LOCKING THE BARN DOOR AFTER THE HORSE IS GONE:
Trade Secret Protection in a Big Data and AI-Centric World
Agenda

- Introduction
- The impact of AI and big data analytics
- Managing trade secret protection in an interconnected world
- Best practices for protecting proprietary data
Panelists

- Kiki Haar, Senior Vice President, General Counsel and Chief Privacy Officer at Informatica
- Brandon Pace, Senior Vice President, Legal, Lending Club
- Neela Paykel, Chief Legal Counsel, Proteus Digital Health
- Betsy Tucci, Associate General Counsel, BCG Digital Ventures
Impact of AI – different types of AI

- **Robotic Process Automation (RPA)** – is the use of software to perform repeatable or clerical operations previously performed by a human
  - Won't do much "out of the box" – needs to be taught
  - Will continue to learn both before and after deployment
  - Inherent investment cost and time requirement
  - Long term investment to reap full benefits

- **Machine learning** – is the ability of a machine to improve its performance in the future by analysing previous results. Machine learning is an application of AI (eg, smart machines can spot an unhappy customer before they look to switch insurance provider)

- **Deep learning** - a form of machine learning concerned with the human brain's function and structure
How does AI commonly work?

- Most current specialist AI systems are distinguished by a **learning** component.
- Often need to be “trained” initially, or “evolved”.
- Positive feedback loops mean that the system **improves over time**, enhancing its ability to handle new data more accurately.

"Does this picture have a cat in it?"

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<thead>
<tr>
<th>Initiation – no data</th>
<th>Training with initial data</th>
<th>Testing on new data</th>
<th>Results of testing fed into system</th>
<th>Testing on new data</th>
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Types of AI: supervised vs unsupervised

- **Supervised vs. unsupervised**

  - **Supervised**
    - algorithms developed based on labelled datasets
    - initial training phase to learn to map input to output by providing “correct” data values
    - prediction phase where the machine has learnt from its training

  - **Unsupervised**
    - algorithms not trained and are left to find regularities in input data without any instructions

- **BOTH**
  - ability of algorithms to change their output based on experience that gives machine learning its power
Chaining AI together – network effects

- **Single AI system**: Single AI as part of a standard algorithmic system
- **Multi-AI system**: Multiple AI components in a single system
- **Networked AI system**: Multiple AI-based systems connected and interacting

Point of exponential progress as AI based systems rapidly evolve
Big Data

- The increasing interconnectedness of devices is creating reams of real-time data
  - Insurance examples
    - When fed into an AI tool that utilizes a machine learning algorithm, this vast pool of data can be used to enhance decisions
    - Outcomes of risk based decisions using AI to help drive business outcomes, eg, pricing and underwriting of insurance policies
    - A Fitbit or similar device can be used to track its wearer’s health and provide real-time updates to insurers
    - Insurers can be granted access to the data from our connected devices (eg, our cars, phones, TVs and homes) to help generate a more accurate user profile
    - Machine learning tools can process this data to help generate more accurate risk profiles
Innovation and creativity with AI: contracting best practices

- The rise of the InsurTechs
- Pilot study / proof of concept agreements
- Data pooling and sharing models
- Collaboration and partnerships
- Strategic investments with AI businesses
- Due diligence of algorithms

Innovation and creativity with AI
Key contractual and commercial issues (1)

IP: who owns what the machines make?

- Again the traditional norms are changing …
- Key areas to think about:
  - the data being utilised (ie, the inputs)
  - the algorithms and IP in the tool itself
  - the outputs it creates
- Who owns what IP and what licences back are granted
- Do you want them to be able to share your data set learnings with competitors?
- Who should own enhancements / modifications to the tool?
- If the tool creates competitive advantage for your business – should you have a period of exclusivity before they can use with a competitor?
- Consider IP aspects of lock in risk on exit and ability to move to a replacement supplier
Key contractual and commercial issues (2)

**IP Issues: data**

- IP rights in data are uncertain
  - Trade secret
  - In US, copyright protection for structured data
  - Contract terms are critical for clarity
- Datasets may be owned or provided by third parties and additional rights may be needed to satisfy “explainability” for regulators
- Graphs and weighting results for neural networks should be archived to reproduce “decision” but regulators may require the ability to access the original dataset or it may be needed for litigation, consider including the dataset in the escrow
Key contractual and commercial issues (3)

Contract concerns

• Traditional software license terms, “AS IS” and liability limits need to be reconsidered
• Special warranties relating to development methodology, “unbiased” datasets and requirement of “explainability” for regulatory compliance
• Notice and recordkeeping of changes, such as use of new datasets
• Terms of data licenses are still evolving; insurance companies may need special rights to satisfy regulatory audits and/or defend future litigation
• Consider the need to add datasets to escrows rights (in US, data rights may not be covered by Section 365(n) of the Bankruptcy Code unless considered a trade secret)
• Consider “tailored” remedies, such as reperforming development work
Key contractual and commercial issues (4)

Data related issues

- Need to understand and evaluate the data flows at the outset.
- What data sets will the vendor have access to and do you have the rights to share the data with them?
- Consider privacy / data protection concerns re: what data is shared and how they may process the data for you. Could they be a controller?
- Where will the data be hosted / be resident? Does this create any overseas data transfer issues?
- Have you specified how data breach notification will be addressed?
- What data and information security requirements do they need to adhere to?
Key contractual and commercial issues (6)

Service level considerations

• Should service credits / at-risk amounts be higher because of greater accuracy?
• Continuous improvement — should service levels automatically improve over time, like the AI itself?
• Where you have combined people and technology driven services (e.g., BPO and RPA), how do you incentivise the supplier to take out roles?

Protection on exit

• The need to quickly replace the system and a significant loss of knowledge may result in cost spikes (imagine if your entire workforce working on a particular process walked out overnight and left no notes or processes in place)
• You must be cognizant of how to prevent technical vendor lock-in on exit if you are dependant on the AI or RPA technology
• What support have you built into your contract to provide exit assistance?
Key contractual and commercial issues (7)

HR issues

- Businesses implementing RPA or AI tools may be exposed to a range of employment law issues, such as consultation requirements and severance payments
- They should also consider the wider PR implications

Interaction with other software

- An RPA or AI tool will likely need to interact with other systems within the customer's wider IT environment
- It is essential that the terms of the licences of other software that the RPA or AI tool will interact with are considered
- Specific points to look out for include if the interaction falls within the scope of the licence as it may trigger an increase in the licence fee for that system
- Licences should be wide enough for the variety of use cases that may be dreamt up by the business