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AN INQUIRY BASED ANALYSIS OF JUDICIAL AND TEMPORAL DATABASES

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ABSTRACT

A **temporal database** is a **database** with built-in support for handling data involving time, being related to the slowly changing dimension concept, for example a **temporal** data model and a **temporal** version of Structured Query Language (SQL). A temporal database records facts about when the data was valid as well as the data itself, and permits you to query on the temporal aspects. You end up dealing with 'valid time' and 'transaction time' tables, or 'bitemporal tables' involving both 'valid time' and 'transaction time' aspects. An example of where a temporal database is useful is where data changes over time. Judicial databases often can be correlated to temporal databases, as once the trials on cases get completed, the validity of justice for the victim is over. Hence, to avoid deadlock situations in settling of pending cases, fast track courts that guarantee justice with fairness and a vision into the victims' future come handy as per the saying, "A stitch in time saves nine".

KEYWORDS: Judicial databases, Trials, Cases, Fast-track courts, Justice with fairness, victims.

INTRODUCTION

India and the internet

Modern India is changing and developing at an incredible rate, embracing information technology to fuel economic development, education and social change. Much of the world's code is written in India, with the industry centred in the southern city of Bangalore, bringing India ever increasing foreign currency earnings. Outside the industry, computers and the Internet are finding their way ever deeper into the fabric of Indian life; many young people from the middle classes spend a good deal of time online and school exam results in Himachal Pradesh are announced first via website. The government has run several projects in an attempt to bring the benefits of Internet access to poor rural areas, including pilot projects to provide weather and agricultural information to farmers.



In a few short years, India has transformed from a largely unwired country to one where internet cafes and 'computer training institutes' are a feature of every major town, and many more isolated areas. In 1997 there were only a very few places to publicly access the internet in Delhi (for the well off only), and most were in 5 star hotels. Now Old Manali village alone boasts at least a hundred publicly accessible net connected computers in cybercafes. Although Old Manali is a big tourist destination in summer, it is nevertheless only a village of 2,000 people.

The impact the internet has had on travellers in India is best demonstrated by a visit to the post restante boxes at the local post office. Until recently a letter was the main way to communicate meaningfully with those at home. A visit to the Poste Restante in 1995 would leave me with a pile of about 100 or so letters, notes and postcards filed under initial "W" alone; on the same visit in 2001 I was handed 6 items; 2 actual letters about 2 months old, and 4 notes left by those using the facility as a kind of noticeboard.

A smaller world



The implications for travellers are big, both positive and negative. The ease of almost instant correspondence makes the world a much smaller place, with friends and family at home easily accessible via email, instant messaging or a blog and news from the wider world coming via major news portals. The downside for many people is that home, which many go to India to forget for a while, is now way too close; the isolation and remoteness that a trip to India used to bring is gone forever, even in the remotest of places. It is a unique and pleasant experience to have no contact at all with the world back home for 2 months, especially as it seems almost impossible to remain out of touch in Europe. While it's easy enough to say "well don't use it if you don't like it", that is easier said than done for many people.

The ease of access to email simplifies many aspects of travel in India. Planning to meet someone in Goa in 3 weeks used to involve a lot of pre-planned drops for notes, pre-decided hotels, even preplanning which beach area to stay, and a good deal of luck if you didn't know the place already. As planning in India has a habit of coming apart very easily, this was at best a 50-50 proposition of success; changing your mind and taking a 10 day detour is hardly uncommon. Email solves the problem of letting people know exactly which hotel you are in, which beach etc.

Online booking

A wide variety of personal websites offer travellers a chance to pick up first hand accounts of places they plan to visit, discussion boards, and the opportunity to share their own experiences. It is now even possible to book an Indian Rail ticket online by credit card, and collect the ticket on departure.

Why bring your own?

For most people, public internet access via cybercafe in India is enough; an occasional look at the news, email via Yahoo. But if you happen to be a net or email junkie who likes writing long mails without the meter ticking, there are compelling reasons to bring your own device to access the internet, and to buy online time in India.

Cost is one. Depending on where you are, net access in cybercafes can be relatively expensive, ranging from the unusually cheap in Paharganj at 10RS per hour, to the seriously pricey in Leh at 180 RS per Hour (2001 price). Somewhere between 30-60 Rs per hour is the going rate, with 60 more common in tourist areas. How expensive this really is depends on how fast the connection is; obviously a 30RS connection that's dog slow is more expensive to use than a fast 60RS one.



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Most places do not offer a lower charge for offline email writing (although some will do half rate) to then send when you log on, so you pay for email writing time in addition to sending / browsing etc. It all adds up. There are plenty of travellers who now want their email / net fix for an hour a day, every day. This will end up costing you something around 150UKP (sterling) during a 6 month trip.

A cybercafe in India

In contrast, using a paid for connection through an Indian ISP works out comparatively cheap - especially if all you're doing is sending emails - and prices are coming down almost every week it seems. Writing emails offline costs nothing except the machine to write on, and online time with the ISP will cost around 5 Rs an hour, with an additional 24 Rs per hour in phone charges. If you use it after 10.30PM, the phone charges are now half (12 Rs per hour) and after 11PM online time is free with BSNL, the Indian government ISP.

