The Business of Law in 2025

Presented by
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The business of law in 2025
AI, blockchain and the digital law firm of the future

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Our Agenda

• Are we in the midst of disruption, or at its threshold?

• Where did the ‘Tournament of Lawyers’ law firm business model come from, why is it under pressure and what will come next?

• What emerging digital technologies are driving disruption generally?

• What should law firms be doing to seize the opportunities (!) and manage the challenges?
Julius Cohen
1873 - 1950
Author in 1916 of:
‘The Law: Business or profession?’

Who saw more technological disruption in their lifetime: Julius Cohen, or somebody today who was born in 1950?

Road Transport

Air Transport

Home lighting

Are things all that different today?
Are things all that different today?

What will 2025 - 2030 be like?
The technological innovations of the late 19th and early 20th Century had a transformational impact on society and on client legal needs.

From people-leveraged ‘Tournament of Lawyers’ to digitally leveraged ‘Computer-aided Legal Services?’

What will ‘computer aided legal services (CALS) be like, when digital tools are better developed?

- When will the lines intersect?
- What will the new model be?
- How to transition?
That the ‘Tournament of Lawyers’ model is in decline is evident from U.S. Government data.

![Graph showing changes in U.S. real GDP and legal services industry value added, 1989 - 2015.](graph.png)

Source: U.S. Department of Labor statistics for legal sector, defined as private law firms plus judiciary; CSG analysis based on the work of Matt Leichter (https://lawschooltuitionbubble.wordpress.com/original-research-updated/)

The 4th Industrial Revolution will be as disruptive as the previous ones, and play out far more quickly.

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<thead>
<tr>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
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<tbody>
<tr>
<td>1700s</td>
<td>Early 1900s</td>
<td>1990s</td>
<td>2010s – 2020s</td>
</tr>
<tr>
<td>Mechanized production</td>
<td>Assembly lines</td>
<td>Digital, automated production</td>
<td>Cyber-physical systems</td>
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"There have been Luddites with every revolution."

Top 3 companies in Detroit, 1990 versus Silicon Valley, 2014

<table>
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<tr>
<th></th>
<th>1990</th>
<th>2014</th>
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<tr>
<td>Market cap:</td>
<td>$36 billion</td>
<td>$1.09 trillion</td>
</tr>
<tr>
<td>Revenues:</td>
<td>$250 billion</td>
<td>$247 billion</td>
</tr>
<tr>
<td>Employees:</td>
<td>1,200,000</td>
<td>137,000</td>
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“The speed of current breakthroughs has no historical precedent.”

Klaus Schwab, World Economic Forum (2016)
What digital trends will drive the 4th Industrial Revolution and end the ‘Tournament of Lawyers’ law firm business model?

First, a riddle ....

- X-rays
- The Beatles
- Microsurgery
- Computing

Artificial Intelligence

An assistant that:

- can find and interpret every piece of information related to a matter (legal + technical + financial) and help develop a cogent summary
- never forgets what they learned
- needs training (not that different to humans) to understand what you need
- helps lawyers (and others) advise clients at levels of sophistication never before possible
Super AI: What is there to worry about?

<table>
<thead>
<tr>
<th>Myth</th>
<th>Super-intelligence by 2100 is inevitable / is impossible</th>
<th>Fact</th>
<th>It may be decades or centuries ... experts disagree ... we don’t know</th>
</tr>
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<tbody>
<tr>
<td>Myth</td>
<td>Only Luddites worry about AI</td>
<td>Fact</td>
<td>Many top AI researchers and other scientists are concerned</td>
</tr>
<tr>
<td>Myth</td>
<td>AI turning evil. AI becoming conscious</td>
<td>Actual Worry</td>
<td>AI becoming competent but with goals that differ from ours</td>
</tr>
<tr>
<td>Myth</td>
<td>Robots are the main concern</td>
<td>Actual Worry</td>
<td>Misaligned intelligence is the main concern</td>
</tr>
<tr>
<td>Myth</td>
<td>AI will never be able to control humans</td>
<td>Fact</td>
<td>Intelligence enables control</td>
</tr>
<tr>
<td>Myth</td>
<td>Machines cannot have goals</td>
<td>Fact</td>
<td>A heat seeking missile has a goal</td>
</tr>
<tr>
<td>Myth</td>
<td>Super intelligence is just years away</td>
<td>Fact</td>
<td>It is at least decades away, but it may take longer to make it safe</td>
</tr>
</tbody>
</table>

Source: Max Tegmark, 2017. Life 3.0: Being Human in the Age of Artificial Intelligence. Allen Lane

Blockchain

- Cryptocurrencies just a small part of the blockchain story – could become a crucial one if they displace fiat currencies
- Promises a world without intermediaries
- Useful applications emerging in every industry sector
Big data

• ~5% of a yottabyte of electronic data in the world at end of 2017
• Global data volume doubling every 12 hours by 2020
• Driven largely by IoT
• Massive implications for due diligence, discovery, law generally

We need to think differently about data

One standard, single sided DVD
Thickness: 1.2mm
Capacity: 4.7GB

One terabyte:
A stack of DVDs 27cm high

One petabyte:
273 metres stack high

One yottabyte:
273 million kilometres
From Earth to our Sun x2.3 times.

2.3x

Sun

Earth
We need to think differently about data

One xenobyte:
A stack of DVDs 273 billion kilometres high
From Earth to Pluto, x36 times.

One domegemegrotabyte:
28,000 light years
From Earth to the edge of our galaxy

Warning: Not responsible for mental harm caused by trying to contemplate the scale of a domegemegrotabyte!

Advanced wireless / mobile

Already live in some places, widespread by about 2020:

4G
Download ~1 gigabit / sec
(HD movie in ~1 hour)

5G
Download ~10 gigabit / sec
(HD movie in seconds)
By 2025 – 2030, 10x to 100x faster than 4G, anywhere on the planet

• Enabled by 5G and later wireless networks
• Smart contracts (blockchain apps) likely to be important (but aren’t that smart, yet)
• Autonomous vehicles
• How does liability work between autonomous machines?
• 20.8 billion devices connected to the Internet by 2020 (Gartner)
Quantum Computing

The ultimate game changer

• Uses principles of quantum mechanics to compute – not limited by binary ‘bits’
• One quantum machine potentially >1,000,000x more powerful than all computers currently on earth
• No current code or cypher will be safe
• Will enable ‘big data’ to be managed
• Race to be first, mostly USA and China

The complexity of multiple inter-related drivers is too vast to contemplate, except down narrow verticals (e.g. very specific client / industry needs)

Broader Context

AI
Blockchain
Big Data
IoT
Advanced Wireless
Quantum Computing

Geo-economic, socio-political, environmental and other trends
What assumptions can we make about the characteristics a new dominant law firm business model will have?

- Multiple models, then convergence to one dominant model
- Machine-created legal work makes nonsense of billable hours
- Further erosion of boundaries between practice of law and other forms of business advice
- New generations of digitally native client legal needs that can only be met by lawyers + machines, together
- Excellence will surpass scale for competitive advantage, especially if digital tools are mostly SAAS (no place for mediocre lawyers)
- For law firms that transform, a new era of prosperity is likely
- Others will quietly (or perhaps noisily) disappear

Thank you

Next:
1. Download our paper ‘Thriving at the Edge of Chaos: AI, blockchain and the digital law firm of the future’ (for free) at: camstrategy.com/foresight/edge-of-chaos
2. Register for further papers and other material, if you wish
3. Email me at: robert.millard@camstrategy.com
Your opinion matters!

Please take a moment now to complete the evaluation.

Thank You!