SEYFARTH *Lean*™
Consulting

Ignite Presentation at

Reinvent Law London

June 2014

We need a Statistical Lawyer.

For several hundred years, we have lived with what I'll call the personal experience lawyer.

In the 21st century, we need a new model, which I'll call the Statistical Lawyer.

The Statistical Lawyer takes us to a new practice level where data, legal knowledge, and practical knowledge combine.

So, we are going to hack a Statistical Lawyer starting with a mashup of Sherlock Holmes and Dr. Watson.

Reality has outstripped experience.

Historically, lawyers have relied on experience alone, meaning cases they handled, read or heard about.

Each lawyer used his or her experience plus training to apply legal knowledge to new fact situations.

But, legal publishers tell us that a case search even 20 years ago which would have turned up a few dozen cases today would turn up thousands of cases.

Reality has outstripped experience.

1,300 x 10^{18} of stored data
+ 2.5 x 10^{18} per day

90% in the last 2 years

We face too much data to process.

We live in a digital universe with 1,300 quintillion bytes of data. An additional 2.5 quintillion bytes rain down on us each day.

Each lawyer's challenge is how to access, process, recall and use from that enormous volume the data that is relevant to his or her client's problem.

Exclude cute cat videos, and the volume of data a lawyer must process still exceeds what any person could handle.

FAST...
& SLOW
Daniel Kahnemann

We also face a thinking challenge.

In addition to the data challenge, our experience model lawyer faces a thinking challenge.

Behavioral scientists say our brain uses two operating systems.

The fast system jumps to conclusions and operates automatically. You use the fast system most of the time, even when giving legal advice.

The slow system is lazy and sleeps most of the time. It wakes up to handle complex work requiring concentration.

He's got to be guilty. Why else would the prosecutor charge him? Why do you need facts?

Experience may not be enough.

This is the problem: lawyers need to use their sleeping slow system to process complex data.

But, even though faced with thousands of cases compared to the dozens they would have seen years ago, lawyers tend not to wake up the slow system and get input on the larger universe.

Lawyers charge ahead relying only on their limited experience.

Think of this as lawyers telling a story to the jury, but omitting the facts.

"If someone says: That's impossible. You should understand it as: According to my very limited experience and narrow understanding of reality, that's very unlikely."

Paul Buchheit, Google Employee No. 23
Gmail Lead Developer, Developed Google
AdSense Prototype

But, data access is not enough.

Even a very senior lawyer has limited experience. He or she may have encountered perhaps 1,000 cases over their career compared to the 100 million cases filed in the US each year.

But, let's assume our senior lawyer did have all the relevant information, chances are he or she wouldn't use it.

The rabbit fast system would outrun her turtle slow system, and clients would still get advice based only on the lawyer's limited experience.

*Without using data, we repeat history.*

Should we care?

Yes! As lawyers and clients we want advice that fits the real world.

If experience means seeing only a small piece of the entire world, isn't our advice possibly skewed?

Do we repeat history, because our experience is too narrow and we can't pick out the patterns that would help us guide clients to avoid history?

"Data, data, data…I can't make bricks without clay."
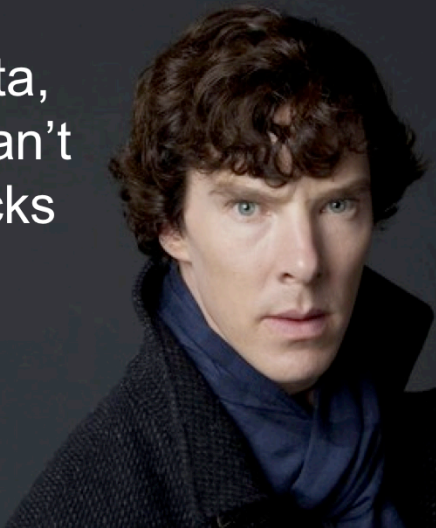
Change requires data.

So how do we change?

We need to supply information our slow system can digest and get that system to use it.

