Perspectives on Legal Tech from Silicon Valley

Shuo Chen
March 2021
Let’s play a game!
Draw **palm tree** in under 20 seconds.
1. Why
2. What
3. How
1. Why
2. What
3. How
Why
Media

MORE THAN 100,000 LEGAL ROLES TO BECOME AUTOMATED
March 15, 2016

THE ASSOCIATED PRESS WILL USE AUTOMATED WRITING TO COVER THE MINOR LEAGUES
June 30, 2016

THE FUTURE OF FINANCE: MORE DATA, FEWER PEOPLE
May 2, 2017

YOUR NEXT JOB INTERVIEW COULD BE WITH A RECRUITER BOT
May 16, 2017

AUTOMATION, AI, AND THE FUTURE OF AUDIT AND COMPLIANCE
May 22, 2017

@cbinsights
@cbinsights
Why
Stats

Law Firm Automation

A whopping 69% of attorneys spend too much time on administrative tasks. Attorneys can get back this time by automating certain aspects of their jobs. In fact, 25% of a lawyer's job can be automated with existing technology! Still not convinced? Here are some eye-opening facts that should encourage you to start automating certain aspects of your firm:

### Inbound Calls

- **By 2024, a predicted 162 billion calls to businesses will be made using smartphones.**
  - Only 34% of customers say they have a poor phone experience with one business they are likely to choose another one.

### Document Assembly

- **Automated document assembly systems can cut administrative time by 50% on average.**
  - Only 34% of lawyers use document assembly software.

### Time Tracking

- **Lawyers spend 2-4 hours per week doing manual time entry.**
  - Lawyers can lose up to 15 hours of billable time per month due to poor timekeeping.

### Calendaring

- **7% of all legal malpractice claims are due to not knowing or incorrectly interpreting a deadline.**
  - 5% of all legal malpractice claims stem from failure to properly calendar dates.

### Billing & Payments

- **Law firms collect only 71% of the work they perform.**
  - On average, 39% of all law firms' clients have balances that are past due.

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**Automation Solutions:**

- Of all communication channels, the phone call is still the preferred method customers choose to communicate with businesses. Invest in a virtual receptionist like Ruby or Smith.ai. They will ensure each of your callers receive a warm greeting and the right people. They can also route callers to voicemail, take messages, and much more!
- All-encompassing legal practice management software such as Rocket Matter will enable you to create documents with just a few clicks. Take pre-existing and custom fields and automatically generate a document that you can use again and again. Any document that you would normally generate more than once is perfect for automation. You'll save yourself hours of administrative time!
- Stop losing out on precious billable time! How? Use a conversational time-tracking assistant like Tali. You can use your voice to track time throughout your day using any device powered by Amazon Alexa or Google Assistant (including your smartphone.) You can then sync to your legal practice management software (such as Rocket Matter) with the click of a button, saving you time and lots of aggravation.
- Avoid missed deadlines (and malpractice suits) by combining your legal practice software with a court rules calendaring solution such as LawCloud. You'll be able to generate your court deadlines instantly, share calendar dates with your entire team, and have dates automatically update if something changes. You'll minimize risks and also qualify for the maximum discounts in malpractice insurance!
- Start by accepting credit cards and offering alternative fee arrangements such as payment plans and recurring billing. With payment plans, lawyers can set an amount for an invoice and charge clients on a monthly basis until the balance is paid-off. With recurring billing, clients pay a set amount of money every month to handle normal interactions. This ensures a steady cash flow to your firm.
Research

1/3 of all current jobs in legal departments will be automated by 2025.

63% of in-house legal work is repeatable, fact-based decisions that involve no subjective judgment or interpretation.

2% of current legal department budgets are spent on technology.
Rate of automation
Division of labour as share of hours spent (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Human</th>
<th>Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>2022</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>2025</td>
<td>48</td>
<td>52</td>
</tr>
</tbody>
</table>

Part I. The Problem with Legal

The status quo sucks

Just on commar alone:
- Oxford comma determines labor dispute
- Oxford comma gets woman out of parking ticket
- In 1872, one misplaced comma cost American taxpayers $2 million ($38,330,000 in today’s dollars)
- $46M action resting on an Oxford comma
- Commas in wills have landed families in court
- How a comma gave Americans the right to own guns
- Pern sentence upheld on a comma
- Attorney allowed to bill more because of an Oxford comma
- Typo costs basketball coach $379,000

Broken law in other guises:
- British MPs can resign (therefore given unpaid job with no actual responsibilities, instead)
- Voided due to numerically challenged chief Justice
- Clerical error, so inmate freed 90 years early
- County judge’s (incorrect) insistence on procedure led to reversal of conviction
- JP Morgan to live with lawyers’ $1.5B paperwork error
- Ownership of LA Dodgers rests on conflicting final drafts in divorce papers
- Motion denied for being “unpréproveable” with footnote quoting Billy Madison: “Mr Madison, what you’ve just said is one of the most insanely idiotic things I’ve ever heard. At no point in your rambling, incoherent response was there anything that could even be considered a rational thought. Everyone in this room is new dumber for having listened to it. I award you no points, and may God have mercy on your soul”
- 1966 federal government publication, Gobbledygook Has Gotta Go: “the flabby, pompous, abstract, complex, argotistic gobbledygook that passes for communications in government “has gotta go” “it’s too out-of-date to renovate; it’s too expensive to tolerate” Punished for dishonest verbosity, attorneys tried to make 70-page brief fit into a 50-page limit by reducing font size and fine spacing (fined $1,000 with explicit instructions that they could not pass the fine along to their client)
- Uninstall please!, motion “riddled with unprofessional grammatical and typographical errors that nearly render the entire motion incomprehensible” Florida judge ordered lawyer to re-read civil procedure text in entirety and for attorney to “personally hand deliver a copy” of the court’s order along with a marked-up copy of the motion to the client

