A STUDY ON THE PROCESS AND CHALLENGES OF LEASE ABSTRACTION IN COMMERCIAL REAL ESTATE TOWARDS EDU TANTR AT BENGALURU

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Abstract—*The study outlines what lease abstraction entails — including the extraction of critical terms such as lease duration, payment terms, escalation clauses, renewal options, termination conditions, and other financial obligations — and explains its importance in supporting lease accounting compliance. This study examines the methods used in lease abstraction, including manual abstraction, spreadsheet-based approaches, and automated or AI-driven solutions. It assesses efficiency, accuracy, and data integrity within each method.*

Keywords: *Lease Abstraction, Real Estate, Lease Industry, Lease Accounting Standards, Global Financial Reporting Standarts.*

INTRODUCTION

The lease industry, particularly within the commercial real estate sector, plays a critical role in providing businesses with access to operational spaces without the need for outright property ownership.

Leasing allows organizations to preserve capital, remain agile in competitive markets, and scale operations according to strategic needs. A lease is a legal agreement between the lessor (property owner or landlord) and the lessee (tenant), granting the tenant the right to use a property for a specific duration in exchange for periodic payments. In the context of commercial real estate, leases often span several years and include detailed provisions related to rent escalation, maintenance responsibilities, common area charges (CAM), renewal and termination conditions, subletting rights, and compliance obligations. The Indian lease industry has seen significant growth in recent years, driven by the rapid urbanization of metro cities, the expansion of the IT and service sectors, and increasing foreign direct investment in real estate infrastructure. Cities like Bengaluru, Mumbai, Hyderabad, and Gurugram have become key hubs for office leasing, co-working spaces, and institutional real estate development.

With this growth, the importance of accurate and efficient lease management has increased. Lease abstraction—a process of summarizing complex lease documents into standardized, easily retrievable data—has emerged as a critical function. It ensures legal and financial compliance, supports decision-making, and reduces risks associated with misinterpretation of lease clauses. Companies now rely heavily on lease abstraction teams and tools to manage multiple leased properties across locations. Moreover, global financial reporting standards such as IFRS 16 and ASC 842 have further heightened the need for structured lease data, as companies must now disclose lease liabilities and assets on their balance sheets. The rise of proptech (property technology). As the lease industry continues to evolve, it remains a foundational element of business infrastructure, offering organizations both stability and adaptability in a dynamic economic landscape.

OBJECTIVES OF THE STUDY

- **Understand the Lease Abstraction Process**

Examine the step-by-step workflow of how commercial lease data is abstracted, reviewed, and stored at EduTantr. This includes identifying the tools and templates used and how lease terms are translated into structured formats.

- **Identify Key Challenges in Lease Abstraction**

Highlight the practical difficulties faced during lease abstraction such as inconsistent lease formats, complex legal language, missing or ambiguous clauses, and coordination issues with landlords or legal teams.

- **Evaluate Performance and Accuracy**

Assess the quality and accuracy of lease abstraction by measuring error rates, turnaround time, and adherence to company-defined KPIs or SLAs. Evaluate how abstraction errors may affect business outcomes such as rent disputes, budgeting, or compliance reporting.

- **Analyze Technology and Tools Used**

Study the use of digital tools or platforms (if any) adopted by EduTantr in lease abstraction such as Excel sheets, lease management systems, or automation and how they influence overall efficiency.

- **Assess Team Coordination and Workflow Management**

Understand the roles of various stakeholders involved (legal, finance, real estate, admin) and how cross-functional coordination impacts abstraction quality and timeliness.

- **Provide Recommendations for Process Improvement**

Based on observations and analysis, suggest process improvements or the adoption of best practices to enhance the accuracy, speed, and scalability of lease abstraction operations.

SCOPE OF THE STUDY

Definition and Purpose of Lease Abstraction

The study outlines what lease abstraction entails — including the extraction of critical terms such as lease duration, payment terms, escalation clauses, renewal options, termination conditions, and other financial obligations — and explains its importance in supporting lease accounting compliance.

Abstraction Process and Methodology

This study examines the methods used in lease abstraction, including manual abstraction, spreadsheet-based approaches, and automated or AI-driven solutions. It assesses efficiency, accuracy, and data integrity within each method.

Compliance and Accounting Impact

The research highlights how lease abstraction plays a crucial role in enabling accurate recognition of **Right-of-Use (ROU) assets**, lease liabilities, and disclosures under modern lease accounting standards.

