



CONTENTS

FACES OF STATISTICS:

- The Story Within: Editor's Note
- The President's Note
- Faculty Voice
- Alumni Voices
- A poem by Prof. Renu Kaul

- Climate Statistics
- Streaming Trap
- Unbiased Data
- SOS: The Last Samosa
- The Polling Problem
- Thrift-o-nomics
- Twisting Truths

DEPARTMENTAL CATALOGUE:

- For Our Teachers
- After Statistics
- Statistics Week
- Career Readiness
- Student Connect
- Moments 2026

THE STUDENT LENS:

- Prelude: Voices (Poem)
- Jester's Calculus
- Goldman Sachs 101
- Actuarial Realities
- Finding Life On The Metro
- Through Her Lens

FROM A STATISTICAL LENS:

Case Studies:

- Crisis Dynamics
- Oil vs Markets (India)

Research Articles:

- Numbers At War
- Chosen Truths
- The Game Of Data

MOMENTS OF PRIDE:

- Our Internships & Placements
- Our Achievements

POST CREDITS:

- Our Esteemed Faculty Advisors
- Contributors



A DEPARTMENT OF STATISTICS PRODUCTION, LSR

LATEST ISSUE

20/04/2026

FACES OF STATISTICS

VOICES FROM OUR DEPARTMENT

FEATURING:

- **The Story Within: From The Editors (Ananya & Anushka)**
- **The President's Note: In The Words Of Saumya Gupta**
- **Faculty Voices: In conversation with Prof. Renu Kaul**
- **Alumni Voices: In conversation with Jessica & Mahi**
- **A poem by Prof. Renu Kaul**

FROM THE EDITORS

THE STORY WITHIN

A NOTE FROM THE CREATORS OF DEGREES OF FREEDOM

There is something truly wholesome about putting together a publication like this. When we first took this on, we understood the responsibility that came with it. What we did not fully know was how deeply personal it would become towards the end. The Department of Statistics has always been more than a place where statistics is studied, and distributions are derived. For those of us fortunate enough to call it ours, it is the classrooms where the best jokes happened between classes, the space where we were challenged and championed in equal measure. This annual magazine, as we fondly call it, Degrees of Freedom, has always been a mirror of that spirit, and with this year's edition, we have done our best to do it justice.

Statistics, at its core, teaches you to sit with uncertainty and look for patterns. We have carried that same sincerity into these pages. This edition carries analytical essays, research, dialogue, and creative work spanning poetry, storytelling, and art, because we have always believed that numbers and narratives are not opposites but companions instead.

To every student and faculty member who trusted us with their ideas, this publication belongs to you as much as it does to us. And to whoever is reading, we hope something in these pages stays with you. We hope it reminds you that behind every dataset is a human story waiting to be told.

With love and immense pride,
Ananya & Anushka
Editors, DoS 2025-26



ANUSHKA SAINI



ANANYA ARORA

THE EDITORIAL & WEBSITE BOARD



Vibhuti Chandna



Harshika Singhal



Akyam Kaur



Priyanshi Thukral



Meher Bagri

—IN THE WORDS OF SAUMYA GUPTA—

THE PRESIDENT'S NOTE

REFLECTION ON LEADERSHIP, LEARNING AND THE DEPARTMENT

What began simply as the celebratory opportunity of coming to an esteemed institution like Lady Shri Ram and a curiosity of what the degree had to offer, soon began to resemble a typical Delhi road, marked by frequent hurdles to slow us down, a haze that managed to obscure the true potential, yet resilient enough to keep us moving. As we move closer to the destination, a journey that initially seemed exhausting and demanding somehow compels us to drive a little longer now. What makes this journey even more enthralling is our Department of Statistics.

“Coming together is a beginning, staying together is progress, and working together is success.”

Henry Ford



A department that emerged strongest to transform adversities into ‘Moments’ of shared growth and celebration, that made us habitual to the pressures of weekly workloads, and that commemorates the true understanding of unity and empowerment. It was an absolute honour to closely witness the department adapt and grow alongside us. Corroborating this resonance is our esteemed faculty, who guided us to initially absorb and spontaneously recover from the non-normal distribution of scholarly, as well as certain other hypothetical, stimulations. Much like many of our initiatives in the department, this magazine too stands as a testament to collaboration and shared commitment towards excellence. Accommodating a wide variety of articles and case studies, a reader is likely to take away insights aligning with a multitude of interests from this student-led publication.

As I conclude this odyssey of years into one note, I, on behalf of Union 2025-26, hereby extend my sincerest gratitude to the faculty members and student body for their unwavering support and continued trust. Extending my best wishes to the future Union and to the students who will continue to grow and strengthen this community.

Upwards and Onwards!

Saumya Gupta (President), Isha Pal (Treasurer) and Dhvani Bhandari (General Secretary)
DoS Union 2025-26

—IN CONVERSATION WITH PROF. RENU KAUL—

FACULTY VOICE

FOUR DECADES OF TEACHING AND SHAPING STATISTICIANS

The Department of Statistics at LSR has been shaped, over decades, by truly dedicated teachers and Prof. Renu Kaul is one of them. Having joined LSR in 1988, she has watched the department, the discipline, and generations of students grow and evolve. We sat down with her for a brief conversation which spanned across her background, then teaching and then the world of statistics in today's era.

Ma'am, you have been teaching for nearly four decades now. How did it all begin?

I started as a young lecturer in 1986, teaching at Hindu College while I was still finishing my MPhil. From there, I moved to postgraduate teaching at the University of Delhi, and then joined LSR in 1988. So it has been quite a journey.

I'll be honest, when I first joined LSR, the all-women environment was something I had to adjust to since I had never been in that kind of space before. So, it took me a little time to find my footing. But gradually, that unfamiliarity turned into genuine appreciation and acknowledgement. There is something very particular about a women's college, a certain hunger, a freedom to speak without any awkwardness, a bold confidence that young girls here seem to develop almost naturally. I have always believed that women learn differently when they are not performing for a mixed room, and LSR proved that to me spectacularly.

How did you end up in statistics in the first place? Was it always the plan?

Not at all! I come from humanities background, and statistics was not the most obvious choice. A school counsellor suggested I combine mathematics with economics, and that path led me to statistics. But it was not without resistance. Some colleges did not want to admit me because I had studied humanities rather than science, and they felt the marks were not comparable. I remember going directly to a college principal and making my case because I was not going to accept that. And it worked. That one conversation is quite literally how I ended up in statistics. In a way, the subject chose me as much as I chose it. Perseverance has always been something I believed in, long before I started preaching it to my students.

Statistics was not as well-known a field back then as it is today, was it?

Not at all. People even used to mispronounce it, misunderstand it, and sometimes looked a little blank when you said the word. But now it is everywhere! Every industry, every research paper, every government policy, and statistics are at the core of all of it. We always knew the subject was important; it just took a little longer for the world to understand and acknowledge it.

What is your advice to students, especially with so many tools and shortcuts available today?

Please, try everything yourself first. Before you go to any other AI tool, sit with the problem and struggle a little. That struggle is not wasted time; it is where the actual learning begins. I once calculated a 16-by-16 matrix inverse by hand. By hand! It was tedious and slow, but I understood every step deeply because of it and honestly, no shortcut would have given me that.

My second piece of advice would be to read widely. Do not rely only on what is being taught in class. Pick up different books, and see how different authors approach the same concept differently. That is how you build your own thought process. Work hard. Stay curious. And please, read your textbooks. All of them!

What has teaching at LSR looked like over the years? Has it changed?

The change is huge, honestly. When I first started, batches were small, around twenty students or more. You knew every student by name, you knew how they thought, what their strengths and even weaknesses were. Now, classes have 50 or more students, with very diverse academic backgrounds due to entrance exams. Many students come to statistics as a second or third choice, which somehow affects the energy in the room.

But I want to be careful not to sound like I am simply complaining about "students these days." Every batch has remarkable students, and we have witnessed that time and again. The challenge is that in a larger, more mixed classroom, you have to work harder to reach all of them, and that is on us as teachers, too.

What are your favourite topics to teach?

Design of experiments and time series analysis, without a question. Time series in particular has so much real-world application. Some of my students have done research on juvenile cases and crime patterns in Delhi, and coal production using time series analysis, and some of that work was even published and presented at conferences. When students take a statistical tool and apply it to something that actually matters, that is when I feel the subject comes alive and our wisdom has borne its fruit.

We thank Renu Ma'am for her time, her warmth, and her remarkable years of dedication to this department. Conversations like these remind us of the people behind the subject we study each day.

JOURNEYS AFTER LSR

ALUMNI VOICES

IN CONVERSATION WITH JESSICA THAKUR & MAHI GUPTA



As students of statistics, we regularly navigate a world of figures, formulas, and models. But the subject holds far more than its technical core. We recently had the pleasure of connecting with two remarkable alumni of the Department of Statistics, Lady Shri Ram College - Jessica Thakur (Batch of 2018), and Mahi Gupta (Batch of 2021). What began as a formal dialogue quickly became a warm, personal exchange about their time within these very red walls, the journeys that followed since, and everything they carry from LSR as well the Department with them.

Can you tell us a little about your time at LSR and what shaped your path within the Department of Statistics?

Jessica: LSR gave me more than just a degree; it gave me a foundation. As President of the Department, leadership and academics went hand in hand. I kept my options open and stayed curious, and that openness was perhaps the most valuable thing I took from those years. Renu ma'am played a big part in it. She had a way of making us think beyond the books, which is a rare quality.

Mahi: My journey was quite different. I came in with a genuine interest in data and wanted to understand it deeply, not just apply it. LSR gave me the conceptual grounding to do that. I looked up to Anuradha Ma'am enormously. Her thought process genuinely influenced how I think about data even today. I built a foundation here that carried me much further than I had anticipated.

How did your paths evolve after graduation? What were the key decisions that shaped where you are today?

Jessica: After LSR, I pursued an MBA at the Indian School of Business, which was incredibly enriching. I then joined Bain, a chapter that felt very much aligned with the life I had envisioned for myself. I'm now at Airtel's Data Strategy Office, and looking forward to some exciting chapters ahead.

Mahi: It did not turn out quite that way for me. At LSR, I got an offer to work as a data analyst for American Express, but my academic interests prevailed, and being offered admission to Columbia University left me flabbergasted.

We also wanted to ask about Moments, our department's annual academic meet. It's grown quite a bit since it began.

Jessica: Oh, absolutely! Moments had just started during my time. It was a much smaller affair then. Teachers would conduct sessions, and students would gather in a single classroom. There was something very intimate and sincere about it. Seeing how much it has grown since, the scale, the participation, and the energy genuinely make me happy. It's wonderful to see something you were part of in its early days become something so much larger and more impactful.

Coming back to academics after working must have been quite the transition, Mahi.

Mahi: It genuinely was. Reconnecting with that mode of thinking, reading papers, and sitting through lectures takes real adjustment after years in the professional world. But I also came to it with so much more context. I could see why the theory mattered and how it connected to real problems I had worked on. That made it richer, even when it was hard. And Columbia's program in Quantitative Methods in the Social Sciences has been everything I hoped it would be.

For Jessica, the move from consulting to a strategic data role is an interesting one. How did that come about?

Jessica: Consulting at Bain gave me a very broad lens, how to structure problems, how to communicate recommendations, and how to operate in ambiguous situations. What I found was that data was increasingly central to all of it. The move to Airtel's Data Strategy Office felt like a natural progression. It brings together the analytical rigour I first developed at LSR, the strategic thinking from ISB and Bain, and now the scale of a large consumer-facing organisation. Every phase has fed into the next. I sometimes think back to what our professors used to say about statistics being a tool for understanding the real world, and honestly, that has rung true at every step.

What would you tell current students who are thinking about what comes next?

Jessica: Don't rush to define yourself too early. That space to explore is what allowed me to find what genuinely excited me. Seek out internships and research opportunities not just for your CV, but to understand where you actually want to be. And if higher studies are on your mind, start early.

Mahi: Build your fundamentals. The conceptual clarity you develop here will carry you further than any tool or platform. Tools change, strong thinking doesn't. If you're considering a competitive graduate program, let your passion for the subject show. It's your strongest application. Talk to your professors. They know more about your potential than you do at that stage.

Before we wrap up, what do you miss most about LSR?

Jessica: The campus, honestly. There's something about the greenery here that stays with you. I don't think I fully appreciated it while I was here, but I do now.

Mahi: Sitting with friends, figuring out assignments together, working through practicals as a group. Those weren't just academic moments. They were the texture of those three years, and I carry them with a lot of warmth.

A REFLECTION ON UNSPOKEN EMOTIONS

अनकहे जज़्बातों की कहानी

PENNED BY PROF. RENU KAUL

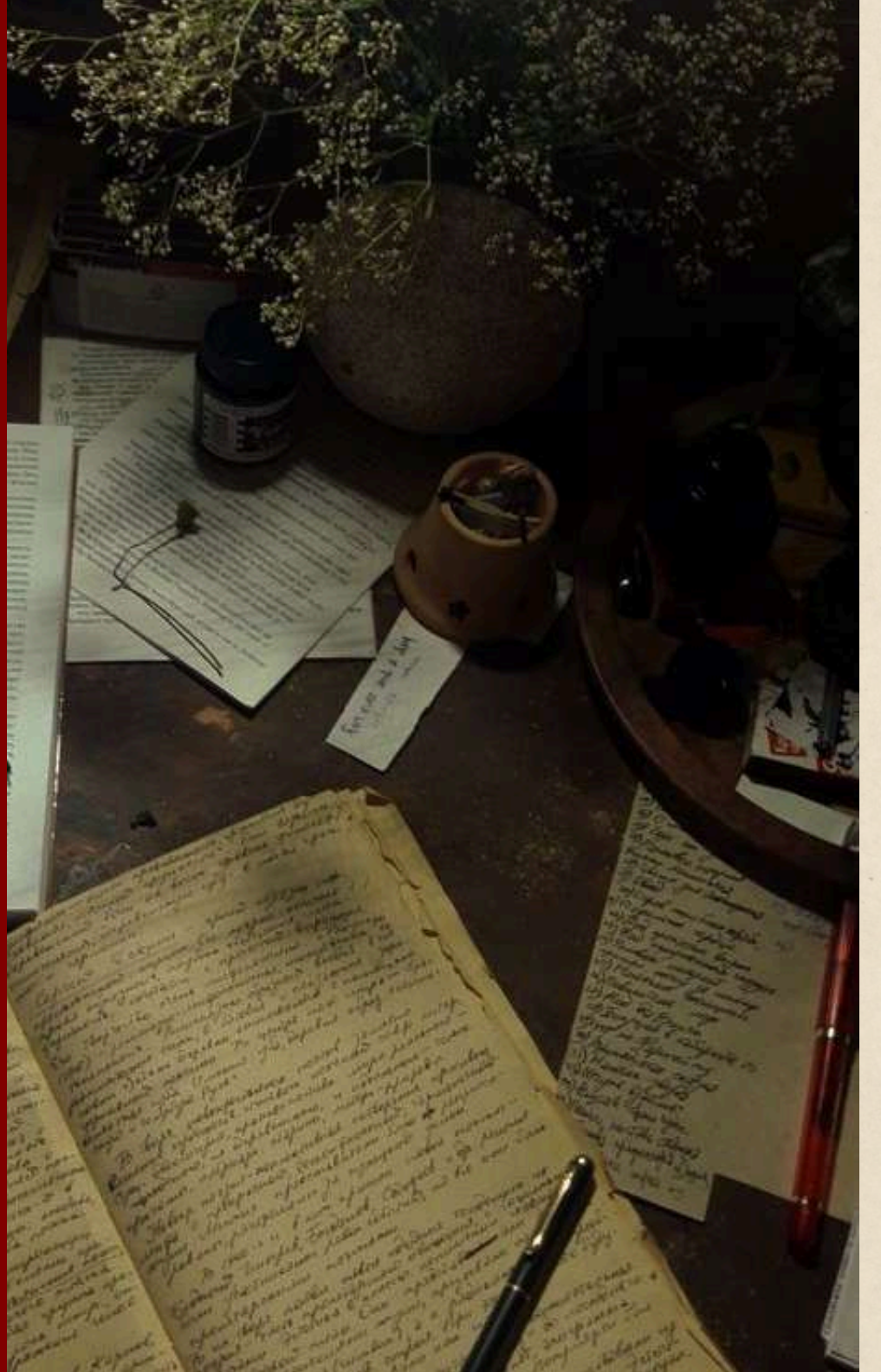
"कोई चुपके चुपके रोता है"

