

How to Evaluate Court Reforms

XKDR Forum
September 6, 2024

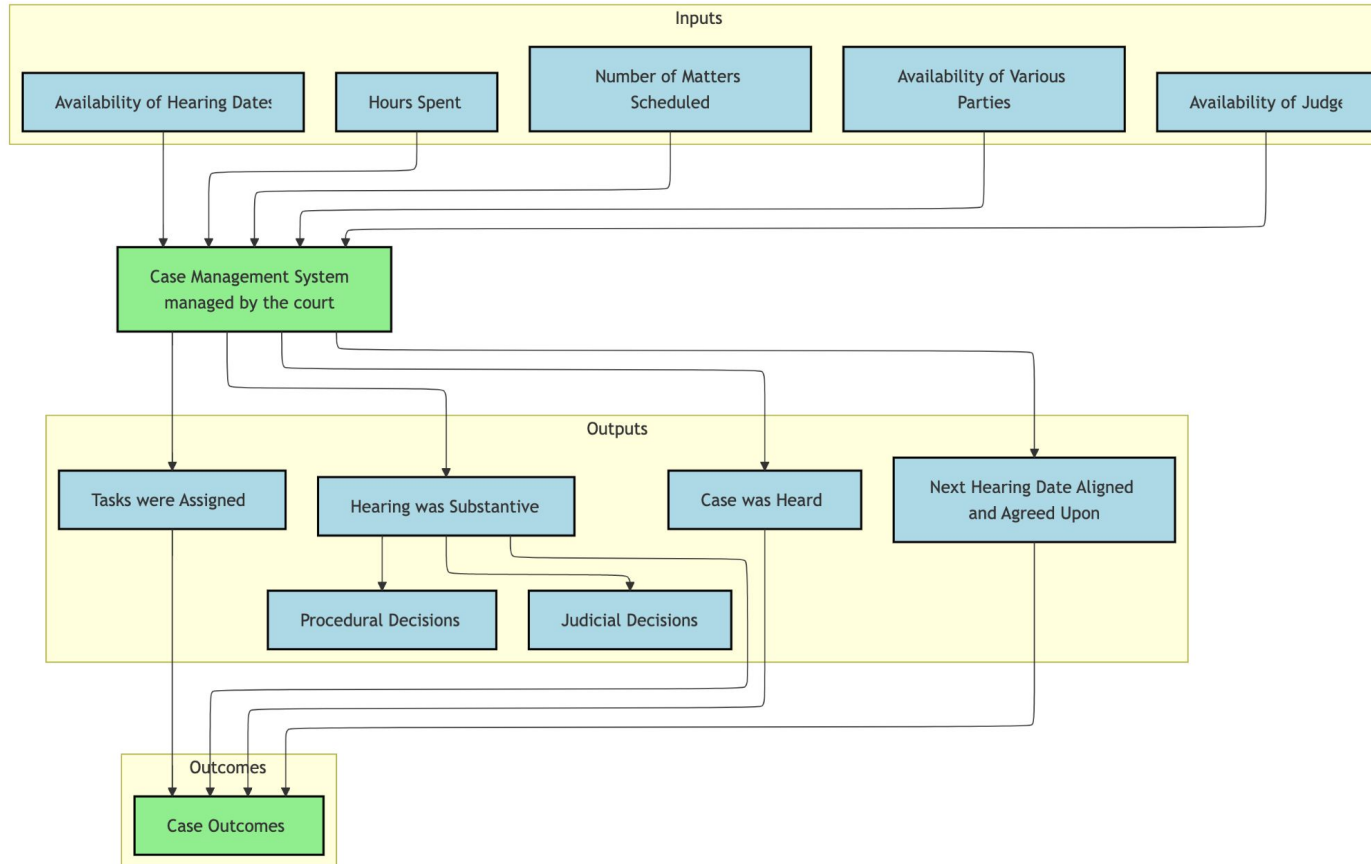
- Our legal system is broken - issues well known
- There are many ideas on how to fix our courts
 - Dedicated / Specialized courts
 - Traffic Challan
 - NIA, 138 cases
 - Better IT systems - ecourts Phase 3
 - More number of judges
 - ICTS - separate administrative and judicial
 - Changing laws (BNSS, BNS)
- How do citizens, administrators assess whether an idea is working?

