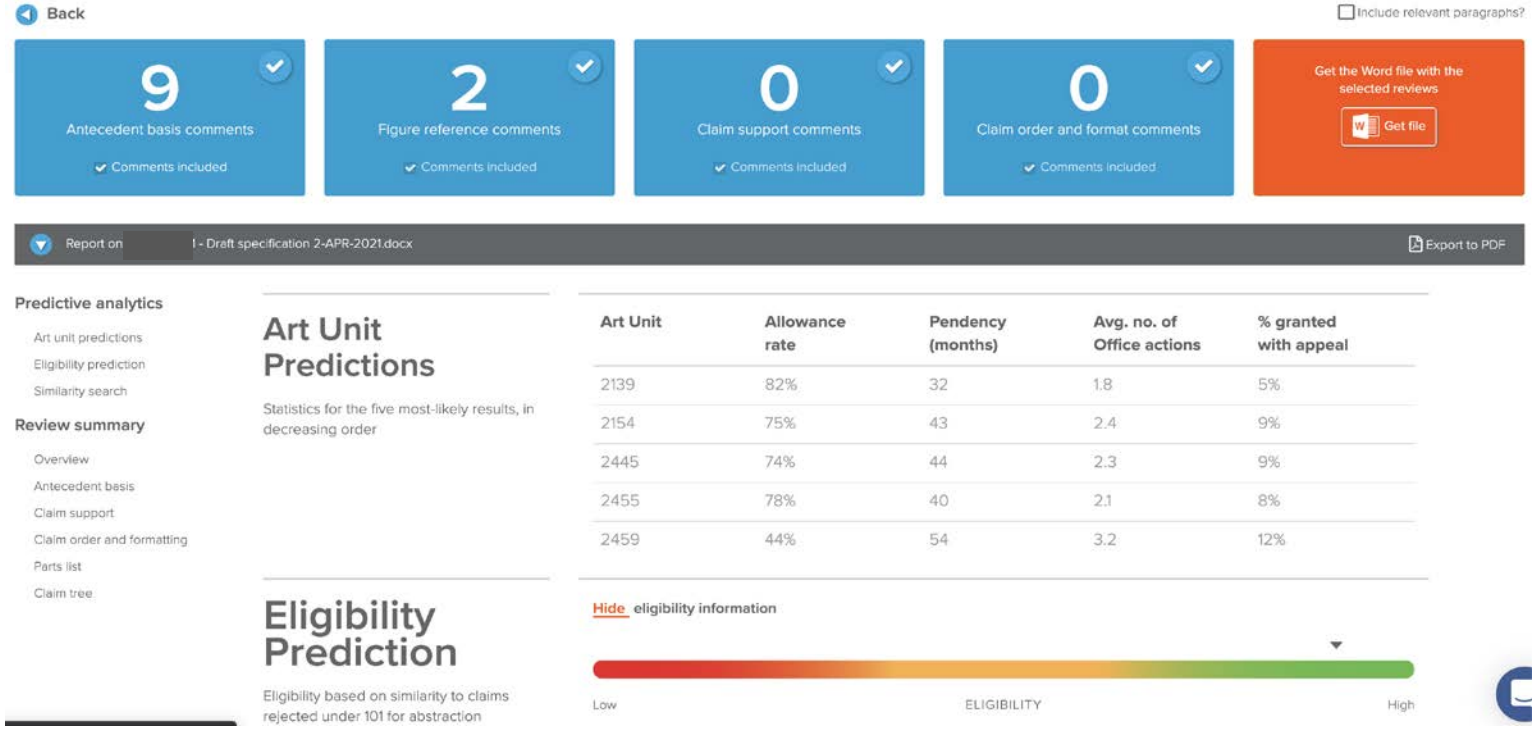
Drafting Tools: Rowan Patents aka TurboPatent

Predictive analytics

- Art unit predictions
- Eligibility prediction
- Similarity search

Review summary

- Overview
- Antecedent basis
- Claim support
- Claim order and formatting
- Parts list
- Claim tree



Harrity

1. Attorney drafts method claims.

2. Attorney provides boilerplate figures.

3. Harrity software drafts computer-readable medium and system claims.

4. Harrity software prepares method flow chart.

5. Harrity software drafts description of method flow chart that supports the claims.

6. Attorney drafts additional specification text and/or drawings.

Drafting Tools: Patent Bots

What is Patent Bots?

“Essential Tools for Patent Prosecution”

- Automated Proofreading
- Art Unit Predictor
- Examiner Statistics
- Prosecution Statistics

Drafting Tools: Patent Bots

Automated Proofreading

Specification

- Claim Numbering
- Antecedent basis
- Term support

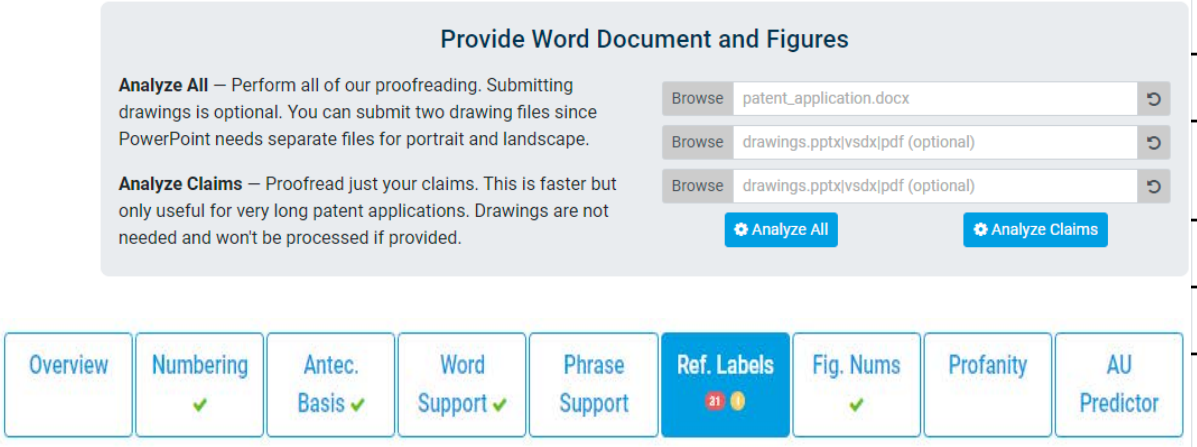
Figures

- Numbering
- Reference Labels

Responses

Drafting Tools: Patent Bots

Automated Proofreading



16	storage device [no text]	2 1	No
18	signal generation device	1	No
20	network interface device	4	No
21	one or more sensors	1	No
22	machine readable medium	2	No
24	instructions one or more instructions	3 1	No
26	communications network	2	No
28	output controller	1	No
125	document file user	5 1 1	1
145	[no text]	3	1

