AI / Cloud Council
Part 3: Data Science in Legal Departments

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Conrad Tokyo

Opening Remarks
Alice Graham, Assistant General Counsel, Corporate, External and Legal Affairs (CELA), Microsoft Japan Co., Ltd.

Data Science in Legal Departments
Rahul Dodhia – Senior Director, Data Science & AI Team, Corporate, External and Legal Affairs (CELA), Microsoft Corporation

Panel Discussion
Takeshi Fujinuma, Sumitomo Mitsui Banking Corporation
Emi Takeda, Accenture Japan Ltd.
Rahul Dodhia, Microsoft Corporation

Moderator: Mari Nakajima, Corporate, External and Legal Affairs (CELA), Microsoft Japan Co., Ltd.
Alice Graham delivered the opening remarks and thanked all participants. This was the third Microsoft AI Cloud Council in Japan, an initiative aimed at building a community around the impact of AI on the in-house legal practitioners and share best practices in the sector.

“As the pace of change continues to accelerate – said Graham – we are always addressing new and evolving issues. Increasingly, we are not only asked to respond to these issues, but our clients want to hear from us what’s the next big thing.” Graham then introduced the focus of the seminar: big data.

“One of the answers in how we respond and anticipate the issues we are facing lies in data science. There’s a big opportunity in taking the vast amount of data available, make sense of it and put it to use for our clients,” concluded Graham.

Rahul Dodhia, Senior Director for Data Science and AI Team at Microsoft Corporation, gave the keynote speech of the seminar. Dodhia presented a brief introduction to data science and its latest developments, then discussed how data science is used in the legal departments, detailing its applications and concrete examples.

**Bringing data science to a legal department**

First, Dodhia clarified the definition of many of the terms used in this area: data science, machine learning, artificial intelligence. Then, he outlined some of the tasks for which legal departments increasingly use data: from chatbots designed to manage knowledge to dashboards to visualize data, to litigation outcomes predictions, to contract negotiation assistance.

“There are three key ingredients to bring data science successfully in a legal department: you need a team, you need the data and finally you need the management,” said Dodhia.

In terms of teams, very close collaboration among three experts is needed: data engineers, business owners or Subject Matter Experts (SME), and data scientists. These team members need to communicate regularly and learn each other’s work.

Data is needed. To get it, organizations can set up data collection business processes. But data is not enough: it’s necessary that this data is of good quality, usable by machines and large in size.

Finally, the management’s role is critical: to ensure success, you need to have a top-down buy-in. Management needs to be educated on typical resource needs, timelines and deliverables stripped of hype. Moreover, having an experienced data science project manager in the department can be an important advantage.

**The impact of data science on the business**

After that, Dodhia illustrated the impact of data science to the business and the evolution of this impact. In the early stage of data science adoption, organizations use it to store data and manage its flow. Then, as the organization evolves its adoption, data science starts to bring a bigger impact, for example by helping visualize why a phenomenon is occurring through basic data stores, reports and dashboards. But that’s just the beginning: next, data can start informing predictions around future trends (e.g. budget forecasts, risk scores) and eventually – this is the case of more advanced tech players using this capability – it becomes the base for AI/Prescriptive models (e.g. image/audio search, AI
assistant, contract/license generation).

**Case studies**

In the legal industry, there are four key categories data science is mostly used for: knowledge management, analytics and insights, budget optimization and document management.

To illustrate concretely how legal departments are using data science, Dodhia presented a few case studies.

The first case study was about knowledge management, and how data science helps organizations to catalog knowledge, saving money by making access to information easier and quicker. In this case, Dodhia presented Zela – the Chat Bot used by Microsoft’s CELA for responding internal inquiries – and Tagulous, a project under progress to improve knowledge bots. The second case was on compliance analytics: data science can be used to create early-warning and monitoring systems to mitigate corruption risks. These systems identify risky deals and partners before they are able to engage in illegal behavior. Data science, in this case, created a protection through smarter and faster decisions.

The third and final case was on contract intelligence and elaborated on how data science helps attorney develop contracts by increasing negotiation velocity.