कोई चुपके - चुपके रोता है,
कोई चुपके - चुपके रोता है।

रात की नंगी छाती पर,
इक दर्द का सूरज उगता है।
चाहत की कलियाँ खिलती हैं,
और प्राण दीप सा जगता है।
इन शुष्क बयारों में यह मन,
खुद ही खुद को छलता है।
सपनों की दुनिया सजती है,
आहों में सवेरा होता है।
कोई चुपके - चुपके रोता है,
कोई चुपके - चुपके रोता है।

इक लब पे तमन्ना आती है,
नयनों से अश्रु गिरते हैं।
शबनम की पीड़ा में छिपकर,
कलियों के घूँघट उठते हैं।
इक दुनिया पैदा होती है,
इक दुनिया पल में मिटती है।
आशा में लुढ़का हर आँसू,
पल में गर्दों में खोता है।
कोई चुपके - चुपके रोता है,
कोई चुपके - चुपके रोता है।

फिर कल-कल कर झरने बहते हैं,
फूलों की राखों पर बिखरे।
शबनम के मोती कहते हैं,
जीवन ऐसे ही चलता है।
नियति ऐसे ही हँसती है और,
थोथा आश्वासन आकर इन
सपनों में जीवन बोता है।
कोई चुपके - चुपके रोता है,
कोई चुपके - चुपके रोता है।



<https://share.google/4WfThk1pWRSi8j5J9>



A DEPARTMENT OF STATISTICS PRODUCTION, LSR

LATEST ISSUE

SPECIAL EDITION

20/04/2026

DEPARTMENTAL CATALOGUE

MOMENTS AND MILESTONES FROM THE YEAR

FEATURING:

- **For Our Teachers: Teacher's Day Celebration**
- **After Statistics: Exploring Careers by Ms. Arti Bangia**
- **Statistics Week: Glimpses From A Week of Statistics**
- **Career Readiness: The Best Guide by Mr. Gagan Singh**
- **Student Connect: Actuarial Guide**
- **Moments 2026: The Moments That Matter**

TEACHERS' DAY CELEBRATION

FOR OUR TEACHERS

A LOVELY AND REMARKABLE AFTERNOON

There are some gestures that go beyond occasion, and the **Teacher's Day celebration** organised by the Department of Statistics at Lady Shri Ram College for Women on 5th September was one of them. For the department, celebrating Teacher's Day has always been one of the most loving and wholesome traditions it holds close, a moment each year where the usual dynamic of lectures and deadlines gives way to something far more human. It was not simply an event on the calendar. It was a room full of students choosing to pause, look up from their own journeys, and acknowledge the people who had quietly shaped them along the way.

The celebration opened with something deeply personal. Each teacher was welcomed with a specially chosen title, one that reflected not just their role in the department but the particular way they had touched the lives of those around them. It was a small gesture, but in that smallness was a great deal of thought, and the warmth in the room was immediate.

The evening drew to a close with thank-you speeches from the members of the union, followed by a video woven together from memories and moments the department had collected over the years. There were smiles, and there were tears, and there was the particular kind of silence that only falls in a room where everyone present feels something real. Some celebrations are held out of tradition. This one was held out of genuine love. And that, more than anything else, is what made it unforgettable.



There is something about a performance offered as a tribute that feels different from any other kind, and this one was no exception. The highlight of the afternoon was quieter and more intimate. Students presented their teachers with handmade portrait sketches and greeting cards, each one carrying a message written from the heart. They were hours of careful effort turned into something lasting, and they said, more eloquently than any speech could, exactly how much these teachers had meant.

EXPLORING CAREERS

AFTER STATISTICS

A SESSION BY MS. ARTI BANGIA

The Department of Statistics of Lady Shri Ram College for Women organised a speaker session titled "Careers in Statistics" on 25th September 2025, with the guest speaker Ms. Arti Bangia. In the session, Ms Bangia discussed the career options in statistics in the public sector.

Ms Bangia holds degrees of B. Sc. (Hons) Statistics and M.Sc. Operational Research from Delhi University and has 14+ years of experience in official statistics and national accounts under her belt. She is currently a Joint Director of the Indian Statistical Service, Ministry of Statistics and Programme Implementation (MoSPI).



In this session, she introduced the National Statistical System and its role, structure, and how it functions. It is the organisational set-up responsible for data collection, processing, analysis, and dissemination. At the central level, the MOSPI is the primary body overseeing the coordination and production of national statistics. Within MOSPI, the Statistics Wing, called the National Statistical Office (NSO), including the Central Statistics Office (CSO) and National Sample Survey Office (NSSO), handles all macroeconomic indicators, such as GDP (NAD), CPI (PSD), SDG (SSD), IIP (ESD), etc., while the Programme Implementation (PI) Wing oversees the implementation of various government programs and projects. At the state level, there are directorates of economics and statistics that are tasked with compiling and calculating data specific to each state using a set policy.



NSS is responsible for undertaking sample surveys on various socio-economic subjects. It has a Field Operations Division, which undertakes field work, an Enterprise and Household Survey Divisions, which design the survey methodology, processes data collected and prepares reports and a Coordination and Quality Control Division, which coordinates the survey-related survey related work.

Ms Bangia's insights helped the students understand what statistics looked like beyond formulas and calculations. She helped them understand how by working under MoSPI, students could utilise their knowledge well by helping the public sector. She also talked about the fact that a degree in statistics did not necessarily mean a data analytics job only, rather it meant applying your analytical and logical fields to diverse fields such as healthcare, finance and more. A statistics degree, according to her, gave students a clearer and more analytical lens to the world that would help them in any domain they chose.



While keeping in mind the ever-increasing increasing usage of the internet, Ms Bangia also mentioned the data available on the MoSPI website (www.mospi.gov.in), such as Microdata Portal, an online microdata library to look into relevant census or survey documents from a selection of 178 surveys and censuses, along with audio video guide of extraction/analyzing of unit level data available on their YouTube channel. Another facility available is the E-Sankhyiki portal, containing a definitive source for comprehensive and reliable official statistical data. We can also access the visualisation of the data from surveys, censuses, census, etc. She also discussed the invitation for the Research Proposal, where eligible institutions may submit their research proposals under the Grant-in-Aid component of the Ministry's Capacity Development Scheme.



Ms Bangia welcomed questions from the students towards the end of her session where she disclosed how she came to work for the government and its significance and how she feels to work for an organization which processes and visualizes the working of India. The session ended with the professors' giving a note of thanks and honouring Ms. Bangia with a sash and a potted plant.

GLIMPSES FROM

STATISTICS WEEK

A WEEK OF STATISTICS

Every year, on the 20th of October, the world observes **World Statistics Day**, a reminder that behind every headline, there is a statistician doing their job perfectly. It is in that same spirit that the Department of Statistics organizes Statistics Week: a chance to step away from the regression tables and probability distributions, and gather as a community, to celebrate the subject. This year, from 3rd to 7th November, Statistics Week 2025 we did exactly that. The event started in a fun and chaotic way through an activity named "Mean, Mode and Madness". It was a Games Carnival that took the students' lunch break to another level of celebrations. The participants enjoyed playing four different games including trivia Connect 4, the mad heads up, the reflex test cup snatching game and finally guessing the colors. Amidst music playing and dance performances of the students, the event ended with smiles.



If the first day celebrated the fun side of the subject, the second leaned into something a little more unsettling. "The Gambler's Dilemma" put students to the test of betting on the hardest to predict probabilities. By posing a single question - Is it all luck, logic, or sheer chaos? Participants were put into a position of uncertainty; betting on probabilities, and resisting the very human urge to keep going after a loss. There was certainly some healthy competitiveness there, although it constantly got disrupted by the much more infectious atmosphere of fun enjoyment. The event showed that statistics is really about being okay with not knowing everything and still making decisions. It said that statistics is an art form that helps people make peace with the unknown.

By the third day, the week had found its stride. **"Brand Wars"**, brought to life by Alpha: The Consulting Club, asked students to trade their calculators for arguments. This event involved intense competitions where teams of students developed and defended their position while trying to refute and disprove the arguments and statements proposed by their competitors. Brand Wars showed how analysis plays a significant role in both academic discussions and business processes.



Statistics Week concluded with "The Boardroom Bootcamp", an insightful session conducted by Mr. Atul Khandelwal, the Director of Flink Analytics and Insights, closing the week on a more measured and considered note. Rather than presenting solutions from a podium, Mr. Khandelwal walked through real corporate cases alongside the students; working the problems out together, in the room, in real time. What made the session particularly interesting was how naturally thinking was woven into the boardroom logic, regression analysis to forecast market demand and supply, numbers being used not as an academic exercise but as the actual basis for a business decision.



Mr. Atul Khandelwal, Director Flink Analytics

Statistical approach to case solving

Ultimately, the statistics week of 2025 turned out just the way it was supposed to be enjoyable, somewhat chaotic, and rather unforgettable. Games, discussions, case studies, and even betting all contributed to making it all the more memorable without having to feel like one had to do anything for it.

THE BEST GUIDE

CAREER READINESS

BY MR. GAGAN SINGH

The "Becoming Truly Career Ready" session was put on by the Department of Statistics on 19th February, 2026. Mr Gagan Singh, a business leader with more than 15 years of experience at companies like Mitsubishi Corporation, was the honoured guest speaker. He talked about the mindset, skills, and planning needed to do well in a competitive setting and reach one's career goals. Mr. Singh, a top student at IIMA, began with an interactive story about two lions to highlight the difference between true growth and just looking successful. He remarked that the lion that always went for easy prey felt good about itself every day, but it got weaker. The lion that went after harder prey, on the other hand, gained strength and became better at hunting, even though it failed a lot. This story showed me that having huge goals helps you grow and get better. On the other hand, setting easy goals helps you feel like you're making progress when you're really not. He said that kids typically create goals that are too tiny so they don't fail at greater ones.



He stressed the importance of time management throughout the whole class, pointing out that students usually only have twelve to eighteen months to get ready for their first big job and that how they use this time will shape their future. He said that the five biggest things that keep people from moving up were too much sleep, being unsure, being lazy, lying, and being too short. He says that companies value honesty more than skill because being honest, responsible, and disciplined are all important traits for success at work.

Mr Singh taught leadership lessons based on his business knowledge. He said that leaders can control strategy, resources, and procedures, but they can't control people. So, to be a good leader, you need to be humble, work well with others, and be able to read people's emotions. He told students to develop these traits early in their academic careers and to always push themselves beyond their comfort zones if they wanted to be able to do things long-term. The seminar used structured frameworks, useful strategies, and stories to help students get ready for jobs. Mr Singh said that even if students aren't sure of their answer, they can still get points for talking to each other and being confident. This was part of his explanation of how interviewers decide whom to hire. This event showed how important it is to stay calm, professional, and clear-headed when working. It helped students realise that success isn't just about how well they do in school. After a strong conversation, the people involved felt more motivated and had a better idea of how to get ready for work.

STUDENT CONNECT

ACTUARIAL GUIDE

IN COLLABORATION WITH DEPT. OF MATHEMATICS

The Department of Statistics at Lady Shri Ram College for Women collaborated with the Department of Mathematics, the Internal Quality Assurance Cell (IQAC), and the Society of Actuaries (SOA) to hold an Actuarial Career Exploration Session called Student Connect on 13th March 2026. This session aimed to introduce students to the actuarial profession and explain career opportunities, and what actuaries do in different industries.

Mr Geet Maurya, an Indian Staff Actuary at the Society of Actuaries, and Mr Arindam Mookherjee, an Advisor for Research and Sustainability and a Consultant at the Society of Actuaries India, were the speakers. Mr Mookherjee is also a former member of the Confederation of Indian Industry. Prof. Mahesh Kumar from the Department of Mathematics moderated the session.

The speakers began by explaining the actuarial profession and its importance in industries like insurance, finance, pension, and risk management. They showed how actuarians use mathematical models, statistics, and financial theories to assess risk and aid organisations in making informed decisions amid uncertainty. They encouraged students with strong analytical and quantitative skills to consider actuarial science as a career. A significant part of the session covered the credentialing process provided by the Society of Actuaries. The speakers outlined the steps to become a Fellow of the Society of Actuaries (FSA)

This involves completing four technical courses, which include two sequenced courses and two additional ones. Candidates also need to finish the Decision Making and Communications (DMAC) course and the Fellowship Admissions Course (FAC). The presentation also pointed out several specialisations within the actuarial curriculum, such as corporate finance, enterprise risk management, investments, retirement benefits, general insurance, health insurance, and life insurance.

The speakers noted that SOA exams take place at secure Prometric testing centres worldwide, providing a consistent and rigorous evaluation process. To promote engagement, the session offered a scholarship opportunity for five students. This includes a 100% fee waiver for either Exam P (Probability) or Exam FM (Financial Mathematics) and access to high-quality online study materials for twelve months.

The session ended with an interactive Q&A segment, allowing students to ask the speakers questions about actuarial exams, preparation techniques, and career opportunities in the field.

THE MOMENTS THAT MATTER

MOMENTS 2026

THE ANNUAL ACADEMIC MEET

Once a year, the Department of Statistics at Lady Shri Ram College for Women steps back from the rhythm of practicals, assignments, and lecture halls, and does something altogether different. It brings together the brightest minds, the sharpest instincts, and the kind of energy that only a room full of people genuinely excited to compete can create. That is what Moments is, and this year, Moments 2026 lived up to every bit of that legacy.

This year's edition was honoured to have Dr. Saurabh Garg, Secretary, Ministry of Statistics and Programme Implementation, Government of India, as the Chief Guest, on 12th April 2026, a fitting presence for a meet built around the power of data and decision-making. Across five flagship competitions spanning sustainability, finance, consulting, marketing, and brand strategy, students were pushed to think harder, argue better, and solve problems that do not come with a textbook answer.



The first of these was Tatva, the sustainability strategy case competition, and it set the tone beautifully. In a world where sustainability has become as much a business imperative as a moral one, Tatva asked its participants to find that difficult middle ground where environmental responsibility and economic viability actually coexist. With Blue Tea as the case partner, and judges from Sattva and Blue Tea bringing sharp, practitioner-level scrutiny to every pitch, it was exactly the kind of challenge that separates good ideas from great ones.

Then came Portfolio Thesis, and with it, a different kind of pressure entirely. Finance, at its core, is about making calls with imperfect information, and that is precisely what this competition put to the test. Participants stepped into the role of portfolio managers, navigating client expectations and market uncertainty across three rounds before arriving at a live simulation where finalist teams managed a portfolio worth Rs. 1 crore through a series of real market shocks. It was the kind of experience that no classroom can fully replicate.

Brandaid 9.0 brought the world of consulting into the room. Run in partnership with Accenture, this was a competition that rewarded the rare ability to hold strategic thinking and creative instinct at the same time, to look at a messy business problem and find a solution that is both rigorous and bold. Judges Priyank Ahuja and Arpit Agarwal, drawing from their own consulting experience, ensured that every team walked away with more than just a result.