- Kerala HC has launched ON Courts 24x7 - a new court in Kollam dedicated to cheque bouncing cases
 - Separate administrative and judicial tasks
 - Virtual, asynchronous modes of communications and operations
 - Improved two-way communication between courts, litigants and lawyers
 - Better scheduling
 - E-filing
- This is built on multiple hypotheses on what litigants, lawyers, court staff, judges want
- How do administrators assess success? It is a journey of ideation and iterative refinement

What gets measured get managed

- In any domain, process of reform must begin with a measurement of outcomes
- Forces objective quantitative assessment and analysis
- Establishes the starting point - where are we today, and then measure across the lifecycle of the intervention to track impact
- Measurement enables -
 - Validating the diagnosis
 - Quantify issues
 - Track directionality of change
 - Impact measurement
 - Feedback
 - Cost benefit analysis

A lot of work in courts is process management



System administrators need data in order to achieve better outcomes

- Few courts give a complete overview of court operations
- There is limited amount of visibility on the actions of frontline staff
- Ideally, we want to assess details of what transpires in court, the behaviours of litigants and lawyers, the reasons for delay
 - What are the common reasons for litigants asking for additional time?
 - What is the actual time (in minutes) that a single case takes?
 - What is the most effective mode of summons?
- Ideally, the court will make small tweaks and adjustments and see the impact
 - What happens if we increase court hours of operation?
 - How far away should hearings be?
 - What is the impact of imposing costs on frequent absenteeism?

The types of measures

Fine Metrics



What the engineering crew sees

Coarse Metrics



What the audience sees

Fine metrics of court operations are available within good IT systems

- Case Characteristics
 - How long does a case take (in actual judicial minutes)?
 - Who are the different types of litigants? Institutional vs Individual
 - Is there a pareto distribution of lawyers and cases?
 - What are the different types of case outcomes?
 - What is the average settlement ratio? Does it vary by type of litigant?
 - How many affidavits, how many interim applications, how many witnesses?
- Adoption of various features / interventions
 - Who is using virtual hearings? How often? From which court centres?
 - What is the scheduling efficiency of the court?
 - Which kind of reminder is most likely to generate an action for a task?

Coarse metrics are metrics which are visible to outsiders

- For coarse metrics, we take the litigant centric perspective - see [“The litigant perspective upon courts”](#), Manivannan et al, 2022
 - Independence, efficiency, effectiveness, predictability, access
- Characteristics of coarse metrics
 - Publicly accessible information
 - Agnostic to case type
 - Agnostic to jurisdiction
 - Agnostic to rules of practice
- Metrics chosen should be quantifiable, measurable with clear directionality of “what is better”

Fine Metrics vs Coarse Metrics

Aspect	Fine Metrics	Coarse Metrics
Primary Users	System administrators, internal stakeholders	General public, external stakeholders
Comparison Use	Useful for comparison before and after	Useful for comparison before and after, across courts doing similar case types in neighbouring regions, allows for a treatment and control setup
How to action	Allows for changes to inputs, tracking outputs	Tracks changes in outcomes - did it make an impact to litigants
Data Requirements	Requires IT systems that put out high frequency admin data - New IT systems	Available in public domain, can use e-courts data
Level of Detail	More detailed, granular admin data	Less detailed, broader case lifecycle measures
Privacy Considerations	May contain sensitive information, requires restricted access	Designed for public consumption, less privacy concerns

Coarse metrics we find useful

1	Time to Disposal	Time from time of filing to disposal (expressed as the probability of disposal within a certain time frame)
2	Number of Hearings	Total number of hearings
3	% of substantive hearings	% of hearings in case that were substantive (moved the case forward)
4	Time to first substantive hearing	Time from filing to the first hearing where judicial business transpired
5	Variability in time between Hearings	IQR of the distribution of the time between hearings across cases

Measuring efficiency - time to disposal

- Most time to disposal calculations are average of (Date of Disposal - Date of Filing) for a set of cases
- This is not useful for us. Let's take 10 cases on 1st of January 2022, and we're calculating on July 1 2024

