

# Unlocking the Potential of AI for English Law: LawTech: Progress and Challenges - Respondent

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McCORMICK SCHOOL  
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# *Unlocking the Potential of Artificial Intelligence for English Law*

- Outstanding package of interdisciplinary research
- Much more research like this is needed
- Tremendous opportunities for international collaboration

# Extracting Outcomes from Appellate Decisions in US State Courts

- Interesting use of deep learning + keyword patterns to identify final outcomes
- Main contributions: annotated dataset of court cases with outcomes in metadata; baseline model for outcome extraction
- “The current works aim ... to open the discussion about the value of structured legal data.” (Extracting Outcomes, p. 9.)

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# Extracting Outcomes from Appellate Decisions in US State Courts

- “Dataset ... acts as the first step towards outcome prediction and advanced legal analytics for the English language legal documents, and for US state Courts of Appeal in particular.”



# Potential use-cases

**Advice**

What are my legal rights?

What should I do?



**Strategy**

Should I settle/fund this suit?

For how much?



**Resolution**

Which party should succeed?

For what reasons?



**Review**

Should a first-instance decision be subject to appeal or review?

# Extracting Outcomes from Appellate Decisions in US State Courts

- Outcome prediction at what stages and for what purposes?  
What about missing data?
  - Understanding Rights and Duties → Disputes → Settlements → Trial Courts → **Appellate Courts** → Supreme Courts
- How might outcome prediction enhance access to justice? How might it exacerbate the lack of access?

# Motivation

- Automated solutions that scale can dramatically lower user costs
  - Example: First mark-up of a standard type of contractual agreement, which might be charged at £1,000+ by a lawyer working in a top-tier law firm, can today be done by an AI system for less than £1.
  - For citizens, facilitate access to justice
  - For businesses, lower costs

(Analysing Cases Using AI, Slide 2.)

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Research gap: Can this be done today? How do we evaluate the quality and value of legal services output by humans and technology?

## ASSET PURCHASE AGREEMENT

THIS ASSET PURCHASE AGREEMENT (the "Agreement") is entered into as of September 1, 2010, by and between CAFEPRESS.COM, INC., a Delaware corporation ("Buyer"), and CANVAS ON DEMAND, LLC, a North Carolina limited liability company ("Seller").

### Recitals

1. Seller is engaged in the business of transforming photographs and images into canvas works of art (the "Acquired Business").

2. Effective on the Closing Date (as defined below), (a) Seller desires to sell, assign transfer, convey and deliver to Buyer, and Buyer desires to purchase and acquire from Seller, all its rights, title and interest in and to the Assets and (b) Buyer desires to assume and become responsible for the Assumed Liabilities, on the terms and subject to the conditions hereinafter set forth (the "Transaction").

3. The Board of Directors of Buyer has declared that it deems the Transaction, the Agreement and the Related Agreements to be in the best interest of Buyer and its stockholders, and deems it advisable and in the best interests of Buyer's stockholders to consummate, and has approved, this Agreement and the Related Agreements and the transactions contemplated hereby and thereby on the terms and conditions set forth herein and therein.

4. The Managers of Seller have declared that they deem the Transaction, the Agreement and the Related Agreements to be in the best interest of Seller and its members, and deem it advisable and in the best interests of Seller's members to consummate, and have approved, this Agreement and the Related Agreements and the transactions contemplated hereby and thereby on the terms and conditions set forth herein and therein.

5. The holders of the aggregate percentage of membership interests of Seller necessary to approve this Agreement and the transactions contemplated hereby as required under (a) applicable law, (b) Seller's articles of organization and operating agreement and (c) any applicable agreements by or among Seller and any holders of membership interests in Seller (together, the "Required Member Approval") have approved, or immediately following the execution of this Agreement will approve, this Agreement, the Related Agreements and the Transaction.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

### SECTION 1. DEFINITIONS.

1.1 Definitions. In this Agreement, the following terms have the meanings specified or referred to in this Section 1.1. Any agreement referred to below shall mean such agreement as amended, supplemented and modified from time to time to the extent permitted by the applicable provisions thereof and by this Agreement.

## ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this "Agreement"), dated as of May 13, 2017, is entered into among Aspen Group, Inc., a Delaware corporation ("Aspen"), solely for the purposes of Section 2.06(b), Section 5.02(b), Section 5.04, Section 5.06, Section 5.08, Section 5.09, Section 5.10, Section 5.15, Section 5.17, Section 9.02, Article IV, Article VII, Article VIII, and Article X; Aspen Newco, Inc., a Delaware corporation ("Newco"); Educación Significativa, LLC, a Delaware limited liability company ("Company"); and Linden Education Partners LLC, a Delaware limited liability company ("Linden"), solely for the purposes of Section 3.07(d), Section 5.02(b), Section 5.03, Section 5.04(a), Section 5.04(b), Section 5.06, Section 5.07, Section 5.08, Section 5.09, Section 5.13, Section 5.17, Section 9.02, Article VII, Article VIII, and Article X.

WHEREAS, the Company is engaged in the business of operating a for-profit, post-secondary education institution under the fictitious business name "United States University," including the main campus and any other campus, branch, satellite location or other facility at which the Company offers all or any portion of an educational program (the "Business");

WHEREAS, the Company wishes to sell and assign to Newco, and Newco wishes to purchase and assume from the Company, substantially all the assets, and certain specified liabilities, of the Business, subject to the terms and conditions set forth herein;

WHEREAS, the Company Board has (a) determined that this Agreement and the transactions contemplated hereby are in the best interests of the Company and its Members, and (b) approved and declared advisable this Agreement and the transactions contemplated hereby;

WHEREAS, the Members of the Company have, in accordance with Section 18-302 of the Act, executed a written consent of the Members approving this Agreement and the transactions contemplated hereby;

WHEREAS, the Institutional Board of the Company has approved this Agreement and the transactions contemplated hereby; and

WHEREAS, the board of directors [and manager] of Aspen and Newco, respectively, have approved this Agreement and the transactions contemplated hereby.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

### ARTICLE I DEFINITIONS

In addition to words and terms defined elsewhere in this Agreement, the following words and terms have the meanings specified or referred to in this Article I:



# Evaluating Legal Services: The Need for a Quality Movement and Standard Measures of Quality and Value – Chapter in Research Handbook on Big Data Law



Photo by Samuel Chenard on Unsplash

By Daniel Linna on March 12, 2020

POSTED IN ARTIFICIAL INTELLIGENCE, INNOVATION, LEGAL OPERATIONS

- Lack of evidence-based practice and empiricism
- Law missed the Quality Movement (e.g., Lean Thinking, Six Sigma)
- Lack of metrics for legal-services quality and value
- Lack of evaluation of technology for legal services and systems

[Link to blog post about book chapter](#)  
[Link to book chapter](#)

# What Differentiates Lawtech from Other Tech?

## Mapping a Lawtech Taxonomy

# A Taxonomy for Technology Venture Ecosystems

- Four sectors:
  - Fintech
  - Healthtech
  - Lawtech
  - Proptech

# A Taxonomy for Technology Venture Ecosystems

- Healthtech four grand challenges
  - Developing future therapies
  - Frontiers of physical intervention
  - Optimizing treatment
  - Transforming community health & care
    - “[C]ommunity health and care could be transformed by an intelligent “companion” that is fully aware of an individual’s healthcare history and experience, empowering them to self-manage their healthcare by providing directly relevant feedback, information and advice[.]” (Page 23.)
    - “[T]echnologies for promoting wellbeing by providing timely, personalised feedback and exploiting social networking to influence health behaviours.” (Page 23.)

# Lawtech

- Classification “captures lawyers’ representation of how technology improves the way they carry out their day-to-day work. We adopt this legal work taxonomy because it is useful for understanding in which areas of work lawyers might use legal technology to enhance what they do.” (Page 26-27.)

# Lawtech

- Classification “captures lawyers’ representation of how technology improves the way they carry out their day-to-day work. We adopt this legal work taxonomy because it is useful for understanding in which areas of work lawyers might use legal technology to enhance what they do.” (Page 26-27.)
- Why limit this to lawyer centric classifications?