Marketrix 1.0 was something a little different, and in the best possible way. A joint initiative by the Marketing Society of LSR and Delta, the Analytics Club of LSR, it turned its lens toward femtech, an intersection of women's health, data, and innovation that rarely receives the serious analytical attention it deserves. Backed by knowledge partners EXL and FemEase, and evaluated by judges Bhupender Singh, Jyoti Sharma, and Vaibhav Tripathi, the competition surfaced ideas that were as socially meaningful as they were technically sound.

And then there was BYOB, Build Your Own Brand, the competition that perhaps captured the imagination of the widest audience. Building a brand from scratch is one of those challenges that sounds exciting until you are actually in it, navigating high-stakes auction rounds, crafting strategy under pressure, and finally standing in front of a room making the case for something you built. With Thinking Bridge and Aurex Ventures as case partners, BYOB was a fitting conclusion to everything Moments 2026 had to offer.



Moments 2026 was a reminder that the Department of Statistics has always believed in something deeper than academic performance alone. It has believed in the kind of learning that happens when students are placed in front of real problems, real stakes, and real people who have navigated those very challenges. The ideas debated, the strategies built, and the decisions made across these competitions will stay with participants long after the scores are forgotten. That is the true measure of Moments, and this year, it delivered in every sense.



A DEPARTMENT OF STATISTICS, LSR PRODUCTION

LATEST ISSUE

20/04/2026

FROM A STATISTICAL LENS

INSIGHTS DRAWN FROM DATA AND INVESTIGATION

FEATURING:

Case Studies:

- **Crisis Dynamics: War & Oil Crisis**
- **Oil vs Markets: Market Reactions to Oil Shocks**

Research Articles:

- **Numbers At War: A Statistical View of Iran-US Tension**
- **Chosen Truths: Misleading Statistics**
- **The Game of Data: Predicting IPL 2026's Champion**
- **Climate Statistics: Why Averages Hide the Real Crisis**
- **Streaming Traps: How Streaming Hacks Your Brains**
- **Unbiased Data: Truth In The Dataset**
- **SOS: The Last Samosa**
- **The Polling Problem: Why Surveys Are Misleading?**
- **Thrift-o-nomics: Is Old the New Gold?**
- **Twisting Truths: The Art of Statistical Manipulation**

WAR & OIL CRISIS STUDY

CRISIS DYNAMICS

A CASE STUDY BY RIDHI ANAND, 6TH SEM

"Since 28th February, a critical 34-kilometre-wide maritime route called the "Strait of Hormuz", which is responsible for transporting nearly 20% of the world's oil supply, has been shut down, triggering some significant disruptions in the global oil market. As a result, countries across the world are struggling to manage their energy demands. Asian countries, in particular, are facing heightened pressure, with reports of flight cancellations due to jet fuel shortages, while India is experiencing an acute shortage of LPG, a vital household fuel relied upon by millions. The widespread coverage of this crisis across various news platforms and blogs made us dig deeper and understand what truly lies beneath the surface when it comes to understanding oil dynamics in our own country."

(The Daily Brief by Zerodha, Understanding the oil market ft. Rory Johnston, 11 APR 2026 AT 9:35 AM)

Through this article, I aim to simplify these complex developments and help you understand what is actually happening in global oil markets as well as in India. I will conclude by analysing whether India has fully passed on these global supply shocks to domestic consumers, along with the key policy implications arising from the situation.

Introduction to India's Oil Economy and Geopolitical context

India is the third largest user of crude oil in the world, and its requirement continues to increase and is expected to double by 2050. Some of the factors that contribute to such high demand are urbanization, increased industrialization, and more vehicles on the roads. The country currently consumes around 5 million barrels of oil daily with one barrel of oil containing up to 159 liters of oil. The main consumption pattern is that of transportation sector, which consumes almost 40-50% and consists mainly in the form of petrol and diesel fuel. Next comes the industrial sector (20-25%) and households via LPG, CNG, PNG. The remaining demand comes from the agriculture and power sectors.

One of the biggest issues in the case of India, regarding the use of crude oil, is that almost 85% of the consumption in India is covered by imported crude oil. India has always depended on the Middle East countries, but after 2022, a major change occurred where India began to import the Russian Urals Crude Oil, which constituted over one third of total import volume in 2025.



<https://share.google/CNQZhvcAzYj0tyq0F>

Domestically, India is able to meet only about 12–15% of its crude oil requirements through production by ONGC and Oil India Limited. As of 2026, India's major import partners include Russia (which remains the top supplier due to discounted crude), Iraq (contributing roughly one-fifth of total imports with stable volumes), Saudi Arabia (offering consistency through long-term contracts) and the United States (which has emerged as a rapidly growing non-OPEC source).

The ecosystem functions on a well-defined value chain. The major leading companies that extract crude oil in India are IOC, BPCL, HPCL, and Reliance Industries. These companies buy crude oil and refine it to create different kinds of fuel such as petrol, diesel, and LPG for sale at their service stations.

To get an in-depth understanding of how the above features in the Indian oil industry link up with the developments happening around the globe, one has to study how the developments in the oil price trends coincide with the geopolitics that is happening around the world.

The following is a chronological listing of some of the major global events along with the changes in the price trends of Brent crude and its consequent impact on the retail prices of petrol in Delhi, as well as the government response.

Period	Major Event	Global Crude (Brent)	Petrol Price (Delhi)	Key Policy Move
Jan 2020	Pre Covid time	\$64	₹75	Standard Taxation, there was no major policy intervention
Apr 2020	COVID Lockdowns	\$18	₹69	The demand for fuel crashed but retail prices did not fall proportionately as a result government increased the Excise Duty to capture the loss of revenue.
Oct 2021	Global Recovery	\$83	₹105	As the world started to return to the pre COVID time, the demand began to exceed supply. Petrol rates in India crossed the ₹100/litre level in many cities. This hike in prices leading to inflationary pressure in the market led the government to reduce taxes for the first time after the pandemic, which was ₹5 on petrol per litre and ₹10 on diesel per litre, in November 2021.

References:

<https://www.newindianexpress.com/business/2026/Mar/01/escalation-in-strait-of-hormuz-could-hit-80-of-indias-lpg-imports-spike-energy-bill?>

<https://www.india-briefing.com/news/us-india-russian-oil-waiver-hormuz-2026-43239.html>

<https://www.india-briefing.com/news/us-india-russian-oil-waiver-hormuz-2026-43239.html>

<https://www.reuters.com/world/india/india-cuts-special-additional-excise-duties-petrol-diesel-2026-03-27/>

Mar 2022	Russia-Ukraine War	\$139	₹105 (frozen)	The West imposed sanctions on the Russian oil. During that period, while global oil prices hovered above \$100 per barrel, India made its strategic shift and began purchasing cheap Russian crude (Ural at \$20–\$30 cheaper than Brent). Russia became India's largest oil supplier by 2023. The prices were kept stagnant in the retail segment for almost two years to ensure that there were no negative impacts.
Jan 2026	Pre- Escalation	\$78	₹94	Gradual Stabilization
Apr 2026	Iran-Isreal War	\$122	₹96 (controlled)	Closure of the Strait of Hormuz happened in March 2026 and the global oil prices surged. Unlike the Ukraine russia war where the oil was available but expensive, this was a physical supply shock. The "Indian Basket" of crude hit \$124.64 in early April 2026 and as a result the government slashed excise duties to near zero levels to keep petrol under ₹100/litre , essentially choosing a massive fiscal deficit over high inflation.

Analysing data from a Statistician's Perspective:

Building on the timeline, the relationship between global crude prices and Indian petrol prices can be analysed statistically. In a free market, the correlation would be close to 1.0, indicating a strong positive relationship. However, in India, this relationship appears "decoupled" i.e. it remains strong during stable periods but weakens significantly during geopolitical crises due to the intervention of the government.

For example, even when Brent crude surged sharply (like in 2026), retail petrol prices increased only a little. This statistical break highlights deliberate policy action to prevent full transmission of global shocks. During such periods, private refiners benefited from exports, leading the government to impose a windfall tax, using the proceeds to fund excise duty cuts. At the same time, oil marketing companies absorbed losses, effectively acting as shock absorbers for the economy.

Final Insight:

While it is clear that there exists a natural correlation between the international price of crude oil and the price of petrol in India, the correlation between the two has been weak in the years ranging from 2022 to 2026. This is owing to the absence of the pass through effect caused by international events. The Indian government was successful in stabilizing the price and safeguarding consumers from an increase in the price of petrol caused by the pass through effect through the use of reduced taxation and under recoveries. Energy security has been secured in India through the planning of the diversification of energy sources, the utilization of cheap Russian oil and alternative energy sources, along with domestic production of oil.

OIL vs MARKETS

A STUDY BY KHUSHI TYAGI & DEEPTI MAURYA, 6TH SEM

Crude oil is a key global commodity that influences economic activities and financial markets. Fluctuations in oil prices affect investor sentiment, which may affect stock market performance. Stock indices reflect the overall market condition, making it important to study the relationship with the oil price movement.

Our objective is to analyse the trends in crude oil prices and stock market indices, examine the relationship between them, and assess the impact of oil price fluctuations on the market.

The study uses monthly secondary data (2010–2023) taken from EIA & NSE India on:

- Brent Crude oil (USD per barrel)
- Stock market index (NIFTY 50)

ABSTRACT:

This study examines the relationship between the crude oil prices in the stock market performance using monthly data from 2010 to 2023. Techniques of analysis used include price indexing, moving average, exponential smoothing, correlation, and regression analysis. Based on the results obtained, the prices for crude oil are extremely volatile, with dramatic falls observed in 2014-2016 and 2020, whereas stock markets demonstrate stable long-term growth with crisis periods when they fall temporarily. From the correlation analysis, it has been concluded that there exists a relatively insignificant relationship between oil prices and stocks ($r = -0.213$, $p = 0.006$), which explains only 4.5% of stocks' fluctuations ($R^2 = 0.045$).

METHODOLOGY

The analysis begins with descriptive statistics to summarise the basic characteristics of both variables and understand how their values are distributed.

A price index was constructed using 2010 as the base year, converting both series into comparable index numbers so their relative changes over time can be read on the same scale regardless of differing units.

To reveal underlying trends, moving averages smooth out short-term fluctuations, while exponential smoothing assigns greater weight to recent observations, with two smoothing constants ($\alpha = 0.2$ and 0.3) used to compare a slower versus faster-responding trend.

Pearson's correlation measures whether the two variables move together or in opposite directions, and simple linear regression estimates how much the NIFTY 50 changes for a one-unit rise in oil price. The R^2 value indicates how much of the stock market's movement is explained by oil prices alone.



<https://share.google/5qvK57RH6WHebw9nI>

ANALYSIS

1) Distribution Characteristics :

For Crude oil prices, the mean = 79.3 while the median = 76.7. Since the mean exceeds the median, the distribution is positively skewed. This indicates that while most oil prices are concentrated within a moderate range, there are a few extremely high values that pull the average upward. In real-world terms, these higher values correspond to episodic price spikes driven by external shocks such as geopolitical tensions, supply disruption and production constraint. A similar pattern is observed for the Nifty 50 index, where the mean 10089 is significantly higher than the median 8798 indicating a strong positive skew.

However, the interpretation here differs in nature. Unlike crude oil, the skewness in NIFTY is largely structural which reflects long term market growth. The relatively higher index values observed in recent years following the post 2020 rally raised the mean, while a large portion of earlier observations remain at comparatively lower levels.

This suggests that the distribution is influenced not by the isolated Spikes but by a sustained upward trend over time which is typical of equity markets

2) Price Index:

Directly comparing the movements of the two variables is not straightforward when they are measured in entirely different units, such as dollars per barrel and index points. A price index solves this by converting both series into a common scale relative to a base year, making it easy to see how much each variable has grown or fallen from the same starting point.

In our analysis, a price index was constructed using 2010 as the base year (2010 = 100) to measure and compare the relative change in crude oil prices and NIFTY 50 over time on a common scale.

The graph shows that the crude oil prices experienced a sharp decline during 2014 to 2016 followed by another major drop in 2020 and then a strong rise during 2021 to 2022 before declining again. In comparison the stock market shows a more stable upper trend with temporary dips during the crisis period like 2020. This indicates that while the oil prices are highly volatile the stock market tends to be more resilient and influenced by multiple factors and not just the oil price movement.



3) Moving Average (3-Month & 6-Month) :

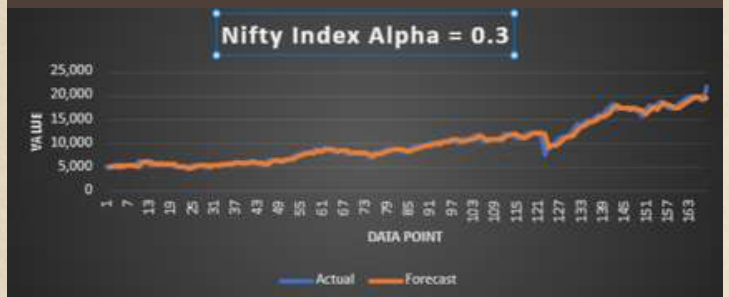
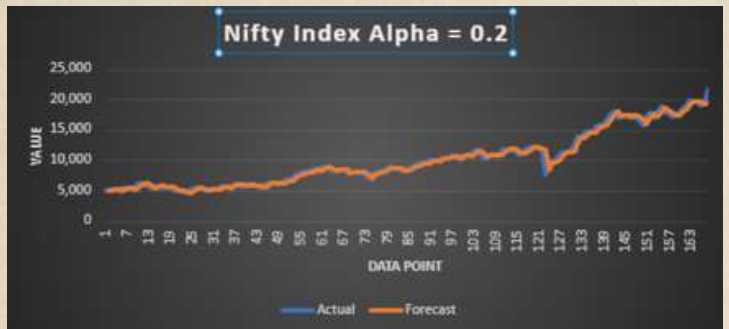
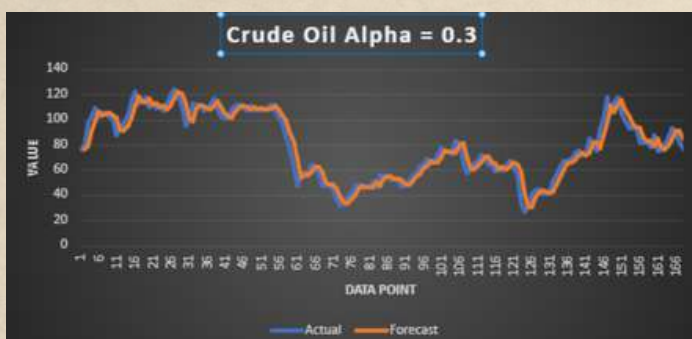
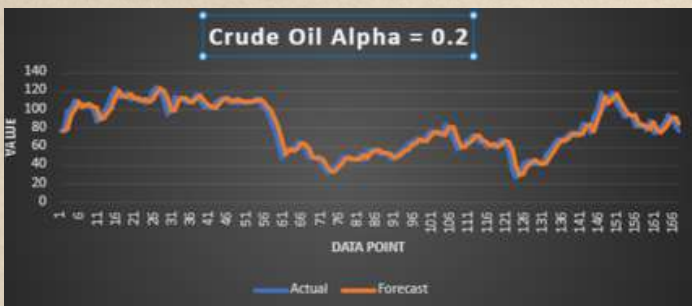
The 3-month and 6-month moving averages are calculated for the crude oil prices in the stock market index to smooth the short-term fluctuation and identify the underlying trend over time.

The graph shows that both the 3-month and 6-month moving averages follow a similar overall trend, with the 6-month average appearing smoother and less volatile.

Crude oil exhibits a clear downward trend during the duration of 2014 - 2016 and 2020, followed by a strong upward trend in 2021-2022 and a decline afterwards

The stock market shows a gradual and stable upward movement with minor dips during the crisis period. This suggests that the oil prices are more volatile, while the stock market responds more steadily, and short-term fluctuations are reduced in the moving average.

