RUPAM KUMARI

rupam.singh027@gmail.com| 857-829-8786 | https://www.linkedin.com/in/rupamk/

EDUCATION

Tufts University | MS in International Business | **GPA: 3.7/4** | **MA, USA**
Harvard Business School | Cross Registrant | *August 2025*
Graduate Coursework: Managing Service Operations (HBS), Strategy Execution (HBS), Applied Data Science; Research and Analysis; Technology Policy; Artificial Intelligence: Algorithms, Ethics, and Policy

Tata Institute of Social Sciences | Integrated Master's in Social Sciences | **GPA: 3.5/4** | **Mumbai, India**
Graduate Coursework: Quantitative Economics, Econometrics, Field Research and Data Analysis | *May 2017*

RESEARCH PROJECTS

- ***Process Excellence, Digital Measurement & Performance Systems (Tata Motors)***
  Conducted comparative analysis of global process excellence frameworks (EFQM, CMMI, ISO, Kaizen, Quality 4.0) and developed a self-assessment scoring model integrating digital metrics, operational performance, and organizational learning. Designed maturity-level scoring matrices to enable benchmarking, longitudinal tracking, and data-driven performance management in large organizations.

- ***AI, Digital Economy & Cross-Country Technology Readiness (Tufts University)***
  Conducted AI-driven empirical analysis of the global digital economy by integrating multi-source datasets to assess AI readiness, digital trust infrastructure, and cloud adoption across 125 countries. Constructed composite indicators to examine cross-country heterogeneity in digital capability and long-run innovation trajectories and developed an interactive Power BI dashboard (30+ indicators) for comparative analysis.

- ***Impact Investing, Technology & Social Outcomes (Kapor Capital)***
  Awarded "Most Innovative Project" for comparative portfolio analysis examining how venture capital allocation and technology investments drive social outcomes. Evaluated both financial performance metrics (ROI, portfolio returns) and non-financial impact indicators (job creation, education access, diversity in founding teams), applying economic reasoning to assess trade-offs between financial returns and social impact.

- ***Corporate Financial Performance, Risk & Operational Efficiency (Tyson Foods)***
  Performed firm-level financial and operational analysis using publicly available data, applying ratio analysis, DuPont decomposition, and cash-conversion-cycle analysis to examine profitability, leverage, liquidity, and operational efficiency. Analyzed risk exposure and mitigation strategies (commodities, FX, interest rates) and assessed implications for operations, capital structure, and long-term performance.

- ***Financial Inclusion & Digital Infrastructure in India (GIS-Based Analysis)***
  Conducted geospatial and quantitative analysis to identify determinants of financial inclusion across Indian states, integrating socio-economic, infrastructure, and banking-sector data. Applied spatial ranking and correlation analysis to evaluate how digital infrastructure and institutional capacity influence financial inclusion outcomes, informing policy and operational interventions.

- ***India's Unified Payments Interface (UPI) & Digital Payments Adoption (Tufts University)***
  Analyzed India's UPI digital payments ecosystem to study technology adoption, financial inclusion, and transaction-level scalability. Examined institutional design, network effects, and infrastructure readiness shaping digital payment diffusion, with implications for platform economics, service operations, and technology-enabled financial inclusion.

- ***From Access to Adoption: Digital Public Infrastructure & Financial Empowerment in India (Hitachi Center for Technology and International Affairs, Tufts University)***
  Conducted a mixed-methods empirical study of India's Digital Public Infrastructure (Aadhaar, UPI, PMJDY) to evaluate the access - adoption gap and behavioral barriers to digital finance. Integrated national datasets with firm-level operational data to assess the effectiveness of hybrid human-assisted digital models and their impact on adoption and empowerment outcomes.

RESEARCH METHODS & ANALYTICAL FRAMEWORKS

- *Operations & Performance Measurement:* Competitive benchmarking, Performance metric and KPI design, Scoring and weighting system development, Benchmarking and maturity-model analysis, Longitudinal performance tracking, Process excellence and quality framework evaluation, Incentive and measurement system design, Cost-effectiveness analysis, Incentive and feedback-loop analysis, Root cause analysis (bottleneck, failure-mode, and variance analysis)
- *Quantitative & Statistical Analysis:* Regression analysis (OLS, multivariate regression), Difference-in-differences (DiD)
- *Economic & Cost Analysis:* Cost-benefit analysis, Cost-effectiveness and ROI evaluation
- *Field & Mixed-Methods Research:* Survey design, Mixed-methods research design (quantitative + qualitative integration), Feasibility and pilot evaluation studies

TECHNICAL SKILLS

- *Statistical & Programming Tools:* Python (data cleaning, exploratory analysis), R (statistical analysis, regression modeling), STATA (econometric analysis, panel and observational data)
- *Data Analysis & Visualization:* Power BI (analytical dashboards, longitudinal tracking), Tableau (comparative and exploratory visualization), Advanced Excel (data manipulation, financial and operational analysis)
- *Survey, Field & Behavioral Data Tools:* SPSS (survey analysis, descriptive and inferential statistics), Qualtrics (survey design and administration)
- *Geospatial & Spatial Analysis:* ArcGIS (spatial analysis, mapping, regional heterogeneity analysis)

- *Data Systems & Research Infrastructure:* SQL (data querying and extraction), CRM / MIS systems (structured data capture, monitoring, and analysis), ERP systems (NetSuite, Oracle) for operational and financial data extraction

EXPERIENCE

TATA MOTORS **NJ, USA**
Business Analyst | Business Excellence Division *Feb 2024- Aug 2024*
Conceptualized performance assessment framework across 11 departments by integrating 12 global excellence models, enabling continuous improvement across 3 BUs (EV, CV, and PV).

