

PropelPro

Transforming Proposal
Development for AEC Industry





Who we are?

The Team



Himanshu Arora in

Co-Founder and CEO
IIT Bombay alumnus



Brings 15+ years of **executive**
leadership experience in AI
Product building, Enterprise Sales



Kushagra Singhania in

Co-Founder and COO
IIT Delhi alumnus



Thought Leader driving **Pre-**
Sales, Operations



Suhas Bhagwat in

Advisor
VP – Hydrocarbons L&T
(Retired)



Hydrocarbons and
construction expertise built
across 4 decades



Sashank Musti in

Advisor
IIT Bombay alumnus
M.B.A. from Carnegie Mellon



Senior Director, AI and DS, Alcon
Working and residing in U.S.
Strong Industry network

Expert Team

The Advisors



Suhas Bhagwat

Advisor VP – Hydrocarbons L&T (Retired)

Hydrocarbons and construction expertise
built across 4 decades



Pankaj Tandon

CEO Everrenew | Ex-CEO, Jackson Group

35 years industry experience
across Infra, Power and Energy

Domain Experts



Gokul Prakash

Chief Executive Officer at Lamberton Power

Over 15 years of expertise in
Solar and Renewable Energy



Nitin Gupta

Sales and BD Lead | Utilities | Ex-KEC

20+ Years in Power Utilities,
Infrastructure Sector



Madanant Murugkar

Head, Technology & Engineering, Kathari Water

25+ years' experience leading
sustainable water and environmental
technology projects.



Deepak Yadav

IIT-Roorkee | XLRI-Jamshedpur | Ex Transrail

Seasoned M&BD Professional in
Power Transmission & Distribution
Industry



Our AI Maturity Journey: **Your Trusted Innovation Partner**

Evolution **Timeline**

- **2020** Predictive Analytics on structured Data
- **2021** Focus on Computer Vision Use Cases
- **2022** Enterprise scale deployment of CV solutions across industries
- **2023** NLP and OCR driven Use Cases
- **2024** Expanding NLP, GenAI Use Cases across AEC with end-to-end Platform based Solution

Maturity **Pillar**

Technical Depth

From basic ML to advanced multi-modal AI

Solution Sophistication

From point solutions to integrated platforms

Industry Expertise

Deep understanding of client workflows

Implementation Excellence

Proven methodologies for AI deployment

Ethical Leadership

Responsive AI framework and governance

Trust **Indicators**

25+

Enterprise deployments

92%

Client retention rate

3

Industry recognitions



Certified for data security

Our Clients





PropelPro

Source: [Census.gov](https://www.census.gov)



Unified Proposal Automation Platform

Plan, Manage and Track proposal development activity from Tender Reading, Understanding Requirements, Cost Estimation to Proposal writing in a single platform.



PropelScout

"This Tender discovery Module empowers you to identify and prioritize high-potential tender opportunities tailored to your strengths, ensuring no valuable tender is missed."



PropelRead

"Reading and Understanding large tender documents is a mundane and tedious process. PropelRead is designed to significantly reduce time to create Proposals by automatically reading through documents"



PropelFlow

"Move from chaos to clarity. PropelFlow lets you orchestrate every step—from assigning tasks to getting vendor quotes—so nothing slips through the cracks, and you stay in control."

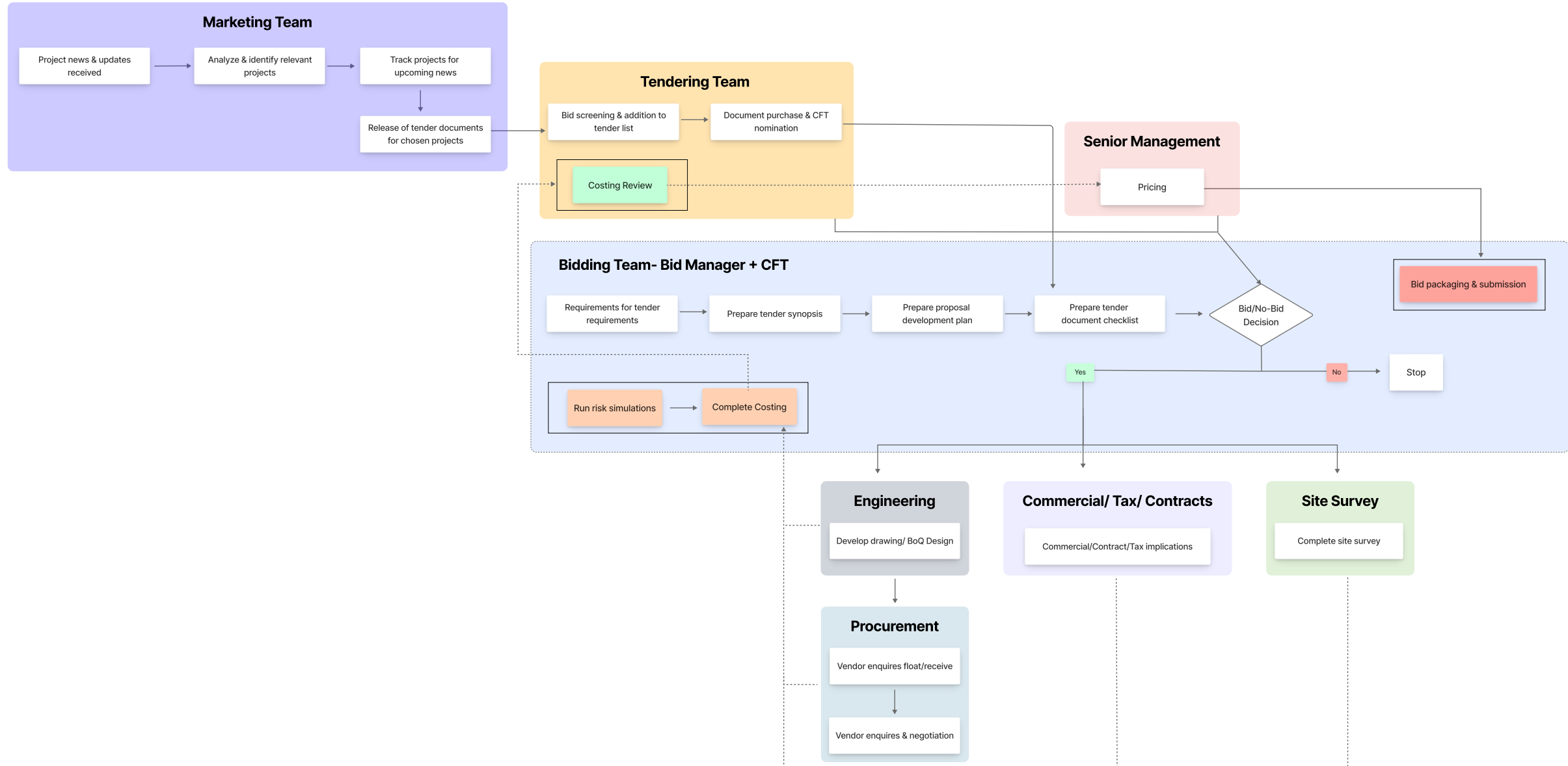


PropelWrite

"Turn your proposals into winning stories. PropelWrite helps you craft compelling proposals with the precision of an expert, boosting your chances without burning hours."

Process Flow for Bid Preparation

Start →



Process Flow for Bid Preparation

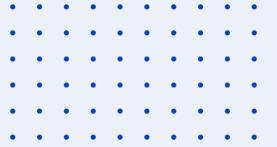
Team	Objective	Module	Features
Marketing	Use market intelligence to identify new opportunities, track competitors, and anticipate customer needs.	PropelScout	<ul style="list-style-type: none"> Curates industry-specific and competitor news for lead generation and strategic advantage Extracts winning bid amounts and competition data to optimize bid strategy
Tendering	Bid screening & addition to tender list	PropelScout	<ul style="list-style-type: none"> Automated Web Scouting Intelligent Filtering
Bidding	<ul style="list-style-type: none"> Prepare tender synopsis Prepare proposal development plan Prepare tender document checklist Bid packaging & submission 	PropelRead PropelWrite	<ul style="list-style-type: none"> Automatically reads through tenders and generates structured summaries in minutes Stakeholder Specific Information Extraction Smart Editor powered by AI Automated submittal list generation
Senior Management	<ul style="list-style-type: none"> Bid/No-Bid Decision Pricing 	PropelFlow, PropelWrite	<ul style="list-style-type: none"> Built-in approval hierarchy with structured approval processes that ensure proper task review and quality control.
Engineering	Develop drawing/ BoQ Design	PropelRead	<ul style="list-style-type: none"> Stakeholder Specific Information Extraction such as Electrical, mechanical, Civil Approved Vendor list Design Standard
Procurement	<ul style="list-style-type: none"> Vendor enquires float/receive Vendor enquires & negotiation 	PropelFlow, PropelRead	<ul style="list-style-type: none"> Extraction of technical Specs to be shared with the vendors Floating Vendor enquires
Commercial/ Tax/ Contracts	Ensure contractual and tax compliance - Identify and mitigate commercial risks - Reduce time on contract review	PropelRead, PropelWrite	<ul style="list-style-type: none"> Risk Matrix Commercial Summary compares client contract terms with standard organizational terms
Site Survey Team	Complete Site survey	PropelRead	<ul style="list-style-type: none"> Incorporating survey findings into tender synopsis and Risk Matrix



PropelScout

"This Tender discovery Module empowers you to identify and prioritize high-potential tender opportunities tailored to your strengths, ensuring no valuable tender is missed."