4) Exponential Smoothing :



Unlike moving averages, which treat all past observations equally, exponential smoothing assigns greater weight to recent data, making it more responsive to current conditions. The alpha (α) value controls this; a higher α (0.3) reacts faster to changes, while a lower α (0.2) gives a smoother trend.

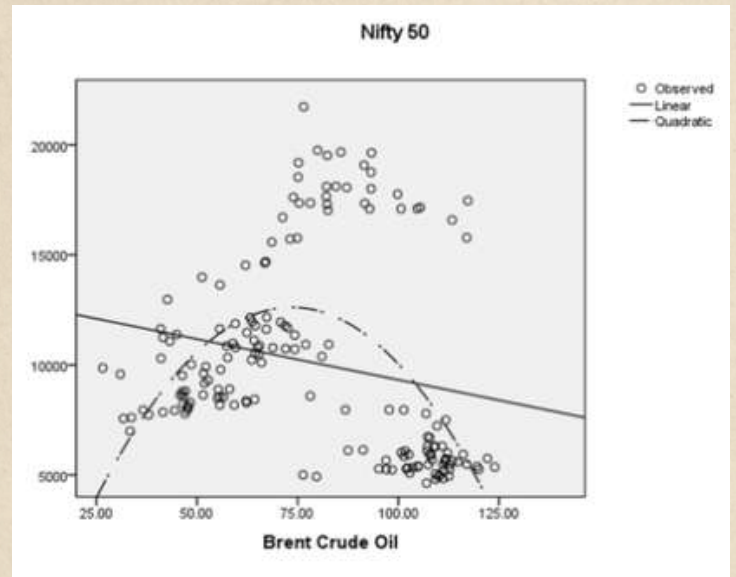
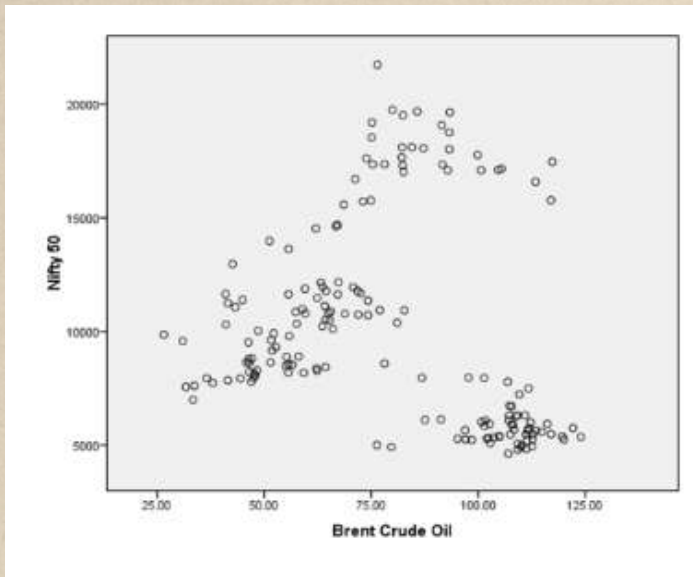
For crude oil, both values show the same trajectory, i.e., stable in the early 2010s, a sharp decline during 2014-16, a collapse in 2020, and a strong rebound in 2021-22 before easing again. For NIFTY 50, both curves reveal a smooth, steady upward climb throughout, with only a brief dip in 2020 that was quickly recovered. While the stock market shows a steady upward trend, this indicates that the oil prices are more sensitive to sudden changes, while the stock market adjusts more gradually over time.

5) Empirical Investigation of the Relationship :

DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Brent Crude Oil	168	26.59	123.93	79.3054	25.63964	657.391	-.060	.187	-1.263	.373
Nifty 50	168	4624	21731	1.01E4	4459.205	1.988E7	.773	.187	-.520	.373
Valid (listwise)	N 168									

SCATTER PLOT B/W BRENT CRUDE OIL AND NIFTY 50



CORRELATIONS

		Brent Crude Oil	Nifty 50
Brent Crude Oil	Pearson Correlation	1	-.213**
	Sig. (2-tailed)		.006
	N	168	168
Nifty 50	Pearson Correlation	-.213**	1
	Sig. (2-tailed)	.006	
	N	168	168

CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED).

The correlation analysis shows a weak but statistically significant negative relationship between crude oil prices and Nifty 50 ($r = -0.213$, $p=0.006$). This suggests that increases in oil prices are generally associated with a decline in the index.

The regression result supports this with the coefficient of -37.03 indicating that a one-unit rise in all prices leads to an approximate 37 - point fall in Nifty 50; however, the model explains only 4.5 % of the variation ($R^2 = 0.045$), indicating explanatory power.

The scatter plot between the crude oil prices and Nifty 50 shows a downward trend, indicating a negative relationship, although a point is a fairly dispersed. The spread of observation reinforces that the relationship between two variables is not strongly linear.

The regression equation is as follows:

$$\text{NIFTY 50} = 13025.56 - 37.03 * (\text{Brent Crude Oil})$$

The negative slope Coefficient conforms to the inverse relationship observed in the scatter plot, indicating that increases in crude oil prices are associated with declines in the index. The magnitude of the coefficient suggests that the effect exists, but is not very large in practical terms

Together, the scatter plot and the regression result validate each other overall, while crude oil prices have a statistically significant negative impact, their practical influence is relatively small. This aligns with real-world expectations, as higher oil prices raise costs in profitability

Conclusion:

The study finds that crude oil prices exhibit significant volatility influenced by global events such as the COVID-19 pandemic and the Russia-Ukraine wars. In contrast, the stock market shows a relatively stable long-term upward trend with only short-term dips during the crisis period

The analysis indicates a moderate relationship between the oil prices and the stock market performance, suggesting that while oil shocks do impact the market, they are not the sole driving factor; broader microeconomic conditions, policy intervention, and investor sentiments play a crucial role in shaping the market outcomes. Overall, the findings highlight that the stock market tends to be more resilient and forward-looking, adjusting quickly even in the face of global economic shocks.

References:

<https://tradingeconomics.com/commodity/brent-crude-oil>

<https://www.nseindia.com/reports-indices-historical-index-data>

-
<https://onedrive.live.com/:x:/g/personal/A57C6169DA2F9301/IQAzPWYLAH-jQpvqkKZM6NSeAQd4fWAU7TfAlmUPQzubon?resid=A57C6169DA2F9301!s0b663d337f0042a39bea90a64ce8d49e&ithint=file%2Cxlsx&migratedtospo=true&redeem=aHR0cHM6Ly8xZHJ2Lm1zL3gvYy9BNTdDNjE2OURBMkY5MzAxL0lRQXpQV1lMQUgtalFwdnFrS1pNNk5TZUFZRZDRmV0FVN1RmQWxtVVBRenVib25V>

https://onedrive.live.com/:x:/g/personal/809E599B42725B0A/IQB7KlJpUs-_R6yJgNeMlZZzAXjSbgDjvj7WBUeUtoFUldE?resid=809E599B42725B0A!s69522a7bcf5247bfac8980d78c959673&ithint=file%2Cxlsx&e=qEVQ32&migratedtospo=true&redeem=aHR0cHM6Ly8xZHJ2Lm1zL3gvYy84MDllNTk5YjQyNzI1YjBhL0lRQjdLbEpwVXMtX1I2eUpnTmVNbFpaekFYalNiZ0Rqdm03V0J1RXVUMEZVbGRFP2U9cUVWUTMy

A STATISTICAL VIEW OF IRAN-US TENSIONS

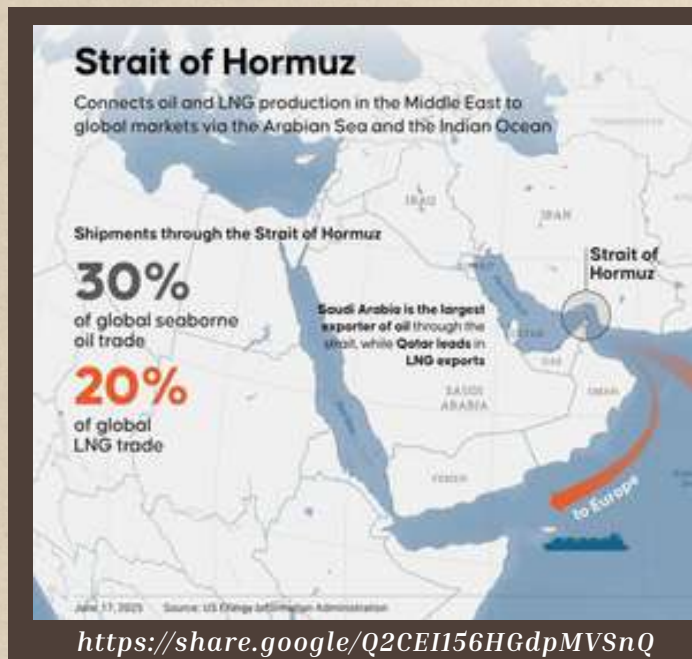
NUMBERS AT WAR

A STUDY BY ANUSHKA SAINI, 4TH SEM & PRAGATI ARYA, 2ND SEM

In discussing the endless battle between Iran and America, it is inevitable that one will think about media reports, airstrike attacks, diplomatic language, and heightened tensions. This conflict appears imminent and intense, distant yet always so close to us.

There is, however, another way of looking at this struggle.

A less dramatic one.



“Peace cannot be kept by force; it can only be achieved by understanding.”
~ Albert Einstein

“Behind every war are interests that are not always visible.”
~ George Orwell

Not through what is said, but through what changes. Every increase carries its trace, both politically and statistically. There are fluctuations in the oil price, in inflation rate, and in market behavior. This war does not only appear in statements and strategies but also in statistics.

The first point of departure should be oil prices. Iran as a nation is situated near the Strait of Hormuz, and this strait is regarded as one of the most strategic routes for oil transportation in the entire world. For this reason, even minor

changes in the intensity of tensions may affect international markets almost instantaneously. Such changes do not usually occur randomly. By observing the history of oil prices, it becomes apparent that most price increases occur at times of escalated tensions.

It is precisely here where the notion of a time series proves useful, as it allows us to track an entity's evolution through time. Each value is associated with its predecessor and affected by the same physical processes. In other words,

their fluctuations cannot be considered random, as they imply some processes taking place out of the picture's scope. Upon closer inspection, they will prove to tell about the nature of political strife turned into economics.

The cost of oil, nevertheless, is far from being the last word on the subject. As soon as one rises, the cost of transporting goods and services will start growing as well. This trend is not limited in scope either; rather, it gradually expands to encompass a range of other factors. First of all, it will be felt in the rise in manufacturing cost, which will affect prices in general terms over time as inflation.

In other words, does the economy follow suit according to the intensity of the conflict? It would seem that this happens to a degree. High-intensity moments almost always mean uncertainty, which will be met with quick action from the markets in response to that uncertainty. Volatility increases and so does instability.

However, cost should also be considered. It can often happen in modern conflicts that cheap technology like drones triggers expensive retaliation. This issue takes on particular importance in the case of the Iran-US conflict. While it takes time for those pressures to accumulate, the result is ultimately that the conflict starts to spill over into economic matters.

They do not stop at expenditure on defence. Other consequences are more insidious and harder to measure. Shipping lanes are realigned. Freight rates edge higher. Supply lines are adjusted. None of these trends are individually significant, but collectively they build up. What starts out as a regional issue is not often likely to remain one for very long.

In some respects, the process of modelling allows us to make sense of all this. This is a useful tool that we can utilize to assess the potential consequences. "What will be the effect on the price of oil if there are rising tensions?" "If there are increased prices, what impact will it have on inflation?"

Nevertheless, statistics has its limitations. Statistical data might indicate that changes have occurred, but it will not always clarify how and why they have occurred. Statistics will not take into account the political process and human motives, which have resulted in the change indicated by statistical data. Thus, an increase in oil prices will be just one part of the whole picture.

Thus, context is important. Without context, statistical data might be misleading. Information becomes relevant only when interpreted in conjunction with news headlines and events. News headlines inform about what has happened, whereas information informs about what was the result of what happened. Statistics enable observing correlations between these events.

It is difficult to comprehend the dynamics between Iran and the USA in full details. No specific theory can explain their relations adequately. Nevertheless, using data as a tool of analysis, one can find certain trends. It is impossible to know everything using data, but there are certain things that emerge, including their effects on both countries.

Data statistics do not provide the complete narrative. However, data provides some pieces of information which may be overlooked without data.

War is waged with weapons, but its legacy is expressed through numbers.

MISLEADING STATISTICS

CHOSEN TRUTHS

AN OBSERVATION BY AKRITI GUPTA, 8TH SEM

The adage “Numbers don’t lie” has been heard by everyone. Data is often seen as depicting the whole truth, but sometimes it may be coached to tell only a specific portion of the truth. The most common claim often heard in any advertisement for disinfectants is “Kills 99.99% of germs”. It seems reliable, after all, 99.99% is nearly perfect, isn't it? But pause for a moment, why not exactly 100%? What does that 0.01% represent? Under what conditions were these results obtained? Ironically, the statement might be factually accurate. The results are obtained in controlled laboratories to tell the consumer only a part of the story. By presenting such absolute figures without proper context, it fakes an impression of effectiveness. This is the absolute power of statistics.

Selectively presenting a subset of data that favours a specific narrative while omitting what complicates it is considered “cherry-picking statistics”. As reported by Shenavarmasouleh and Arabnia (2019), about 70% of the surveyed researchers were unable to reproduce another person’s work, and more than half of the researchers could not reproduce their own work. Let’s understand why this reproducibility crisis happens. Since no researcher intends to present false results, this crisis eventually arises due to variations in the interpretation of data that can impact the outcomes at a significant level. However, the truth is not everyone’s foremost priority. There can be many causes that can make research papers irreproducible and report misleading statistics.

One reason is the flexibility of interpretation with researchers. Different choices of sample size, selection of variables, statistical tests and handling outliers can lead to different results. In statistics, the “Law of Large Numbers” suggests that as the sample size becomes large, the sample mean approaches the population average. Cherry-pickers love to work with small samples because they are unstable. A coin flipped four times, the chance to get four heads is decent (6.25%), and a researcher may interpret “in our trial, this coin produced heads 100% of the time”, without mentioning that the coin is flipped only four times. The choice between a parametric test (which assumes a specific distribution, typically normal) and a non-parametric test (which doesn’t have strict distributional assumptions) can produce varying results, and is often justified based on the data and assumptions.

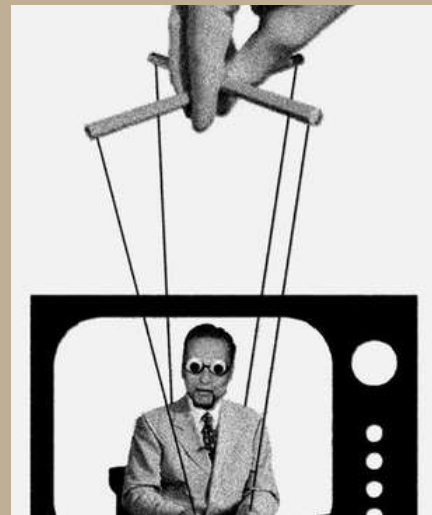
“Facts are stubborn things, but their meaning depends on how we use them.”

~ John Adams

Another factor is the selection of data; sometimes, statisticians may focus only on picking data that favours a specific outcome. This is closely associated with practices like p-hacking. Technically, the null hypothesis is typically defined as a claim that there is no effect or no difference between the variables under study. On the other hand, the p-value quantifies how probable it is to observe an outcome at least as extreme as the observed one, assuming that the null hypothesis of no effect is correct.