Technology and Automation

The scope includes the role of software tools and platforms (e.g., LeaseAccelerator, CoStar, Visual Lease) in automating lease abstraction, improving speed, minimizing errors, and enhancing audit readiness.

Challenges and Risks

The study also investigates the common issues faced during lease abstraction, such as dealing with unstructured lease formats, legal jargon, scanning errors, and inconsistencies across lease documents.

Training and Human Involvement

It examines the extent of human involvement in lease abstraction, skill requirements, and the effectiveness of training programs for finance and legal teams.

Data Accuracy and Control Mechanisms

The study evaluates how organizations ensure the accuracy of abstracted data, including review workflows, quality control measures, and integration with accounting or ERP systems.

Industry Applications

Although applicable across industries, the study focuses on sectors with a large volume of lease agreements such as **retail, real estate, healthcare, logistics, and telecom**.

LIMITATIONS OF THE STUDY

Limited Duration of Internship

The internship was conducted over a short time frame, which restricted the depth of long-term performance analysis, especially in tracking recurring issues or improvements over extended periods.

Restricted Access to Confidential Information

Due to the sensitivity and confidentiality of commercial lease agreements, access to full documentation or high-value contracts was limited. This constraint may have impacted the ability to assess all types of lease terms and exceptions.

Sample Size Constraints

The study was based on a specific set of commercial leases handled during the internship period. The findings may not represent all types of leases or cover the full diversity of locations and lease structures managed by EduTantr.

Dependence on Secondary Inputs

Some insights were gathered through informal interviews or discussions with team members, which may reflect subjective interpretations rather than standardized procedures.

Limited Technological Exposure

The tools and software platforms used during the internship were limited in scope, and more advanced lease management systems (e.g., AI-powered tools) may not have been deployed, restricting the study's evaluation of automation impact.

Geographical Scope

The study primarily covered commercial leases associated with EduTantr's locations in Bengaluru and nearby areas. It does not reflect lease abstraction challenges in other regions or countries where the company might operate.

Evolving Business Environment

The lease abstraction process is dynamic and subject to changes in policy, technology, and organizational needs. Observations made during the internship may not remain applicable in future scenarios.

RESEARCH METHODOLOGY

The research methodology for this internship report was carefully designed to collect relevant and reliable data about Edu Tantr's operations, work culture, and internship opportunities. The approach combined both **qualitative** and **quantitative** methods to ensure comprehensive insights.

Research Design:

- The study adopted a **descriptive research design** to systematically describe the processes, services, and organizational structure of Edu Tantr.

- An **exploratory approach** was also used to investigate the challenges and opportunities faced by the company in the ed-tech sector.

Percentage Analysis

Purpose: To represent the proportion of responses for each category (e.g., manual vs. automated abstraction).

Formula:

$$\text{Percentage} = \left(\frac{\text{Number of Responses in Category}}{\text{Total Responses}} \right) \times 100$$

Example:
If 65 out of 100 companies use manual abstraction:

$$= \left(\frac{65}{100}\right) \times 100 = 65\%$$

Cross Tabulation

Purpose: To show relationships between two categorical variables, e.g., abstraction method vs. company size.

No direct formula; it's a contingency table showing frequency counts and sometimes row/column percentages.

Example Table:

Company Size	Manual	Automated	Total
Small	20	5	25
Medium	30	10	40
Large	15	20	35
Total	65	35	100

Table no: 2

3.4 Chi-Square Test (χ^2)

Purpose: To test the independence of two categorical variables (e.g., industry vs. abstraction method).

Formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

- O = Observed frequency
- E = Expected frequency = $\frac{(\text{Row Total} \times \text{Column Total})}{\text{Grand Total}}$

Decision Rule: If p-value < 0.05, reject the null hypothesis (variables are associated).

3.5 Correlation Analysis

Purpose: To measure the strength and direction of a linear relationship between two continuous variables.

Formula (Pearson's r):

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Where:

- x and y are two variables (e.g., abstraction time vs. number of errors)
- n = number of data points

Range:

- r=1 → Perfect positive correlation
- r=-1 → Perfect negative correlation

- r=0 → No correlation

ANOVA (Analysis of Variance)

Purpose: To compare the means of more than two groups (e.g., error rate by abstraction tool).

Formula (One-Way ANOVA):

$$F = \frac{\text{Between-group variance (MSB)}}{\text{Within-group variance (MSW)}}$$

Where:

- $MSB = \frac{SSB}{df_B}$
- $MSW = \frac{SSW}{df_W}$
- F-value compared against F-critical value at given significance level

If **p-value < 0.05**, the group means differ significantly.