If we could do that, we would have our Holmes – an information driven lawyer.

100 million lawsuits - he finds the patterns among facts and law.

100s of contracts - he finds commonalities and differences in all the clauses.
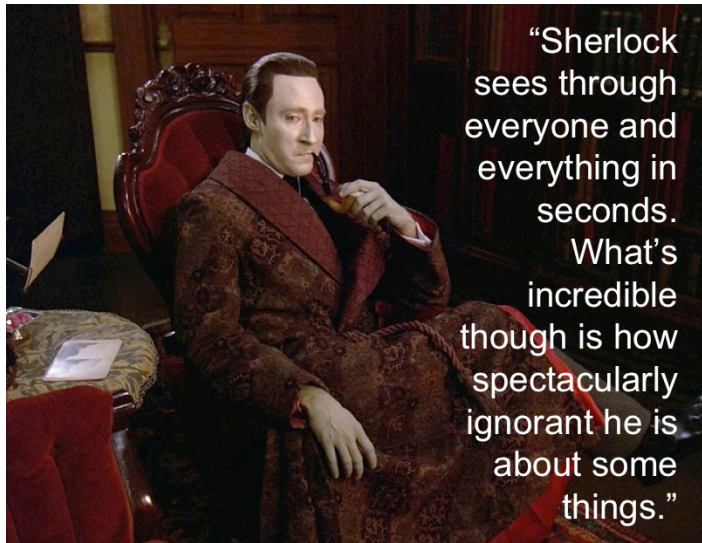
"Sherlock sees through everyone and everything in seconds. What's incredible though is how spectacularly ignorant he is about some things."

But, we need more than data.

Now that we have him, should we rely only on Holmes?

Probably not. Holmes has all the cases and regulatory decisions and knows all the contract provisions and phrasings.

He is great at comparing the current fact pattern to the large data set and giving us probabilities.

But, data and probabilities without insight, wisdom and understanding, leaves us with gaps.
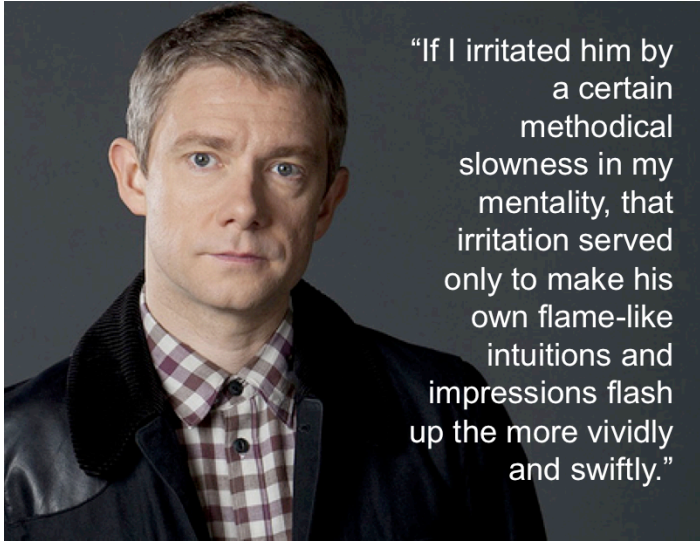
"If I irritated him by a certain methodical slowness in my mentality, that irritation served only to make his own flame-like intuitions and impressions flash up the more vividly and swiftly."

We also need wisdom and insight.

As Holmes without Watson would make weaker stories, our Holmes without help will provide less useful advice.

Data and statistics should help illuminate our path. To know whether to follow the path, we need intuition, judgment and insight.

When we get too lost in the numbers, we see things that aren't there. We find causation when there is only correlation.

forecasting the
perfect storm
in 2016?