# Lawtech

- Three-way classification
  - Managing the Business (e.g., CRM & legal operations)
  - Performing (e.g., corporate transactions and litigation)
  - Managing and Performing (e.g., knowledge management and risk management)
- “[W]e drop the “consumer services” category, as our taxonomy contains a separate dimension concerning client types.” (Page 26.)

## Areas of financial work

### *Commercial banking*

- Payment services
- Lending
- Credit card
- Electronic fund transfers
- Digital banking

### *Investment banking*

- Underwriting
- Mergers and acquisitions
- Structured finance
- Investment management
- Proprietary trading
- Securities research
- Broker services

### *Foreign exchange*

- Currency exchange
- International transfers

### *Insurance*

- Insurance management
- Insurance underwriting
- Reinsurance

### *Regulation*

- Anti-fraud services
- ESG monitoring

### *Other areas*

- Financial literacy education
- Wealth management
- Digital assets
- Crowdfunding

## Areas of health work

### Biology

- Therapeutics & discovery
- Diagnostics & biomarkers
- Medical devices
- Service delivery
- Precision and population medicine
- Clinical trials and research platforms

## Areas of property work

### *Constructing properties*

- Building information modelling
- Digital explorations
- Carbon footprint modelling
- 3D printing

### *Financing properties*

- Mortgages
- Deposit management
- Automated valuation models

### *Maintaining properties*

- Emergency assistance
- Property inspections
- Property management
- Tenant onboarding
- Smart home

### *Property marketplace*

- Search
- Record management
- Transaction
- Conveyancing

### *The sharing economy*

- Hotel
- Office
- Retail
- Residential

## Areas of legal work

### *Managing the business*

- People & resources
- Finance & operations
- Clients

### *Managing & performing*

- Knowledge
- Matters
- Risks
- Rights management

### *Performing*

- Documents & contracts
- Transactions (including M&A)
- Litigation

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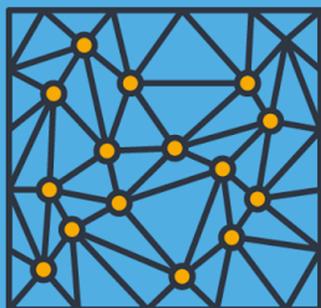
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Legal  
Services  
**Innovation  
Index**

# Measuring Legal Innovation & Technology Adoption: The Legal Services Innovation Index

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# Legal Services Innovation Index



## Phase 1 – Minimum Viable Product

- Law Firm Innovation Catalog
- Law Firm Innovation Index – 260 international firms
- Law School Innovation Index prototype – 40 recognized innovators

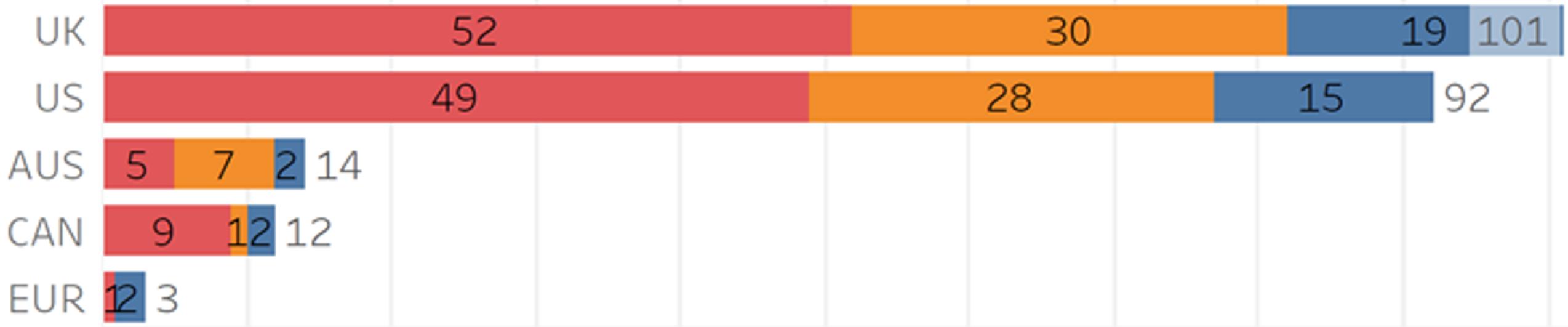
**LEXBLOG™**

[LegalTechInnovation.com](http://LegalTechInnovation.com)