Drafting Tools: Patent Bots

Examiner Statistics

Background

- Education
- Location
- Length of USPTO service

Grant Rate

Interview Benefit

Recent Dispositions

Appeal Statistics

Drafting Tools: Patent Bots

Examiner Statistics

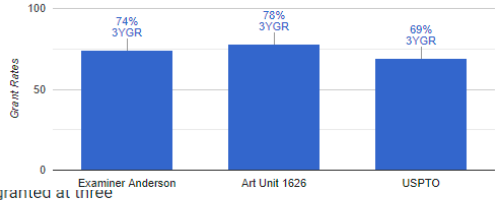
Grant Rate | Interview Benefit | Recent Dispositions | Appeals Statistics | Appeal History

Grant Rate and Difficulty Ranking

3-Year Grant rate:	74% over 515 cases
Difficulty:	Easier
Difficulty Percentile:	39th

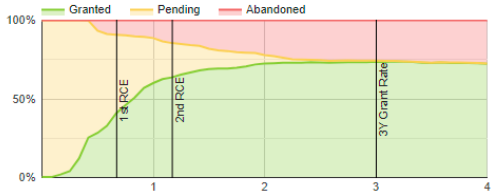
Comparison with Art Unit 1626

Examiner Anderson's grant rate is lower than that of Art Unit 1626 and higher than that of the USPTO.



Grant Rate Timeline

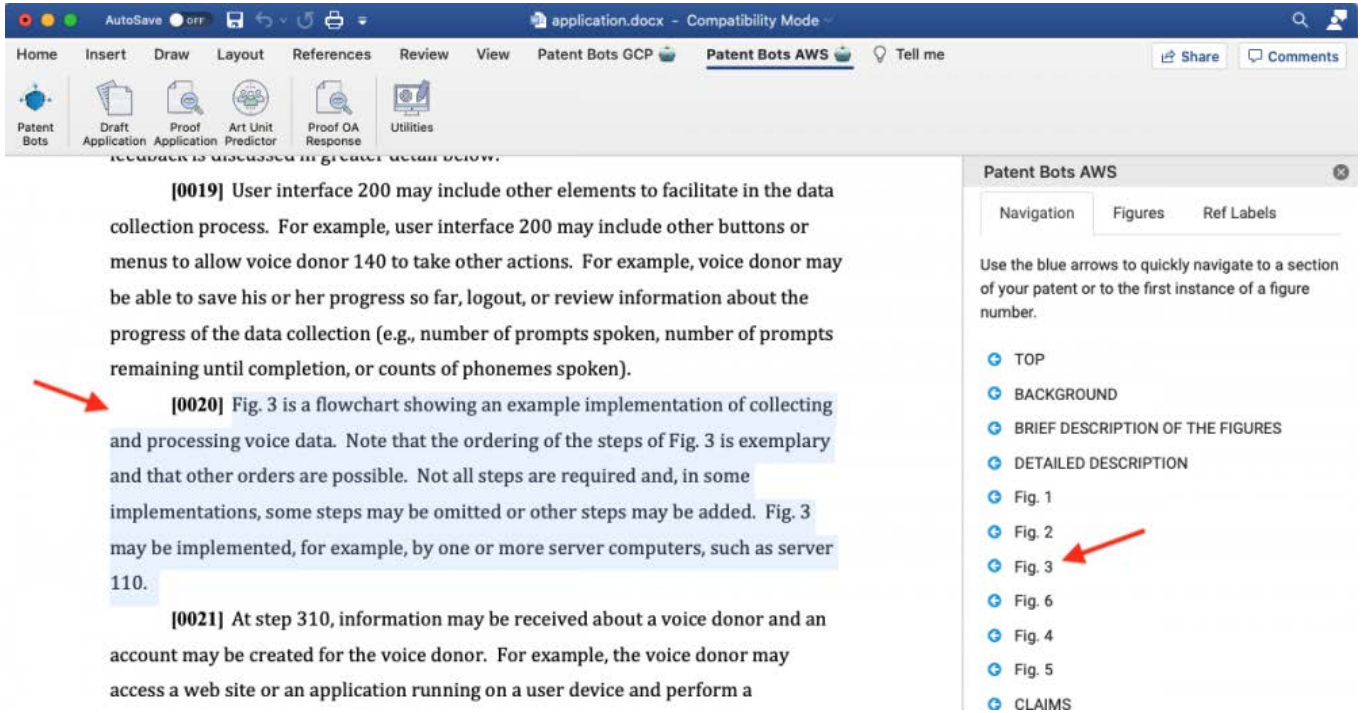
Below is the grant rate timeline for Examiner Anc
timeline is relative to the date of the first office a
year grant rate is the percentage of applications granted at three
years after the first office action.