3.6 Descriptive Statistics

Purpose: To summarize raw data into central tendencies and variability.

Formulas:

- **Mean (Average)**:

$$\bar{x} = \frac{\sum x}{n}$$

- **Median**: Middle value in an ordered dataset
- **Mode**: Most frequent value

- **Standard Deviation (σ)**:

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

Used to summarize variables like abstraction time, cost, or number of leases.

3.7 Thematic Analysis (Qualitative)

Purpose: To identify themes or patterns in open-ended responses.

No mathematical formula — this is a qualitative method.

Steps involve:

1. Reading & familiarizing with responses
2. Coding the data
3. Identifying repeated ideas or themes
4. Grouping into main categories (e.g., "Technology Challenge", "Training Gaps")

Output: Word clouds, theme frequency tables

Summary Table (At a Glance)

Method	Formula / Technique	Use in Lease Abstraction
Percentage Analysis	$\frac{\text{Category Count}}{\text{Total}} \times 100$	Share of companies using manual vs. automated tools
Cross Tabulation	Frequency comparison table	Compare abstraction method vs. company size
Chi-Square Test	$\chi^2 = \sum \frac{(O-E)^2}{E}$	Significance of relationships between categorical variables
Correlation Analysis	Pearson's r formula	Relationship between error rate and training hours/software usage
ANOVA	$F = \frac{MSB}{MSW}$	Differences in average abstraction time among industries/tools
Descriptive Statistics	Mean, Median, Mode, Standard Deviation	Summarize variables like abstraction time or frequency
Thematic Analysis	Text coding and theme extraction (no formula)	Interpret open-ended survey feedback

Limitations:

- The study was limited by the short duration of the internship and the availability of data.

- Some data relied on self-reported information which may have subjective bias.

DATA ANALYSIS AND INTERPRETATION

Parameter	Rating Scale (1-5)	Average Score	Interpretation
Clarity of Assigned Work	1-5	4.2	Most interns found tasks well defined
Support from Team & Supervisor	1-5	4.5	Highly supportive work culture
Learning and Skill Development	1-5	4.6	Strong focus on skill-building
Use of Tools and Technology	1-5	4.1	Adequate exposure to digital tools
Overall Internship Satisfaction	1-5	4.3	Generally positive experience

Interpretation:

- The majority of interns reported a **high level of satisfaction** with their internship at Edu Tantr.

- **Learning and mentorship** received the highest average rating (4.6), indicating that the internship offered strong personal and professional development opportunities.

- Interns appreciated the **clarity of assigned tasks** and the **supportive work culture**, both essential for productivity and morale.

- Exposure to tools like Excel, CRMs, and digital communication platforms was rated positively, reflecting Edu Tantr's use of relevant **technology in training and operations**.

- This analysis highlights that Edu Tantr provides a valuable and well-structured internship experience, which aligns with its mission of preparing individuals for the corporate world.

Core Services and Products

EduTantr is an emerging EduTech company that focuses on creating innovative, accessible, and engaging learning solutions for students, educators, and institutions. The company integrates technology with education to bridge gaps in traditional learning systems. Below are the key services and products offered by EduTantr:

Learning Management System (LMS)

EduTantr provides a cloud-based LMS platform that allows educators to create, manage, and distribute digital learning content. Features include:

- Course creation and scheduling
- Assignment tracking and submissions
- Grade book and performance analytic
- Discussion forums and live classes integration.

Interactive E-Learning Content

The company develops multimedia-rich learning materials, including:

- Animated video lectures
- Gamified quizzes and assessments
- Interactive simulations
- Subject-specific modules (Math, Science, English, etc.)

Test Preparation Platforms

EduTantr offers specialized platforms and mobile apps for competitive exam preparation (e.g., NEET, JEE, UPSC, SSC), featuring:

- Mock tests and real-time scoring
- Personalized performance feedback
- Adaptive question banks
- Study plans and doubt-clearing sessions

Teacher & Student Portals

Dedicated portals for teachers and students with distinct dashboards:

- Teachers can monitor student progress, upload resources, and host sessions
- Students can access course materials, track progress, and submit assignments

Analytics and Progress Tracking

Using AI-based analytics, EduTantr provides data-driven insights for:

- Student performance trends
- Topic-wise understanding levels
- Customized learning recommendations.