#	Date of Filing	Date of Disposal	Status	Time to disposal (years)
1	01-Jan-2022	30-Jun-2022	Disposed	0.5
2	01-Jan-2022	31-Dec-2022	Disposed	1
3	01-Jan-2022	30-Jun-2023	Disposed	1.5
4	01-Jan-2022	31-Dec-2023	Disposed	2
5	01-Jan-2022	30-Jun-2024	Disposed	2.5
6	01-Jan-2022	-	Pending	-
7	01-Jan-2022	-	Pending	-
8	01-Jan-2022	-	Pending	-
9	01-Jan-2022	-	Pending	-
10	01-Jan-2022	-	Pending	-

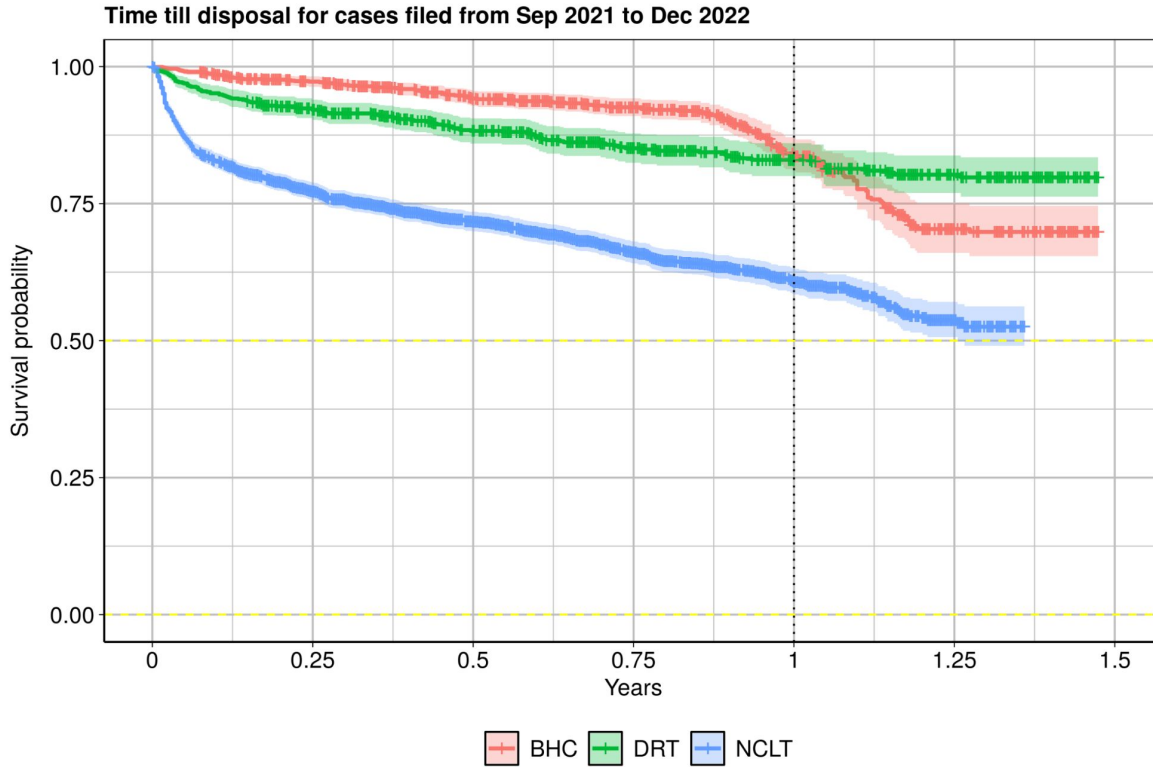
We may erroneously conclude that the time to disposal is the average $7.5/5 = 1.5$ years.

But clearly, the 5 cases have a time to disposal >2.5 years, so even IF they were to end on the day of measurement, the average time to disposal across 10 cases would be 2 years

We need a way of including the pending cases in the analysis

- Survival curves allow us to represent this as a probability of disposal at certain point in time

1 Some samples - time to disposal



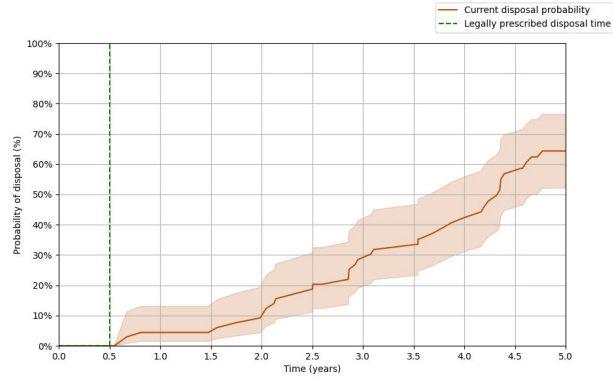
Forum	Probability of Disposal within a year
NCLT	39%
DRT	17%
BOM-HC	16%