Drafting Tools: Patent Bots

Word Add-in

- Convenience
- Direct Editing
- Navigation
- Drafting Assistance



Drafting Tools: Patent Bots

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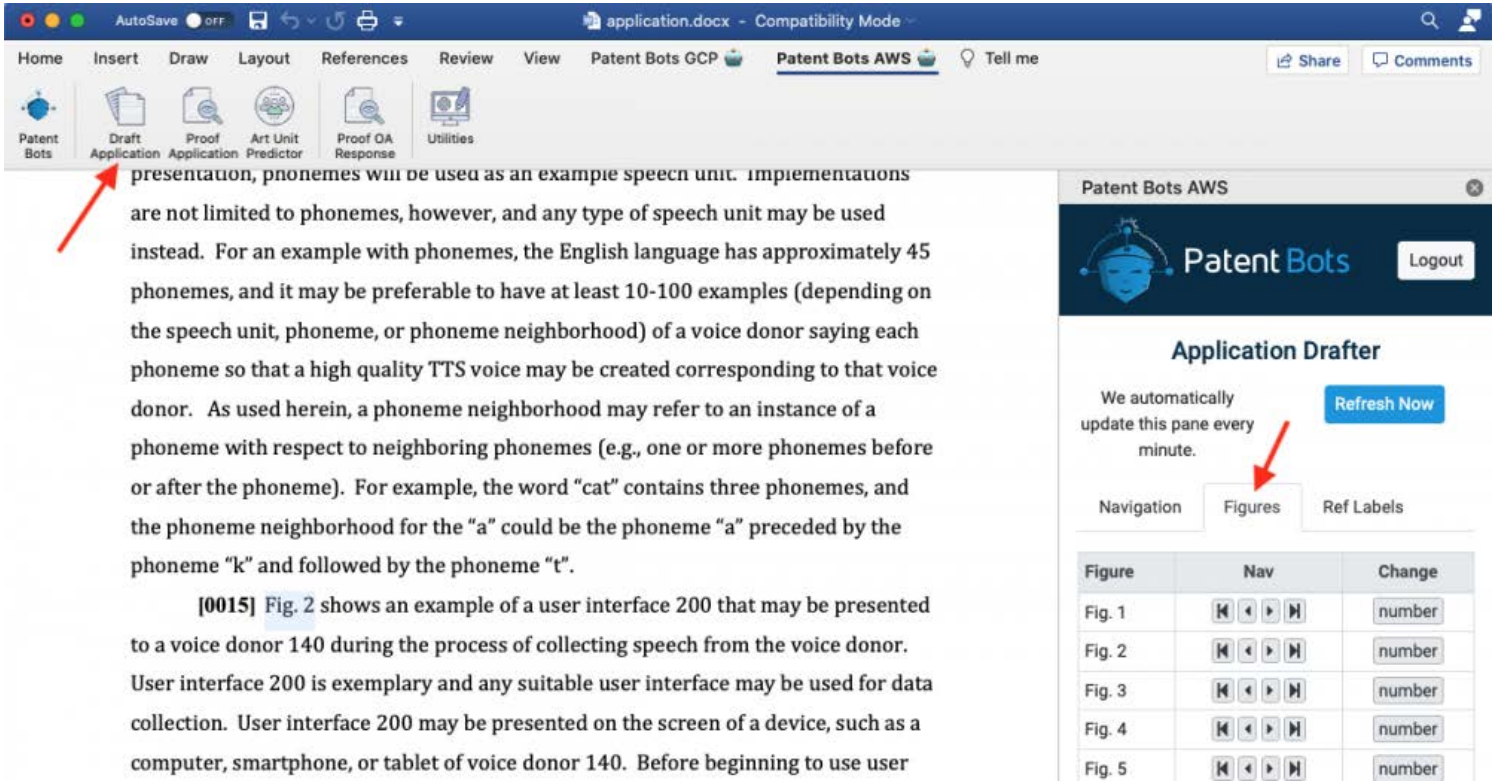

Drafting Tools: Patent Bots

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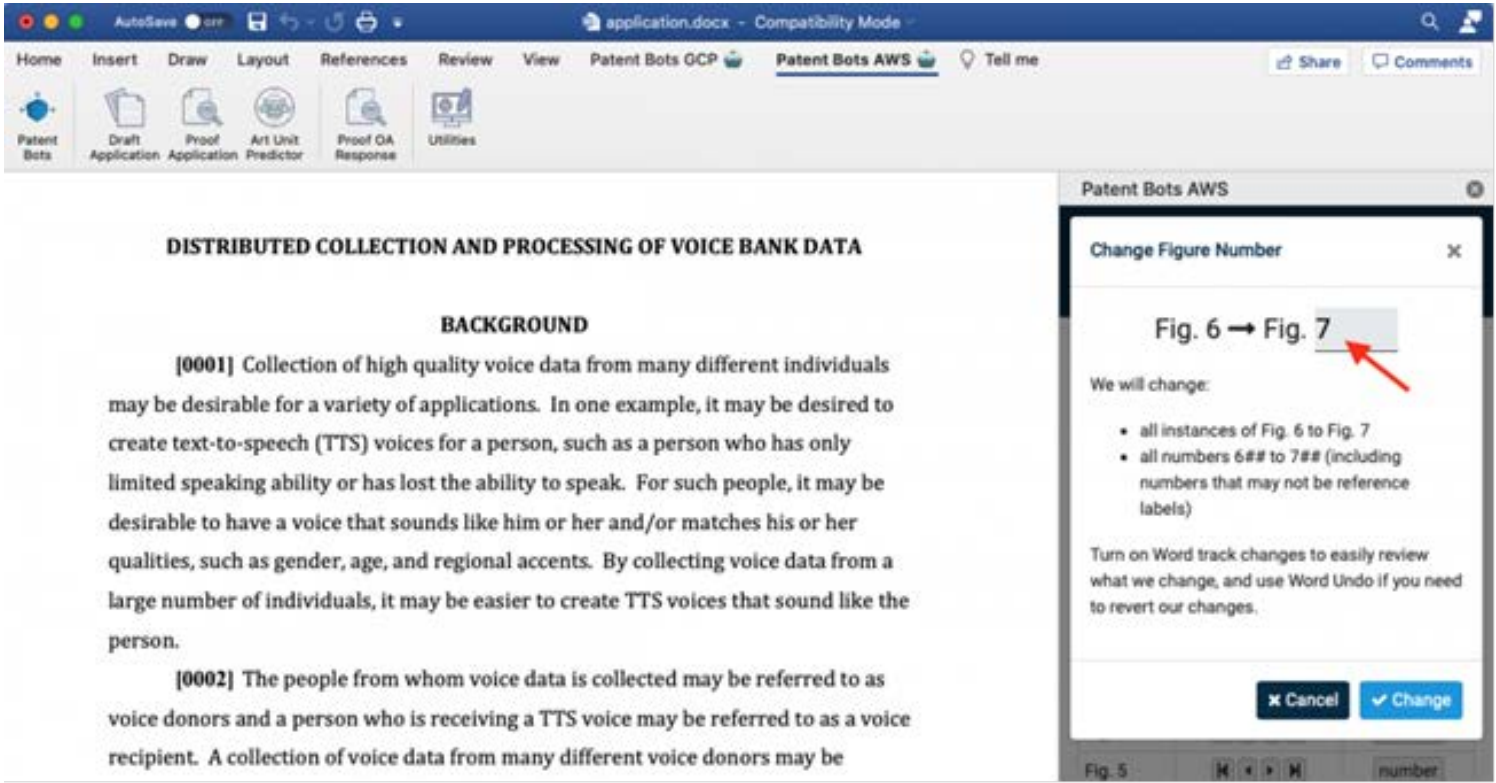


Drafting Tools: Clorganize

What is Clorganize?