# Catalog of Law Firm Legal-Service Delivery Innovations

VERSION 1.0





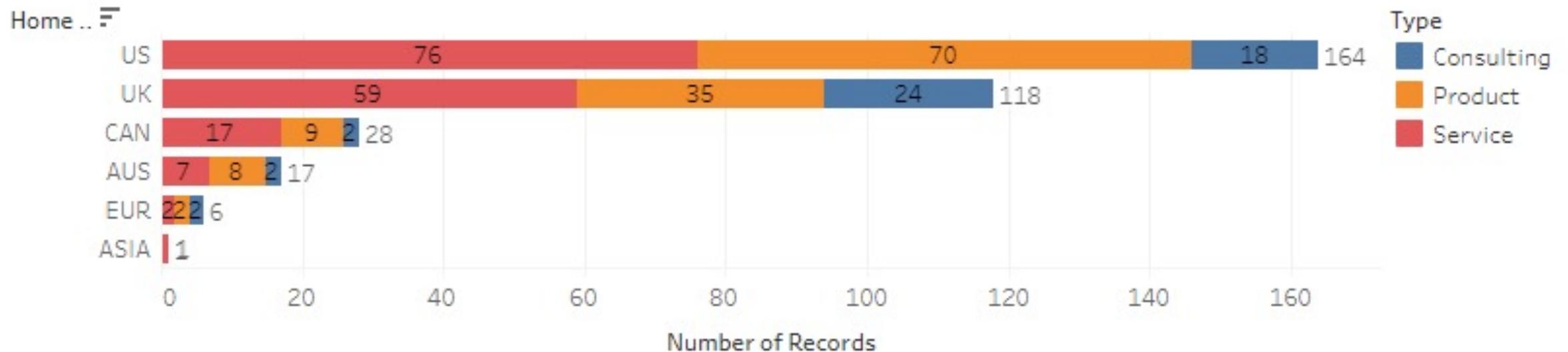
Type

- Consulting
- Product
- Service

# 222 + 112 = 334 Law Firm Innovations



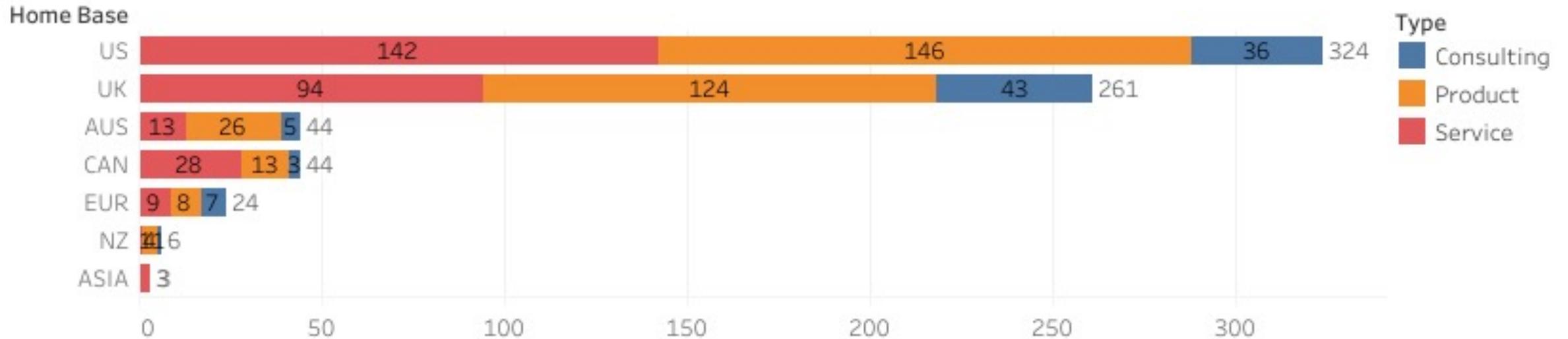
## Catalog of Law Firm Innovations - Phase 1, v. 1.02