Scouting the Web



Problem

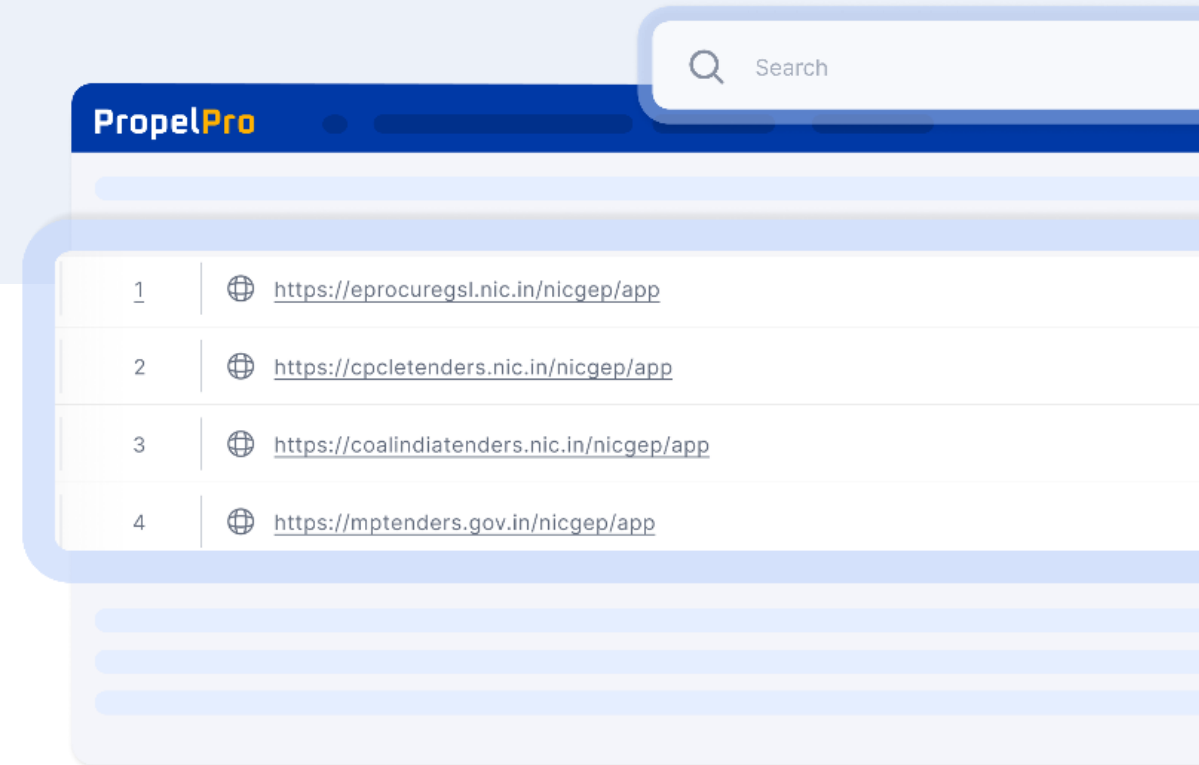
Manual monitoring of multiple government and bidding portals to track tenders.



Solution

Our platform monitors relevant websites on regular intervals to identify new opportunities.

Video link- [PropelScout Flow](#)



Keywords List



Problem

Manual keyword input in Tender portals presents several challenges: Tedious user interface navigation, risk of missing critical keywords, and an overall inefficient search experience.



Solution

Customizable keyword selection for targeted, precise searching.

Notifications & Alerts



Problem

It is challenging to keep track when new tenders are floated or files in existing tenders get updated.



Solution

Notifications and Alerts on Identification of new opportunity or new files addition/deletion from existing tenders.

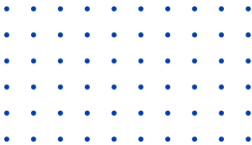
New File Added.

Water Treatment Plant has been added to your RFP lists.

PropelPro

New RFPs List

SR. NO.	OPPORTUNITY NO	TITLE	PUBLISHED DATE	PRE BID DATE	BID SUBMISSION DATE	RFP
1	2025_ZPHD_820597_3	Water Treatment Plant at Goha...	26-02-2025	28-Feb-2025 02:30 PM	18-03-2025	3,50,0



Only Opportunities that suit you

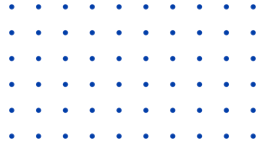


A screenshot of a web application's 'Custom Criteria' filter interface. The interface is titled 'Custom Criteria' with a subtitle 'Welcome! Filter as per your needs.' and a close button (X). It contains four input fields arranged in a 2x2 grid: 'Project Location' with the value 'Gujarat', 'Project Cost' with the value '> than 5 crore', 'Project Type' with the value '16 EPC', and 'Size of the Project' with the value '> Greater 100 Mega Watts'. A blue 'Search' button is located at the bottom right of the filter panel. The background of the slide features a series of horizontal blue bars of varying lengths on the left side.



Problem

Lot of time is wasted looking at irrelevant opportunities. Existing portals have very specific filtration criteria.



Solution

PropelScout automates opportunity identification and never misses a relevant tender.

Tender Selection



Problem

How do I find past tenders similar to current tender and also choose the one I find most relevant?



Solution

This feature automatically identifies and lists down similar tenders for which different insights have to be drawn. It allows users choose most relevant tenders to make the insights highly useful

The screenshot displays the 'PropelPro' interface for 'Tender Insights'. The header includes the PropelPro logo and navigation links. The main section is titled 'Tender Insights' with a subtitle 'Track performance, analyze patterns, and make smarter tendering choices.' and a 'Generate Insight (5)' button. Below this, a section titled 'Available Tenders (10)' shows '5/10 Tenders Selected'. The list of tenders includes:

- Ramagiri, Andhra Pradesh** (PDFISEC000143-5225958...): Design, engineering, supply (except PV modules), unloading, erection, testing, commissioning, 5yr O&M. Due: 2024 (March). Capacity: 300MW, AC. [Selected]
- Khavda, Gujarat** (PDFISEC000143-5225958...): EPC contract (excluding PV modules), full scope, 5yr O&M. Due: 2024 (June/July). Capacity: 200MW, AC. [Selected]
- Nationwide, Pan-India** (PDFISEC000143-5225958...): EPC for ground-mounted solar PV (up to 200MW per project). Due: 2024 (January). Capacity: (200MW lots). [Selected]
- Dhar, Madhya Pradesh** (PDFISEC000143-5225958...): Design, engineering, supply (except PV modules), unloading, erection, testing, commissioning, 5yr O&M. [Selected]

At the bottom, there are 'Previous', '1', '2', and 'Next' navigation buttons.

Tender Insights



PropelPro

< Back

Tender Data Insights

Analyze trends, spot risks, and identify your strongest opportunities.



<input type="checkbox"/> NAME	NUMBER	LOCATION	PRICE	CAPACITY	CLIENT NAME	COMPETITORS	WINNERS
<input type="checkbox"/> Design, Engineering, and Construction of 300 MW Grid-Connected Solar Power Project at Ramagiri	SECI/C&P/OP/11/013/2023-24	Ramagiri, Andhra Pradesh	₹54.70 crore	300MW, AC	Solar Energy Corporation of India Limited (SECI)	NA	Amara Raja
<input type="checkbox"/> 200 MW Solar Power Project approved by Bihar Electricity Regulatory Commission	--	Bihar	--	200 MW	Bihar Renewable Energy Development Agency (BREDA)	NA	NA
<input type="checkbox"/> Limited Tender for 100 MW Solar PV Project + 50 MW/150 MWh Battery Storage System (including 10 years O&M)	SECI000025	Rajnandgaon, Chhattisgarh	--	200 MWp DC	Solar Energy Corporation of India Limited (SECI), Niser Delhi	NA	Tata Power Solar Systems Ltd.
<input type="checkbox"/> Tender for 1200 MW ISTS-connected Solar PV Projects with 600 MW/1200 MWh Energy Storage Systems	SECI/C&P/IPP/11/0023/23-24	Multi-state(India-wide)	₹3.41-3.42 per kWh	1200 MW	Solar Energy Corporation of India Limited (SECI)	NA	Pace Digitek, JSW Neo Energy, Acme Solar Holdings, Hero Solar Energy
<input type="checkbox"/> Limited Tender for 100 MW Solar PV Project + 50 MW/150 MWh Battery Storage System (including 10 years O&M)	ST/EDA/RTSPV-200MW/51/2024/1085	Jammu, Jammu & Kashmir	₹1,040 crore	200 MW	Jammu & Kashmir Energy Development Agency (JAKEDA)	NA	NA

Explore news and announcements linked to similar tenders

[More like this](#)



1-10 of 97

Rows per page: 10 < 1/10 >



Problem

Information and insights from Past tenders is often lost. Can these be automatically extracted ?



Solution

Insights from Past tenders such as Winning Bid, potential Competition are useful to gauge about customer preferences and arrive at a Bid value with higher likelihood of winning the tender.



Market News



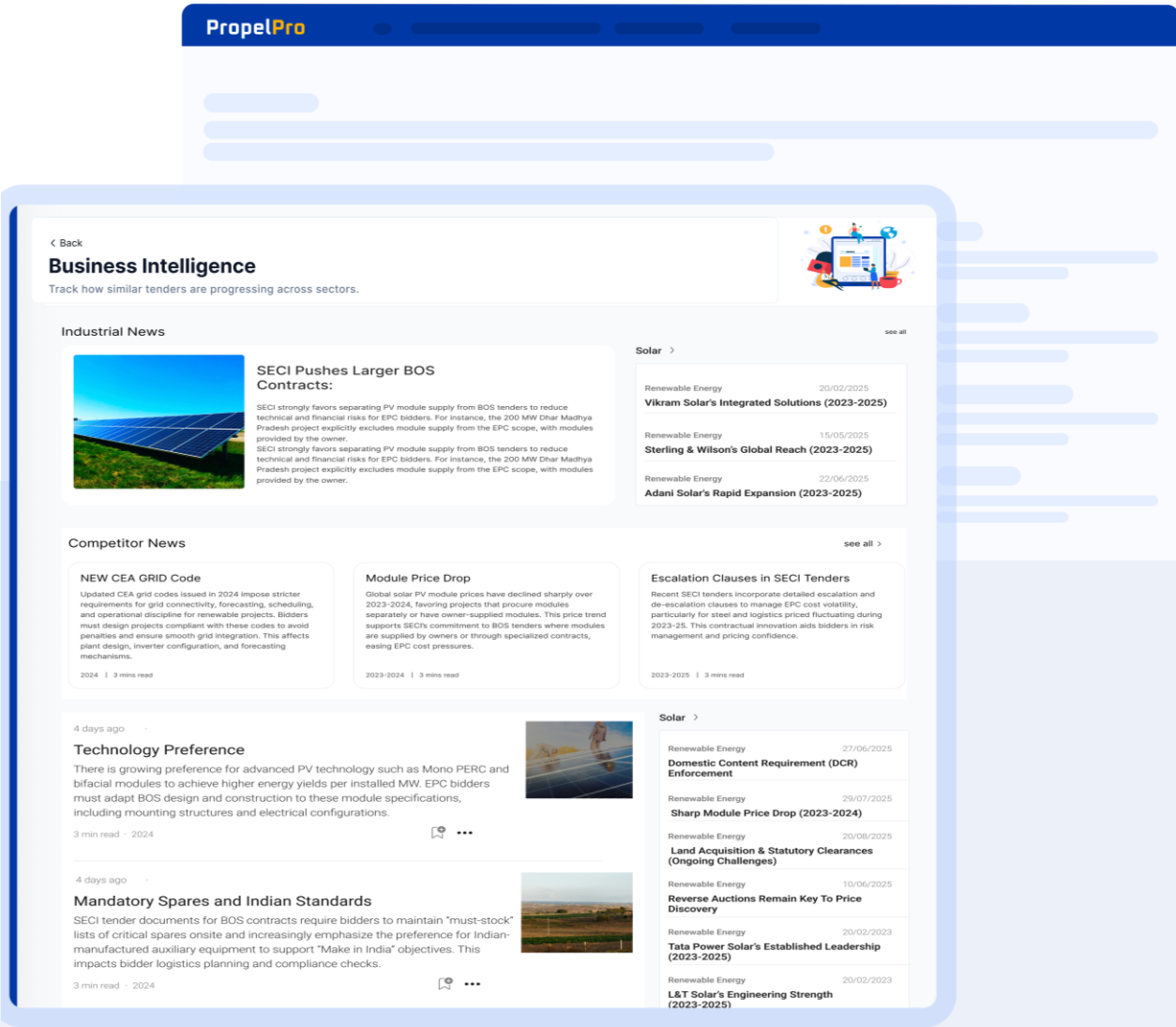
Problem

There is so much intelligence floating around in the market. Can it be Captured ?