- Claim Tagging
- Claim Manipulation

Clorganize — Claim Management

Problem

- IDF subject matter limited by claim counts
- Differing claim counts and types between jurisdictions
- Great repetition between claim classes and direct application support

How to get there

- Claim Tagging and management enables computational manipulation of claims
- Clorganize supports flexible numbering, subset selection, and claim transformation

Benefits

- Attorneys draft claims once and transform into filing forms
- Attorneys can draft claims without concern for ultimate filing count
- Complete IDF subject matter can be organized through claims

Tactical Steps

- Claim Parsing
- Claim marking (e.g., tagging, classification)
- Claim transformation

Clorganize — Workflow

Attorneys draft claims of one type (e.g., method)

- Claims are marked up by type (e.g., "m" for method)
- Claims duplicated and tweaked for other types
- Claims are categorized (e.g., US, CN, FIRST_FILING)
- Final claim output based on type and category
- All claims transformed for inclusion into application text

Results

- Reduced drafting and revision time
- Reduced time to tailor claims to different jurisdictions
- Record of unclaimed subject matter to speed prosecution

Example

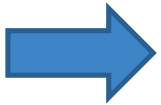
1. A method for doing really cool stuff, the method comprising:
obtaining, via a sensor, human activity in an area;
classifying, via processing circuitry, portions of the activity into a set of classes;
measuring human attention devoted to classes of activity, applying the measure to the set of classes;
selecting a subset of classes from the set of classes based on the measure; and
performing an activity from the subset of classes.

2. The method of claim 1, wherein the sensor is a camera.

3. The method of claim 2, wherein measuring the human attention devoted to the classes of activity includes:
applying gaze detection to images captured by the camera to count a number of observers for a class of activity; and
using the number of observers as a portion of a measurement of the human attention.

4. The method of claim 2, wherein measuring the human attention devoted to the classes of activity includes:
applying sentiment detection to images captured by the camera to count a number of observers for a class of activity to produce a sentiment of human observers; and
using sentiment of human observers as a portion of a measurement of the human attention.

5. The method of claim 4, wherein the sentiment detection provides a sentiment that is one of disgust, fear, boredom, or pleasure.



[ep cn us] m10. The method of claim m9, wherein the artificial neural network is a spiking neural network.

[ep cn] m11. A system comprising means to perform any method of claims m1–m10.

[ep cn] m12. A machine-readable medium including instructions that, when executed, cause a machine to perform any method of claims m1–m10.

[us] crm1. A non-transitory machine-readable media including instructions for doing really cool stuff, the instructions, when executed by a machine, cause the machine to perform operations comprising:
obtaining, via a sensor, animal activity in an area;
classifying, via processing circuitry, portions of the activity into a set of classes;
taking a measurement of animal attention devoted to classes of activity;
applying the measurement to the set of classes;
selecting a subset of classes from the set of classes based on the measurement; and
performing an activity from the subset of classes.

[us] crm2. The non-transitory machine-readable media of claim crm1, wherein the sensor is a camera.

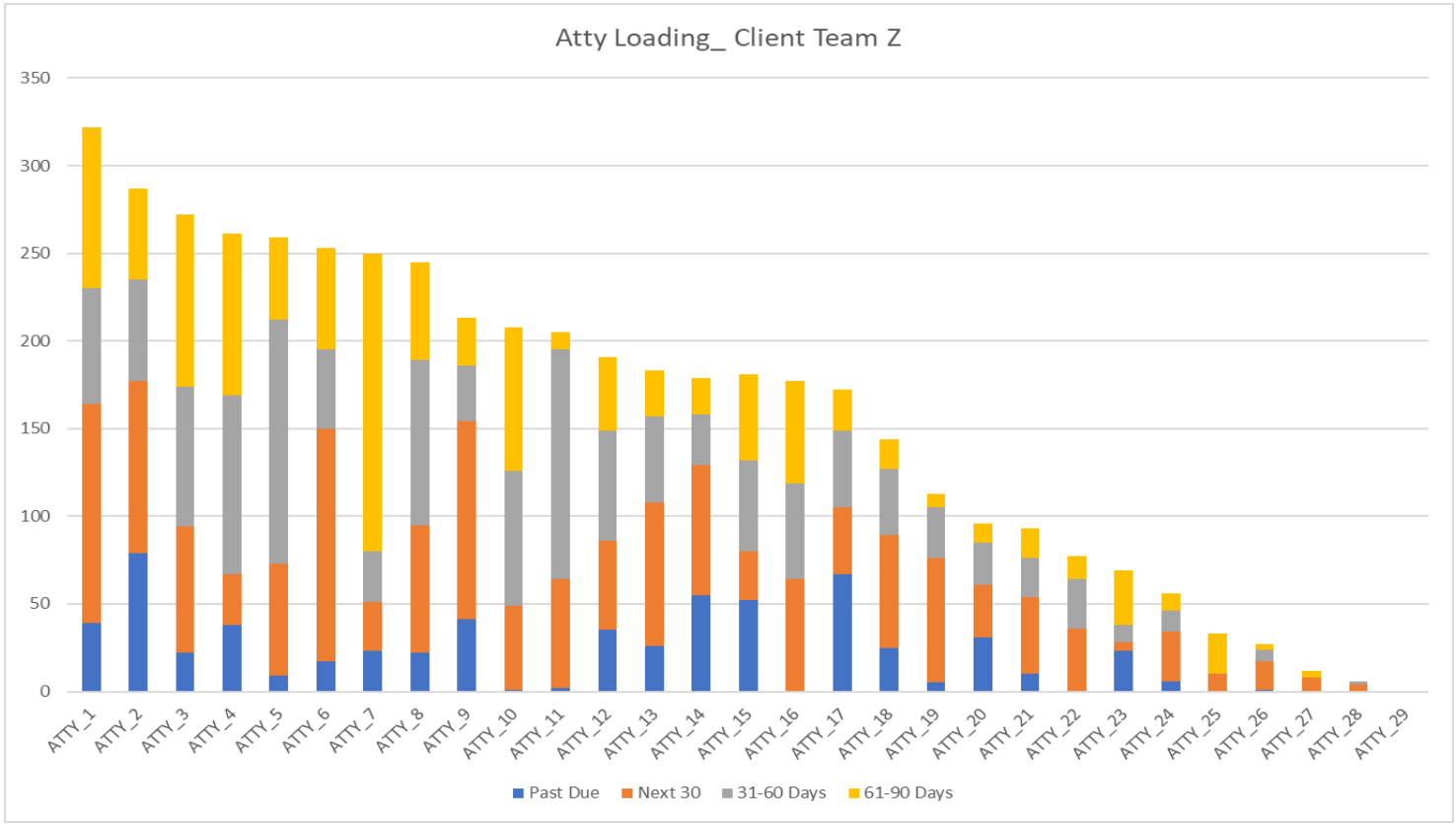
[us] crm3. The non-transitory machine-readable media of claim crm2, wherein taking the measurement of the animal attention devoted to the classes of activity includes:
applying gaze detection to images captured by the camera to count a number of observers for a class of activity; and
using the number of observers as a portion of a measurement of the animal attention.