- Performance Optimization: Identified capability gaps in TBEM by benchmarking global excellence models like Kaizen, EFQM and designed a self- assessment tool for various functions and align with global standards
- Comparative Analysis: Conducted comparative maturity and gap analysis across three business units (EV, CV, PV), examining heterogeneity in operational capabilities and continuous improvement practices.
- Cross-Functional: Collaborated with senior leadership across all verticals including supply chain; integrated a unified analytics dashboard projected to drive a 15% improvement in operational efficiency and track performance management
- Workflow Management: Designed and operationalized a performance scoring system, integrated into enterprise dashboards to support benchmarking, incentive alignment, and decision-making.

RELIANCE INDUSTRIES LIMITED **Mumbai, India**
Business Analyst | Retail- Strategy and Operations *Mar 2022 - Aug 2023*
Empirical analysis of digital service operations, performance measurement, and behavioral outcomes using large-scale operational data.

- Digital Transformation: Collaborated with AWS to deploy AI-led customer service solutions including chatbots and automated workflows; improved SLAs and contributed to a 13% increase in digital sales through reduced query resolution time
- Consumer Insights: Conducted quantitative analysis on 60K+ customer observations to identify behavioral drivers of digital adoption and service usage, translating findings into hypotheses on product–market fit and regional heterogeneity in adoption patterns.
- Operational Performance Measurement: Designed a vendor performance measurement framework and Tableau-based dashboard to track quality, lead time, and fulfillment reliability across geographies, enabling comparative analysis of operational performance variation among suppliers.
- Data Quality: Worked closely with backend data delivery teams to validate transactional and customer interaction data, ensuring clean pipelines for for empirical analysis and performance evaluation

MASSACHUSETTS INSTITUTE OF TECHNOLOGY / (J-PAL at MIT RESEARCH LAB) **Delhi, India**
Consultant | Quantitative Research & Field Operations *Dec 2019 - Feb 2022*
Conducted field-embedded quantitative research on housing finance and credit access, integrating survey data, geospatial analysis, and operational metrics while managing large-scale data collection and field logistics.

- Project Management: Managed delivery of a $170k project, led a cross-functional team of 10+ to deliver program milestones, define KPIs, and ensure timely execution through structured reporting
- Research Execution: Managed a large-scale consumer survey focused on housing and credit access, by deploying geospatial and behavioral analysis tools (ArcGIS) to support regional targeting, partner alignment, and market expansion decisions
- Data Management: Led and trained field teams and partner staff on data collection protocols, MIS usage, and dashboard interpretation, improving compliance with research protocols and consistency in reporting
- Stakeholder Training: Designed and delivered targeted training sessions for partners and field teams on data collection protocols, dashboard interpretation, and field reporting tools

SUNBIRD BIOENERGY **Mabilifu, Sierra Leone**
Business Development Manager | Digital Operations & Field Implementation *June 2017 - Nov 2019*
Conducted field-based analysis of digital system design and technology adoption, focusing on how operational frictions and digital interventions affect participation, payments, and service scalability.

- Technology Adoption & Behavioral Response: Led a digital financial inclusion intervention (bank partnerships and training) for 10K+ unbanked suppliers, resulting in a 37% increase in service adoption and improved operational continuity.
- Revenue Growth: Led end-to-end business development lifecycle - from RFP drafting to pitch delivery - resulting in $96K in new revenue
- Process Optimization: Managed a 7-member team to conduct behavioural segmentation and streamline end-to-end data workflows, driving an 18% uplift in user acquisition across priority customer segments
- CRM Optimization: Built a custom CRM-based MIS to track supplier profiles, training completion, delivery timelines, and payment status, enabling data-driven coordination and performance monitoring.

LEDERSHIP AND INITIATIVES

- Semi-finalist, Fletcher D Prize Competition, Developed a proposed digital marketplace model for MSME loan distribution.
- Organizing Committee Member, Global Innovation & Entrepreneurship Symposium (GIES), Tufts University - Supported speaker coordination, and event execution.
- Recipient, Most Innovative Project Award, Impact investing research and portfolio analysis conducted in collaboration with Kapor Capital.
- Community Service, Robin Hood Army, led a partnership initiative with Uber India to facilitate free COVID-19 vaccinations for 400+ elderly individuals.