Considering (connection dependent) it only takes a couple of minutes to download mail and upload pre-written mail to send using a mail client such as Eudora or Outlook, the comparative cost is minimal, like 5 rs instead of 60.

But, the crime rate is alarming in India, even though the literacy rate is high as of last five years period. However, to provide fair amount of justice to the victims, the setting up of and monitoring of fast-track courts is gaining momentum.

MATERIALS AND METHODS

Configuring and Monitoring the effectiveness of fast-track courts

It is high time the Indian Government considers the configuration and monitoring of fast - track courts, in the current Indian "crimes and justice" scenario.

Figure:



9pt Times New Roman, Bold, Italic

RESULTS AND DISCUSSION

various Indian statistics
<ul style="list-style-type: none"> - position in the corruption index of 133 countries surveyed (2003): 83rd (survey by Transparency International) - number of districts in India (2003): 593 - number of families: 192 million - number of houses: 179 million - Indian families living in one-room-houses: 40 % - number of places of worship (temple, mosque, church etc): 2.4 million (more than schools, colleges and hospitals combined) - number of gays, lesbians and transgender individuals: 70 million (estimate by Humsafar Trust) - estimated percentage of sexually active males in India who have had sex with men at least once: 25 % (estimate by National AIDS Control Organisation health survey) - Indian families who own a TV set: 32 % - illegal immigrants from Bangladesh: over 15 million - length of the Indo-Bangladesh border: 4096 km [Indian Express Oct 04] - most polluted river in India: Yamuna (July 2003) - annual increase of forest cover: 38,000 hectares (according to HP forest Minister Chander Kumar) - India's first test tube baby: 1978 (world's second test tube baby); Kanupriya Aggarwal - literacy rate: 1990: 52 % (61.8% male; 33.7% fem) -- 2001: 65.4 % - * newspaper readership in urban areas in 2006: 45% of urban population [DNA Aug 2006] - * growth of newspaper readership from 2005 to 2006: 12.6million more readers [DNA Aug 2006] - * average time spent on reading newspaper: 44 min [DNA Aug 06] - * people listening to the radio: 27% of the total population [DNA Aug 06] - percentage of rain during 4 months summer monsoon: 80 % of yearly rainfall in India - number of NRIs in Britain: 1,3 million (NRI: Non Resident Indian) - number of Indian nurses working in the UK: almost 10,000 [2004] - number of additional villages electrified in 2003: 6,350 (acc. to Ministry of Power) - number of single light connections released to "Below Poverty Lines" family: over 3 million (acc. to Ministry of Power) - number of portraits of Jayalalitha by painter Shihan Hussaini drawn by his own blood: 56 [HT Feb 04] - India's road accident record 1998: 6 % of the world's road accident deaths happen in India (while India has only 1 % of the world's road vehicles) [GBoWR] - death and injury caused by accidents on India's roads: 1 person dies every 6 minutes; 10 are injured in the same time frame [BBC; Sep 2005] - * India's percentage of global car population: 1% [Daily Telegraph Sep 06] - * India's share of global car accidents: 10% [Daily Telegraph Sep 06] - financial losses due to road traffic injuries 2005: 550 bn Rs = 3% of GDP [BBC; Sep 2005] - number of vehicles per km in Mumbai: 591 [BBC; Sep 2005] - number of road accidents in Mumbai: up to 35 per day (with up to 15 deaths per day) [BBC; Sep 2005] - number of cars in Bangalore (Karnataka): 1.95 million cars (Bangalore's population is 6.5 million people) [BBC Sep 04] - increase of alcohol consumption in past two decades in India: by 106 % [HT Jul 04] <p>more facts and figures about India in quick reference stats popup</p>
some facts & figures on poverty in India
<ul style="list-style-type: none"> - people below poverty line: about 260 million (acc. to AB Vajpayee feb 04) - poor living in India: one quarter of the world's poor [BBC Aug 04] - people living on less than 1 Euro per day (50-55 Rs) 2004: about 30 % of

population

- * **number of people in India living on less than 50 pence per day:** about 300 million [BBC News Night, Oct 2006]
- **number of people living in slums:** 150 million [BBC 15 sep 2004]
- **people in Mumbai living in shanty towns, open spaces, or on pavements:** 50% of Mumbai's population [BBC, Nov 2005]
- **world's largest slum:** located in Mumbai; Dharavi, 432 acres
- **number of inhabited buildings declared as dangerous or dilapidated in Mumbai:** 19,000 [BBC; Sep 2005]
- **number of children in India who die before the age of 5:** 63 out of 1000 according to UN report [BBC; Sep 2005]
- **children under 3 years of age in Orissa severely malnourished:** 21 % (Feb 04, acc to National Family Health Survey); or 3.8 % (acc. to data collected by the state)
- **tribal children below the age of six who have died of malnourishment-related causes in 15 districts of Maharashtra:** 9,000 (between Apr 2003 and May 2004)
- **number of street children in Delhi:** 150,000 estimate [BBC; Sep 2005]