[Helping litigants make informed choices in resolving debt disputes](#), Manivannan et al, 2023

1 Some samples - time to disposal

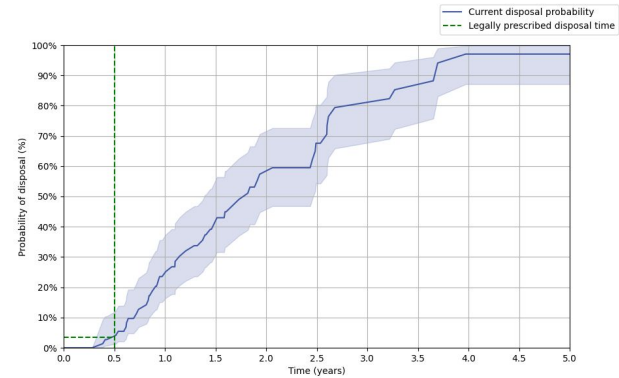
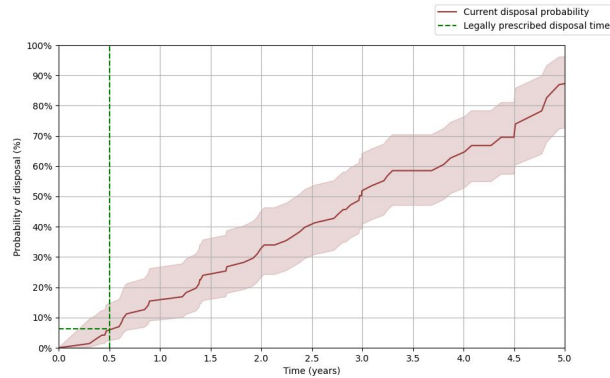
Ernakulam

S138



Bangalore

MV



- Number of hearings is a proxy for cost
 - Monetary (some lawyers charge per hearing, loss of daily earnings)
 - Physical effort (travel to court)
 - Mental effort (keep track of what happened, ensure coordination)

Metric	Ernakulam		Bangalore	
	S138	MACT	S138	MACT
Number of Hearings	7	13	19	25

All arguments against using simple summary stats for “Time to Disposal” apply to “Hearings to Disposal”

"I request the members of the bar to not seek adjournments unless really really necessary. This cannot become a tareek pe tareek court. This defeats trust of citizens in our court." - CJI DY Chandrachud

The Ministry of Law, Justice and Company Affairs, in the context of **fees payable to government counsel**, refer to 'Effective hearings' and 'Substantial work'. Effective hearings are where either one or both parties are heard by the court, while 'non-effective' hearings are where 'the case is mentioned and adjourned or only directions are given or only judgement is delivered by the court'. The same memorandum refers to substantial work as 'when the case has been admitted by the Court after hearing of preliminary objections or filing of the affidavits/counter-affidavits etc. by the Counsel'. These definitions guide a distinction between adjournments and non-substantive hearings.

In this article, we broaden the notion of differentiating non-substantive hearings beyond adjournments. **Only hearings where there is application of judicial mind to the resolution of the dispute, are classified as 'substantive'.** Thus hearings that involve disposals, withdrawal, admission, reporting settlement, are classified as substantive hearings. Adjournments are classified within non-substantive hearings. A reading of the order for an adjourned hearing may simply have a next date given for a hearing. These may be adjournments on account of paucity of time, time sought by parties, non-appearance of parties, wrongly listed or technical glitches. We also classify hearings as non-substantive when orders in which the court gives directions to file pleadings or take on record pleadings. Hearings that involve matters of procedure, without a substantial impact on the resolution of the dispute itself, are taken as non-substantive for a litigant.