The law firm business model is...
- “risky, exhausting” “struggling” “rigged to fail” “dying” “broken” “all wrong” “stumbling” “in a death spiral” “trapped in 1995”

Everybody now!
- The Quiet Crisis in Legal
- The Lawyer, the Addict
- The end of lawyers?
- Contract lawyers are “copy and paste monkeys”
- ABA’s report on the Future of Legal Services in the US that was (deliciously snarkily) called Toothless by LegalZoom’s Eddie Hartman
- The ABA writes about automation and the legal profession; in 2015 and then similarly 6 months later
- How automation is dead from the start, but the ABA can’t get it off the table, so breaded on breaded that it’s the sole job with...
Let's play a game!
Why Countries

Artificial Intelligence Strategies

- March: Pan-Canadian AI Strategy
- May: AI Singapore Announced
- October: AI Strategy 2031
- December: Finland’s AI Strategy
- January: Budget for AI in Taiwan
- March: AI at the Service of Citizens
- April: First Workshop for Strategy
- April: UK AI Sector Deal
- May: White House Summit on AI
- May: Sweden’s AI Strategy
- June: Towards an AI Strategy in Mexico
- Fall 2018: EU’s AI Strategy

2017
- March: AI Technology Strategy
- July: Next Generation AI Plan
- December: Three-Year Action Plan
- January: Blockchain and AI Task Force
- January: Strategy for Digital Growth
- March: France’s AI Strategy
- April: Communication on AI
- May: Australian Budget
- May: AI R&D Strategy
- June: National Strategy for AI
- Fall 2018: Germany’s AI Strategy
Indian Government to Issue National Blockchain Strategy

US Lawmaker Proposes Legislative Groundwork for National Blockchain Strategy
Texas lawyer trapped by cat filter on Zoom call, informs judge he is not a cat

- Lawyer Rod Ponton unable to undo filter during court debate
- ‘I don’t know how to remove it ... I’m here live. I’m not a cat’
Impact

By 2020, AI will create 2.3M jobs more than the 1.8M it will eliminate. Gartner
The New Jobs
How AI can save our humanity

Impact

Compassion Needed

Concierge

Social Worker

PR/Marketing Director

CEO

M&A Expert

Creativity or Strategy

Optimization

Customer Support

Radiologist

Research Analyst

Columnist

Scientist

Artist

Remote Tutor

Elderly Caretaker

Elderly Companion

Teacher

Tour Guide

High school teacher

Beauty Consultant

Wedding Planner

Crisis Hotline Volunteer

Tele-sales

Security Guards

Hematologist

Truck Driver

Dishwasher

Compassion not Needed

to give more medical care to more people?

Source: Kai-Fu Lee | TED2018

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1. Why
2. What
3. How
INCREMENTAL VS EXPONENTIAL THINKING

When people get impatient for results

Launch  |  Build  |  Grow

Exponential Thinking

Incremental Thinking
Hype Cycle for Emerging Technologies, 2020

- Innovation Trigger:
  - Secure Access Service Edge (SASE)
  - Social Distancing Technologies
  - Explainable AI
  - Carbon-Based Transistors
  - Bring Your Own Identity
  - Ontologies and Graphs
- Peak of Inflated Expectations:
  - Citizen Twin
  - Self-Managed Identity
  - Social Data
  - Private 5G
  - Differential Privacy
  - Biodegradable Sensors
  - Health Passport
- Trough of Disillusionment:
  - Generative Adversarial Networks
  - 2-Way BMI (Brain-Machine Interface)
  - Low-Cost Single-Board Computers at the Edge
  - DNA Computing and Storage
  - AI-Assisted Design
  - Authenticated Provenance
- Slope of Enlightenment:
  - Embedded AI
  - Data Fabric
  - Responsible AI
  - Multiexperience
  - Digital Twin of the Person
  - Packaged Business Capabilities
  - Adaptive AI
  - Composite AI
  - Generative AI
- Plateau of Productivity:

Plateau will be reached:
- less than 2 years
- 2 to 5 years
- 5 to 10 years
- more than 10 years
- obsolete before plateau

As of July 2020

gartner.com/SmarterWithGartner

Source: Gartner
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Discover Legal Technology

Explore a curated list of 1742 companies changing the way legal is done.

[Search for a company]

Analytics

[SEE COMPANIES]

Compliance

[SEE COMPANIES]

Document Automation

[SEE COMPANIES]
Legal document automation: 184 firms
Legal marketplace: 153 firms
Legal practice management: 138 firms
Legal analytics: 70 firms
Legal research: 57 firms
e-Discovery: 35 firms
Legal education: 30 firms
Online dispute resolutions: 20 firms
Legal compliance: 5 firms
Fundraising: Over $2.5B raised in more than 450 deals
Trends

Past

- Move to the cloud
- Learning from consumer technologies (mobile, design)
- Intelligent agents as a means of document automation
- E-discovery, Analytics and Automation: from search to AI
- DLT and Smart Contracts: emergence of a new category
- A move towards decentralization
Startup Directory

Discover YC companies by batch, industry, region, and company size. To see demographic data on our batches, check out our blog.