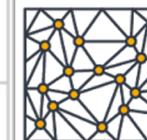
# 222 + 112 + 375 = 709 Law Firm Innovations



## Catalog of Law Firm Innovations - Phase 1, v. 1.03



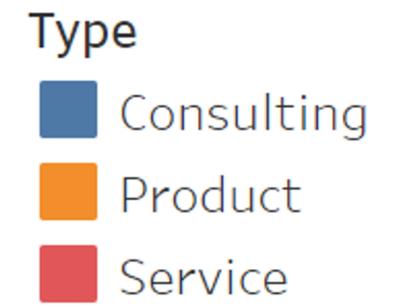
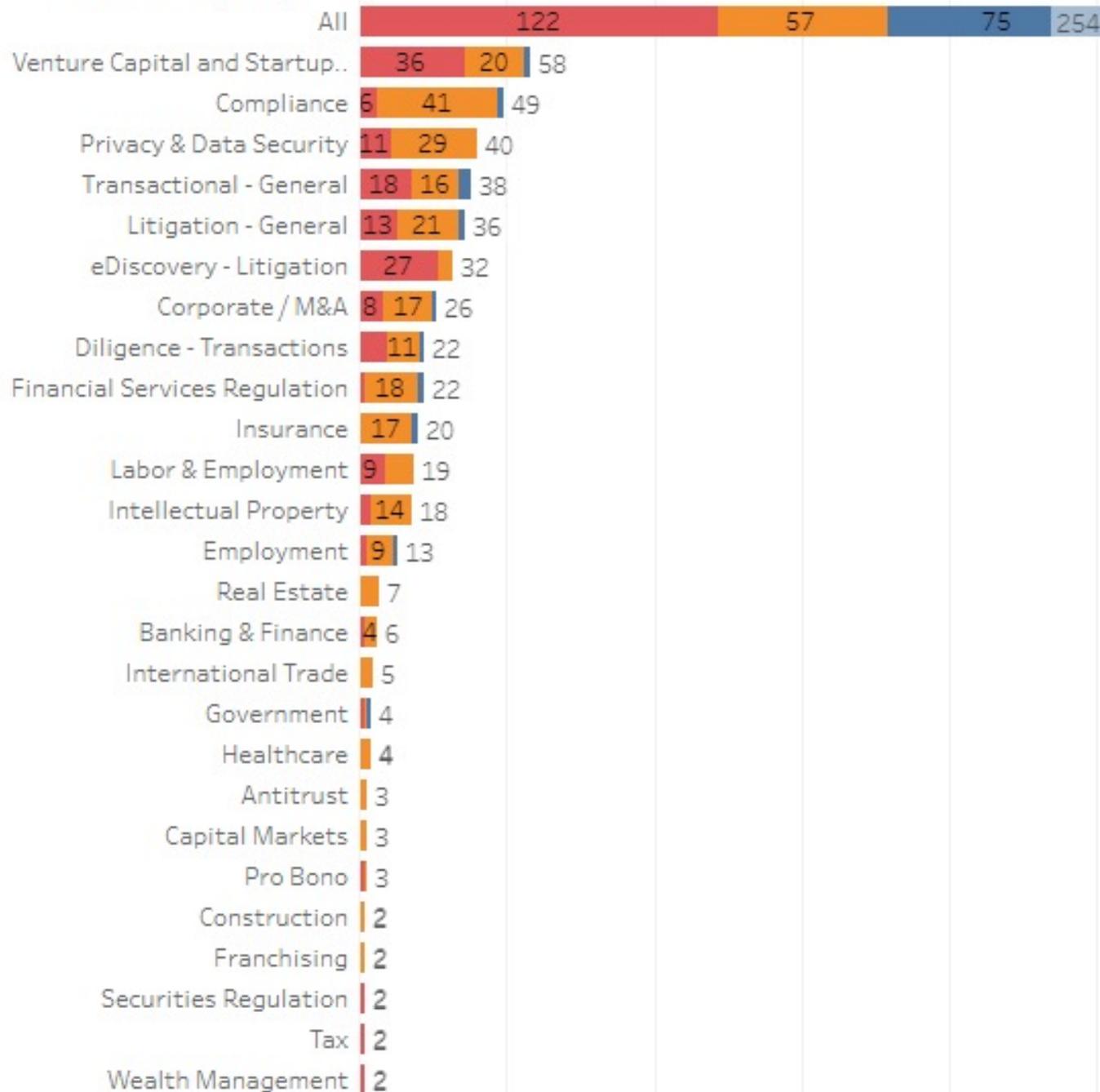
Law Firm	Type	Branded As	Partner(s) (if..	Tool / Discipline ..	Area of Law ..	
<b>Actuate Law</b>	Product	Quintec	n/a	Innovation Entity	All	<a href="#">Details &amp; Link</a>
<b>Addleshaw Goddard LLP</b>	Consulting	Transaction Services Team	n/a	Contract Management	Transactional - General	<a href="#">Details &amp; Link</a>
	Service	n/a	DWT	Alternative Fees	All	<a href="#">Details &amp; Link</a>
<b>Akerman</b>	Consulting	R&D Council	n/a	Innovation Entity	All	<a href="#">Details &amp; Link</a>
	Product	Akerman Data Law Center	Thomson Reuters & Ne..	Expert System	Privacy & Data Security	<a href="#">Details &amp; Link</a>
<b>Akin Gump Strauss Haue..</b>	Service	AGility	AGility	Project Management	All	<a href="#">Details &amp; Link</a>
<b>Allen &amp; Overy LLP</b>	Consulting	n/a	Ulster University	Innovation Entity	All	<a href="#">Details &amp; Link</a>
		aosphere	n/a	Expert System	Compliance	<a href="#">Details &amp; Link</a>
		Project Management ..	n/a	Project Management	All	<a href="#">Details &amp; Link</a>