Solution

The platform curates and publishes both industry-specific and competitor-related news, helping users stay updated on major project announcements and competitive developments to build strong market intelligence.





PropelRead

“Reading and Understanding large tender documents is a
mundane and tedious process.
PropelRead is designed to significantly reduce time to create
Proposals by automatically reading through documents”

PropelRead VS ChatGPT



PropelRead

You are not limited in data processing (successful processing of **10,000+ pages** and **150+ files**), and there is **no restriction on the number of files** you can add.

Answers from the document only
and does not hallucinate at all

Very high accuracy achieved with **use of multiple models** for processing different sets of information

PropelRead comes with **domain expertise** trained on specific AEC data

Can work even on **scanned PDFs**

ChatGPT



Allows only **128000 tokens** to be processed (i.e. about **300 pages** on text data and file size of about **20Mb** only), and you can **only upload up to 10 files**



Hallucination is for Real



Will give **output from a single model** only which is not always accurate for all data



This is a **generic model** hence might **not understand** all the terminologies related to AEC



Cannot handle scanned PDFs



Go/No-Go Summary



Problem

Preparing Go/No-Go summaries is a tedious task and requires going through multiple documents manually. Then consolidating each parameters basis, the conditions sometimes leads to errors.



Solution

PropelRead automatically generates a structured Go/No-Go Summary in mere minutes along with providing a recommendation based on pre-defined conditions

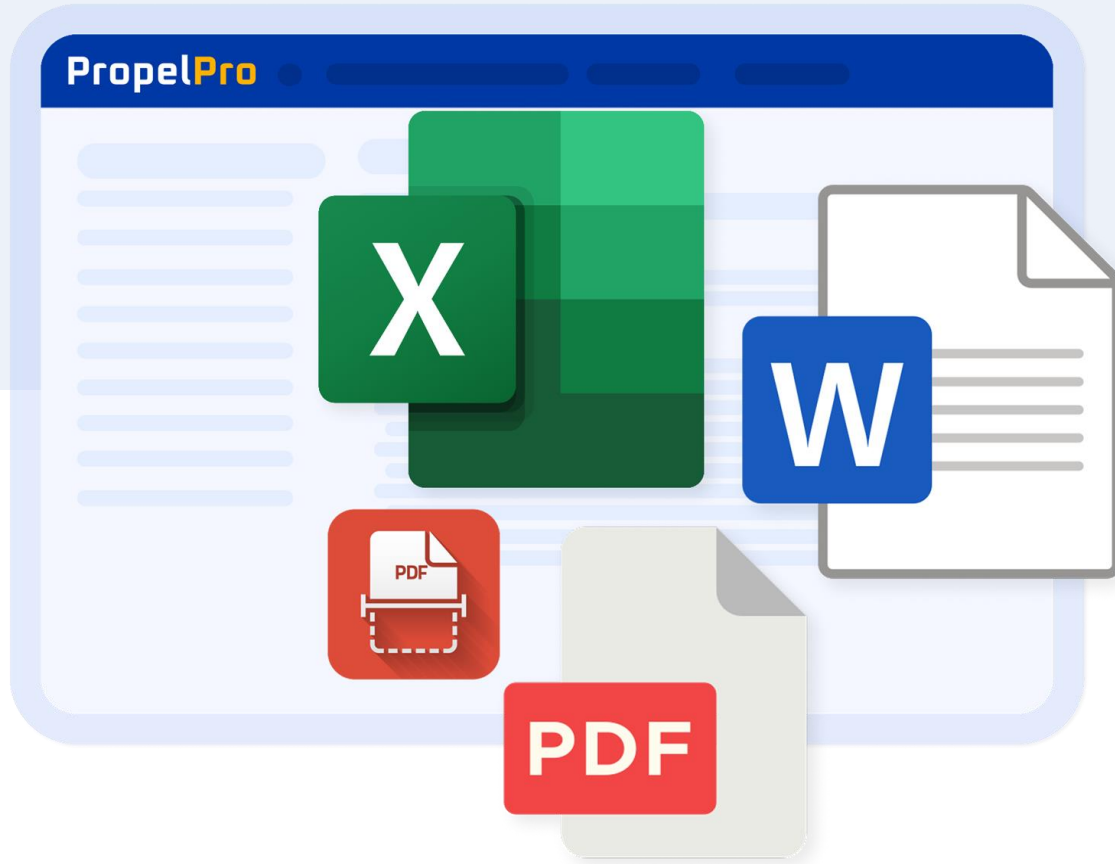
PropelPro

Commercial Summary				
Bid Summary				
Bid Summary				
Bid Parameter				
PARAMETER	CONDITION	INFORMATION TENDER	RECOMMENDATIONS	DETAILS
Project Value	>=70	NA	Inadequate data for taking decision	The document does not specific total project cost of the project cost being equal to 7.
Preferred States	All States	Tamil Nadu	✓	The project is associate chennai metro rail limited located in chennai, tamil review with management required.
Client	PSU, CPSU, Int State Utility/ Authority	Chennai Metro Rail Ltd.	Review with Management is required	The document mentions rail ltd.' as the employer details section, indicating organization...

Video link- [Go/No-Go Summary](#)



Scanned Docs **Format Supported**



Problem

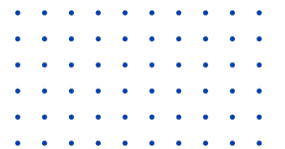
'CTRL+F' works on pdf, word, files. But scanned documents become too difficult to handle.



Solution

PropelRead goes through the entire set of tender documents PDFs, Word files, Excels, and even the Scanned PDFs.

Video link- [Scanned Docs Format Supported](#)





Stakeholder-Specific Info Extraction



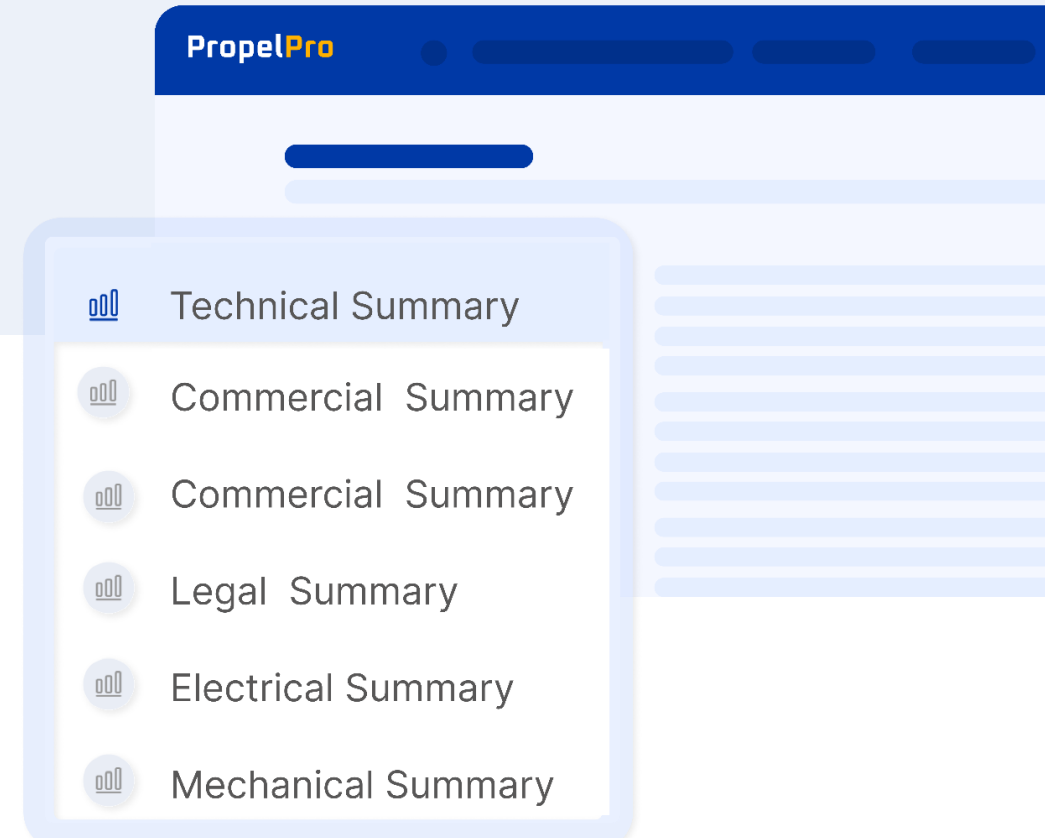
Problem

How do I get more time for my Proposal Team and reduce their stress ?



Solution

PropelRead extracts department-specific data with contextual understanding from tenders, auto-populating custom templates for different teams in matters of a few minutes to hours thereby freeing up significant time and reducing errors.