The obtained p-value is compared with a threshold, known as the level of significance (α) which is usually taken as 0.05. When the p-value exceeds the selected significance level, there is insufficient evidence to reject the null hypothesis; if it falls at or below that level, the null hypothesis is rejected. P-hacking refers to the deliberate adjustment of aspects of the experimental setup or data analysis to obtain a statistically significant outcome. One common tactic is to set a significance threshold that is more lenient than the resulting p-value and then use it to claim significance. Another approach researchers utilise is to split the study into multiple smaller tests (say, n) and analyse each one independently to obtain a statistically significant p-value in at least one of them. While this method may look effective, it inflates the overall chance of error since the threshold level is applied unchanged to every test, leading to family-wise errors. The likelihood of observing at least one statistically significant outcome

purely due to random variation can be expressed as $1 - (1 - \alpha)^n$. If only the significant findings are reported, it is clearly misleading in the bigger picture, since such results are often driven by Type I errors (which arise when we incorrectly reject a null hypothesis that is actually true, commonly known as a false positive). To avoid the family-wise error, one should use the Bonferroni correction which suggests using α/n as a new stricter threshold level for each of the individual tests considered.



<https://share.google/KIWlzUj!THdkRTOWY>

Cherry-picking often exploits confirmation bias, as audiences are often drawn to information that confirms their existing beliefs. When the statistical results align with our internal beliefs, they are frequently accepted as fact without scrutiny. But when results are misaligned, we tend to interrogate for every possible flaw. The danger of misleading statistics isn't just academic, it raises many global concerns too. How do we protect ourselves? Whenever you encounter "impressive" statistics, look for the full context. Numbers might not lie but when selectively used it can mislead. It's up to us to ensure that we get the whole story and not just the cherries on top.

[1] Shenavarmasouleh, F., & Arabnia, H. R. (2019). Causes of Misleading Statistics and Research Results Irreproducibility: A Concise Review. *International Conference on Computational Science and Computational Intelligence (CSCI)*, 465-470. <https://doi.org/10.1109/CSCI49370.2019.00090>

CAN NUMBERS PREDICT IPL 2026'S CHAMPION?

THE GAME OF DATA

A SURVEY BY SAMRIDHI SANGAR & MIHIKA KUMAR, 2ND SEM

"Punjab Kings or Rajasthan Royals?" "Or could Royal Challengers Bengaluru secure their second victory in a row?" This is the exact thought running through the mind of every single Indian cricket fan at the moment.

On the surface, things seem clear : Punjab Kings and Rajasthan Royals are sitting at the top of the table, and their consistency in the early stages of the tournament makes it look like they are almost certain to make it to the playoffs.

On paper, it might feel straightforward. But as any data scientist will tell you, the points table is a lagging indicator in itself, it tells you where teams have been and not where they are going.

To find the true champion, we have to move beyond the "coin flip" logic of simple win loss records. But something far more interesting emerges when we apply a Poisson Distribution combined with Linear Regression.

When we look at the IPL traditionally, every single match is treated as an independent event, but cricket does not work that way. Momentum, clinical finishes and historic defeats leave a "rate of performance" that sticks to all teams.

Instead of assuming every match has a 50/50 trial, we model this season using a Poisson Distribution. This allows us to calculate the probability of a specific number of wins occurring in the remaining window based on a team's current "intensity" or rate (λ).

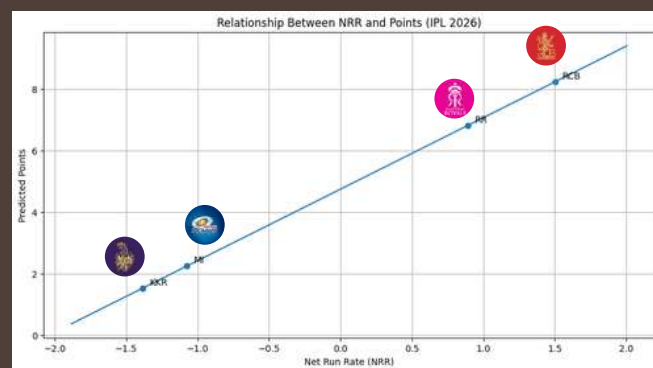
$$P(X = k) = e^{-\lambda} \cdot \lambda^k \div k!$$

Now this shift is important because it accounts for the teams that are performing exceptionally. It recognises that a team is dominating it's opponents not because it's lucky, but because it's operating at a higher mathematical frequency.

Royal Challengers Bengaluru (RCB) currently has a massive Net Run Rate (NRR) of +1.503, so while the standings show a crowded top, NRR shows the true power dynamics. In our regression-based expected points framework, this is a massive signal of sustained superiority.

Using the Method of Least Squares on 2026 data, we find a remarkably strong correlation $r = 0.8764$ between NRR and total points. The relationship is defined by the equation:

$$Points = 4.749 + 2.323(NRR)$$



This means every 1-unit rise in NRR corresponds to an increase of over 2.3 expected points. For RCB, this efficiency translates into a projected performance rate (λ) of 6.75 for their remaining matches.

When we run these rates through our Poisson model to see who hits the critical 16-point qualification threshold, the numbers become definitive:

The Frontrunner: RCB (90.5% Chance)

Bengaluru's case is built on sheer efficiency. With a massive NRR of +1.503 their performance rate (λ) sits at a dominant 6.75. For RCB, NRR isn't just a tie-breaker; it's a statistical cushion. Even if they have a bad night, their "average" level of play is so high that they are mathematically the strongest team in the league.

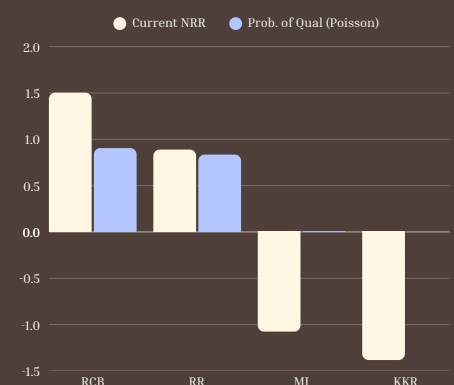
The Challenger: Rajasthan Royals (83.5% Chance)

Rajasthan has the points and the early discipline, but they aren't "controlling" the league with the same authority. Their slightly lower rate (λ) of 5.85 suggests that while they are safe, they are winning games by thinner margins. In a knockout scenario, those thinner margins matter.

The Wall: MI (0.84%) and KKR (0.01%)

For Mumbai and Kolkata, math has become a wall. To reach the 16-point qualification mark, they would need a "rate of success" that falls significantly outside the 95% confidence interval of their current performance. For KKR specifically, needing 8 wins from 9 matches against their current rate ($\lambda = 1.35$) makes qualification a statistical miracle.

Team	Current NRR	Predicted Pts (Regression)	Prob. of Qual (Poisson)
RCB	1.503	8.24	90.50%
RR	0.889	6.81	83.50%
MI	-1.076	2.25	0.84%
KKR	-1.383	1.53	0.01%



The surface narrative still belongs to the teams with the most points today. But the deeper analytical story, the one hidden inside regression intercepts and Poisson decay rates, keeps pointing toward Royal Challengers Bengaluru.

Bengaluru's case is built on statistical sharpness. They are winning matches by margins that, historically, teams go on to win the title by. RCB has found a way to dominate by the numbers in a tournament where the smallest advantages decide everything.

While others are playing a game of accumulation, the numbers suggest that RCB is playing a different game entirely. And on 31st May 2026, we'll get to know who the real champion is.

—WHY AVERAGES HIDE THE REAL CRISIS—

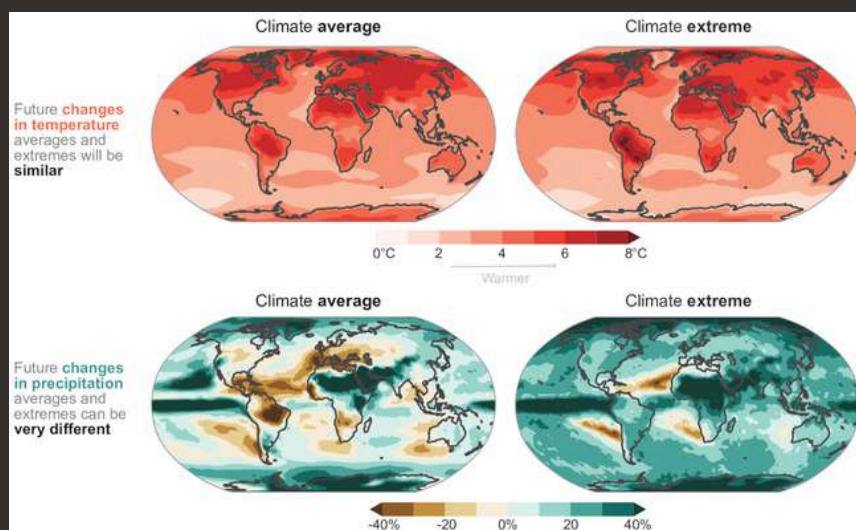
CLIMATE STATISTICS

AN ANALYSIS BY MEHER, 2ND SEM

From the wheel, to Game of Thrones – humans have made certain remarkable things over the years. This brilliant mind of mankind eventually created methods to mobilise coal, leading to one of the first large-scale emissions of Greenhouse Gases. Over time, this discovery gave way to the industrial revolution, which in turn led to the creation of Chlorofluorocarbons, or CFC Gases. The common use of CFC gases brought awareness to the increasingly warming temperature of our planet, leading to global leaders holding agendas to combat this newfound climate crisis. Now, words like “sustainable development”, “sea level increase”, “melting ice caps” can be seen in every other publication, or international conference. And yet, global average temperature increase deeply understates the extent to which climate change has hastened exponentially since the industrial revolution.

According to the WMO State of Climate report 2025, these past eleven years have seen the hottest climate on record. In fact, 2025 was the third warmest year on record, and around 1.43 degrees celsius higher than the 1850-1900 average. The Earth’s climate is more out of balance than at any time in observed history, reaching a new high in 2025. With global warming accelerating, the frequency and intensity of many extreme weather and climate events are also increasing. Extreme day-to-day temperature changes are an independent, yet largely ignored, aspect of extreme weather events.

Global maps of future changes in surface temperature (top panels) and precipitation (bottom panels) for long-term average (left) and extreme conditions (right)



<https://share.google/05I9jPuCSCpVqzPfE>

Observations note that such events are increasing in frequency since the 1960s in low and mid-latitudes, but decreasing at high latitudes, primarily due to GHGS emissions. This increased variability has been studied to have strong implications for both human health and changes in pressure and soil, posing substantial risks to societal and ecosystem resilience and adaptation.

In the adjacent figure, the projected changes in the climate averages and extremes in terms of

temperature and precipitation are given, where it is apparent that the temperature average and extremes are similar, while those in terms of precipitation are extremely different.

A study by nature communications shows that daily temperature variability can be the key to understanding global patterns of change in the frequency and severity of the extremes in many places. In many places, daily temperatures are predicted to be in an upward trend, following the general warming where warm extremes are more frequent than cold ones. The same cannot be said, however, for projected global and regional precipitation. Recent observations highlight changes that can raise trepidations regarding our changing climate. Figures show substantial drying in places like Southern Europe and Northern South America, and wetting in places such as the Arabian Peninsula and Southern South America. As the globe warms, extreme downpours are accelerating much faster than the average precipitation.

This highlights two things: averages and extremes reveal very different things regarding the future of our climate, and temperature is not the only factor that we should be highlighting when it comes to the climate crisis. Precipitation is just one area of the biosphere that we are observing here. Others, such as sea level, earth energy sources etc. are additional indicators of the climate crisis that can be observed in a similar capacity.

Oftentimes, while looking at climate data, it is possible to forget that this data is collected from places around the world where people suffer from the effects of the expediting climate crisis. The **Climate Risk Index 2025** highlights the different consequences of the statistical distribution of climate patterns. It makes its readers aware that while most of the developed world looks at the small number describing the increase in global average, there are areas in the tropics that suffer due to these small numbers.

Outliers in our climatic distribution have the power to turn lives upside down. Variability in historically stable climates can trigger extreme events with disastrous consequences. Between 1993 and 2022, countries like Dominica, China, Honduras, Myanmar and India were among the worst affected, suffering massive economic losses and many casualties.*

A small value can set off large changes.. When headlines point out a fraction of a change in the temperature, or comment on the rise of the sea level, it becomes easy to brush these off as trivial.. The path to resisting this hastening climate change comes from knowing that it is, in fact, quite severe already. The first step in this path to recovery is awareness and understanding what it is that we should truly be looking at- the crisis unfolding before us as of this very moment.

— HOW STREAMING HACKS YOUR BRAIN? —

STREAMING TRAP

A STUDY BY AKSHITA MITTAL & HIMANSHI GUPTA, 4TH SEM

You start scrolling Netflix and within a few minutes you see yourself watching a movie or a Kdrama. Let me tell you..it wasn't you who chose what to watch, rather it was the back-end calculation that made you choose the show. In the time it took you to choose, a software was doing millions of calculations that has been designed to predict your behaviour, change your mindset and make you keep watching the show.

According to reports, over 80% of shows watched on Netflix are led by its recommendation algorithm. It basically means that people only search 1 out of 5 shows by themselves and they watch the remaining 4 based on the recommendation of Netflix.

Now, the question is how Netflix is doing all this? There is a concept in Statistics called collaborative filtering. It is basically a statistical technique that is used to make recommendations based on the preferences of the other users who have similar tastes. It assumes that users with similar preferences in the past will continue to have similar tastes in the near future that can be interpreted by the likes, ratings or clicks.

In this, it asks the question "What kind of content other users prefer who have similar behaviour as this person and what did they enjoy?" rather than "What does this user like?"

So the platform generates a big spreadsheet in the back-end where rows are users and columns are every single show on Netflix. Each cell tells what you have watched, how long you have watched, have you completed the show, how many times did you pause. And the spreadsheet is almost empty because no one has watched everything. These blanks are filled by the algorithm. This process is called matrix factorisation. So, from now on give it a thought when you watch something - is it really your taste or is it the algorithm's?

"We become what we behold. We shape our tools and thereafter our tools shape us."

~ *Marshall McLuhan*



<https://share.google/iWkJD9HrscQg48qbW>

Talking about the thumbnail now. Have you ever noticed that a Netflix thumbnail appears different on other users' screens? Netflix does not show the same thumbnail for the same thing to all its users. For popular shows, the platform keeps multiple options, some showing an action pose, some showing leaning into emotional moments, some showing suspense. The thumbnail you see is one of the predictions that statistical model has done by running its dataset based on your past behaviour or preferences and will make you most likely to click. If you watch a lot of romantic dramas, the platform tends to show you a close up or intense shot even for horror or thriller shows. Rather, if you watch a lot of action shows, it might show you images of tense situations between characters. You and your friend might open Netflix at the same time & at the same place but still you will see different thumbnails on both of your screens.

It does not mean that content is different but it shows that it has been tailored as per algorithm. The mechanism behind this is called a contextual bandit model which is a type of algorithm based on probability theory i.e. making smart choices based on the situation in front of you, while learning from past experiences. It continuously runs small experiments that tests which thumbnail option leads to the highest click from users like you. It is based on your genre preferences, favourite or most engaged actor or actress, time of day, day of the week and even the device you are using to watch the shows.

Netflix has found that users spend approximately 1.8 seconds on a thumbnail before deciding to click on the particular show or keep scrolling. In those 1.8 seconds, the platform has already calculated which cover variant has higher chances to be clicked by the users. You think that they are judging a show based on its thumbnail. But, in reality, You are being shown those particular thumbnails that make you judge in the way the platform wants you to. You might have been surprised by knowing all this. But, it's not a secret that any streaming app is hiding. Netflix itself has published research papers on both collaborative filtering and their personalisation.