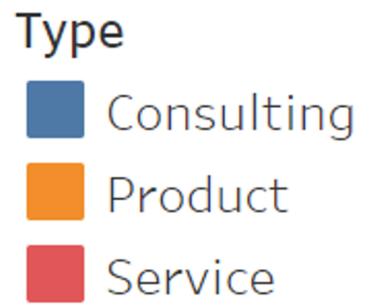
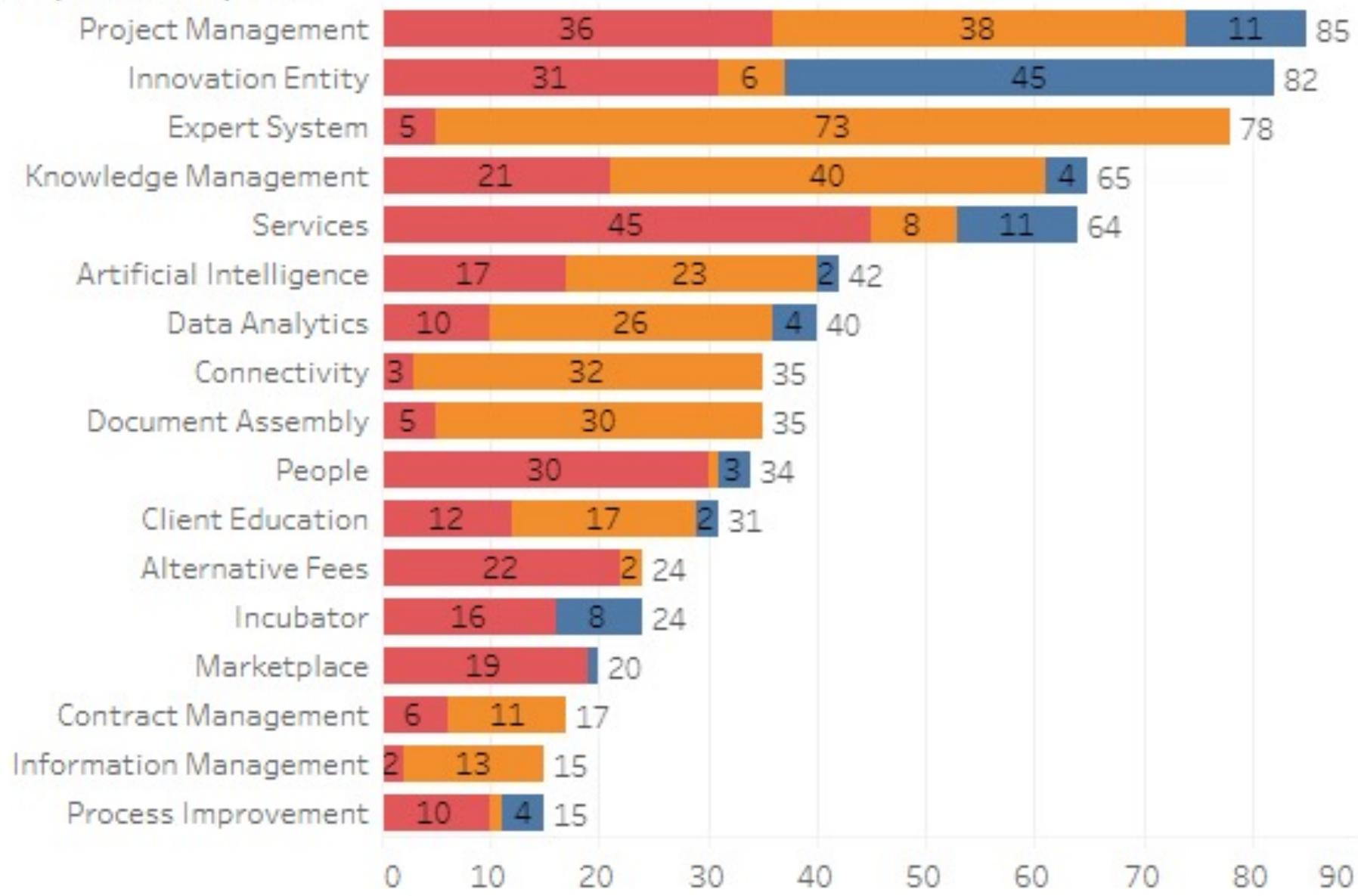
Legal Services  
Innovation  
Index