[us] crm4. The non-transitory machine-readable media of claim crm2, wherein taking the measurement of the animal attention devoted to the classes of activity includes:

Production Management Tools

- Load/Capacity Monitoring
- On-Time Delivery Monitoring
- Views
  - Firmwide
  - Client Team
  - Individual Attorney

Attorney Loading Dashboard – Firmwide View



Attorney Loading Dashboard – Firmwide View

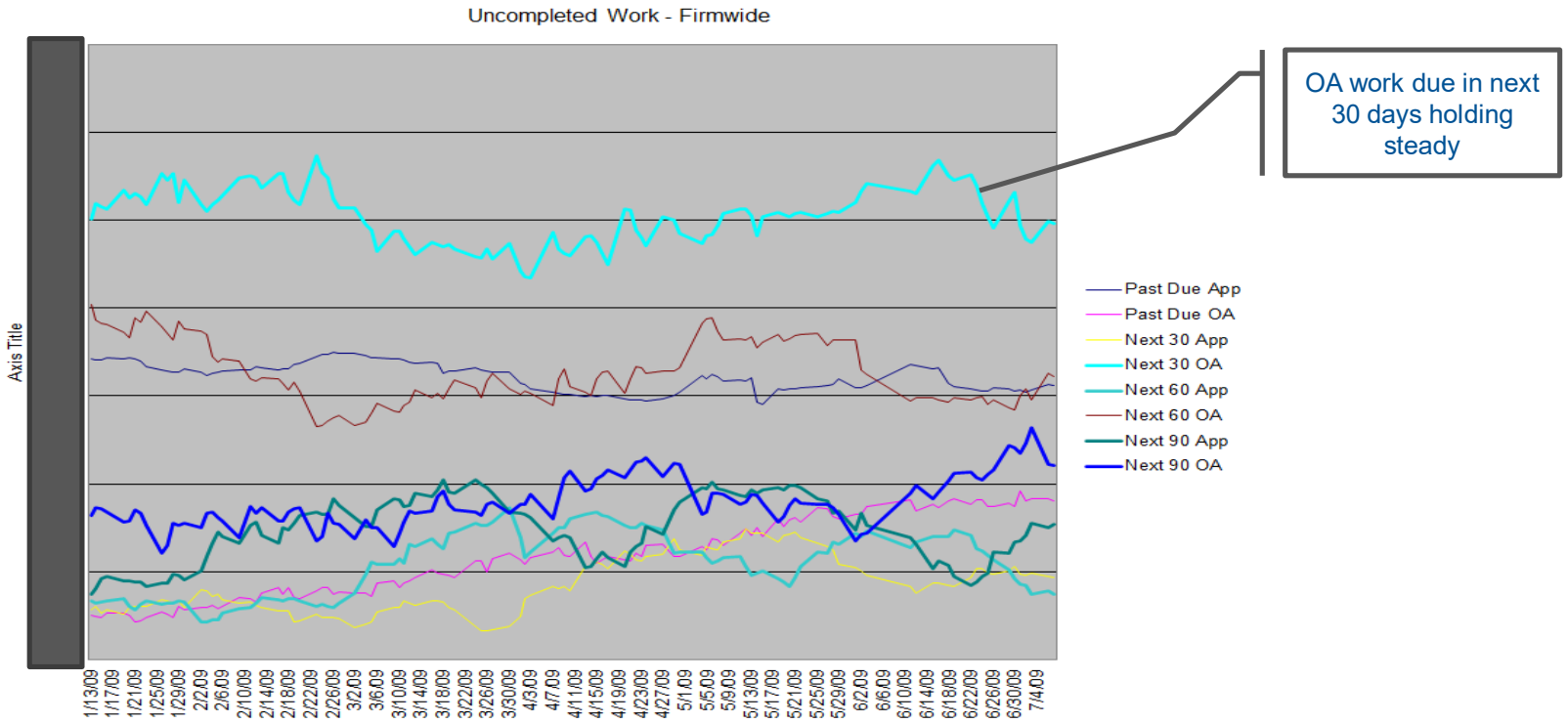
Name	Past Due	Next 30	31-60 Days	61-90 Days	Total
Attorney 1	44	25	23	11	103
Attorney 2	1	15	42	57	115
Attorney 3	0	65	54	0	119
Attorney 4	8	65	28	22	123
Attorney 5	0	16	50	69	135
Attorney 6	0	36	79	23	138
Attorney 7	22	34	50	37	143
Attorney 8	0	57	35	53	145
Attorney 9	0	53	70	23	146
Attorney 10	6	109	36	6	157
Attorney 11	9	40	72	47	168
Attorney 12	33	31	108	12	184
Attorney 13	5	74	96	14	189
Attorney 14	32	44	81	38	195
Attorney 15	0	10	4	183	197
Attorney 16	100	69	19	7	195
Attorney 17	1	68	92	42	203
Attorney 18	67	56	35	45	203
Attorney 19	1	46	80	104	231
Attorney 20	2	30	132	84	248
Attorney 21	73	52	100	39	264
Attorney 22	39	29	141	54	263
Attorney 23	75	88	103	10	276
Attorney 24	96	60	45	81	282
Attorney 25	0	60	118	109	287
Attorney 26	0	0	186	118	304
Attorney 27	75	39	127	66	307
Attorney 28	96	134	61	22	313
Attorney 29	33	92	157	62	344
Attorney 30	87	92	93	112	384
Attorney 31	90	197	52	56	395
Attorney 32	23	155	85	165	428