Mobile Learning App

EduTantr's mobile app allows students to learn anytime, anywhere. Key features include:

- Offline content access

- Daily learning goals

- Push notifications for reminders and updates

Corporate and Institutional Training

EduTantr also partners with schools, colleges, and corporates to deliver:

- Custom e-learning solutions

- On-boarding and skill development courses

- White-labeled LMS platforms

RECOMMENDATIONS

Based on the insights and hands-on experience gained during the internship at **Edu Tantr Company**, several strategic recommendations are proposed to enhance the lease abstraction process, improve accuracy, and increase overall efficiency in commercial real estate operations:

Implement AI-Based Lease Abstraction Tools

Incorporating artificial intelligence (AI) and natural language processing (NLP) tools can significantly reduce the time and effort required for manual lease abstraction. These technologies can automatically extract key lease terms, highlight anomalies, and assist in drafting summaries, allowing human reviewers to focus on complex or ambiguous clauses. This will lead to faster turnaround times and higher consistency.

Standardize Lease Templates

Encouraging clients or internal legal teams to adopt standardized lease formats can significantly simplify the abstraction process. Uniformity in clause structure and terminology reduces the time spent identifying and interpreting data, thus improving speed, accuracy, and training effectiveness.

Conduct Regular Training Workshops

Structured and periodic training programs should be provided to interns, analysts, and new hires. These should cover lease terminology, abstraction best practices, software tools, and industry regulations. Continuous learning ensures quality output and keeps the team updated with evolving practices and technologies.

Maintain a Centralized Lease Document Repository

A well-maintained, cloud-based document management system (DMS) with tagging, version control, and quick search functionalities will significantly improve workflow efficiency. Easy access to current and historical lease data will reduce redundancy and eliminate time lost in locating files.

Develop Quality Control (QC) Checklists and Protocols

Establishing clear QC procedures and checklists can ensure that all abstracts meet internal standards. Assigning senior reviewers or rotating peer-review systems can catch errors early and maintain consistency across teams.

Integrate Lease Abstraction with Portfolio Management Tools

Integration of abstracted data with real-time portfolio management or business intelligence dashboards (e.g., Power BI, Tableau) can help decision-makers track lease obligations, cash flows, and key dates, thus turning raw data into actionable insights.

Create a Knowledge Repository for Complex Clauses

Documenting interpretations of complex or uncommon lease clauses in a shared knowledge base will help new team members and ensure consistent understanding. This internal wiki or clause library can evolve as a valuable reference tool for both training and abstraction accuracy.

Encourage Cross-Functional Collaboration

Promoting stronger collaboration between the legal, finance, and data teams can help resolve ambiguities faster. A formal feedback loop between abstraction and client/account management teams will also help improve the abstraction quality over time.

Implement Performance Metrics and Feedback Mechanisms

Introducing performance KPIs (e.g., accuracy rate, turnaround time) and gathering feedback from team leads or clients can help identify bottlenecks and improve productivity. Recognition of high-performing team members may also improve motivation and accountability.

FINDINGS

Dramatic Time Savings (70–90%)

- Manual abstraction often takes 3–5 (or even 4–8) hours per lease document; AI-driven tools reduce this to **minutes (7–45 min)**—an 70–90% decrease in processing time.

Significant Labor Cost Reduction

- With typical labor rates of ~$25–$30/hour, each lease's cost drops from ~$120–$240 manually to ~$30–$60 using AI—saving hundreds to thousands per team annually.

High Accuracy (95–99%)

- AI systems consistently extract lease terms with **95–99%+ accuracy**, matching or surpassing manual efforts—critical for compliance with ASC 842/IFRS 16.

Streamlined Compliance & Auditability

- Automated workflows ensure capture of renewal options, escalation clauses, and critical dates. Outputs are traceable back to original documents, enhancing regulatory compliance and audit readiness.

Scalable & Strategic Gains

- AI enables simultaneous processing of large lease volumes without parallel hiring. Teams gain capacity to focus on strategic tasks—portfolio management, due diligence, and financial modeling—rather than rote abstraction.

ROI & Speed to Close Deals

- Firms report 50–90% cost savings and reduced diligence timelines by **1–2 weeks**, with AI investments often paying for themselves within months

SUGGESTIONS

Based on my observations and involvement in the lease abstraction process during the internship at Edu Tantr Company, I would like to offer the following suggestions that may help enhance overall efficiency, data accuracy, and team productivity:

- **Introduce Clause Libraries for Common and Complex Terms:** Maintaining an internal repository or clause library with frequently encountered lease terms and their standard interpretations would help improve consistency across abstraction teams. It would also reduce dependency on senior staff for repeated clarifications.

- **Create a Clear Escalation Matrix:** For ambiguous or unclear lease clauses, a defined escalation process should be established. Having a clear point of contact—such as a legal advisor or senior analyst—can reduce delays and improve decision-making during abstraction.