You can also see YC’s top companies and pages for underrepresented founders here:

- YC top companies
- Black-founded companies
- Latinx-founded companies
- Women-founded companies

Batch:
- All batches
- W21
- S20
- W20
- S19
- W19
- S18
- W18
- See all batches

Industry:
- All industries
- B2B Software and Services
- Education
- Consumer
- Healthcare

Legal

**Legalist**  San Francisco, CA, USA
Tech-enabled legal asset manager
- $16
- Fintech

**Vouch**  San Francisco, CA, USA
Insurance and risk management tools for startups.
- $19
- Fintech

**SimpleLegal**  Mountain View, CA, USA
Legal Operations for corporate legal teams.
- $13
- SaaS
Trends

- Move to the cloud
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- DLT and Smart Contracts: emergence of a new category
- A move towards decentralization
What does it mean to be human?

Applications

Pattern detection
Recognize (ir)regularities in data

Foresight
Determine the probability of future events

Customization
Generate rules from specific profiles and apply general data to optimize outcomes

Decision-making
Generate rules from general data and apply specific profiles against those rules

Interaction
Communicate with humans through digital or analogue mediums
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What
Governance, Risk & Compliance

Machine Learning
Anomaly Detection
What
Governance, Risk & Compliance

Machine Learning Anomaly Detection
97% Accuracy
50+ Client Companies
Fraud Prevention

Super Hearing: Identifying Fraudsters on the Phone

Listen to calls to figure out if it’s really you based on your voice, your behavior, and the noise on the line.

In the US: **90 voice fraud attacks every minute**
What

Sentiment Analysis

I still don't understand why your product is twice as expensive as Jinx.
Seeing Divergence From Building Plans
What does it mean to be human?
Ravel’s visualization tool shows how dozens of cases are connected through citations.
Get financing for your case.
Fill out a brief form to find out whether Legalist can help get your case to the finish line.

Apply now

Funding justice.
Litigation finance for those who want to level the playing field.

Apply now

“Working with Legalist allowed my client to access the litigation funding he needed in order to pursue his case.”

Aryeh Kaplan, Pillsbury Winthrop Shaw Pittman
Data Insights

We mine court records to make better funding decisions. Dossier offers insights to help litigants and attorneys choose data-driven strategies and win their cases.

Why Litigation Finance Could Be a Lifeline for Small Firms in the Next Coronavirus-fueled Recession

Litigation finance
Grow Your Business Intelligently

Node combines a massive database with powerful AI to help you find the people and companies that will transform your business.

REQUEST DEMO

LEARN MORE →
What does it mean to be human?

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Legal research software made for fast and in-depth research.

Question-based Search
Search less, answer more.

Find Similar Language
Leave no stone unturned.
Sued for a debt? We're here to help.

You must respond to the lawsuit within 14-30 days of receiving the complaint. Our automated software will help you safely and accurately prepare your response.
Legal wills made easy
An online tool for your estate planning needs

$69 Start for free, pay only when you print and sign
Applications

- **Pattern detection**
  *Recognize (ir)regularities in data*

- **Foresight**
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- **Customization**
  *Generate rules from specific profiles and apply general data to optimize outcomes*

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- **Interaction**
  *Communicate with humans through digital or analogue mediums*
Natural Language Processing
IRS Regulation Review
3x consistent & 2x efficient
Break-Even ROI in a Year
Contract Intelligence (COIN) - JPMorgan

Made possible by investments in machine learning and a new private cloud network, COIN is just the start for the biggest U.S. bank. The firm recently set up technology hubs for teams specializing in big data, robotics and cloud infrastructure to find new sources of revenue, while reducing expenses and risks.

As for COIN, the program has helped JPMorgan cut down on loan-servicing mistakes, most of which stemmed from human error in interpreting 12,000 new wholesale contracts per year, according to its designers.
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Hi! Click the buttons below to talk to me. To start, please click a button to select a language.
Putting Things Together
What

Putting Things Together
1. Why
2. What
3. How
Intersecting Exponential Technologies
Atrium raises $65M from a16z to replace lawyers with machine learning

Twitch's Justin Kan returns to pwn law firms

Josh Constine  
@joshconstine / 7:01 AM PDT • September 10, 2018
$75M legal startup Atrium shuts down, lays off 100

Justin Kan's hybrid legal software and law firm startup Atrium is shutting down today after failing to figure out how to deliver better efficiency than a traditional law firm, the CEO tells TechCrunch exclusively. The startup has now laid off all its employees, which totaled just over 100. Atrium had raised more than $75.5 million in funding to investors, including Series B lead The separate Atrium law firm will continue to operate.
10 months ago we shut down Atrium after raising $75m in venture capital. Anyone hearing that knows I made tons of mistakes along the way. Someone asked me today what my biggest lessons learned were. Here they are:

8:39 PM - Jan 5, 2021 - Twitter Web App

2K Retweets 359 Quote Tweets 9.7K Likes

Justin Kan @justinkan

Start with the mission

It is very hard to write the mission after the fact. You should start with a clear reason to exist and filter early hires for believers.

Justin Kan @justinkan - Jan 5

Start remote. SFBA is over for startups: the cost of housing and rent gives you much worse operating leverage. Many talented people choose jobs they want to be flexible re: location. Remote is better at this time in the market.

