

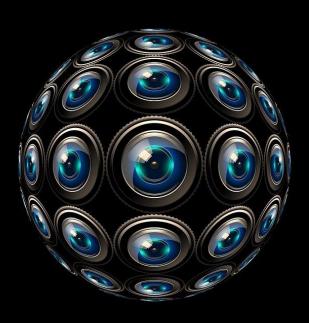
# **Predictive** analytics

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branch of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modeling, data mining techniques and machine learning

(IBM)

# **Predictive** analytics



Growing interest and concern

Predictive policing

Criminal sentencing and bail decisions

Automated and real-time compliance monitoring and detection

# Law and direction of time

Traditional, narrow view of law: backward-looking, precedents and status quo

But law always involves past, present and future

Law is now more future-oriented



#### **Future effects of law**

Prospective application of law (ex ante)

Presumption against retroactivity (ex post facto)

Statutes are in effect until repealed

#### Future effects of law

Doctrine of non-desuetude (non-use)

#### Constitution is

intended to endure for ages to come, and, consequently, to be adapted to the various *crises* of human affairs (Marshall)

### Future legal interpretation

Statutes 'always speaking'

Ambulatory approach

Lex ferenda (future law or ought to be)



# Legal principles about the future

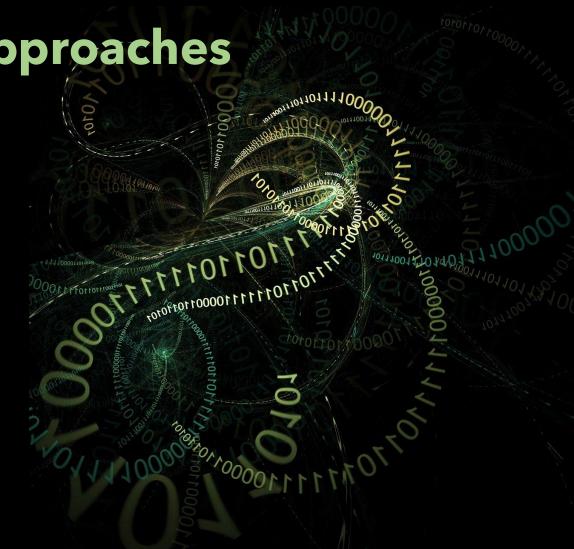


Regulatory approaches for the future

Non-rules based

Principles-based

Risk-based



## Law and the future



# Law and prediction



Not just technical or epistemic but also normative and social

Not only forecasting but also shaping the future through present actions and decisions

Self-fulfilling prophecy

#### Normative element



The most powerful tool of prediction is law

(Neuwirth)

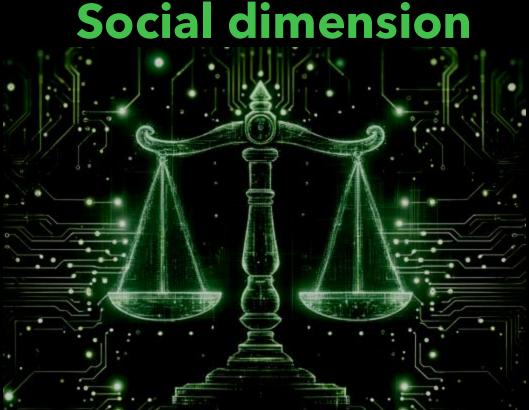
Predictive power of law rooted in its normative and prescriptive character

Possible for law to shape and embrace predictive technologies

Laws and technologies embody and enact public interests and social values

With technology, values-based design

In law, concerned with social values, contexts and considerations



### Future of predictive regulation

Predictive technologies as **targets** and **tools** of regulation

Regulation will still be very difficult

Uncertain, random and stochastic

Biases and effects (hindsight, confirmation, anchoring, Hawthorne, Rosenthal)

### Future of predictive regulation

Regulation will still be very difficult

Traps of instrumentalism and technological determinism

Law in books versus law in action



# Regulation of predictive technologies now

Need to refocus law and policy discussions

From future to present

More human- or societycentric and less fixated on technology per se

Existing yet changing goals, norms and values

Norms and values approach

No better time than now



### **Questions and comments**

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