Attorney running low on work but has past due work

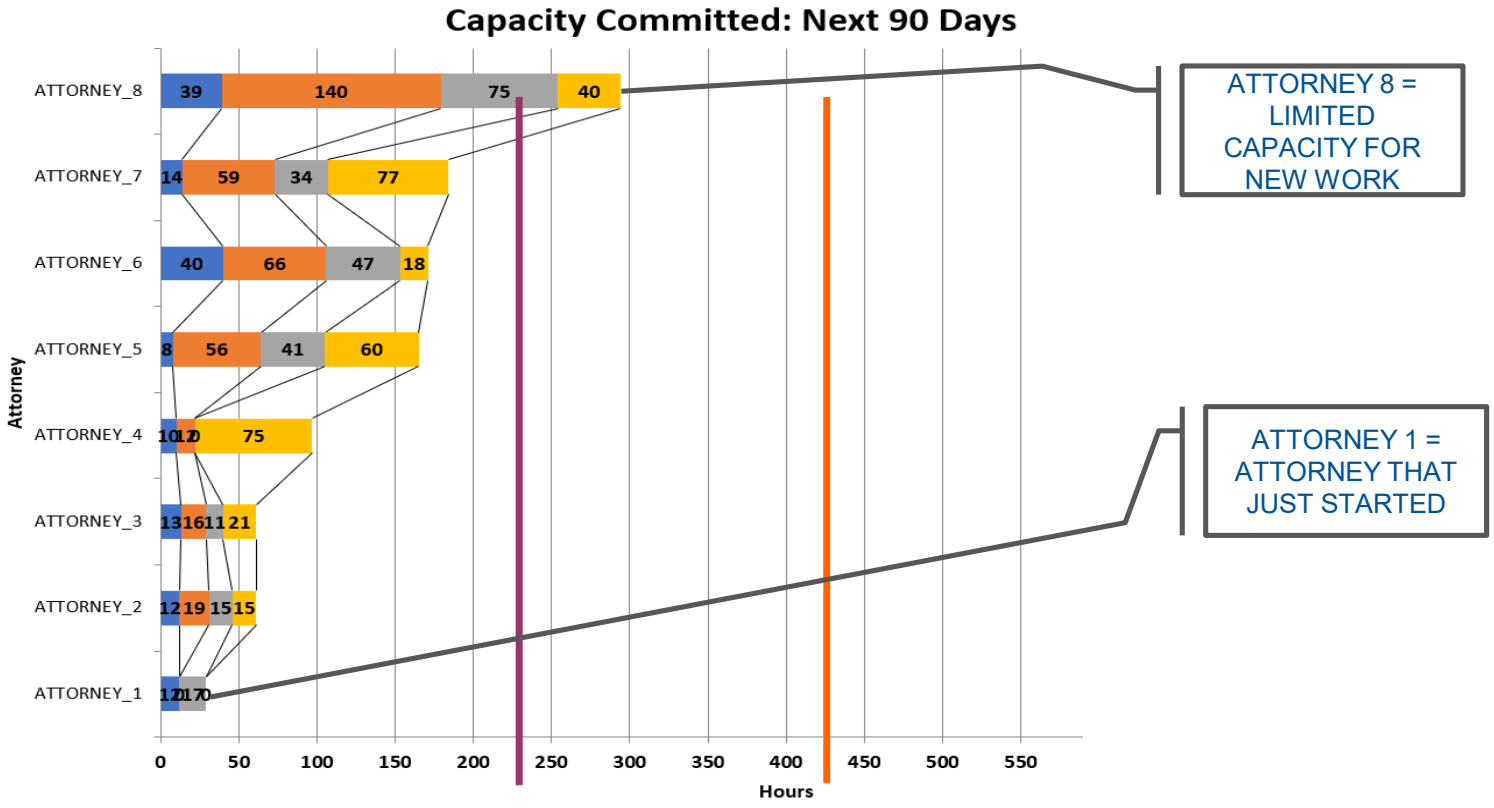
Speak to attorney about past due work

Attorney may be overloaded