Video link- [Specific Info Extraction](#)

Risk Matrix



Risk Category	Risk Description	Explanation
Design Risk	Errors or delays in design submission & approval	Contractor must prepare detailed documents; delayed approvals affect timeline. Vol 1, Clause 5.2
Site Access Risk	Delays in granting site access	No compensation is given for access delay. Vol 1, Special Conditions, Clause 2.1
Regulatory Risk	Delays in permits/approvals	Employer not liable for delay/refusal of permits. Vol 1, Clause 2.2
Performance Security Risk	High bank guarantee requirement (8%-10%)	Vol 1, Clause 4.2
Labor & Compliance Risk	Part of Associations such as ASA, ABC, AGC, AIA, ASHRAE etc.	Awareness, Lead Generation
Retention & Payment Risk	Strict adherence to Indian labor laws, EPF, ESI, safety regulations, etc	Vol 1, Clause 6.4 & Appendix on Labor Laws



Problem

How do I identify the risks associated with different clauses of the tender ?



Solution

PropelRead automatically highlights clauses that could pose a challenge to the company and fills in the risk matrix.

Video link- [Risk Matrix](#)



Amendment Updates & Version Control



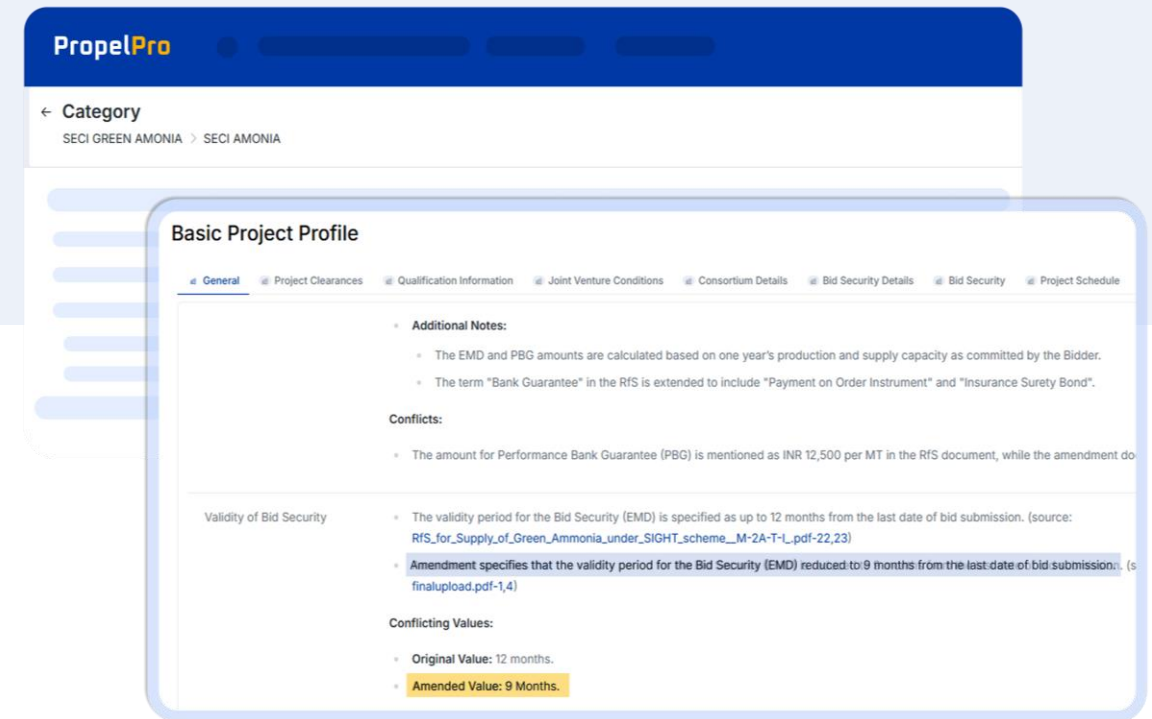
Problem

Reading through an RFP is anyways labor-intensive process. But keeping a track of any revisions or updates is even tougher.



Solution

PropelRead not only proactively keeps a track of such revisions and automatically updates the relevant summaries but also has versioning for transparency, thus eliminating any manual intervention.



Video link- [Amendment Update](#)

Comparison of Contract Terms



PropelPro

← Category
Consultancy work for Solid Wa... > 1924

Comparison Of Contract Terms And Conditions

Compare RFPs Download

Contract Review

KEY CLAUSES	CLIENT CONDITIONS	STANDARD CONDITIONS	MATCH/MISMATCH	IMPACT	REASONING
Agreement Basis	Agreement is based on specific terms outlined in the tender documents.	Agreement is based on FIDIC Client/Consultant Model Services Agreement Fourth Edition, 2006, unless amended.	⚠	Negative	The client does not explicitly reference FIDIC terms, which may lead to differences in interpretation and application of contract terms.
Liability Limitation	Consultant is liable for all direct consequences of errors and omissions up to the contract's value, except for claims of negligent acts, fraud, and willful misconduct.	Liability is capped at 25% of the total fees, with adjustments for project size.	⚠	Negative	The client's terms impose a higher liability on the consultant, which increases risk exposure.
Liability Duration	No specific duration mentioned for liability.	Liability is limited to 2 years from completion of services.	⚠	Negative	Absence of a defined liability duration in the client's terms creates uncertainty and potential long-term exposure.
Payment Terms	Payments are made within 60 days after invoice submission.	Payments are due within 30 days, with options for 14 or 7 days for short-term services.	⚠	Negative	Longer payment terms in the client's conditions may impact cash flow for KEO.
Late Payment Charges	No provision for late payment charges.	Interest of 6.5% per annum is charged on overdue payments.	⚠	Negative	Lack of late payment charges in the client's terms removes a deterrent for delayed payments.
Varied Services	Additional services require prior written approval.	Additional services require written approval of associated fees.	⚠	Neutral	Both conditions align on the need for written approval for additional services.
Dispute Resolution	Disputes are resolved under the jurisdiction of Omani courts.	Disputes are resolved in Dubai, UAE competent courts.	⚠	Neutral	Jurisdictional differences may affect the legal process but are not inherently mismatched.



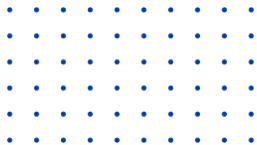
Problem

Lot of time gets wasted understanding and checking contract terms



Solution

The platform auto-compares client terms with standard organizational terms, highlighting mismatches for clarification during pre-bid meetings.



Eligibility Criteria



Problem

The eligibility criteria has to be manually checked for ?



Solution

Our platform extracts the eligibility criteria from the current tender, cross-checks each requirement against the data in the repository, analyzes it, and indicates whether each criterion is met or not.

PropelPro

Basic Project Profile

Compare RFPs Download

QUALIFICATION CRITERIA	CONDITIONS	SINGLE BIDDER	JV	CONSORTIUM
Financial Capacity	Minimum Net Worth of 15% of the Estimated Project Cost at the close of the preceding Financial Year	✓	✓	✓
Technical Capacity	Payments received for construction of Eligible Projects during the last 5 financial years and current financial year up to the Base month: (a) 60% of Estimated Project Cost from One Eligible Project, OR (b) 40% of Estimated Project Cost from each of the Two Eligible Projects, OR (c) 30% of Estimated Project Cost from each of the Three Eligible Projects	✓	✓	✓
Eligible Projects	Projects where works contract are directly given to the Bidder by a Govt. Department; or by a Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, registered at least 5 years back from the date of submission of Bid by the Bidder to the Authority AND Projects where the Bidder have received payments for not less than 75% value of awarded project cost of such project as per the original agreement under specified categories	✓	✓	✓
Categories of Eligible Projects	Passenger terminals with minimum passenger handling capacity of 5000 persons/day OR Social and Commercial infrastructure such as commercial real estate projects with minimum built-up area of 15,000 square meters OR Residential real estate projects with minimum built-up area of 30,000 square meters	✓	✓	✓



Compare RFP



Problem

What if i wanted to compare two RFPs say to check if terms are similar or different for RFPs with similar scope ?



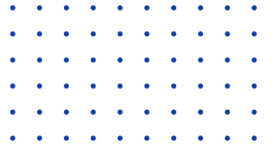
Solution

Users can select any two RFPs from the database and compare them across key parameters, providing a reference point for quicker and more informed bidding.

The screenshot displays the PropelPro web application interface for comparing two Request for Proposal (RFP) documents. The top navigation bar is blue with the 'PropelPro' logo. Below it, a breadcrumb trail shows 'Category' followed by 'SECI GREEN AMONIA > SECI AMONIA'. The main content area is divided into two side-by-side panels. The left panel, titled 'SECI GREEN AMO...' with 'Opportunity No: SECI AMONIA', shows a comparison of 'JV is Allowed' conditions. It lists 'JV is Allowed' as permitted and provides an 'Overview of Joint Venture (JV) Conditions' with four numbered sections: 1. Formation and Registration, 2. Shareholding Requirements, 3. Roles and Responsibilities, and 4. Compliance and Legal Requirements. The right panel, titled 'NLC GH2 Revis' with 'Opportunity No: 1952', shows a comparison of 'Joint Ventures (JVs) are not permitted' conditions. It includes a source reference to 'Corrigendum-III.pdf: 21-24' and a note 'NA: Not Available' with a warning icon. A small chat icon is visible in the bottom right corner of the interface.

Video link- [Compare RFPs](#)

Multi Document Chatbot Search



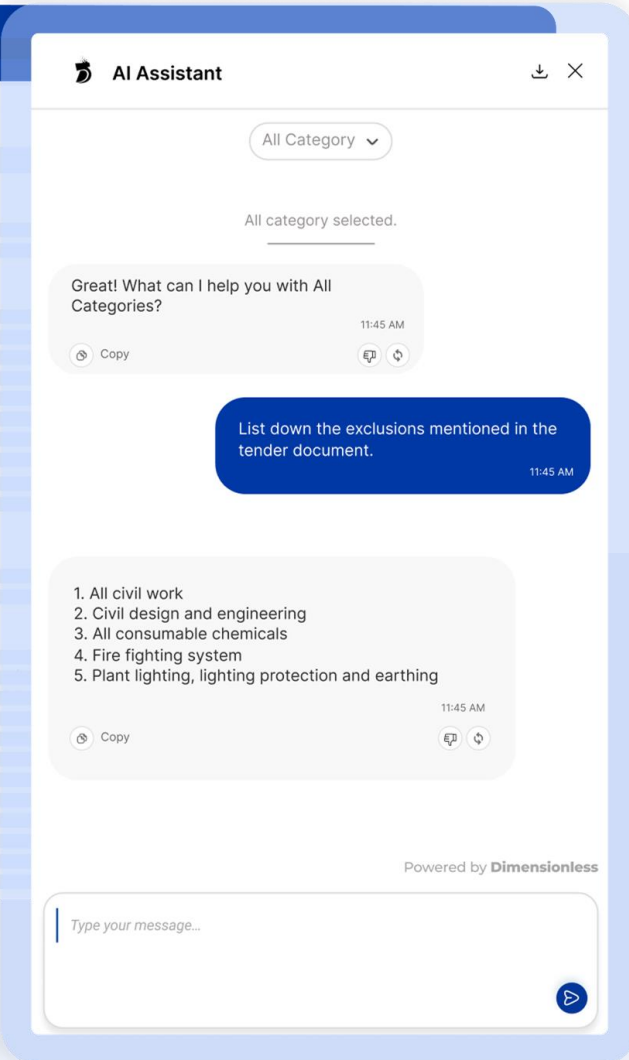
Problem

How do I get information other than the designed template ? Also, as a manager, I need to review the extracted information, can I get that along with knowing where the data is coming from.