Bush

Clinton

Rand

Christie
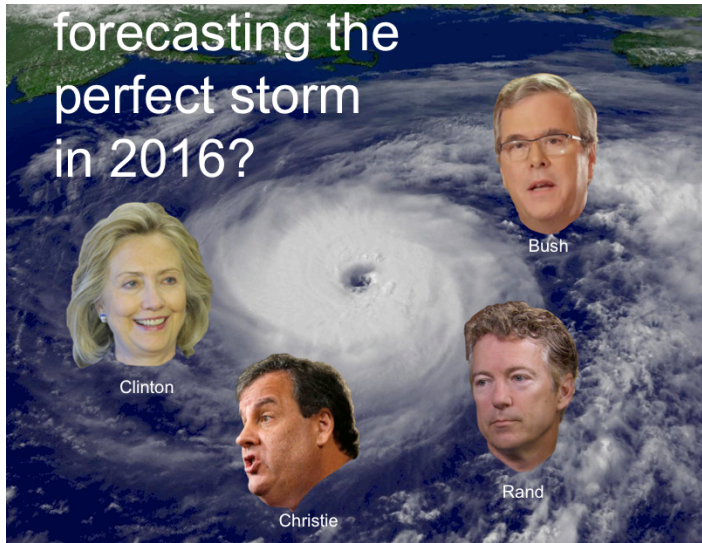
$Wisdom + data = better\ results.$

We know from other areas a Holmes only approach does not work best.

In weather, we know data driven models plus the wisdom of meteorologists gives us more accurate forecasts.

In politics, we know election predictions based on quantitative and qualitative approaches do much better than quantitative studies alone.
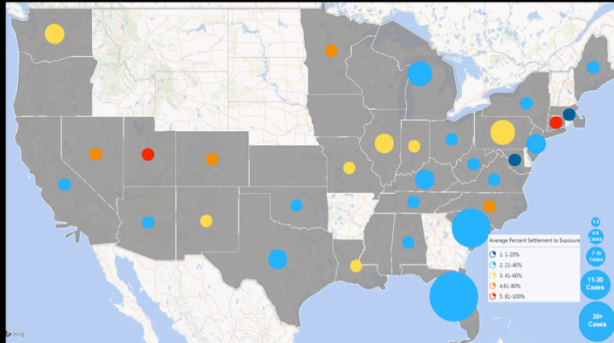
Statistical Lawyers are not "lawborgs."

So is this what we want?

No! We aren't trying to create "lawborgs" – part person, part machine.

We want professional problem solvers who use data as an input to illuminate the issues and provide guidance for solutions.

Our Statistical Lawyer is more sophisticated than simply man or woman plus machine.

build an analytic framework

To start, gather data & build analytics.

As Sherlock says, without clay we can't make bricks.

The legal industry is data poor and not familiar with analytical tools.

To start, we need to build a data rich environment and gain familiarity with the tools.

At Seyfarth, we have started on that journey by building data gathering and analytics into our core processes.

introduce analytics vs gut
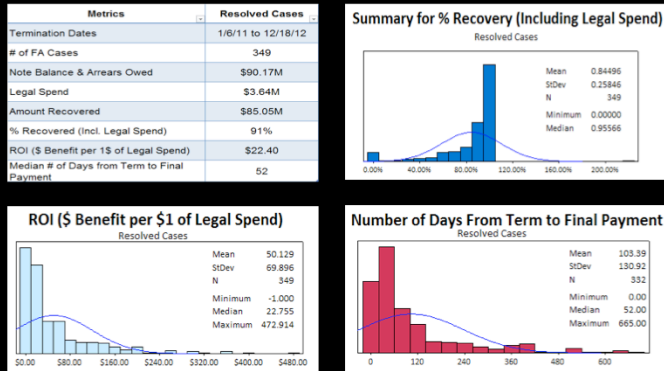
Focus on the client, not the fee.

Our journey should be client focused.

Traditionally, firms talk about changes as something firm focused and something firms push out to clients.

We think differently at Seyfarth. Change should be client focused and firms should respond to client needs.