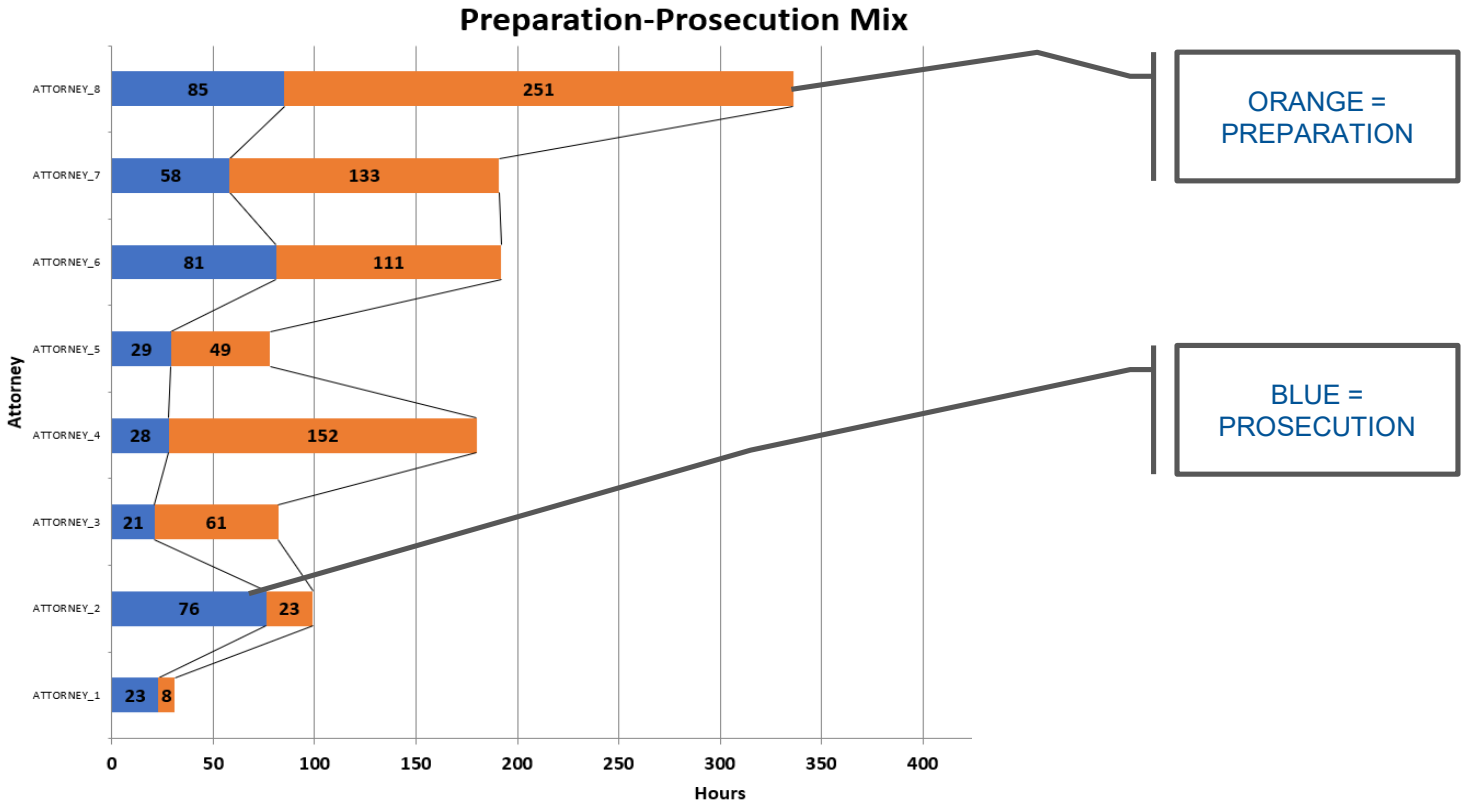
Attorney Loading Dashboard – Firmwide View



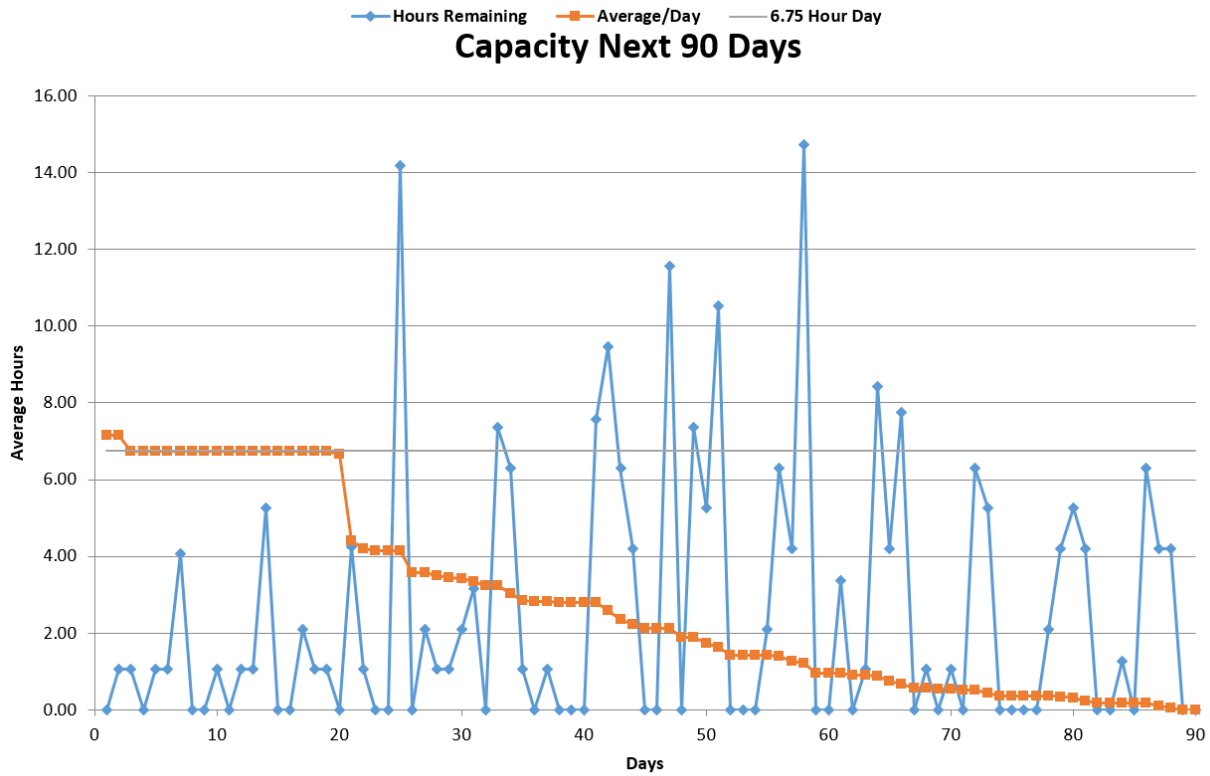
Attorney Loading Dashboard – Client Team View