- In their article - [“How substantial are non-substantive hearings in Indian courts: some estimates from Bombay”](#), Manivannan et al 2023 offer a definition of “substantive hearings” - **hearings where there is application of judicial mind, that move the case forward**
- Based on a reading of the order text, we can now classify hearings as “substantive” or “non-substantive” at scale

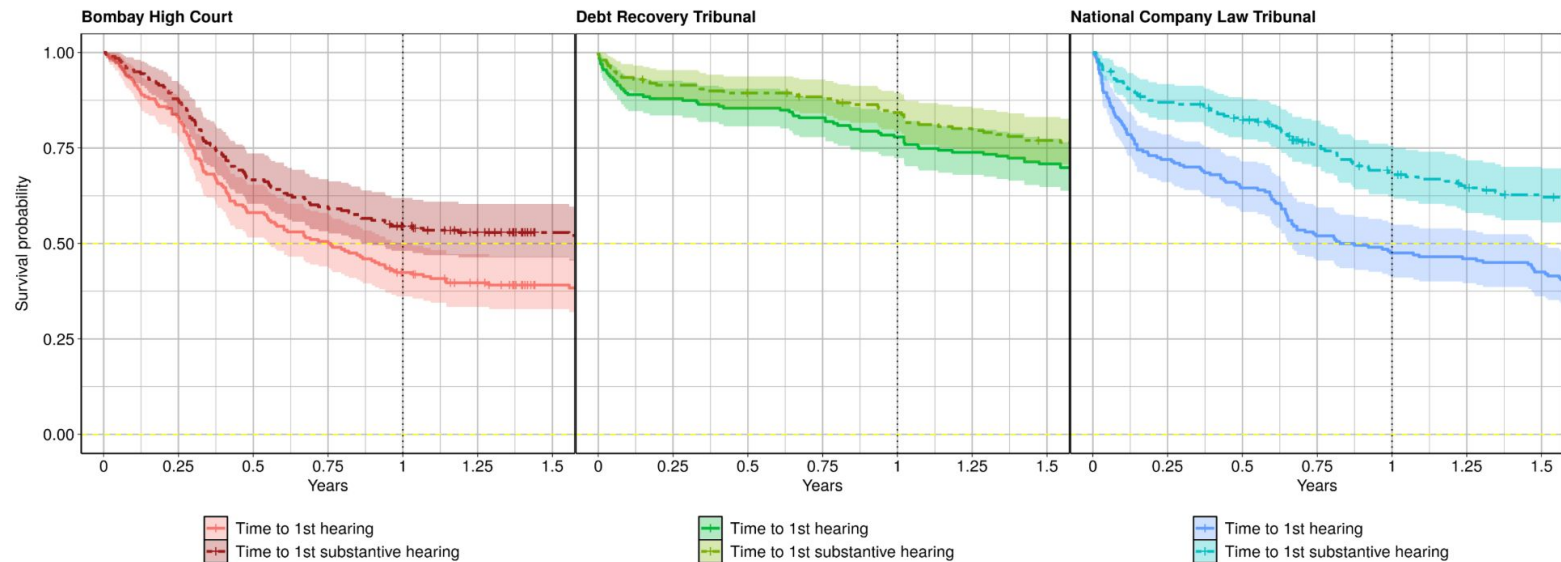
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Some analysis on % of substantive hearings across different types of courts

Court	% substantive
BOM HC (Debt Disputes)	43%
DRT (Debt Disputes)	82%
NCLT (Debt Disputes)	91%

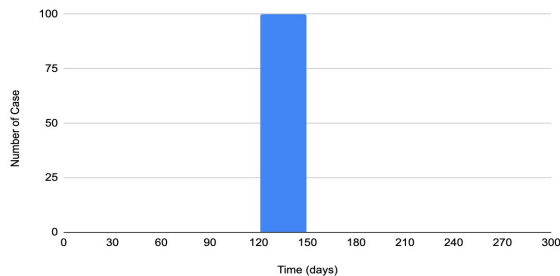
Court	% substantive
Ernakulam (S138)	24%
Bangalore (S138)	40%
Ernakulam (MACT)	33%
Bangalore (MACT)	41%

- How long does it take for a case to make “some tangible” progress
- For fora / courts where admission, cognizance is measured in months, this is another useful metric