The technology that these platforms use is not wrong, rather it helps users only to get the content they would genuinely love and might not have found otherwise.

But obviously, it also has a subtle opportunity cost. As most of the content you are watching is being decided by an algorithm shows your preference is not being expressed rather, it is being shaped. So next time when you open any streaming app and feel like there is nothing to watch despite having thousands of options; this means you are not running out of content. It's just an algorithm that has not yet figured out the perfect things to show you....

TRUTH IN THE DATASET

UNBIASED DATA

A REVIEW BY PRIYANSHI THUKRAL, 2ND SEM

Let us think of a mirror which reflects the world perfectly, but what if the world it's reflecting has cracks from years of bias? That's Artificial Intelligence in a nutshell. It learns from historical data without any moral compass to judge, so human biases baked into that data inevitably show up in its output. We often speak of AI as a digital "brain" capable of processing information without any messy human interference. But in reality, AI doesn't "think" in a vacuum but mirrors.

At its core, a machine learning model is a sophisticated pattern-recognition engine. It analyses training data distribution to find correlations. A representative data set can be defined as a set that has the same probability distribution as the population it represents. It is not an ethical problem but more a structural one, in that any conclusions drawn from the non-representative sample set are flawed. To understand how this happens, we have to look at representativeness. In statistics, a sample is a representative only if it accurately reflects the members of the entire population. When there is a mismatch, we encounter bias.

Let us take an example of a face recognition software. The error rate of this system is extremely high when it comes to recognizing faces of those who are darker skinned. It's not that it's simply an issue of a bug in the software but it's the lack of representativeness of the dataset which leads to this error. For another instance, consider if a healthcare AI is trained mostly on data from urban hospitals, it learns patterns specific to those populations. This creates a skewed training data distribution. When applied to rural patients, predictions become less accurate because those groups were underrepresented.



<https://share.google/u40Q5FSY0qoF2ZrF5>

The second notion is algorithmic bias. Although data bias comes from the sampling process, algorithmic bias arises during the conversion of the sample into rules through the model. There are a number of optimization goals, threshold choices, and regularization affect what gets kept and what is thrown away in terms of statistical connections. For instance, maximizing accuracy does not necessarily mean being accurate in small sub-samples.

“Algorithms are opinions embedded in code.”

~ Cathy O'Neil

It is here that statistical literacy comes in handy. A model that is 95% accurate can be profoundly flawed if the error terms are systematically biased toward the less represented populations. In regions where there are more data points, there will be more confidence. In areas with fewer data points, there will be interpolation. This is how the prejudices of humans who recorded history in loans, medicine, or online moderation systems can resurface in machine-generated decisions. AI is not making judgments; it is making statistical extensions of precedents.

From a research perspective, the crucial insight is that AI bias is fundamentally a problem of inference under imperfect sampling conditions.

The conversation should therefore move beyond whether AI is “fair” and instead question whether its dataset sufficiently captures the heterogeneity of the real world. Better models start from better sampling, greater checks on representativeness, and ongoing distribution shifts. Fundamentally, what AI offers is less a neutral form of intelligence than a mirror reflecting the data we put before it. More representative data produces a more accurate reflection. If data reflect inherent biases in humanity, the AI learns them as facts of nature and that is not failure; it is exactly as intended.

To design a better mirror, we have to stop seeing our data as objective truths and instead embrace it as an essential, rigorous structure of varied samples to create statistical representation, auditing algorithms to spot error variance among different demographics, and humans within the loop to inject a moral dimension that is lacking in the raw data. Conclusively, AI is not capable of making independent judgments on its own. In reality, it merely mimics the decision-making mechanism implemented in the dataset. Therefore, when addressing the issue of fairness in AI, we must look at the method of data gathering rather than the algorithm.



<https://share.google/40wPn072i4L9Bzi0e>

—A STATISTICAL TRAGEDY IN LUNCH LINE—

SOS : THE LAST SAMOSA

A DATA STUDY BY VIBHUTI CHANDNA, 2ND SEM

It is an exhausting Tuesday and you have just finished a tiring lecture of Probability Distributions, your stomach is growling in hunger and the cafe is just in sight. The crispy golden samosas sit right there challenging you. You walk faster than you'd like to admit, and that's when the queue comes into view.

The queue is long. You count thirty-two heads, do the math, and already know. But you join it anyway. By the time you reach the counter, you are handed a sympathetic shrug and a plate of rajma chawal.

Welcome to the most statistically predictable tragedy in institutional life.

At the core, the Last Samosa Problem is a major probability discussion. Let's say 60 samosas were prepared for lunch stock. Each person ahead of us represents a unit of demand. Assuming each person takes one or two samosas, the probability that at least one samosa remains by the time you arrive drops sharply as queue length increases.

If you are tenth in line and stock is 60, your probability of getting a samosa is comfortably high - close to 1. But slide to position thirty-five, and the math begins to turn against you. Statistically, the "danger zone" begins when the number of people ahead of you exceeds roughly half the starting stock. Beyond that point, each additional person in the queue compounds your misfortune exponentially, not arithmetically.

The relationship between queue length and individual happiness follows one of statistics' most elegant patterns: a strong negative, or inverse, correlation. As one variable rises, the other falls; consistently, predictably, and with a cruelty that no scatter plot can fully capture.

"Life is a game of chance, but you have to play the hand you're dealt."

~ Jawaharlal Nehru



<https://share.google/o3Xgtf19PLr1z4>

Queue length vs. happiness index & probability of getting a samosa



The chart makes it visual. At five people in the queue, your chances of getting a samosa are high, and so is your mood. At thirty, both are slipping. At fifty, you're not really there for the samosa anymore, you're just in a queue, waiting, for something.

"Correlation does not imply causation, but when it comes to samosas and sorrow, the relationship is hard to argue with."

Queuing theory, a branch of applied mathematics developed in the early twentieth century by Danish engineer A.K. Erlang, was designed to model systems where demand occasionally exceeds capacity. Originally applied to telephone exchanges, it maps beautifully onto the cafeteria scenario. The core idea is simple: any service system has an arrival rate (people joining the queue), a service rate (how fast they are served), and a capacity limit (the samosas themselves).

When the arrival rate briefly outpaces the service rate - say, when two lecture halls empty simultaneously at 11 AM, the queue balloons. The system has not failed; it is simply experiencing what Erlang would call "congestion." The thing that makes our situation different is that the food we are waiting for is limited, and we cannot get more. It is not like a phone call where the line's available again after the call is over. If someone eats a samosa, it is gone for good. This makes the cafeteria a loss system in queuing terminology: it is not a matter of being delayed, it is a complete denial of entry. The food we wait for does not feel as important as the wait itself. It is not merely about fried potatoes and peas. It is about the mathematical certainty that the system was never designed to accommodate everyone, and that timing determines who eats.

The rational response, as queuing theory suggests, is to intervene at the structural level: increase stock, stagger lunch breaks, or implement a token system to cap demand at peak hours. But most of us will not lobby the canteen committee. We will, instead, leave our next lecture three minutes early, wear comfortable shoes, and move through the corridor with quiet, focused urgency. Because the samosa does not wait. And neither should you.

WHY SURVEYS KEEP GETTING IT WRONG

THE POLLING PROBLEM

AN INSIGHT BY AKYAM, 2ND SEM

2026 is the new 2016; we all must have come across this phrase at least once. Looking back on 2016, one of the most infamous data deceptions in history occurred. Pre-election polls fueled predictions that Hillary Clinton's likelihood of winning was about 90%. With few exceptions, the final round of public polling showed Clinton with a lead of 1 to 7 percentage points in the national popular vote. Trump won. The polls were at last correct about the popular vote. But they missed the mark in vital swing states that tilted the Electoral College for Trump. This is an important nuance; analysis continues to mislead.

With a highly nonchalant audience, getting surveys right is occasional. When the pollster makes 1,000 calls, the majority of them do not answer. Telephone poll response rates have plummeted to less than 6 percent today as compared to about 35 percent in the 1990s. It implies that the 60 or so who do respond are being used to represent a whole electorate, and they are not a random sample. Those who do not trust institutions, who do not believe that the political establishment cares about them, and who are angry to the point of not wanting to converse with a stranger about politics hang up. And in 2016, it happened to be that demographic that was turning up to Trump. The polls were not assessing the opinion of the people. They were evaluating the minds of individuals who would be polled.

In an average national poll in 2016, almost half of the people interviewed had a college degree. In the real American population, it was 28%. It was clearly not a rounding error. College-educated voters were drawn towards Clinton in heavy numbers; thus, polls constructed on their numbers were biased towards Clinton, not because of bias but because of a blind spot. The majority of the pollsters were not even weighted by education. It was a known variable and one that they did not want to adjust. Even the best methodology will lead you to the wrong solution when you construct an image of the electorate with the wrong canvas.



<https://share.google/34iEjACzdMjUv7pPq>

Then 2020 happened. Then 2024. The disease is not winning the race against the cure; rather, the disease is evolving faster than the cure. Every fix introduces a new assumption. Education and weight, and you run the danger of over-correcting. Even the process of changing a poll involves a theory concerning the electorate, and when the theory is false, the change will only worsen things. The central problem of polling is not data; it is that what is measured continues to vary. Aggregators also try to filter individual poll errors by averaging dozens of surveys, this works until all the polls are biased in one direction. Maybe the best signal to complement the rest is prediction markets, in which individuals place bets using actual money on the result. Other pollsters are also testing multi-source models, which are surveys mixed with voter data and economic indicators. These are not solutions; they are just closely approximated. There isn't a clear solution to the polling problem; instead, there are a number of tedious alternatives.

Polls were never just measurement tools. They are political instruments: shaping coverage, directing money, and signalling to voters what is possible before a single vote is cast. When they are wrong, the deception doesn't end on election night, instead, it shapes who runs, who is taken seriously, and who is written off months before the votes are counted. The margin of error isn't a technical footnote. The distinction between a democracy is not what is reflected by its citizens but rather by its pollsters.

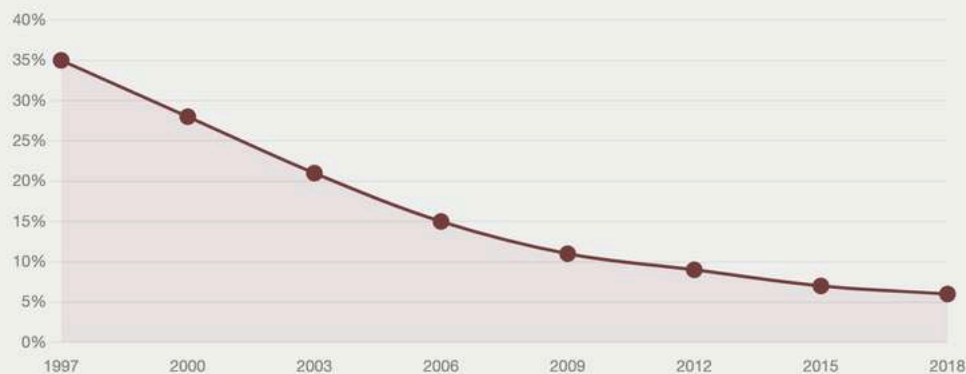
"The polls weren't measuring public opinion. They were measuring the opinion of people willing to be polled"

All polls contain a "likely voter model": a series of assumptions on who will actually turn out on The Election Day. Would it be similar to the 2012 electorate? 2008? Will new voters turn up? Would enthusiasm be relevant? These models are constructed based on historical trends, and Trump's 2016 did not fit any. In Wisconsin and Pennsylvania, white working-class voters showed up in numbers that had not been expected by pollsters. The urban centers had a low turnout of Democrats. The likely voter model, hidden behind all polls, predicted voters who never appeared.

After 2016, the polling industry didn't shrug. It organised committees, released post-mortems, and reformulated its procedures. Pollsters began education weighting. They constructed new probability based voter models. They included respondents whom they had thrown out.

Phone poll response rates, USA

Source: Pew Research Center



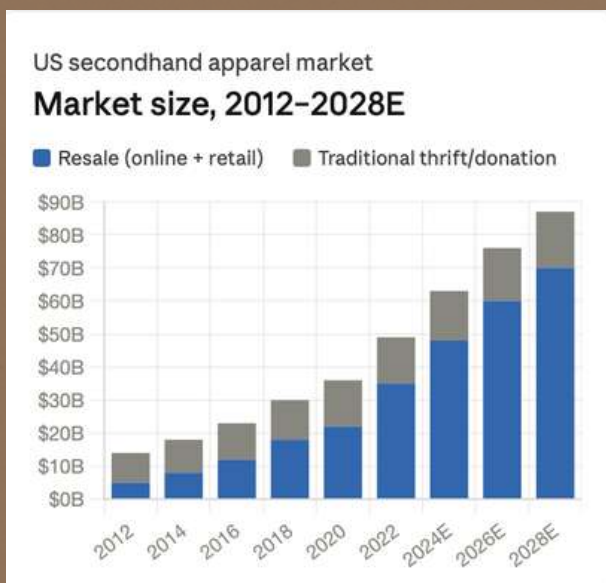
The people who answer polls are a shrinking — and increasingly unrepresentative — slice of the public.

— IS OLD THE NEW GOLD? —

THRIFT – 0 – NOMICS

AN ARTICLE BY HARSHIKA SINGHAL, 2ND SEM

The rise in thrift culture is one of the most palpable shifts in the fashion industry. People these days want to invest in clothes not just because the piece was “in-trend” but also because they want their clothes to tell a story.



Credit: Statista

Fashion is one of the most prominent ways for someone to express themselves and people's feelings about self expression are never stagnant. They are always abstract. They stem from moments and memories throughout their lives. They stem from art. They stem from culture. And this is where the concept of thrifting comes in.

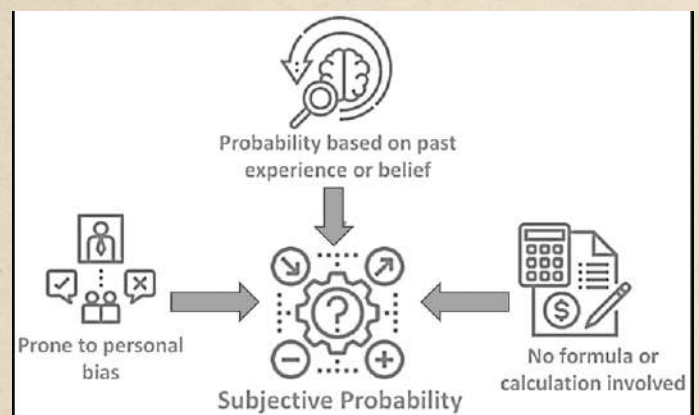
People have the ability to experiment with thrifting. The feeling of going through racks and piles of clothes which have stories to tell and then finding that one item that is ‘you’ is unmatched. This feeling is something that mass produced goods could never replicate.

Looking at this from a socio economic perspective, the political and social climate in our world today is very confirmatory. We all are drowning in opinions and trends all the time. Someone telling us what to wear. Some new trend coming up every monday. Some political news that enrages us and leaves us feeling helpless.

Amidst all of this, thrifting allows people the choice to pick pieces and dress themselves as they want to. It is a small but important shot at self expression and liberty.

In our highly capitalistic world, thrifting also gives people a chance at exploring themselves, their styles, at a budget. The rising prices tend to confine people's choices and they seldom get to explore what they actually like and what resonates with them. Thrifting solves this problem. It gives them utility. They get to have options and choose pieces which they actually like and within their budget.

There is also a subjective bias at play in the thrifting market. In fact, thrifting is based on the notion that everyone has a subjective bias. Now, a subjective bias means that people's judgements and decisions are based on prejudices, past experiences or memories rather than solid facts. So many times, the choices made in a thrift store are not always "logical". They are based on stories with loose ends and memories that are hard to forget. People buy pieces that click in some part of their mind somewhere. Here we can gather that it is not really value but "perception" which makes a piece of clothing a hit or a miss. In fact, here, perception creates value.