When thinking about analytics, we should focus on what helps clients improve their businesses, not just on what it costs to provide legal services.
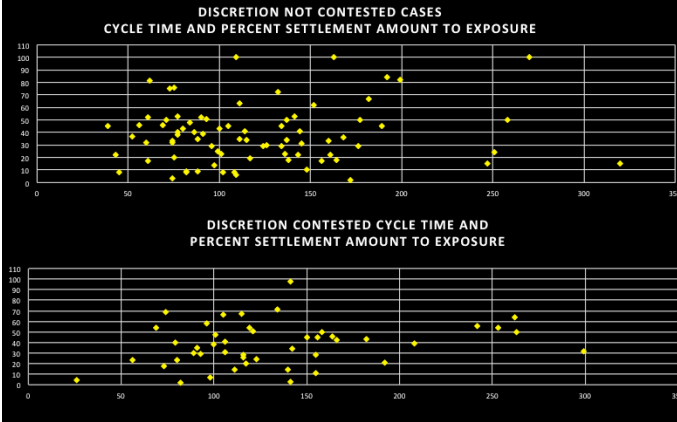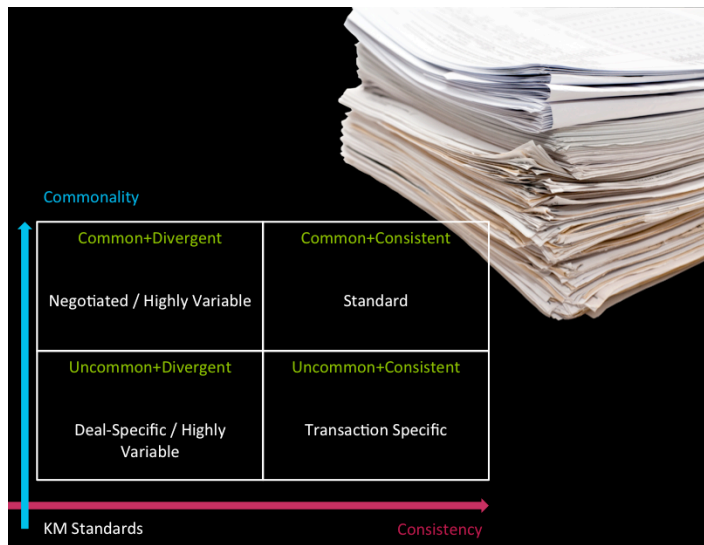
Our data models should help us drive efficiency as well as predictability.

Forecasting risks but then handling them inefficiently can be worse than simply handling risks as they come up.

Data models should help us find ways to reduce variability, increasing efficiency as well as quality.

As we build these models, we can develop feedback loops that serve to update our forecasting accuracy and continuously improve efficiency.

	Commonality	
Common+Divergent		**Common+Consistent**
Negotiated / Highly Variable		Standard
Uncommon+Divergent		**Uncommon+Consistent**
Deal-Specific / Highly Variable		Transaction Specific

KM Standards — Consistency

Think broadly & go beyond disputes.

We want to think broadly. Not all lawyering is about disputes.

What about contracts? Any type of contracts. Semantic analysis, natural language processing and machine learning work together to give us a picture across documents.

It isn't just what clauses are in the documents, it is the text itself.

We focus on clauses worth discussing and we concentrate on clauses which drive risk.

We now have a Statistical Lawyer.

Analytics, Experience, Wisdom, and Knowledge.

A good Statistical Lawyer will use all these tools, and more, to generate her guidance.

She will value experience, for her more intimate knowledge of the facts.

She will value analytics, for its broader perspective and patterns.

We started with a mashup of Sherlock Holmes and Dr. Watson.

But, since we work in law, perhaps a more appropriate way to create our Statistical Lawyer starts with a mashup of Oliver Wendell Holmes and IBM's Watson.

Pairing the power of a machine like IBM's Watson with the crowdsourced wisdom of experienced lawyers in a firm would give what neither one alone can provide.

If I have you intrigued, stay tuned – our journey has just begun.