Solution

PropelPro's AI Assistant answers queries from tender documents with cited references, providing instant access to any information beyond standard templates.





Order of Precedence



Problem

Identifying and reconciling SCC parameters over GCC ones can be a critical action on client user side.



Solution

PropelRead does this identification and reconciliation automatically with Special conditions taking precedent over General conditions.

General Conditions of Contract

The contractor warrants that the Facilities or any part of thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant and Equipment supplied and of the work executed.

Special Conditions of Contract

Defect liability period is 36 calendar months from the date of issue of Final completion certificate/ Final acceptance Certificate/ handing over by THDCIL of the full capacity (100.1 MWac) of all the three plants (RTPS, BTPS, YTPS), whichever is later.

Liquidated Damages & Other Details

Defect Liability Period (DLP) Risks Insurance Terms Liquidated Damages (LD) for COD Delay Contract Details

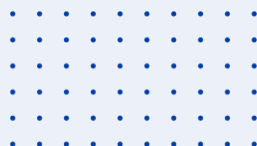
1. The Defects Liability Period is 36 calendar months from the date of Issue of Final completion/ Final acceptance Certificate/ handing over by THDCIL of the full capacity (100.1 MWac) of all the three plants (RTPS, BTPS, YTPS) whichever is later.
2. Unless otherwise specified in SCC, the Defect Liability Period shall be twelve (12) months from the date of erection and commissioning of the equipment.
3. The contractor's liability for latent defects warranty shall be limited to a period of five (5) years from the end of Defect Liability Period of the respective plant and equipment including spares.

Source:

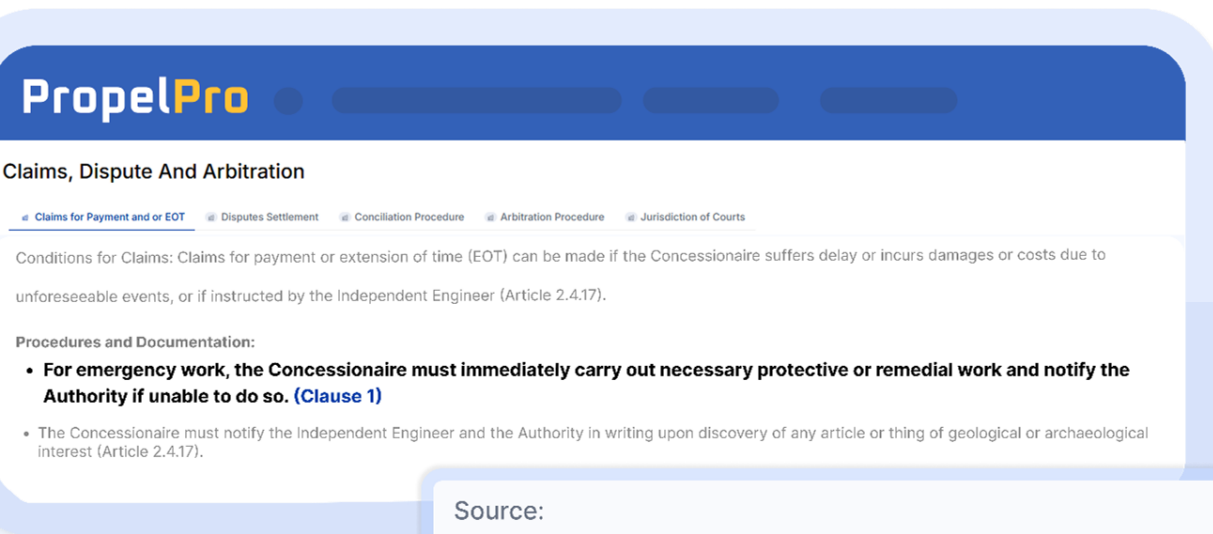
NIT_Section_0_to_IV.pdf : 139-146, 176-177, 184-185, 192-195

NA: Not Available ⚠ : Warning pages

Video link- [Order of Precedence](#)



Reference Links



Source:

Filename: Grasim_Mahad

Title 19. Completion Period, Sub Title 19. Completion Period, Page No. 38

Video link- [Reference Links](#)



Problem

How do I know if the extracted information is correct?





Solution

Each extraction comes with a source link to verify the data thereby providing an audit trail for easy reference.

Mitigating Unread Data Risk



**WARNING!**
Some pages could not be fully processed, review may be required!



FILE NAME	UPLOADED DATE	UPLOADED BY	STATUS	OMITTED PAGE NO.	WARNING PAGE NO.
80_MLD_STP_Tender.pdf	15-01-2025	Anuja Srivastav	Success	73	1

Source:
Bid_document_Salem_24x7.pdf : 91-93112-119 188-190 239-242271-272276-277

NA: Not Available Warning Pages

Video link- [Mitigating Unread Data Risk](#)



Problem

What if, the tool misses out reading some page or is not sure of the contents of any Page ?



Solution

PropelRead has been designed to take care of these issues already. It highlights the Page Numbers that are omitted(generally happens for pages with Diagrams) and also provides Warnings for Pages it is not sure of.



Conflict Identification



Problem

Client RFPs contain multiple parameters that often conflict with each other. Manual reconciliation is tedious and prone to oversight, creating significant risk of missing critical conflicting requirements.



Solution

PropelRead automatically identifies conflict if any in the parameter value, and highlights it with the sources from the tender document.

PropelPro

SWRO (Sea Water Reverse Osmosis)

Additional Information:
Design Permeate: 60 MLD (2,500 m³/h)
Recovery Rate: 45%
Flux Rate: 15 LMH

Conflicts or Discrepancies:

- The document mentions different **flux rates (15 LMH and 17 LMH) in different sections** which could be a discrepancy.

Document Snippet:

The clarified water shall be filtered through Ultrafiltration system (UF) for reducing the turbidity and SDI. The gross flux of the UF membrane shall be 50 l/m²/h.

6.3 RO Plant
6.3.1 RO Membrane and Permeate Recovery
The RO plant is designed as single stage system with recovery of 45% permeate. SWRO membrane elements of 8-inch diameter have been selected. Each pressure vessel will house seven membrane elements.

An average membrane flux of 17 l/m²/hour (LHM) has been selected of the RO plant

6.3.2 RO Feed Water Pumping and Pressure Management
Based on preliminary membrane projections, the anticipated membrane pressure will be in the range between 64.6 bar to 70.7 bar, depending on feed water quality, temperature, membrane conditions and the type of membrane selected. Varying Feed pressure to the RO system based on the design temperature and salinity ranges mentioned in the region. A combination of VFD driven booster pumps with Energy Recovery units and VFD driven RO HP pumps have been selected for operational flexibility and to minimise electrical energy costs.

CHAPTER 11: REVERSE OSMOSIS
view of RO Plant
The RO plant will be a single stage/pressure recovery of 45%. The plant will be configured with four RO trains. Each of the four RO trains will have a dedicated pumping system and Energy Recovery Unit.

The plant is to be designed such that full capacity can be achieved with three trains. The trains will be configured such that one train can be isolated for cleaning, maintenance, or repair without affecting the overall capacity of the plant.

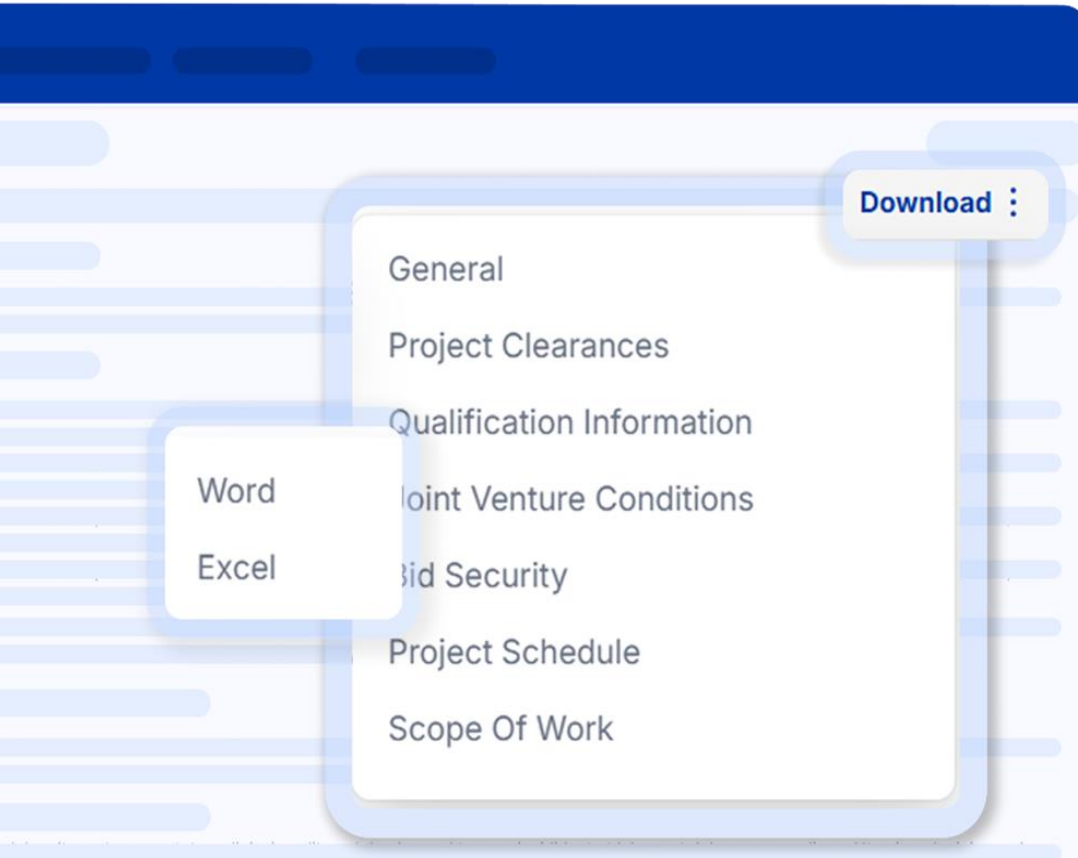
SWRO membrane elements of 8-inch diameter will be selected. Each pressure vessel will house seven membrane elements. The gross flux of the UF membrane shall be 50 l/m²/h.