<https://share.google/AS9UZJ3CXkDfQKyNR>

Now to answer the question, Is 'old' actually the new gold? Well, there is no old in this industry.

Trends come and go but a thrift store? It has it all. It gives people the option to explore beyond trends and styles and find their own likes and dislikes, and this is where it seizes a major opportunity. Buyers go here because they know at any point in time if they go to a thrift store, it will have what they want. Be it a pair of bell bottoms from the 80's or slim fitted jeans from a decade ago.

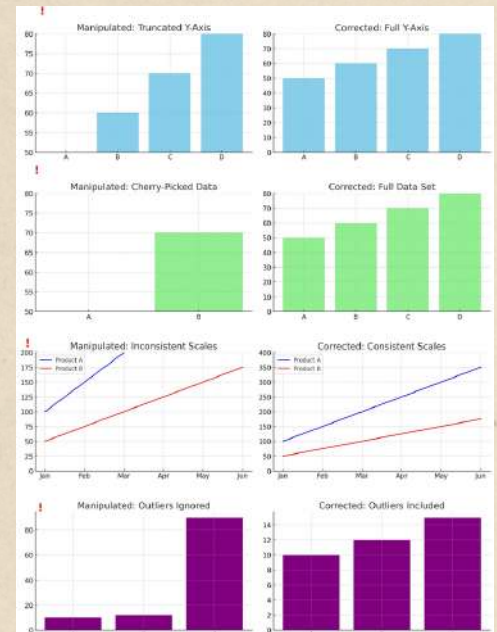
While big brands focus on manufacturing and promoting fast fashion, thrifting makes sure people have a lot more choices spanning decades of cultural shifts and fleeting trends. So, you will find everything, the old and the new at a thrift store. Now if it's gold or not depends on you, the buyer.

THE ART OF STATISTICAL MANIPULATION

TWISTING TRUTHS

AN OUTLOOK BY SAKSHI, 6TH SEM

How many times have you come across a brand marketing its product as being health conscious: saying "Newer formula with 20 percent less sugar"? Quite often, right! But have you ever questioned, less than what? What are they comparing it with- their earlier formula, the usual market norms or their competitor's product? We see these claims everywhere- on soft drinks, snack packets and advertisements, even in everyday conversations. They sound convincing, reassuring and most importantly, **statistically correct**. After all, numbers don't lie, right? That is how brands capture the audience. They don't give the wrong statistics, but simply hide how they calculated it. The numbers aren't wrong but they are not telling you the truth either. And in that gap between truth and interpretation lies the art of **Statistical Manipulation**.



Statistics is often seen as the **ultimate** form of objectivity. It carries an authority that opinions lack. However, Statistics does not exist in isolation. It depends on a lot of factors like what is shown, what is hidden and how the question is framed. This manipulation rarely involves outright falsehood. Instead, it operates through methods like selective presentation, biased sampling, missing data and question design. The result? Conclusions that appear convincing, logical and coherent are deeply misleading.

One of the most subtle yet powerful tools of statistical manipulation is **Framing and Question Design**. Statistics answers the question asked but if the question itself is flawed, the answer will be misleading no matter how accurate the dataset is. By carefully asking the wrong questions one can lead to *technically correct* but misleading answers. You would have heard about the infamous **OJ Simpson Murder Trial**. OJ Simpson was accused of murdering his ex-wife, Nicole Brown and this case was watched by the entire world. To give you some context, Nicole had called 911 multiple times, there were photos of visible injuries and years of documented domestic abuse. So, the prosecution claimed that this entire history is directly relevant to the case but the defense challenged it by using a simple statistic which said, "Only **1 in 2500** men who abuse their partners go on to killing them which is only a **0.04%** chance mathematically. So the likelihood of him being the killer is marginally low. And it worked. However, the actual flaw behind the argument is not the statistic but the question which the defense asked.

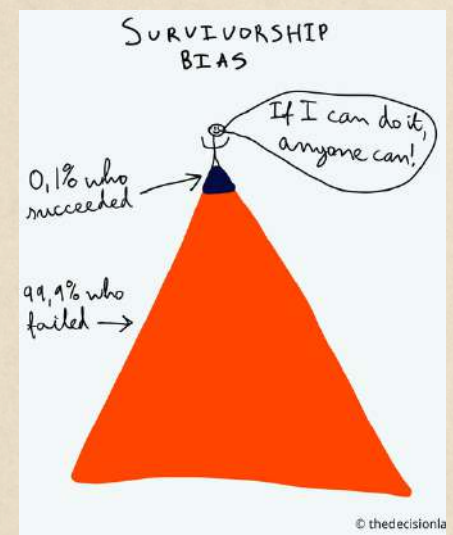
They asked "What is the probability an abuser kills his partner?" But they missed one crucial detail. Nicole was already dead. So, the real question should have been "When a woman is killed and there is a history of abuse, who is most likely responsible?" And over **80%** of the time it is going to be the abuser. The statistic is *correct* in both the cases, but manipulating the question led the defense to fool the entire world. They answered the *wrong* question with the *right* statistic. This is the power of Framing and Question design. By shifting the entire framework, the interpretation of the data changes entirely.



<https://share.google/LDvnOLOBJ37Or2grK>

This problem is not just limited to courtrooms, but also appears constantly in our everyday lives. Consider **online ratings**. A product with a **4.5 stars** rating on Amazon is generally perceived as reliable and high-quality. But we forget the fact that people with extremely positive or negative experiences are far more likely to leave a review. Additionally, average rating, while mathematically correct, fails to capture the full distribution of opinions. Moreover, 4.5 star ratings could depend on a lot of factors, like how many total reviews are being posted, how long since the product is being listed and there might be a possibility that cases wherein the people were not happy with the product chose to return it or sort it out with the customer care instead of leaving a bad review. Factor in the possibility that a lot of brands also pay people to leave good ratings and reviews and now the 4.5 star rating appears to be *skewed*.

Another example is **Survivorship Bias**. This is the case of the **missing data problem**. We only come across success stories of toppers, startups and viral influencers and attempt to replicate their habits. These might range from waking up early, eating healthy food to even changing the location of where we live. We see the results they achieved by following the same routines and try to copy it to achieve similar returns. However, we fail to counter-in the fact that their success was not merely based on their hardwork, but also depends on the opportunities they came across, how they reacted to failures and also on luck. Failures are hardly showcased, and often ignored. So we assume the patterns are universal. By focusing only on the positive outcomes, we create an **illusion of certainty**.



<https://share.google/LDvnOLOBJ37Or2grK>

What ties all these examples together is a powerful idea: **Statistics does not lie, but it does not guarantee truth either**. This makes it easy to manipulate opinions and choices people make without altering facts. So, the next time you come across a claim like, "20% less sugar", pause and reflect on the number. Because the real skill is not in understanding the data but actually in **questioning it**.



A DEPARTMENT OF STATISTICS PRODUCTION, LSR

LATEST ISSUE

20/04/2026

THE STUDENT LENS

CREATIVE EXPRESSIONS FROM STUDENTS

FEATURING:

- **Prelude: Voices (Poem)**
- **The Jester's Calculus: Data In Motion**
- **Goldman Sachs 101: Steps To One Of The Dreams**
- **Acturial Realities: What Lies Beyond Acturial Dream?**
- **Finding Life On The Metro: Everyday Journeys of Student Life**
- **Through Her Lens: Statistics Was Never Just About Numbers**

STUDENT BLOG : PRELUDE

VOICES

A POEM BY ANANYA ARORA, 4TH SEM

We call ourselves a small department, but somehow we carry more than our share, in classrooms, in corridors, in lives that are constantly running elsewhere.

From the outside, it looks composed, like we've figured numbers and time with ease, but inside we are still negotiating deadlines, learning how to breathe between degrees.

8:45 a.m. classes feel like a battle we never quite agreed to fight, and somehow the ones who live closest are always late, including me, despite.

There is always a practical waiting, another file that refuses to end, and an unspoken prayer to the FMS, chanting it like a prayer rather than a friend.

Time slips strangely here, between submissions, societies, and trying to do it all, because we were never meant to choose just one thing, instead, answer every call.

Sports, finance, consulting, music, dance, stages we move through without pause, as if slowing down would mean missing out on who we once thought we'd be because.

And in the middle of all this chaos, there are the people who anchor the pace, professors who hold their deadlines close, yet leave room for laughter in the same space.

We complain, we negotiate, we show up unprepared and still stay, but somewhere in between the bickerings, they become the reason we find our way.

And yet, beneath all of this movement, there are quieter things we don't always name, thoughts we set aside, telling ourselves we'll come back to them the same.

Because somewhere between exams, assignments, internships, and the rush to become, we forget that we were once allowed to pause, to feel, to be undone.

This section is for those moments, for everything we never fully process or say, for the parts of us that exist beyond performance, in a more honest, unguarded way.

Some of it may feel distant, some of it may feel too close to ignore, but all of it is us, as we are, and maybe a little more.

— DATA IN MOTION —

THE JESTER'S CALCULUS

AN INSIGHT BY SUHANA GUPTA, 8TH SEM

Lecture at 8:45, practice at 11, competition at 1 and a test at 3:30. That was my life for most of college. I was writing practicals during competitions and ideating plays in the shower. Juggling everything made me feel like a clown. Managing many positions of responsibilities alongside a demanding course like Statistics isn't easy at all. The intensity barely leaves any time to pause and that is exactly why many hesitate to take it on. I haven't mastered this balance, but going through it has taught me a lot. It gave me the chance and strength not just to be on stage, but to build and run it.

The first year felt manageable, almost like an extension of school. But the second year changed everything. I was elected as the General Secretary of the Department, while also serving as an active member of the annual street play production. On CV it might sound exciting, but that's when things got real. Ironically, I was playing a jester on stage, and honestly, it didn't feel like acting.

"The death of one man is a tragedy, the death of millions is a statistic."

~W.Beumelburg (1932)

The emotional pressure, academic load and constant exhaustion started piling up fast. What began as "just being busy" turned into overload. I was showing up everywhere, but not fully present anywhere. My academics suffered a setback, but more than that, it felt like I was constantly trying to catch up to a version of myself that kept moving further away. I wasn't sure I could keep up.

That phase forced me to confront a hard truth: I couldn't do everything alone. I had to learn delegation, specifically the kind where you let go of control and trust others to deliver.

My friends stepped in, sharing notes and practicals, and grounded me when I felt overwhelmed. I still remember a terrible statistical joke a friend made about "overfitting my life" by trying to manage everything at once. It was silly, but it stuck.

That shift changed how I approached everything. I learned how to function without burning out. And the difference showed. "Moments 2024" came together well. Our street play performances across Lajpat Nagar, Khan Market and Mukherjee Nagar drew incredible engagement; watching people stop, listen and respond to our work was a different kind of validation. That's when the thought first came, what if I directed next year?

But third year wasn't supposed to be the time for risks. The gamble of risking academics and my future was at stake, and I had already promised my parents I'd step back from theatre. But the thought never left... Convincing them took time, but they eventually gave in when they saw how much it meant to me, with one condition: that my academics wouldn't suffer. That year became about proving I could handle both. And so, I directed "Antraal: Anant Ki Aur."

When we began working on judicial delay, I was clear I didn't want to rely only on emotional storytelling. While my team focused on narratives, I brought in a statistical lens, studying reports, case data, judge-to-case ratios and the economic cost of each year of delay. What stood out most was the invisible cost, how many people don't even file cases because the trade-off isn't worth it. These weren't just numbers; they revealed a pattern. That's when it clicked, injustice isn't just moral, it's quantifiable, structural and often predictable. People don't just suffer from it, they calculate whether they can afford to fight it. Sitting with that data felt like the two halves of my college life finally speaking the same language.



This phase gave me direction. Theatre showed me the problems worth paying attention to, and statistics gave me a way to understand them beyond the surface. Together, they pushed me towards actuarial science and risk management at the intersection of data and social impact. I don't have everything figured out, but I know the kind of problems I want to work on. A junior once asked me how I managed both statistics and theatre. I didn't have a perfect answer. Because honestly, there isn't one. I just told her — if something matters enough, you make space for it. And you don't do it alone. Every main character needs a supporting cast. Mine showed up as professors who cut me slack, checked in, or simply kept things light when everything felt heavy. It might not have seemed like much to them, but it made a difference. The same goes for family and friends; they may not fully understand what you're juggling, but they show up when it counts.

So go for it. Take the risk. You don't find your footing by playing it safe — you find it by taking on more than feels comfortable and figuring it out as you go. And I am just getting started.

<https://www.alamy.com/stock-photo/goldman-sachs-building-new-york.html?pseudooid=4D082DE2-559B-411C-BAED-73156C9270A38&sortBy=relevant>

STEPS TO ONE OF THE DREAMS

GOLDMAN SACHS 101

A JOURNEY BY VANI BEDI, 6TH SEM

There's a version of this article that starts with "**here are 7 tips to get your dream internship.**" This isn't that article. I'm writing this because once I was a second-year student trying to figure out how to land internships without a cousin working at Goldman Sachs. I found Goldman's off-campus hiring program, applied, and somehow ended up spending my summer of 2025 working under the Corporate Planning and Management division of one of the most recognised financial institutions in the world. Round-trip flights were booked, and we were put up in a five-star hotel for the first week by Goldman. Walking into that lobby, I remember thinking: okay, this is actually happening. That first week was mostly about each other. Being in the same space as students from completely different academic backgrounds, cities, degrees, and ways of thinking was genuinely one of the highlights. You don't get that kind of concentrated, high-quality peer interaction very often, and I made some of the best connections of my college life in those few days.



<https://share.google/AZ0KFc5Tf3KZsy9UG>

Then came orientation at the Goldman Sachs Bangalore office, and I will not pretend it wasn't intimidating. Finance firms take compliance seriously in a way that most people outside the industry don't fully appreciate. We sat through rigorous compliance training, confidentiality protocols, information boundaries, and the works. One concept that genuinely fascinated me was the Chinese Wall. It's basically the formal separation between teams within the same Investment Banking division to prevent information from crossing when sensitive deals are in progress. That alone told me a lot about how seriously the firm thinks about governance.

Before the actual projects began, we had the GS Internship Ideation Challenge, a national-level competition where interns had to develop a financial product concept for HNI markets across India, China, and similar economies, presented in front of the Board of Directors, MDs, and VPs. Standing in a room making a business case to people of that seniority, as a college student, is not something you forget in a hurry. My actual internship fell under a governance-focused mandate, and I ended up being assigned two projects, most interns handled one, so the workload was real.

The bigger project involved a high-volume query management problem. Hundreds of queries were coming in through the ServiceNow portal daily, all being resolved manually, with turnaround times stretching anywhere from a few hours to a full day. I was asked to automate the entire workflow and bring that response time down significantly. Using Python for automation, Excel for data sorting and cleaning, Power BI for tracking and visualising the efficiency metrics, and GS AI to support the workflow build, I got the query resolution time from 24 hours down to under 2 minutes, achieving roughly 99% efficiency improvement. Seeing that number land in the final presentation was one of the best professional moments I've had.

The second project focused on identifying and eliminating duplicate entries across internal workflows, a less dramatic problem on the surface, but one that had real downstream impact on operational efficiency. We wrapped up with an AI bot implementation for the Travel and Expense team, which was truly exciting to be part of. And yes, our batch was among the first to get access to GS AI when it launched internally that summer. We also happened to be around when Rishi Sunak joined Goldman. Not a bad time to be an intern, haha.