I wrote that before COVID, now it's extra true.

Justin Kan @justinkan - Jan 5

There is no skipping the R&D phase of a company - if you try to skip this you miss the part where you are forced to develop something differentiated. Very hard to solve this with money.

Justin Kan @justinkan - Jan 5

Be kind to yourself. If you won't, who will? My new podcast The Quest (@thequest_pod) out now on Apple and Spotify

Justin Kan @justinkan

At least one person injured in Tacoma, after a police car drove through a crowd of pedestrians Saturday night

Los Angeles Times - Yesterday

Remembering Kobe Bryant: 1 year later

The New York Times - Yesterday

Dr. Anthony Fauci reveals what working for Trump was really like

Politics - Trending

#Jesus

Trending in Kobe Bryant: 1 year later
Justin Kan @justinkan  Jan 5
You can read more in this AMA I dropped on Reddit today:

I am Justin Kan, cofounder of Twitch (world's bigge...
My newest project, [The Quest](https://the-quest-with-justin-kan.simplecast.com/), is a podcast whe...)

Issac Oni @onissaac  Jan 5
Replying to @justinkan
@yercekepearl @Duke_backley

Joakim Achrin @joakim_a  Jan 5
Replying to @justinkan
@readwselo save thread

Readwise @readwselo  Jan 5
Donát! We’ve saved this whole thread to your library so you can revisit/remember it 😊

Stats:
- 8 saves of this thread (ranked #1202)
- 14 unique saves of Justin Kan’s threads (ranked #239)
- 43 total saves of Justin Kan’s threads (ranked #185)

Kid presentable @TheRevJPConway  Jan 5
Replying to @justinkan
@threadder_app compile please

Threadder @threadder_app  Jan 5
Hey kid, what’s up? The thread is compiled, don’t hesitate to share it.
Have a good read:
Cognition IP looks to streamline the patent filing experience with a dose of smarter search

Matthew Lynley  @mattlynley / 8:05 am PST • February 1, 2018
Fixed-fee, Comprehensive IP Protection

Our expert IP lawyers use modern technology to streamline your IP protection

REQUEST A MEETING
Fixed-fee, Comprehensive IP Protection

Our expert IP lawyers use modern technology to streamline your IP protection

REQUEST A MEETING

OUR LAWYERS HAVE PROVIDED IP PROTECTION FOR

AstraZeneca
Apple
Texas Instruments
HP
Purdue
Our results are close to 2x better than other law firms

We have a 91% historical success rate for patent applications that we file. Compare this to the 55% success rate of the average law firm in the United States. We put care and attention into our work and our technology helps produce consistent results. Our past successes show this.

Fixed-fees so you’ll never be surprised by a legal bill.

We price our services on a fixed-fee basis so you’ll know how much to budget for all your IP needs. Other firms bill by the hour and won’t tell you how much the final cost is until after they send you the invoice. We give you control over your legal spending.
IP prepared in weeks. Not months.

We prepare patent applications in a matter of weeks, not the months long wait times you have with traditional law firms. We prioritize our startup clients and get to work on their IP right away. Your work won’t get put on the back burner behind a traditional law firm’s bigger clients.
HELPING YOU PROTECT YOUR IP

**IP Strategy**
We provide expert guidance on IP strategy based on years of experience and advanced analytics.

**Freedom to Operate**
Ensure that you have the freedom to commercialize your product and prevent lawsuits before they occur.

**Trademark**
Protect your brand by working with us on a comprehensive trademark search and application filing.

**Provisional Patent Application**
Based on your invention disclosure, we’ll prepare and file your provisional patent application to obtain a strong priority date.

**Non-Provisional Patent Application**
Work with our IP practitioners with domain expertise who will craft and file your non-provisional application.

**Patentability Search**
Our worldwide patentability search will help provide greater certainty that you’ll be able to patent your invention.
Focus on ...

- Knowledge
- People
How Knowledge
Other Players in the Field

Non-exhaustive listing, though we do try to put everyone we've encountered here. Holler if we missed something!

Legaltech-for-Startups

- **Bonsai** helps freelancers get paid
- **Carta** (formerly e-shares) does ownership management
- **Catalyx** does corporate administration, e-signatures, law browsers, working day calculators, court costs calculation, and PDF concatenates
- **Clerky** (Delaware) does incorporations and fundings
- **CofoundersLab** offers templates to entrepreneurs
- **Concord** is end-to-end contract signature management
- **DocDep** takes you from investment to divestment
- **Eloquens** has an entire section for startups
- **FirstCounsel** offers legal support for entrepreneurs, startups, and SMEs in Singapore
- **FounderSuite**
- **Flashfunders** is an equity crowdfunding platform with a ton of augmentations
- **Incorporations.io** finds the best jurisdiction in which to incorporate your particular startup
- **Ironclad** automates a range of startup-friendly legal templates, with Dropbox and HelloSign integration
- **Jioafabang** is an document automation service for startups
- **LawCanvas** (for Singapore)
- **Legitify** has DIY agreements
- **Niuwa** is a cloud-based service for issue of financial instruments by SMEs
- **Patentify**
- **Paper** does incorporations and fundings
- **SeedLegals** does incorporation & funding documentation in the UK
- **Sleek.sg** does incorporations, Saas company secretary, visas and immigration in Singapore
- **StartupDocuments** is affiliated with **Bedrock**
- **Stash**
- **StartupLawyer** does incorporations and fundings
- **Stripe Atlas** (Delaware)
- **Upstart Alliance** provides online templates targeted at startups
- **Valcu** offers document automation and some scripting
- **Valvatrue** capital structure modelling and visualization
- **VCEExperts** offers due diligence and other tools
- **Venture360** is a complete deal management platform for seed funds
- **Visible.VC** offers a **TechInvesting Software Stack**
- **Zegal** (formerly Dragon Law) is founded by a lawyer