In sizing the RO plant with design membrane flux of 15.0 l/m²/hour (LHM) has been selected

11.2 Pumping System Design and Pressure Management
Based on membrane projections, the anticipated membrane pressure will be in the range between 64.6 to 75 bar, depending on feed water quality, temperature, membrane conditions and Varying Feed pressure to the RO system. A combination of VFD driven booster pumps with Energy Recovery units and VFD driven RO HP pumps have been selected for operational flexibility and to minimise electrical energy costs.

Video link- [Conflict Identification](#)

Ease of Sharing



Video link- [Ease of Sharing](#)



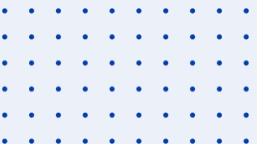
Problem

How do I share specific Category and Sub-Category level information with Vendors/Subcontractors.



Solution

PropelRead allows you to not just get the summaries but also download it in word or excel format to share it with relevant stakeholders.





PropelFlow

“Move from chaos to clarity. PropelFlow lets you orchestrate every step—from assigning tasks to getting vendor quotes—so nothing slips through the cracks, and you stay in control.”

RFP Creation



Create new RFPs in the system and manage the workflow.

PropelPro

Create New RFP

Welcome! Create a new RFP to get started.

Basic InformationProject Details

Project Title*

Enter Project Title

Nickname

Auto-generated

Opportunity Number*

Enter Number

RFS Number

Enter Number

Client Name*

Enter Client Name

RFP Type*

Select

Publish Date*

Select

Create New RFP

Welcome! Create a new RFP to get started.

Basic InformationProject Details

Country

Select

State*

Enter State

City*

Enter City

Start Date*

Select

Bid Due Date*

Select

Project Duration

Enter Duration

Days

Approx. Project Cost

Enter Cost

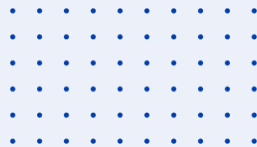
INR

Work Description*

Enter Description

Cancel

Create RFP



Task Creation



Allows creation of different tasks within the RFP. Each task will have various details including Priority, Owner, Due Date, Status and Remarks to know exactly what is happening with it at any given time

A screenshot of the 'Create New Task' form in the PropelPro application. The form is overlaid on a blurred background of the application interface. It includes fields for Task name, Task ID, Start Date, Bid Due Date, Priority, Status, Assignee, and Phases. A dropdown menu for Assignee is open, showing options: Jatain (checked), Sachin, Ravi, and Sumit. The form has 'Cancel' and 'Create Task' buttons at the bottom right.

PropelPro

Create New Task

Welcome! Create a new task to get started.

Task name* **Task ID***

Start Date* **Bid Due Date***

Priority* **Status***

Assignee* **Phases***

☒ Jatain
☐ Sachin
☐ Ravi
☐ Sumit

Inputs & Deliverables



Each Task also comes with fields “Inputs” and “Deliverables” to track progress

A screenshot of the PropelPro web application interface. The top navigation bar is dark blue with the 'PropelPro' logo in white. Below the navigation bar, there are several light blue horizontal bars representing other sections of the interface. The main content area is white and features a section titled 'Files & Materials' with the subtitle 'Reference materials and outputs for this task'. This section has two tabs: 'Inputs' (which is active) and 'Deliverables'. Under the 'Inputs' tab, there are two file entries. The first entry is 'Project Requirements.pdf', uploaded by Asit Biswas on April 07, 2025, with a size of 2.4 MB, and includes a download icon. The second entry is '80 MLD Files.pdf', also uploaded by Asit Biswas on April 07, 2025, with a size of 2.4 MB, and includes a download icon. Below these entries is a dashed box for uploading files, with an 'Upload Files' button and a 'Browse Files' button. The background of the interface is light blue with horizontal bars representing other sections.

Task Approval



PropelPro

Task Description
Review this entire RFP document and identify key requirements, deadline, and evaluation criteria.

✓ Mark as Approved

Details

🕒 Status
⚠ Pending

🚩 Priority
High

📅 Start Date
07 April, 2025

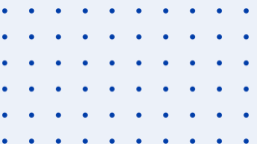
📅 Due Date
16 April, 2025

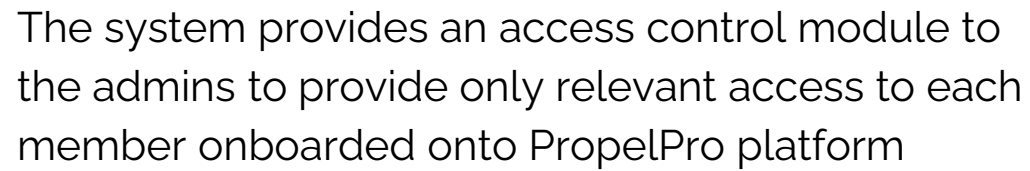
👤 Assigned To
Asit Biswas

👤 Approver
Rahul Paul



Each task has an approval hierarchy to ensure proper review of each task





Back to Roles

Add Roles

Manage and edit details for this RFP

Basic Information

Members

Roles

Role Details

Add Role

Role Name

Project Manager

Description

Describe the responsibilities and access level of this role...

Clearly describe what this role is responsible for and what level of access they have

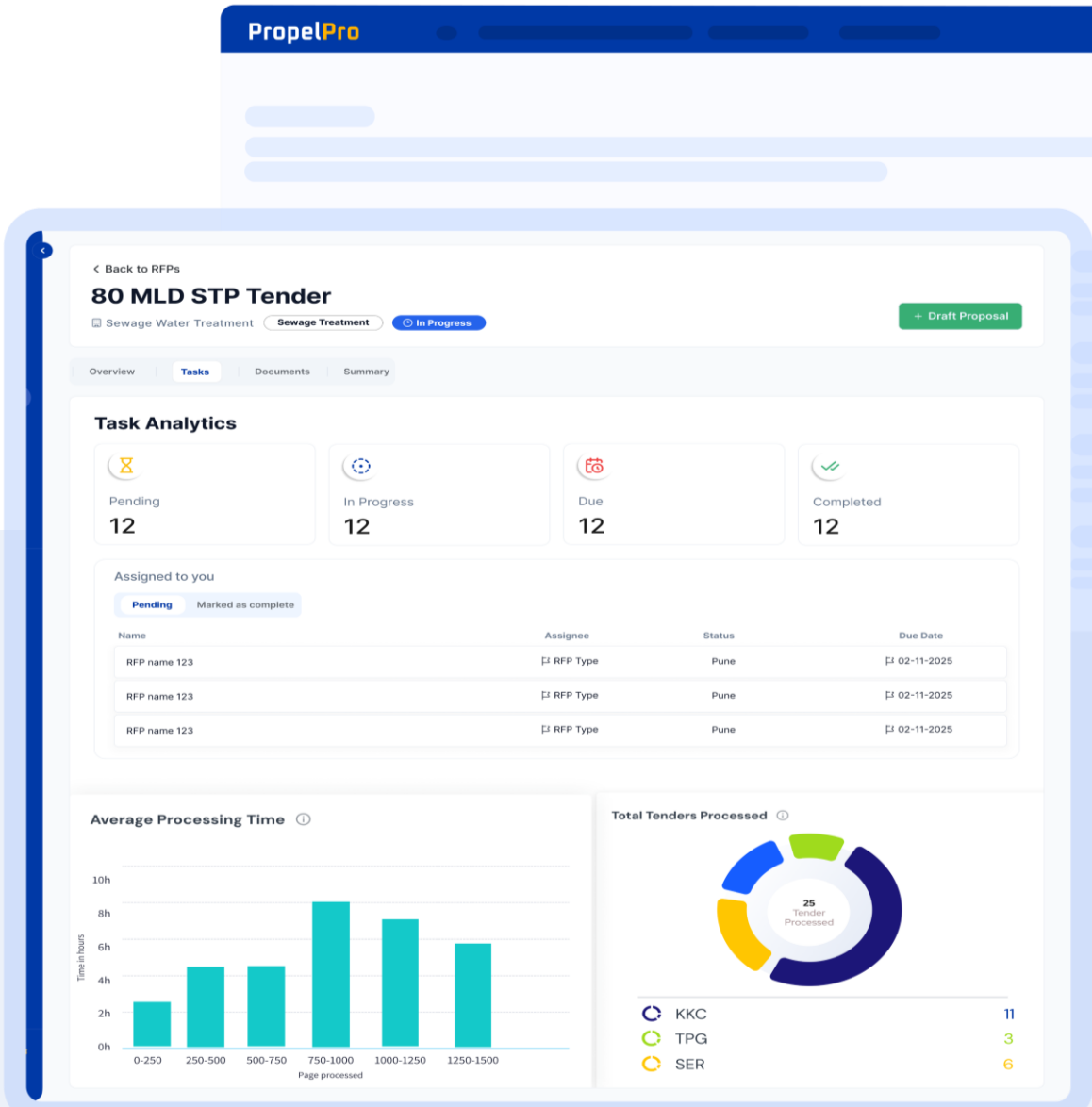
Role Permissions

Read Module					
Feature Name	Full access	Read	Create	Edit	Delete
Amendment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compare RFPs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bid/No-Bid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conflict Identification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Task Analytics



Customizable dashboards for Proposal Managers, Senior Management and Team providing metrics at Task level, RFP Level, Business Unit Level to track and view progress