The internship closed with a final presentation to the global team, including stakeholders from Dallas and New York alongside our division's MDs and VPs. Before that, there was a networking dinner with senior leadership, one of those evenings where you realise that the people at the top of these institutions are more human and approachable than you'd assumed. We also did a CSR initiative, going to a local school and painting the walls together, which was easily the most unexpectedly fun afternoon of the whole summer. I flew back to Delhi with a hard drive full of experiences and a clearer sense of what I'm capable of professionally.

If you're a student reading this and wondering how any of this becomes accessible to you, here's what I'd actually tell you, having been on the other side of that question not long ago.

Your CV is your first argument. Make it tight, make it quantified, and tailor it every time. One page. Numbers over descriptions. The tools I used at Goldman; Python, Power BI, Excel for data work were things I'd built familiarity with long before the internship. Certifications in relevant technical or domain skills signal that you're someone who learns on their own time, which matters.

Case competitions gave me the ability to think through business problems under pressure and present to people who push back. That skill showed up directly in the Ideation Challenge. I was also a part of the Mercedes-Benz Global Fellowship and selected for the HPAIR Harvard conference which pushed me into rooms I hadn't expected to be in, and built a kind of quiet confidence that comes from having already done hard things.

And for off-campus specifically: keep a very close eye on deadlines. Goldman's off-campus program is publicly available and genuinely merit-based, but it has a hard cut-off and it doesn't advertise itself loudly. The students who miss it usually miss it because they weren't looking. Be the one who's always looking.

WHAT LIES BEYOND AN ACTUARIAL DREAM?

ACTUARIAL REALITIES

A TRAIL BY AKSHITA MITTAL, 4TH SEM

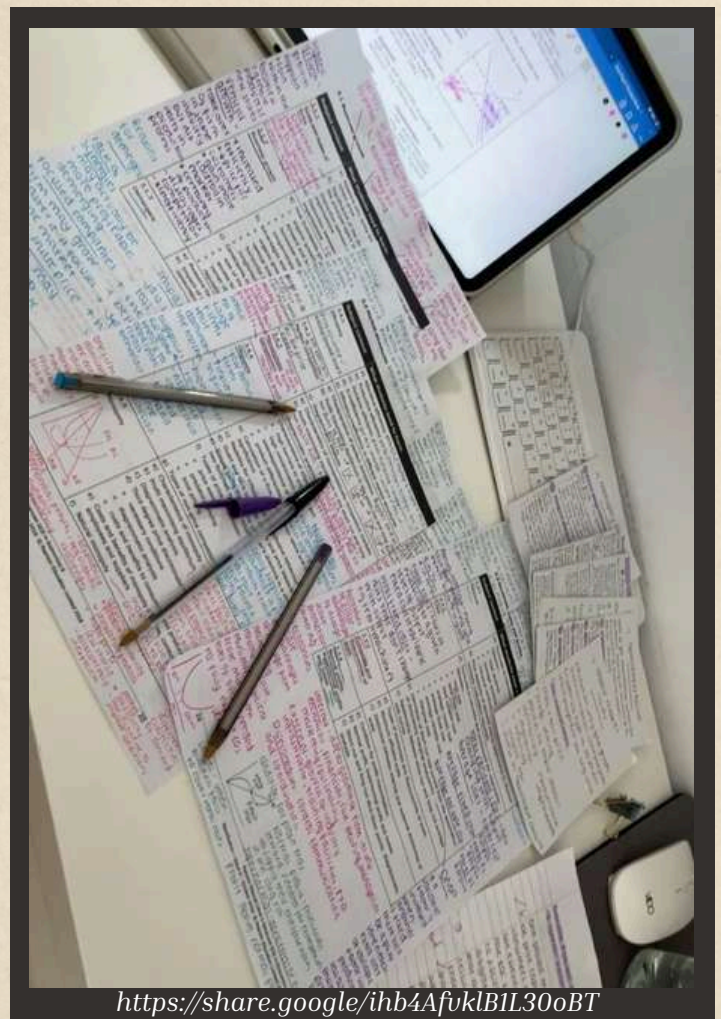
The screen flashes. Your result is out. You missed it - by a margin so small that it almost feels unreal. Every student enters this field with enthusiasm and energy. Almost everyone knows the grind behind these actuarial papers. It takes a certain level of courage to step into a field with passing rates as low as battery at 1% with no charger around. Most people think it's just about long hours of studying, clearing exams, and eventually landing a job. But what no one really talks about are the crucial life lessons it teaches beyond just clearing levels.

From the outside, the actuarial path seems linear - a structured and obvious climb. But anyone in it knows better. It is uneven. Unpredictable. And at times, deeply personal. Failure, here, comes far more often than success and far more unexpectedly, too. We grow up believing that failure is the total opposite of success. But this journey rewrites the idea of failure completely. In the actuarial world, it is not a contradiction to success but a part of it. It does not mean that you lack capability; rather, it shows that you are strong enough to face setbacks and move forward. Each failure pushes you one step ahead and makes you stronger to handle rejection with a content face.

Every setback also comes in with comparison. This journey is so highly unpredictable that at times, you may find yourself stuck on a single paper while others clear their exams in one go. It's easy to question your own ability in those moments. But the truth is, it's not always about capability; sometimes it's merely about the timing, circumstances and even luck for that matter. But comparison only weakens your spirit. And as we all know, if there is any competition worth holding onto, it is with your own previous self.

“Prediction is very difficult, especially if it’s about the future.”

~ Niels Bohr



<https://share.google/ihb4AfuklB1L30oBT>

And somewhere between failure and comparison, you learn patience.

Sitting for hours trying to understand complex concepts, and then struggling to apply them in exams. Preparing for months and still not getting the result you expected. All of this builds patience that helps you accept delays, handle failures, and keep going with sincerity. These couple exams test you in ways you would never imagine. None of this is talked about enough.

The actuarial community is also good at celebrating milestones but quieter about the stretches in between. The months where nothing happens. The phases where you're studying consistently and still not seeing the results. The moments where you genuinely don't know if you're on the right track, or if there is even one in the first place

And sometimes your own mind joins in. You start questioning why you're still doing this. You think about quitting, and honestly, it doesn't even sound that wrong at the moment. But then something pulls you back. You sit down again. You show up again. Not because you figured it all out, but because somewhere in you, you remember you signed up for this yourself.

That silence can be isolating, especially when you're already running low. But the ability to handle uncertainty, stay disciplined without being pushed, and keep showing up after setbacks, these are not soft qualities. In a profession that quite literally deals in risk and long term thinking, they are exactly what the work demands of you.

So what really lies beyond an actuarial dream? Not just a designation or a career but a version of you that has been genuinely tried and tested. Someone who has learned enough to sit with discomfort and still not flinch. Someone who has failed, and yet come back stronger. The journey doesn't just prepare you for the profession. It prepares you for far more than that. And perhaps that is the part worth talking more about..

EVERYDAY JOURNEYS OF STUDENT LIFE

FINDING LIFE ON THE METRO

A ROUTINE BY PRIYANSHI AND MEHER, 2ND SEM

There's a peculiar kind of life that unfolds between metro stations. Between home and college, between who you are and who you're becoming.

At first, it just feels like loss. Lost time, lost sleep, lost energy. You watch people who live closer to college and think about how much easier it would have been. The crowd, the sprinting, the clock-watching all add up to a low-grade exhaustion that follows you into the 8:45AM lecture.



<https://share.google/K14wHuLa7FAaKIkXd>

Some days it feels like the journey takes more out of you than the day itself. But somewhere along the way, without noticing exactly when, something starts adding up.

You learn where to stand to get a seat. You learn which benches are softer, which doors open faster, how to move with the crowd instead of against it. The system that once felt hostile starts to feel like something you belong to. That small feeling of having figured something out is quietly satisfying in a way that's hard to explain.

Then the metro becomes yours.

Headphones in, favourite song on, bag between your feet. For twenty minutes, nobody needs anything from you. You're not a student. You're not someone's child.

You're just a person on a train, thinking your own thoughts, at your own pace. It's loud and cramped and nothing like peace. But it becomes your space anyway, maybe the only part of the day that belongs entirely to you.

That is something nobody tells you about long commutes. Yes, they're tiring. But they also give you something rare: time that exists outside every role you play. The metro doesn't care who you are in class or who you are at dinner. It just carries you, and in that in-between, you start to notice yourself a little more clearly.

The small things start mattering too. An aunty's laughter at the front of the coach, a stranger quietly telling you they're getting off so you can take their seat, school kids spilling in after coaching, golden-hour light flooding the window on the way back.

These aren't remarkable moments. But they're real, and they're yours, and over time they add up to something that feels like home.

You stop dreading it and start looking forward to it. Not for any reason you can easily defend, but because it has become a part of your day. Imperfect, exhausting, and somehow, entirely yours.

The commute doesn't just take you somewhere. Over time, it shows you who you're becoming. In the quiet moments between stations, when no one is watching and nothing is expected, and you're just there, figuring yourself out.

—STATISTICS WAS NEVER JUST ABOUT NUMBERS—

THROUGH HER LENS

WITH YASHITA KHANNA, 8TH SEM

Ask Yashita Khanna what four years of Statistics Honours at Lady Shri Ram College for Women has given her, and she will tell you it was never just about the subject. It was about becoming, as she puts it, the most well-rounded version of herself. Here is how that happened.

Talking about the beginning, how did you end up in Statistics?

My stint with Statistics didn't begin smoothly. I remember struggling with mathematics during my school years. My teachers often pointed out the mistakes I used to make. Somewhere along the way, I accepted the idea that perhaps I wasn't meant for numbers. But I made a firm decision not to let it beat me anymore. So I worked hard despite my doubts, showed up every day with persistence, and when exams came around, I ended up securing a perfect score. From that point onward, my comfort with the subject grew, and over the years, I found myself excelling therein.

Fast forward to 2022, and I was offered Statistics Hons. at LSR. Realising that math and logic were at its core, that data-driven thinking was becoming indispensable in workplaces, and that there weren't many takers for it, I finally decided to take that path.

Since then, it is not merely a subject that I feel the need to study; it is a calling that I've been awakening to since the day I shook hands with it. And I am truly proud to have had the opportunity to associate myself with it.

And coming to LSR itself, what was that transition like?

My first reaction was disbelief. Nothing could have prepared me for what LSR held. Despite being generally comfortable with people, a part of me remained reserved for months because I did not wish to be judged. So for a while, I simply observed.

But slowly, this place pushed me out of my shell. I wanted my time here to be about more than just classroom learning, so I became my own sculptor, honing my abilities until I was confident enough to lead. Over the course of college, I headed four societies: the Editorial Board, Delta: The Analytics Cell, Global Youth LSR Chapter Foundation, and Interface: The Academic Forum of LSR. I began as a member and worked my way up to lead.

My idea of leadership was never about walking ahead of my teams, but in standing alongside them, listening and supporting before directing. That distinction mattered deeply, and it rewarded both my society and me in ways that made the experience truly meaningful.

How did the curriculum itself prepare for what came after?

More than I had expected, honestly. From the very beginning, the course emphasised working with data practically. Excel was non-negotiable and not just the basics, but advanced functions, real spreadsheet thinking, and regular hands-on work through lab sessions. Over time, we were also introduced to tools like R, Python, SQL and SPSS.

What I appreciated most was that these tools were always taught alongside theory. Concepts never stayed confined to books; they were constantly tied to practical application. So by the time I walked into my internship at Macquarie Group, I didn't feel like I was starting from zero.

Speaking of my internship, getting there wasn't entirely straightforward. My first attempt at the company's selection process in my second year ended in rejection. After that, I spent the next year intentionally upskilling, pursuing targeted certifications, traineeships, and building a portfolio that would allow me to apply again with greater confidence in my fourth year.

When the opportunity came around again in my final year, I reapplied and was fortunate to secure the role. During that summer internship, many of my academic learnings came together. I worked on automating dashboards and also undertook an independent project on Value at Risk using Monte Carlo simulations, drawing directly from what we had studied in our statistics coursework. Seeing those academic concepts translate into a real corporate finance context was validating in a way that is hard to put into words.

Yashita graduates this year, stepping into whatever comes next with the same quiet steadiness that carried her through four years of becoming. The journey, as she would tell you, was always the point.

How has the fourth year experience really been?

As much as we were looking forward to the research year in Statistics at LSR, there was a great deal of genuine uncertainty. Alongside our regular coursework, writing and publishing a research paper is no small ask. The program itself was new and hence unconventional, not just for us but also for the faculty and college administration.

For those of us who stayed, the year has been demanding. We navigated advanced subjects, monthly research presentations, and the simultaneous pressure of preparing for master's applications or competitive exams. There were moments where we found ourselves carefully weighing risks and making one cautious decision at a time - and in hindsight, I completely understand why the uncertainty felt real.

But despite all this, the faculty met us exactly where we were. Deadlines were often made flexible to accommodate our needs, and professors remained approachable, offering guidance and support to us at all times. And then there was the batch itself. Being a group of just eleven students meant that we leaned on each other more than any of us had anticipated - and quite beautifully so. There were study sessions that were as much about holding each other together as about finishing assignments, breaks where we laughed stress away, and lunch gatherings where time seemed to move far more quickly.

That small group, in a strange way, is now walking away with a depth of engagement and understanding that the previous three years simply could not have offered - and perhaps that has been our quiet reward too.



A DEPARTMENT OF STATISTICS PRODUCTION, LSR

LATEST ISSUE

20/04/2026

MOMENTS OF PRIDE

STUDENT ACHIEVEMENTS & ACCOMPLISHMENTS

FEATURING:

- Our Internships & Placements
- Our Achievements

ACHIEVEMENTS AND ACCOLADES

STUDENT SPOTLIGHT

CELEBRATING THE ACCOMPLISHMENT OF OUR STATISTICIANS

OUR INTERNSHIPS & PLACEMENTS



Placement offers



Internship Offers



Highest Package



Highest Stipend



Average Package



OUR ACHIEVEMENTS

1. Anushka Saini, Semester 4 - Presented a Research Paper: "From data to Decisions" at XIM Bhubaneswar
2. Ananya Arora, Semester 4 - National Finalist - HSBC X HKU India Business Case Program (Top 24 out of 10,000+ students)
3. Deepti Maurya, Semester 6 - National Winner - Strategy Showdown by Master's Union & IIT Roorkee
4. Srishti Mor, Semester 6 - Presented a Research Paper: "Reimagining India's Development" at the International Conference 2026.
5. Anushka Saini, Semester 4 - National Finalist at Accenture Strategy Connect Season 4 (Top 12)
6. Vrinda Agarwal, Semester 4 - National Rank 2 at SRCC Business Conclave
7. Anvesha Dixit, Semester 6 - Founder - The Conviction Lab (a problem-first startup lab)
8. Vibhuti, Sayesha, Aanya & Mihika, Semester 2 - National Winners- Confluence, SVC

PEOPLE BEHIND THIS ISSUE

POST CREDITS

A NOTE OF THANKS FOR EVERYONE'S HELP

OUR ESTEEMED FACULTY ADVISORS



Prof. Renu Kaul



Prof. Anuradha Sarkar



Ms. Sakshi Soni

CONTRIBUTORS



Yashita Khanna



Vani Bedi



Samridhi Sangar



Sakshi Kumar



Radhika Mendiratta



Khushi Tyagi



Mihika Kumar



Himanshi Gupta



Deepti Maurya



Alankrita Kagra



Shaanvi Kachroo



Pragati Arya



Riya Singh



Ridhi Anand



Nishtha Manocha



Akshita Mittal



Akriti Gupta



Suhana Gupta

To every contributor who trusted us with a piece of themselves, whether through writing, research, art, poetry, or design, this magazine would simply not exist without you. Your words, ideas, and creativity are what give these pages life. To those who worked behind the scenes, building and shaping the visual identity of this publication, your effort is felt on every page. This means more to us than we can put into words.