Law Firm	Type	Branded..	Partner..	Tool / Discipline ..	Area of Law ..	Home Base
<b>Actuate Law</b>	Product	Quintec	n/a	Innovation Entity	All	<input checked="" type="checkbox"/> (All) <input checked="" type="checkbox"/> ASIA <input checked="" type="checkbox"/> AUS
<b>Addleshaw Goddard LLP</b>	Consulting	Transaction Services Team	n/a	<p><b>Actuate Law US</b>            Quintec - Branded As / Entity            n/a - Partner(s)</p> <p><b>Product</b> - Type (Product, Service, Consulting)  <b>Innovation Entity</b> - Tool / Discipline (Beta)  <b>All</b> - Area of Law (Beta)  <b>Affiliate</b> - Relationship (Internal, Affiliate, Partnership)            1/18/2019 - Approximate Launch Date            Description: Quintec will build legal expert systems and other AI-driven tools that automate the delivery of legal and compliance services to meet client and industry demand for more efficient, scalable, and cost-effective solutions.            Status update:            Link: <a href="http://quintec.com/">http://quintec.com/</a>  <a href="#">Click to View on Firm Website</a></p>		
	Service	n/a	DWT			
<b>Akerman</b>	Consulting	R&D Council	n/a			
	Product	Akerman Data Law Center	Thomson Reuters			
<b>Akin Gump Strauss Haue..</b>	Service	AGility	AGility			
<b>Allen &amp; Overy LLP</b>	Consulting	n/a	Ulster University			
		aosphere	n/a	Expert System	Compliance	Area of Law (Beta) <input type="text" value="(All)"/>
	Project Management ..	n/a		Project Management	All	Law Firm

## Area of Law (Beta)



Tool / Discipline (Bet..



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Blog: [www.LegalTechLever.com](http://www.LegalTechLever.com)

Research: [www.LegalTechInnovation.com](http://www.LegalTechInnovation.com)

LinkedIn: <https://www.linkedin.com/in/danlinna/>

Twitter: [@DanLinna](https://twitter.com/DanLinna)