Fundraising Templates

- **500 Startups** offers the KISS
- **CooleyGo** has equity and debt instruments
- **SeedSummit for Europe, by SeedCamp**
- **SeriesSeed** (also for Finland and India)
- **Simmonds** does automated KISSes for South-East Asia
- **Y Combinator** has both Series AA and SAFE instruments in four flavours; though some think it's screwing you up, not safe, sacrifices flexibility and future bargaining possibilities on the altar of expedience; for some others, may not love it... but at least understand:
  - Comparative reviews, e.g.: Shockwave Innovation; Quora weights in: Square Bank compares the SAFE with convertible debt notes; SAFE vs KISS; SAFE vs KISS by Rubicon; KISSing SAFELY or SAFELY KISSing; SeriesSeed vs Series A; Involverlawy; Vincent Jacobs

Cap Tables

- Techcrunch's Jason Rowley wrote about first round fundraising
- **Quora** answers "What is the best cap table template available online?”, and also the best template for startups with different types of shares, bonus pools, multiple rounds, etc.
- **AskTheVC**
- **Capshare.com**
- **Captable.io**
- **ExactEquity**
- **Gust** Equity Management does captables and equity issues
- **Reportally.com**
- **VentureHacks**
- **eShares round modelling which is gaining impressive marketshare

Education

- **How Startups Burn Money on Lawyers**
- **Quora** answers "When founding a startup is it worth immediately investing in a lawyer, or can you get by with pre-made documents?" NASA: Heidi Rolzen's Walkthrough
- **Docracy's guide to Term Sheets**
- **Brad Feld's Term Sheet Blog Series**
- **Venture Deals**
- **Deal Terms by Wilmerding**
- **Angel or seed investing: Angel term sheets for startups** from the MaRS Library
- **Paul Graham on High Resolution Fundraising**
- **The Truth About convertible Debt at Startups and The Hidden Terms You Don't Understand**
- **Mark Suster's Bad Notes on Venture Capital**
- **StartupCompany Lawyer**
- **LivePlan helps you with forecasts**
- **The Ultimate List of Legal Resources for Startups**
Industry-specific Solutions

Real estate BitRent does smart real estate contracts on the blockchain // Core Logic // Chromaway does it on the blockchain // EasyLaw does online land searches and calculates legal fees, stamp duties, and RPQT in Malaysia // Goodlord does tenancy agreements, references, e-signing all-in-one // Dealpath does corporate real estate deal management // Flip allows you to make a lease agreement, amongst others // Track With Ease // Shipping Bimco does shipping contracts & clauses // CP Desk is a good example of a vertical-specific legal application // Chinnay does contract management for freight // Conga lets you create customised shipping documents from Salesforce // Domo does document management for shipping // Immigration Boundless does marriage-based green card applications // Citizenshipworkshop // FastVisa does immigration workflow automation // Legal Space is a digital immigration and visa solution for relocating to the USA // Joshua Browder does chat bots for asylum seekers (and parking tickets and air ticket refunds) // Olimedia does immigration visas // Visabot is an AI chatbot for US green cards // WorldEvermore says it is turbotax for immigration // Wills doyourwills // Willing makes wills online // Farewell in the UK and Wales // Freewill in the U.S. // LegalWills in Canada // QuickWillMaker // WillCreator Deluxe // WillS.org.uk allows you to make a fully legal will online // MyWillOnline does it in Australia // Divorce Amicable does fixed price divorce and separations // DivorceMate targets Canadian family law practices for spousal child support situations and document assembly // It's over easy does uncontested divorce filings in 3 steps // iSpiltDivorce // LexQuanta has a divorce assets division simulator // Separate.us // SupportPay does child support // Wevorce // IP rights management // Kenneth Adams' Copyright and the Contract Drafter // (New York Law Journal, 2006) asks: are contracts copyrightable? // AltLegal // Acclaim IP does patent search & analytics // Anaqua // Cognate does trademark protection // DataNovo // elementaryIP does patent law // IPNews provides legal templates, forms, checklists, and guidelines for IP protection // Lecorpo acquired by Anaqua does IP software and services on a platform // Lex Machina groks patent law // Specific automates patent applications // Trademarkia // Trademark Now does trademark searches // Consumer Protection radovate for automated consumer dispute processes

Document Generation & Assembly


Assemblers (usually for law firms and in-house counsel) Autole // AvvoCA // AvvoCA offers contract automation and pair drafting // Bizbody // ContractExpress by Thomson Reuters // DocAssemble is opensource (YAML and Python) and allows domain experts to build what TBC would call a shallow-modal expert system wizard // Law Help Interactive is another expert system // Exari // HotDocs // LegalFab // Planet X Law // XpressDoc // Turner is a contract-drafting IDE // DocMate // Nonprofit Techy compares A2J Author, Docassemble, QnA Markup and HotDocs // Justice for Some

Plug-Ins Woodpecker does automation in Word // Xpressdoc // Contract Express Author