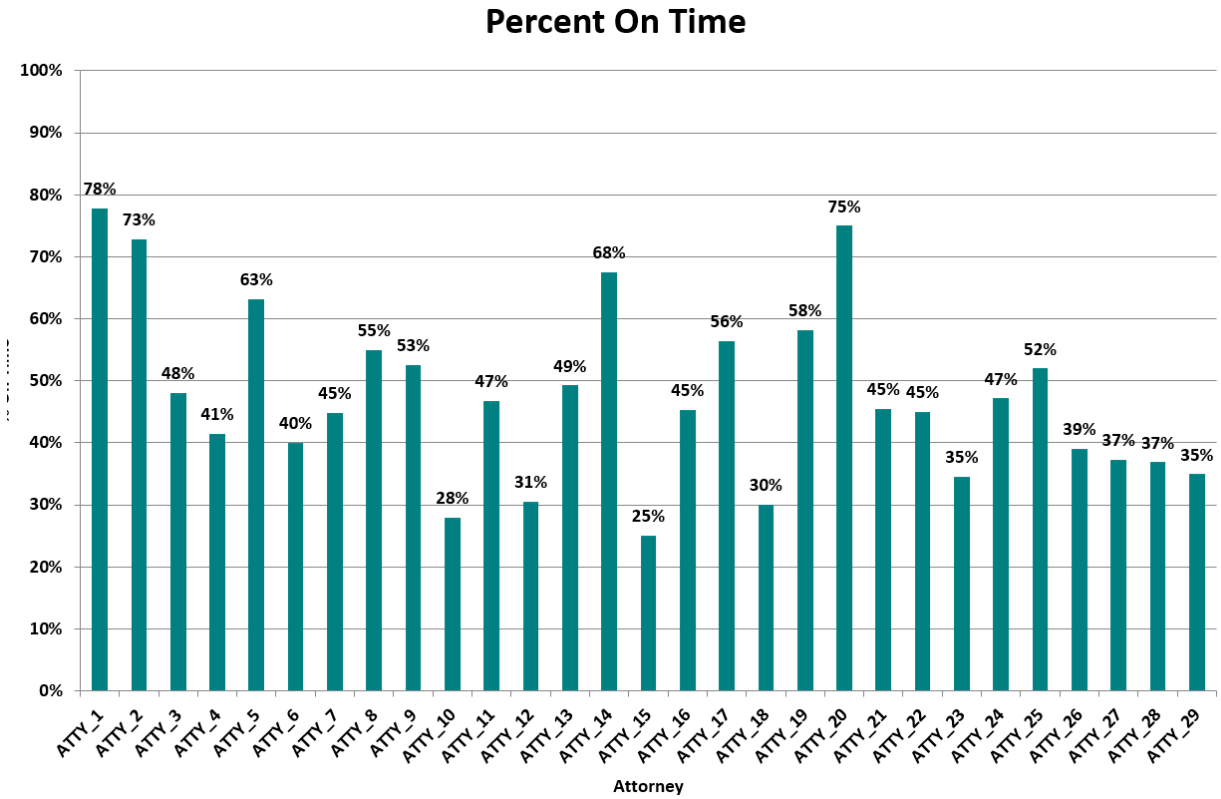
Attorney Loading Dashboard – Client Team View



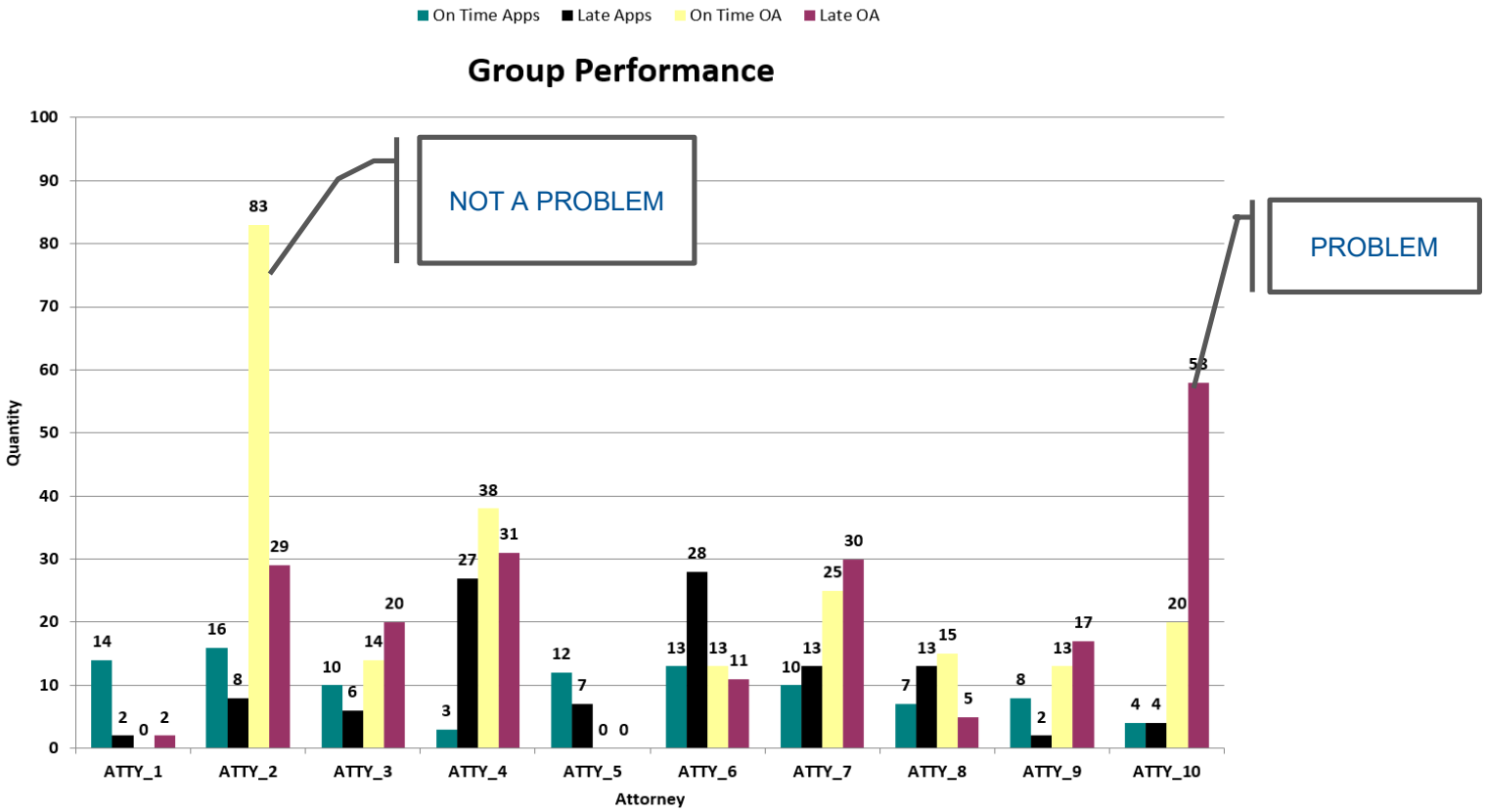
Attorney Loading Dashboard – Individual View



Attorney Performance Dashboard – Team View



Attorney Performance Dashboard – Team View



Thank you for your interest.

Questions?

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