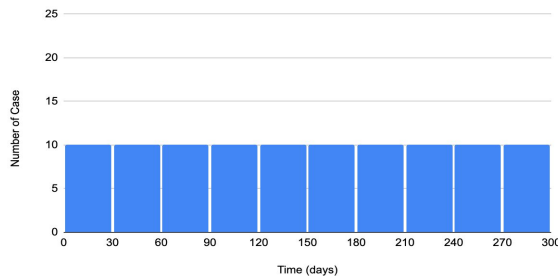


Measuring predictability - time between hearings

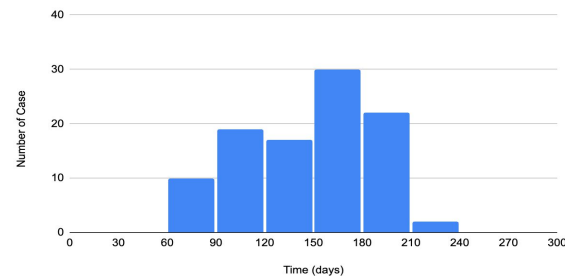
- Having a semblance of predictability is useful for planning.
- Imagine having to commute to work daily, without knowing whether it's going to 20 mins or 2 hrs
- One key factor is the time between hearings, and the range across cases



*Extreme definition of high predictability.
All cases have median time between
hearings in the range of 120-150*

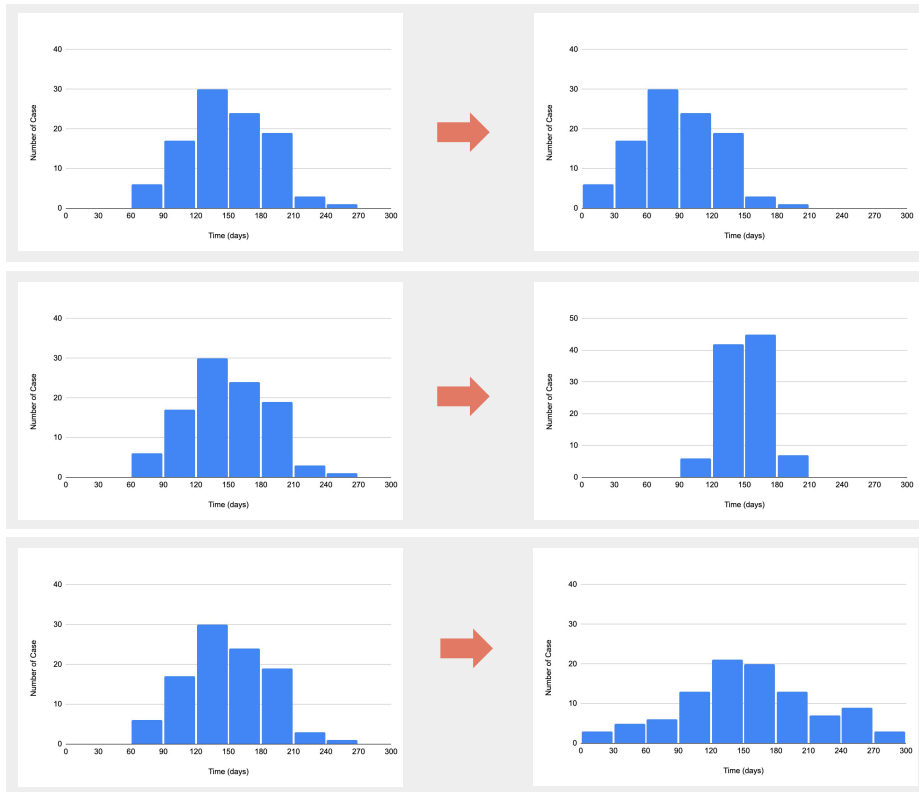


*Extreme definition of low predictability.
The probability is uniform across 10
months, so the next hearing could be
anytime*



*Sample graph what a random set of 100
cases with median at ~150 might look like*

- Aim is to reduce the variability across cases



Shifts the graph leftward.

This is an improvement in efficiency, not in predictability

	From	To
Median	144	84
IQR	31	31

Decrease in spread of the graph. Increase in predictability.

	From	To
Median	144	150
IQR	31	11

Increase in spread of the graph. Decrease in predictability.

	From	To
Median	144	150
IQR	31	38

- We analyze case lifecycle data of cases of a similar nature within a certain period of time
 - Tagging of stage
 - Classification of hearings as “substantive” or “non-substantive”
- All data from e-courts - publicly available, verifiable, comparable across different courts
- Random sampling of both pending and disposed cases to get a full picture

- What are some other useful coarse measures that are available?
- How long does it take to see an impact? What is the gestation period?
- There are many choices of fine metrics - which are the ones that will actually help us improve a system?

Thank You

Questions? Comments?

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