Libraries & Repositories

Libraries AVAL (for Australia) // BVCA (UK) // edoc // ILRG Legal Forms Archive // LawCanvas - Easy Legal Documents for Singapore // LawDepot // LegalZebra (for Australia) // Onedrive is an archive of legal forms // Otrick's Start-Up Forms Library and terms sheets // Taylor Wessing's Documents (UK)
For Lawyers and/or In-house Counsel

Practice Management Alta Claro // Auto is kind of IFTTT for lawyers with workflows as an expert system // Brightflag does eBilling & spend management // BusyLamp // Casepeer does personal injury case management // CaseStatus // Cavity does cloud-based legal practice management // Clio // Cosmolex // Darychain // Digitory Legal // Dealmaker // DocEx Legal tracks your documents // Gideon Legal does chatbots and also predictive analytics // Josef creates chatbots for law firms // Jurato // Justly // LawDroid does chatbots // LawMaster // LawVu does matter and ops management // Legaler does online meetings for lawyers // LegalInc // MerusCase // Metajure // MyCase // NextChapter does practice management just for bankruptcy law // Paladin does pro bono work management for law firms // Practice Evolve from Australia // SavvySuit does chatbots // SimpleLegal // Sheriffs practice management for law firms in Africa // Time Miner does billing // Virus does case management // Yerra is a tech consultancy for law firms, which has just been acquired by Elevate // Elevate is a consultancy firm specialising in law firms // Zygos

Negotiation ContractRoom // SimplyAgree focuses on signature and closing // Synergist is a contract negotiation platform with easily tunable knobs // Parley Pro negotiate better contracts faster // The DocYard Is a polished app for lawyers to address the pain point of deal negotiation and closing

Run-time Monitoring IntraspeXion is an early warning system for employment litigation


RegTech Corlytics is regulation technology and analysis with big data // ComplyGlobal helps big business cover their many widely dispersed assets // Corlytics // Global-Regulation // SaGo for compliance


Due Diligence dealWIP does cloud-based due diligence // Dromos // Luminate does due diligence as well // Midway does buy-side due diligence // Wizdos // Fieldguide

Litigation AllegryLaw // Bouna does digital forensics // Blue J Legal helps lawyers research tax law // CaseText // Caseshare and OpenLaw, co are both case databases // Clarilegal // Citaxia // Courtroom for litigants-in-person // Docket Alarm // Docket Navigator is a curated platform for patent litigation // Doctrine is a search engine for court decisions and other legal texts // EpiPal does patent analysis // ExactCase // CaseText // Early Neutral Analyses predicts
Lawyers getting in on the game

Some more innovative / technical / interesting than others, obviously.

Allen & Overy and Deloitte make MarginMatrix which codifies the law in various jurisdictions and automates drafting of certain kinds of multi-jurisdictional documents // Allen & Overy's Fuse, a legal tech innovation space // Bakers McKenzie's Innovation Programme aims to apply design thinking to client services, and has deployed bespoke AI to enhance its M&A and transactional practices // Chrissie Lightfoot on Twitter // ClydeCode is a consultancy service by Clyde & Co specialising in smart contract advice // Evolution Lawyers // KM Standards (Kingsley Martin) reads and writes contracts — see his 2013 FutureLaw talk // KWM’s Project DrA on Github // NextLex offers templates and also corresponding human services for compliance requirements // OpenCounsel headed by Andrew Rens // Orrick’s Term Sheet Creator // Papiertiger offers a few contract templates, made with lawyer approval // In Singapore, big 4 firm Rajah & Tann's bid in the space, Rajah & Tann Technologies // Robot Lawyer Lisa // SynchLab by Swiss law firm Synch // TermFrame from Pinsent Masons seems to be a wizard expedite the choosing of ideal templates. // WireLawyer

Legal Marketplaces

Law // Advise Hub // Advos Assisst is Germany’s largest network // Asia Law Network (for Singapore) // Avvo // Axion is positioning initially as an outsourcing option for in-house counsel (see coverage) // AvvA will eat it all, from China // Bodhala // BookIt Legal connects lawyers with law students // Caliber Litigation Services for court reporters // Cadehod // Court Buddy does a-la-carte legal services at flat rates // Fair Document // Fatguy is a legal marketplace as well as case library // FirstCounsel // Anwaltakunft, Anwaltsinfo, Anwalts suche, DASD, Bewertet, Rechtsanwalt, Advocado, LegalBase just in Germany alone // Ithaca is a humanitarian initiative to connect lawyers to refugees in need of asylum // Korum Legal is a boutique legal consultancy for special projects at cheaper rates // LawCanvas (for Singapore) // LawDingo // LawGives // Lawtap // Lawtrades // Lawyev // Lawyers on Demand // LegalClick // Legalify // LegalZoom // LexMeet // Lexo // MyLawyer (Singapore) // Nolo // Obelisk // Partnerwire to sell document templates // Priori Legal // Premonton, lawyers by win rate // RocketLawyer // VertexLegal

Computational Legal Studies

Borrowing from social science, these apply computational data-science techniques to the legal world.