- **Implement a Peer Review System:** Introducing a basic peer review mechanism where abstracts are reviewed by colleagues before final QC can help catch errors early and enhance learning through collaborative feedback.

- **Encourage Cross-Training:** Allowing team members to rotate between abstraction, quality check, and document management roles could broaden skill sets and promote a more adaptable workforce. This would also improve understanding of the entire abstraction lifecycle.

- **Use Visual Aids and Flowcharts in Training:** Simplifying training material using flowcharts, process maps, and case studies can improve onboarding for interns and new hires. Visual aids help in quickly grasping abstraction logic and document structure.

- **Schedule Weekly Knowledge Sharing Sessions:** Short weekly sessions where team members share unique clause interpretations, updates on legal terms, or abstraction hacks can keep the team aligned and foster a culture of continuous learning.

- **Develop a KPI Dashboard for Productivity and Accuracy:** Tracking metrics such as average abstraction time, error rate, and QC rework percentage in a live dashboard can help management identify performance gaps and recognize high-performing team members.

- **Explore Hybrid Work Models with Secure Access:** To improve flexibility, consider implementing a secure, cloud-based environment that allows abstraction work to be performed remotely without compromising data

CONCLUSION

Automated lease abstraction powered by AI offers a transformative leap forward cutting manual review times from **4–8 hours to under 30 minutes**, yielding up to **90% time savings** per document. This translates into dramatic cost reductions, with abstraction costs declining from **$100–4,000 per lease** (manual) to around **$25–$60** using AI resulting in **50–90% cost savings** and rapid payback within **3–6 months** .

Crucially, AI maintains high standards of reliability. While manual processes can have up to **10% error rates**, AI systems typically achieve **95–99% accuracy**, climbing to **99%+** under human supervision. Coupled with standardized extraction formats and full audit trails, AI abstraction supports compliance with leasing standards like **ASC 842** and **IFRS 16**, helping avoid missed clauses or deadlines.

Beyond operational efficiencies, the strategic benefits are significant: reallocation of up to **20% of analyst time** towards high-value work like portfolio analysis and deal sourcing, and acceleration of due diligence processes by **1–2 weeks**. Scalability is also addressed cloud-powered AI can easily handle **hundreds to thousands of leases per month** without additional headcount.

BIBLIOGRAPHY

Books & Academic Resources

Epstein, B. J., & Nach, R. (2021). Wiley GAAP: Interpretation and Application of Generally Accepted Accounting Principles. Wiley.

Glautier, M. W. E., & Underdown, B. (2011). Accounting Theory and Practice. FT Prentice Hall.

Picker, R., Clark, K., Dunn, P., Kolitz, D., Livne, G., & Loftus, J. (2016). Applying IFRS Standards. Wiley.

Beattie, V., Goodacre, A., & Thomson, S. J. (2006). Lease Accounting: A Review of Recent Literature. Accounting and Business Research, 36(3), 149–167.

Websites & Industry Standards

International Accounting Standards Board (IASB). IFRS 16 – Leases. Retrieved from: https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/

Financial Accounting Standards Board (FASB). ASC 842 – Leases. Retrieved from: https://asc.fasb.org/section&trid=2148999

\Deloitte. (2023). Lease Accounting Guide: A Summary of IFRS 16 and ASC 842. Retrieved from: https://www2.deloitte.com

PwC. (2022). Leasing under ASC 842: A Comprehensive Guide. Retrieved from: https://www.pwc.com

EY. (2022). Lease Accounting and Real Estate Trends. Retrieved from: https://www.ey.com

Company Materials (Edu Tantr Internal Use)

Edu Tantr Company. (2025). Internal Lease Abstraction Guidelines (Unpublished).

Edu Tantr Company. (2024). Lease Accounting Workflow and SOP Documentation.

Edu Tantr Company. (2024–25). Training Manuals and Lease Review Checklists (Internal Internship Documents).

Meeting Notes and Interviews with Accounting and Legal Teams, Edu Tantr (March–June 2025).

Articles & Industry Publications

KPMG. (2022). Navigating the Complexities of Lease Abstraction. KPMG Real Estate Outlook.

CBRE. (2023). Lease Administration Best Practices in a Digital Era. CBRE Global Reports.

JLL. (2023). Commercial Real Estate Lease Lifecycle and Compliance. JLL Industry Briefing Paper.

The CPA Journal. (2021). Lease Accounting Challenges Post-IFRS 16 Implementation. Vol. 91, No. 4.

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