**Conclusions**

Dodhia concluded his speech with three takeaways: 1) You already use AI everyday. You can use it to make your repetitive and detailed tasks easier and more accurate. 2) AI opens up revenue streams that were not possible before. 3) Creating AI is expensive. Using AI is easy and not expensive.

Ahead of the panel discussion, Takeshi Fujinuma from Sumitomo Mitsui Banking Corporation gave his personal thoughts on how to improve the efficiency of legal departments in banks. Fujinuma introduced the legal department at Sumitomo Mitsui Banking as follows:

"The legal department oversees customer contracts and their processing. There are many manuals for various tasks at the banks, but when there is a situation between the customer and on-site bank representatives that deals directly with the law, we give advice from a legal perspective."

"Although legal advice is reflected in manuals for smoother customer service, as customer needs diversify and banking business gets bigger, manuals become more complicated as well." Fujinuma explained that cases where foreign laws and regulations such as countermeasures for money laundering have a direct impact on Japanese operations, are increasing in frequency. "High-risk regulations are increasing: Japanese banks are forced to comply with U.S. regulations and are subject to, for example, fines of several billion JPY if they violate them. I believe that we will see an increasing need for foreign regulation compliance resources."

Fujinuma reflected on this administrative environment and how legal and compliance departments can utilize IT as follows: “Legal and compliance departments in Japan
currently advise based on careful consideration of each department’s operations, but it’s possible that in the future, we will need to delegate specific decision-making to each department where necessary, upon providing basic legal principles to them. This is where IT can be useful. However, it’s also important to establish company-wide policies and strengthen communications between business areas, so input from legal and compliance departments will continue to be crucial even as we use more and more IT.”

Next, Emi Takeda of Accenture Japan introduced case studies of AI technology utilization in the legal department. “One of Accenture’s missions is to facilitate innovation—we actively utilize AI technology in our management and legal departments,” she explained.

As an example, Takeda introduced Randy-san, a Japanese language chat bot, as well as how Accenture uses technology to examine contracts. “This chat bot began as a way to respond to HR-related inquiries, then expanded to include other fields such as accounting and management, and now can answer legal questions as well. Randy-san has been well received by the over 11,000 Accenture employees in Japan—the vast majority are very satisfied.” Takeda added that Randy-san’s skills are also being used in “Mush-kun,” a chat bot used by Aizuwakamatsu City to respond to questions from locals to the administration. Finally, Takeda introduced a “contract insight platform,” which compiles the necessary skills, knowledge, guidelines, and policies for contract review.

**Introducing technology to the legal department**

Nakajima began the panel discussion by asking panelists where companies should start when implementing IT. “Businesses should start from document management,” said Dodhia. “Saving documents such as NDAs online and making them easily accessible will show that digitalization yields real results. It would be best to start here, then begin making budget estimates and figure out how to use IT in other areas.”

Next, Nakajima asked how technology is being used in various kinds of work. Fujinuma said that “Chat bots are being used for internal HR and IT support and the employees are encouraged to utilize them. We are considering using similar methods to respond to customers’ legal questions in the future as well.”

Nakajima also introduced how data is being utilized at Microsoft Japan’s CELA department. “We have also been implementing a number of new tools through trial and error. The legal department needs to make more time to plan and operate seminars and go to client meetings with the sales department, so utilizing technology to that end is crucial.”

**Transformation in the legal and compliance department**

Finally, each panelist commented on how legal and compliance departments will evolve in the future. Fujinuma spoke as follows: “Because our staff is not increasing at the same pace as our workload, we need to consider how to maintain the quality of our work. I strongly believe that we need to select the ways of working best suited to the current trends. This is what IT can be used for.”

“We are anticipating a ‘human plus machine’ structure,” said Takeda. “AI and technology will not steal people’s jobs, but rather create new jobs that connect people and machines. I think that using technology in a clever way will also be a new task for legal staff. The AI of the future will be robots that support us in our roles.” Finally, Dodhia closed the panel discussion with the following statement: “The greatest challenges for AI are privacy, security, and ethics, and we have to face these challenges globally. Thinking about these topics together will lead to new laws on AI and data science usage.”