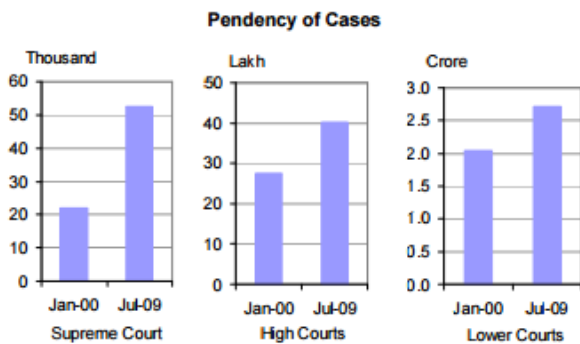
stats on court cases, murder and jails in India

- **pending court cases country wide:** more than 20 million (end of 2002)
- **persons in jail waiting for trial:** over 1 million (end of 2002)
- **conviction rate of court cases:** around 1 percent (according to Prem Shankar Jha)
- **number of murders in India between 1998 and 2000:** 37,170
- **murders committed in Uttar Pradesh:** 7,200 to 7,500 per year [HT Jun 04]
- **occupancy of Muzzafarnagar district jail in UP:** 1,155 prisoners (oct 03)
- **capacity of Muzzafarnagar district jail in UP:** 530 prisoners (oct 03)
- **number of prisoners jailed in 60 prisons in Uttar Pradesh:** 50,939 (oct 03)

Formulae:
Nil.

Tables:

Number of pending cases across Indian Courts has been increasing...



- As of July 2009, 53000 cases are pending with the Supreme Court, 40 lakh with High Courts and 2.7 crore with Lower Courts. This is an increase of 139% for the Supreme Court, 46% for High Courts and 32% for Lower Courts from their pendency numbers in January 2000.¹
- In 2003, 25% of pending cases with High Courts had remained unresolved for more than 10 years.²
- In 2006, 70% of all prisoners in Indian Jails were undertrials.³

...as fresh cases outnumber those being resolved

Filing, Resolution & Pendency of Cases in 2008*

Category	Supreme Court	High Courts	Lower Courts
Pending at end 2007	46,926	3,743,060	25,418,165
Cases filed in 2008	70,352	1,668,706	16,410,217
Cases resolved in 2008	67,459	1,531,921	15,385,389
Pending at end 2008	49,819	3,874,090	26,409,011

Source: Court News, Supreme Court of India

- Since fresh cases exceed the number of cases getting resolved, this leads to an increase in pendency.
- Interestingly, the number of cases that are resolved each year has increased substantially over the last decade. However, this has not kept pace with the increase in fresh filings.
- In 2008, Lower Courts settled 1.54 crore cases as compared to 1.24 crore in 1999, an increase of 30 lakh. However, 1.64 fresh cases were filed in 2008, 37 lakh higher than the 1.27 crore figure for 1999.¹

CONCLUSION

It is indeed worth quotable here the saying, “Nothing makes me happier than myself feeling happy”. Hence to bring cheers and livelihood among the families of various kinds of victims (the so called “criminals”), the configuration and monitoring of fast track courts can serve in the long run, especially for the Indian scenario. Justice must be ensured with fairness and due consideration of the future aspects of the victims with nil deadlock situation, in the provision of judgements, while undertaking of trials by the judges so that there will be minimum degree of both “Wound-wait” and “Wait-die” for pending younger transactions or fresh cases.

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Our sincere thanks are placed on record to the following web URLs:-

- 1) <http://www.prsindia.org/administrator/uploads/general/1251796330~~Vital%20Stats%20-%20Pendency%20of%20Cases%20in%20Indian%20Courts%2026Aug2009%20v10.pdf>
- 2) http://www.neoncarrot.co.uk/h_aboutindia/india_crime_stats.html#jail

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- [2] Deborah J. Merritt & Melanie Putnam, “Judges and Scholars: Do Courts and Scholarly Journals Cite the Same Law Review Articles,” in Chicago-Kent Law Review, Volume 71 Issue 3 Symposium on Trends in Legal Citations and scholarship, January 1996.
- [3] www.neoncarrot.co.uk/h_aboutindia/india_crime_stats.html Neoncarrot, an online personal travelogue of our travel experiences, life in India, backpacking life and chai drinking in the Kulu Valley (also known as the Valley of the Gods) in the Indian Himalaya. The site contains travelling tips and hints, articles and essays, photo galleries, an online journal / weblog and some vital Indian statistics.
- [4] www.prsindia.org PRS Legislative Research (PRS), an Indian non-profit organisation that was established in September 2005 as an independent research institute to make the Indian legislative process better informed, more transparent and participatory. PRS is based in New Delhi, India.

AUTHOR BIBLIOGRAPHY

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