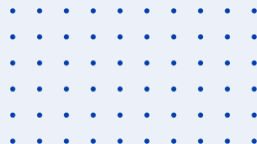
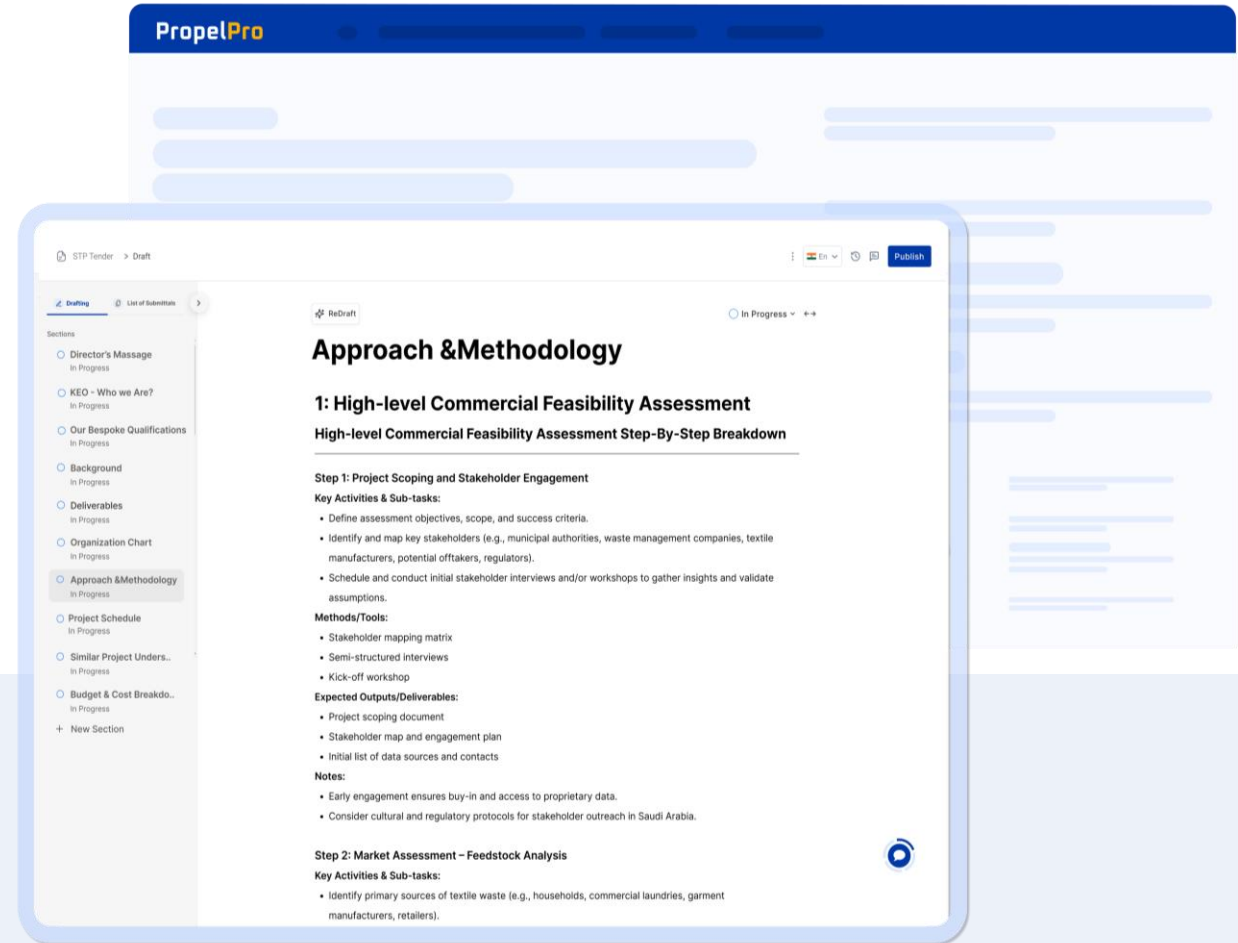
PropelWrite

“Turn your proposals into winning stories. PropelWrite helps you craft compelling proposals with the precision of an expert, boosting your chances without burning hours.”

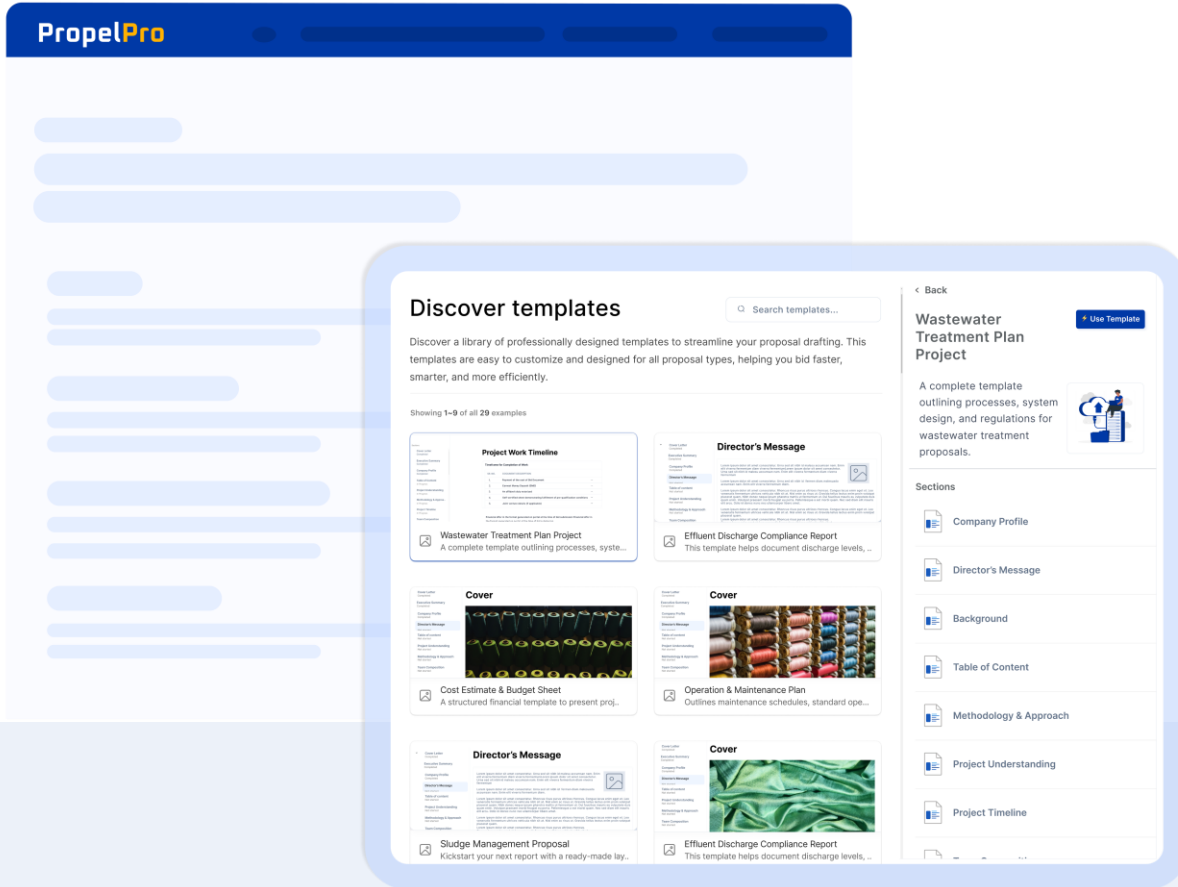
Drafting Proposal



AI-powered proposal drafting feature offers smart templates with editable, pre-structured sections. Users can customize these or start from scratch, with an AI chatbot available for real-time content generation—making proposal creation faster and easier.



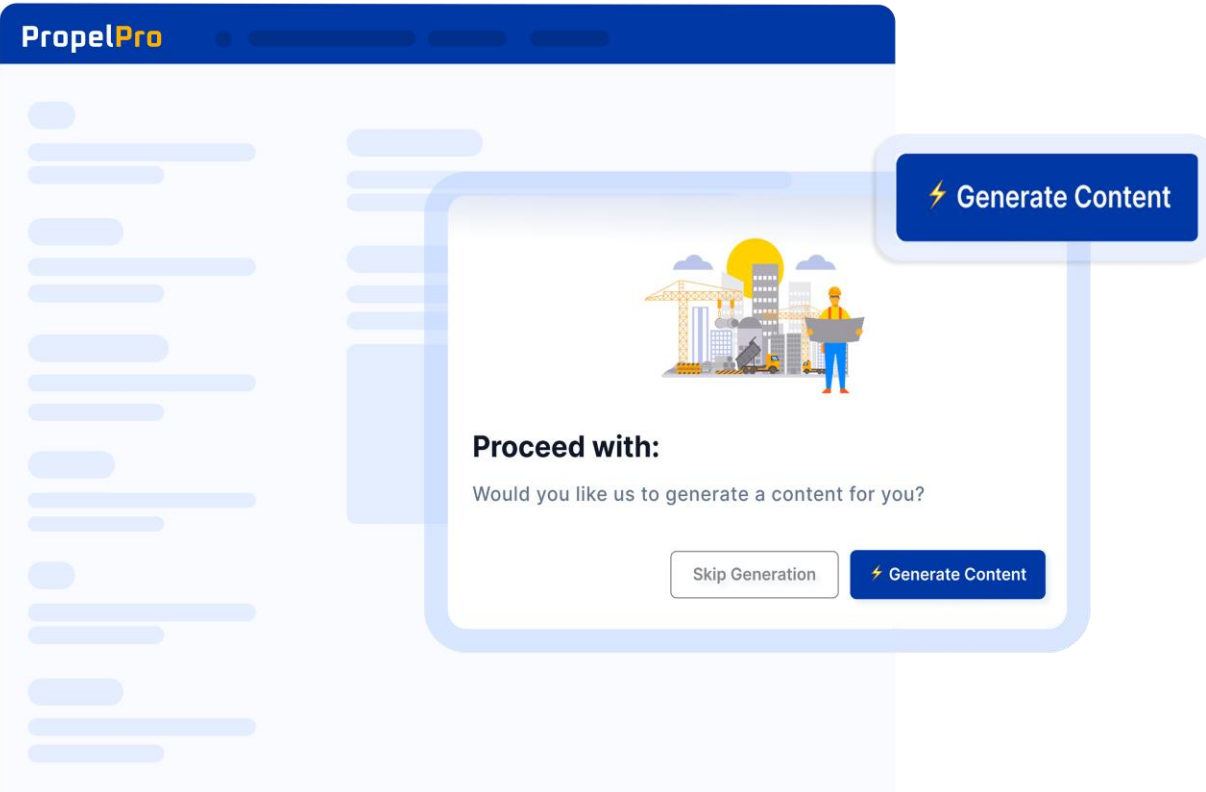
Template Selection



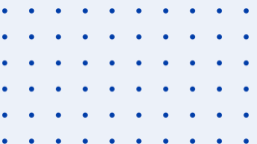
Choose from a range of professionally designed templates tailored for different types of proposals. Whether it's a technical bid, commercial offer, or compliance document, PropelWrite adapts your content to the selected format—saving time and ensuring consistency.