The Law Lab at Illinois Tech // LawOS at Santa Fe Institute // law.mit.edu takes a social-science approach to examining law; see Dazza’s video // Coding the Law examines how the legal system uses computer algorithms

Smart Contract Implementation

Adjoint will build and formally verify your smart contracts // Attorex does smart contracts as a service // Bitquant // Clause will build a Ricardoian smart contract and is teaming up with Thin Film Electronics to use near-field communication to pair physical goods to digital contracts // Counterparty // Democracy Earth // Ethcore will build and browse your smart contracts // Ethernote appears to be a proof-of-concept implementing a promissory note as a smart contract // Imandra: Online ecosystem for sharing and analysing internal and client-facing trading system specifications; see also their language docs // International Blockchain Technologies registers your contracts in a blockchain // Kadana’s hash-based turing-incomplete PACT language // legalthings // Mattereum brings software smarts to legal agreements and enables the Internet of agreements // Minicliq is a web IDE for smart contracts // OpenZeppelin is an opensource library for smart contracts // Otonomos // Sagewise // SmartContract // UCL’s blockchain group
Smart Statutes / Digital Legislation

- **Digitizing the World's Laws** by Claire M. Germain, 2010 // Berkeley Bridge has an expert system // **Checkbox** has an expert system // **Digital Legislation** from Data61 attempts to answer the call // FiscalNote, Tim Hwang's startup on government relationship management has raised $20M // **Internet of Agreements** by Vinay Gupta explains demand from blockchain // **Making Sense of Regulations with SBVR** // **Neota Logic** has an expert system // **OpenFinis** does legislation as code and multidisciplinary agile development of policy and legislation // **SBVR to OWL 2 Mapping in the Domain of Legal Rules** // **The Foundation for Computable Law** // On the Road to Regulatory Ontologies: Interpreting Regulations with SBVR // **Oracle Policy Automation** helps you build an expert system // How to build an automated legal-decision-making system // **Labplus** discusses better rules for government discovery and is now helping to turn New Zealand's legislation into code // **Rules as Code** is a global effort to draft machine-readable legislation

Contract Formalisation & Natural Language Generation

The need for multilingual contracts can be seen in Indonesia, where a court has ruled that contracts must be in both Bahasa and another language // CLACK at UCL // **Joe Dewey's essay on ContractCode, 2016** // **CommonForm** // **Codex** by Pax is a scripting language for Ethereum; **in concert with Pax Directory** // **Michelson** by Tezos, is a scripting language for smart contracts // **Lexicon by Law** is a scripting language for smart contracts // **Babbage** smart contract language for Ethereum // **Restatement** by Jason Boehmig, Tim Hwang, and Paul Sawaya (Intro essay; see also modelling - Background Reading) // **CommonAccord** has some early thinking online // **Hammurabi Project** hosts its DSL in Wolfram Language (Mathematica); an earlier version developed a DSL called Akkadian // You've heard of XBRL, now the SEC wants Python

A.I. & Natural Language Processing

Reliable natural language processing is a vastly harder problem than domain-specific languages, compilers, and natural language generation, but we wish them the best. Should they be successful, drafting contracts which meet their AI’s approval will be straightforward because we can run the contracts through the AI ourselves.

- Fagougos is an artificial assistant which predicts case outcomes based on precedent // **Kira** is used by a surprising number of law firms & professional services firms (top firms, Freshfields, Clifford Chance, DLAs Piper, Axion, Debevoise) // **Peter** does for legal what **Clara** does for appointments // **AI capable of legal reasoning** from Weightmans and Kira // **Riverview Law** is also developing an artificial assistant // **ThoughtRiver** does NLP to read contracts and reason about them // **Perceptive** also does NLP to read and extract data from finance contracts // **SkoposLabs** predicts effects of law and policy // **Surukam** helps corporate legal teams automate their workflows and the decision-making process with NLP and ML // **Y Legal Reasoning**

Support Services

- **Signature Services** Adobe EchoSign is the well-respected grandaddy, modulo some grumpiness. Competitors include Digisigner // DocuSign // e-SignLive by Silanis // HelloSign // Scribble // SignEasy // RightSignature // Secured Signing // Signatrys also can send your signed documents to court // and dozens more (see the full list) // Notarisation Notorize is an app // Human resources Hiringplan helps plan employment compensation

Other Interesting Things

- LegalTech has a LegalTech landscape // German LegalTech Mapping // Swiss LegalTech Mapping // Legal Geek Startups // Law Hackers for a curated list of legal startups // A Medium post for some maps and classifications of services legaltech startups provide // Stanford's CodeX list of LegalTech startups // Ambrogio's Legal Tech Startups list // techlaw.stanford.edu // AngelList shows over a thousand startups in the legal category, but many of these are what
Signature Services: Adobe EchoSign is a well-respected grandaddy, modulo some headaches. Competitors include DocuSign, DocuSign, e-Signature by Silius, HelloSign, SignEasy, RightSignature, Secured Signing. Signatory also can send your signed documents to court. And dozens more (see the full list). Notarisation Notarize is an app. Human resources Hiringplan helps plan employment compensation.

Other Interesting Things

Landscaping: Thomson Reuters has a LegalTech landscape. German LegalTech Mapping. Swiss LegalTech Mapping. LegalTech Startup Map. Law Hacklers for a curated list of legal startups. A Medium post for some maps and classifications of services legaltech startups provide. Stanford’s CodeX list of LegalTech startups. Amoribio’s Legal Tech Startups list. techlaw.stanford.edu. AngelList shows over a thousand startups in the legal category, but many of these are what we call “law firms with websites”, not actual LegalTech startups. AL100 is a directory of legal tech. The TechnoLawgist.

Mmmmm... a mix bag. Artificial Lawyer is a blog covering the computational legal field. CanLaw pivoted to LegalTech consulting, it seems. Ergo. LawForMe is India-based, design-oriented, and aims to make the law and legal processes more available. Lawyers On Github. LegalHackers is a global movement for law and technology. LegalTechLabs is a LegalTech incubator. Praktio by Michigan Law Professor, Michael L. Bloom teaches contracting drafting, analysis, and negotiation. Simple Rights crowd-sources statute simplification. QnA is a DSL for conducting and displaying interviews. Q Legal intends to crowdfund the world’s first live online pay-as-you-go legal advice service. An argument for open source legal.

Deadpool

(We’re certainly not the first to come up with a deadpool, but these folks talked about it after us and it’s at once hilarious, illuminating, and wonderful! Check out: @butnickdavis piece for ROSS Intelligence and @peterkonrad’s tweet.)

To be clear, we’re not entirely sure if these guys are defunct or just have broken websites. If we made a mistake, we do apologise. Let us know and we’ll reinstate you up there!

JustInvesting wanted to move investing online. Restatement by Jason Boehmig, Tim Hwang, and Paul Sawaya. Termsheet.io (India & US) used to do incorporations and funding, now they do investment tracking. LegalHub wanted to output documents into both human-readable (PDF, doc) and machine-readable (JSON, XML) forms. Caserails. Lawvery used to do case management. OxLegal was a startup from Oxford University’s accelerator that wanted to reduce the time lawyers spent on work. LawEdge. LegalCFSG wanted to provide free and open source templates to cofounders in Singapore. DocStor. LawKick wanted to help you find the right lawyers at the right price. Lawful.ly wanted to give us plain language, annotated standard legal documents. Lawpolis wanted to build a collaborative community for lawyers. IPStreet. Logify. Kagu did business immigration help. QuickLegal provided on-demand legal advice and won the Techweek California App of the Year for 2014. Upcounsel used to be a marketplace for legal services. Ross Intelligence used to help lawyers do research.
Engage in Conversations

Future

Academia-Industry Partnerships

Harvard University's Berkman Klein Centre for Internet & Society // PlainSite // Law.MIT.edu takes a social-sciences approach to examining law: see Dazza's video

Stanford University's Computational Law // Stanford University's CodeX Center for Legal Informatics produces a crop of startups every year // Stanford University's Computable Contracts Initiative // the Legal Informatics Research Network // Law OS, a research program on compliance and the law at the Santa Fe Institute // The Law Lab is an interdisciplinary teaching and research centre set up by Illinois Tech and the Chicago-Kent College of Law, and focused on legal innovation technology // Lexis's MFLI was one of the earliest commercializations of financial contract formalization // Common Accord // University of San Diego's Centre for Computation, Mathematics, and the Law // The Accord Project which was created by legal tech startup Clause and collaborates with the International Association for Contract Management, Hyperledger, Clio, etc. // University of Swansea has a Centre for Innovation and Entrepreneurship in Law // University of Oslo has the Norwegian Research Center for Computers and Law // Osgoode Hall Law School at Toronto's York University is preparing its students to compete against AI

Workshops & Conferences

The biennial International Conferences on AI & Law (ICAIL) started in 1987 // Since 1988, the Foundation for Legal Knowledge Based Systems (JURIX) has held annual conferences on legal knowledge and information systems JURIX; and since 2007, the JURIXN workshop runs alongside // ERC2010 Workshop Proceedings in 2010 // The Stanford Centre for Legal Informatics has been running the CodeX FutureLaw Conference since 2013 // AAIJ (Artificial Intelligence for Justice), 2016 // The HackLaw series of conferences // 2017 saw the inaugural Legal Geek Conference in London // MIT Legal Forum // Singapore and its inaugural TechLaw.Fest in 2018

Some are more lawfirm-driven than others: // ILTACON // ABA TechShow // Clio Cloud Conference // Lawyeramics // the Law Society of Scotland's Law and technology conference // LegalWeek in the US

"Well, all information looks like noise until you break the code"

says Hiro Protagonist, the hero/protagonist in Snow Crash
Neal Stephenson, 1992
How People
The race to invest in social audio app Clubhouse is on again. Venture capital firms have approached the startup’s founders in recent weeks about leading its potential next round of funding at a roughly $1 billion valuation, according to four people with knowledge of the discussions.

Investors also have tried to buy Clubhouse shares from existing shareholders at an implied valuation of $1 billion, said one of the people. That figure is 10 times higher than the app’s valuation from eight months ago following a hotly contested investment round, before it was even available on Apple’s App Store. A new deal at a billion-dollar value would be unusual for a social media app at this stage of its life and would also reflect the broader increase in valuations for fast-growing, privately
Fireside Chat with Keith Enright, Chief Privacy Officer at Google

About this Event

Join us on Wed March 24th, 7-8 pm PST to learn about overall industry insights and advice from Keith Enright, Chief Privacy Officer at Google.

Keith Enright serves as Google’s Chief Privacy Officer and leads the global privacy legal team. He joined Google in March 2011. He has more than 20 years of experience in creating and implementing programs for privacy, data stewardship, and information risk management.

Prior to joining Google, Keith served as the senior-most privacy executive at two Fortune 500 online and offline retail enterprises, as senior consultant for a leading global consulting practice, and as General Counsel for a privately held advertising technology company.

Keith has been a featured speaker discussing online privacy and related topics at industry conferences, including nsaf, DMA and GRC.
1. Why
2. What
3. How
Thank you

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