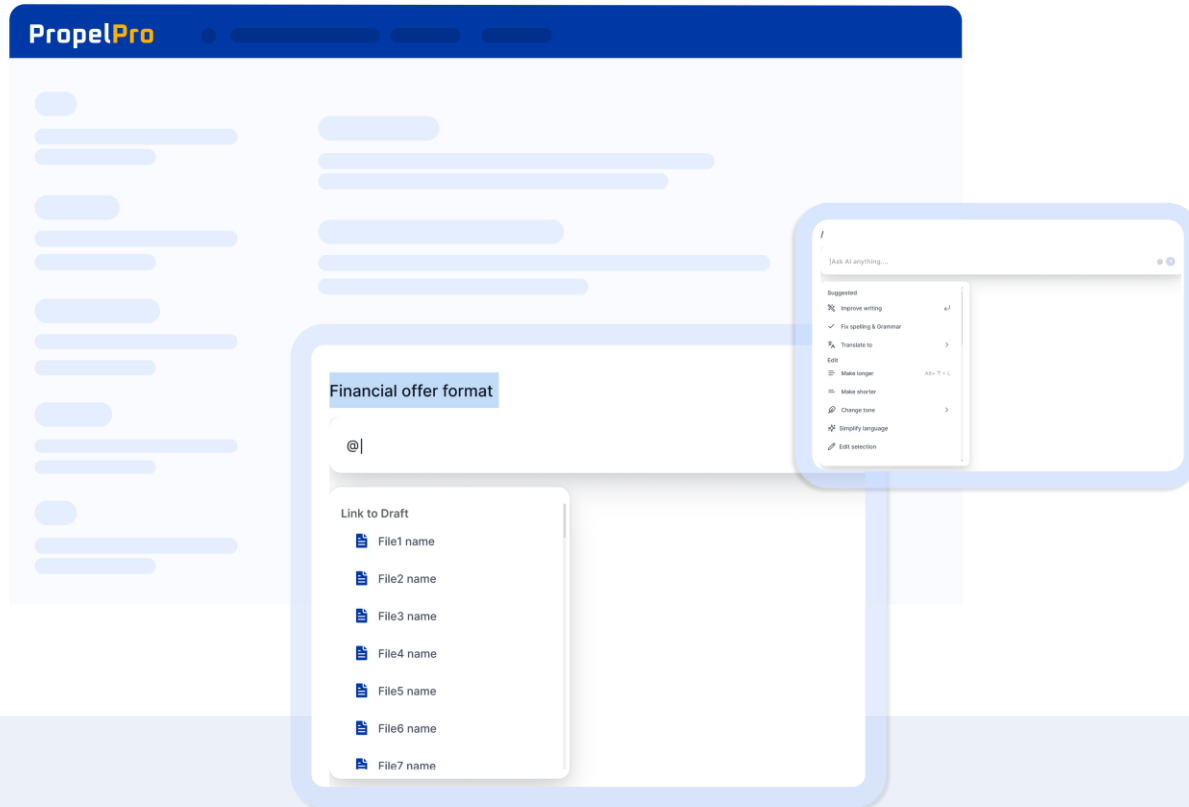
Generate Content



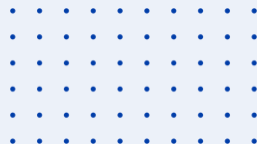
Whether it's a technical write-up, company profile, or methodology, our AI generates tailored content based on tender requirements—saving time while maintaining accuracy and relevance.



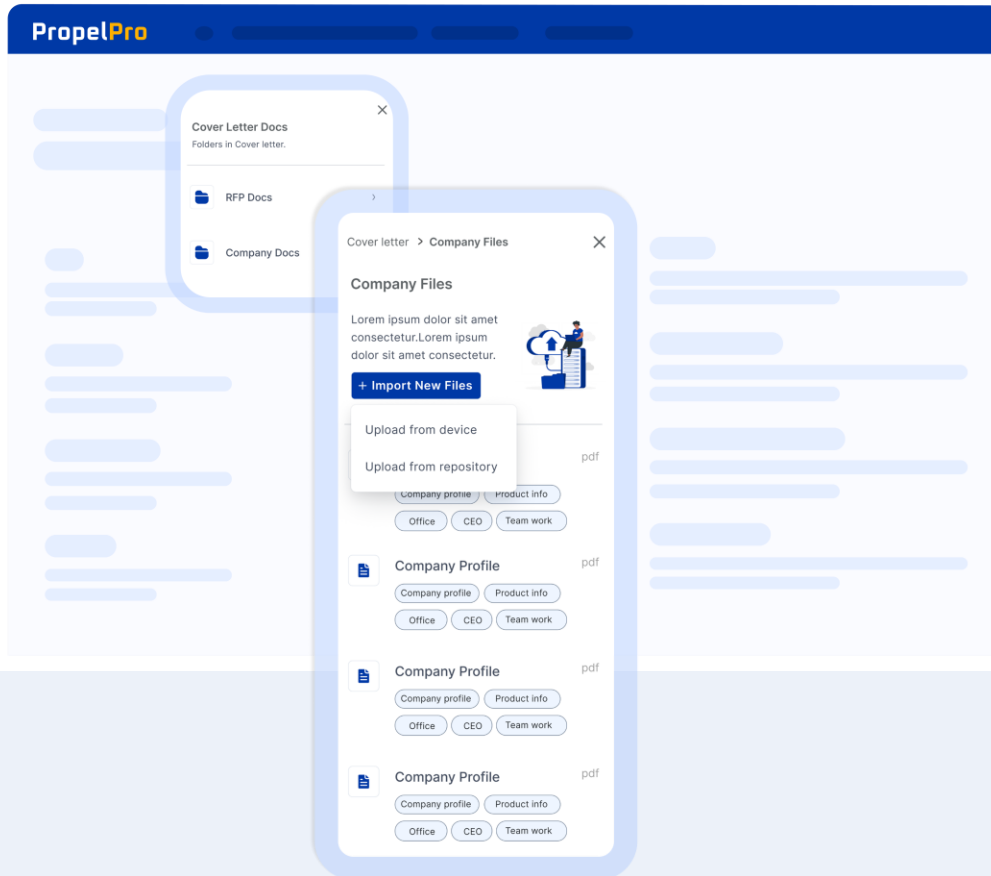
Ask AI



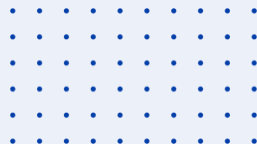
Need help improving a section or rewriting a paragraph? Just ask. PropelWrite's AI Assistant responds to your queries in real-time—offering suggestions, rephrasing content, fixing tone, or filling gaps based on context. It's like having a writing expert by your side.



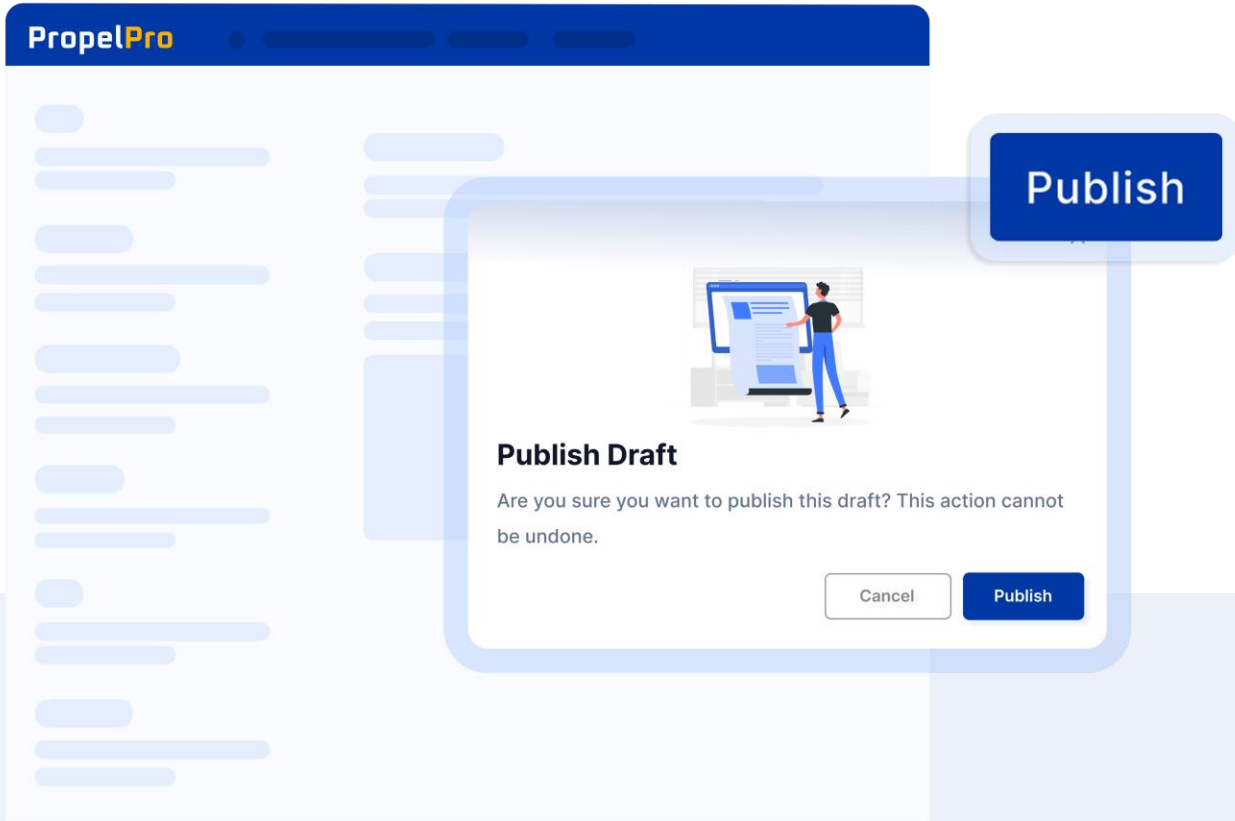
Add/Remove files for context



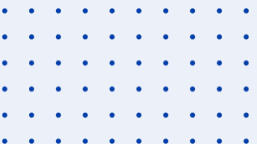
Upload relevant tender documents, previous proposals, or supporting materials to guide content generation. PropelWrite uses these files as context to ensure the AI writes accurately and aligns with your specific requirements. Easily update or remove files as your draft evolves.



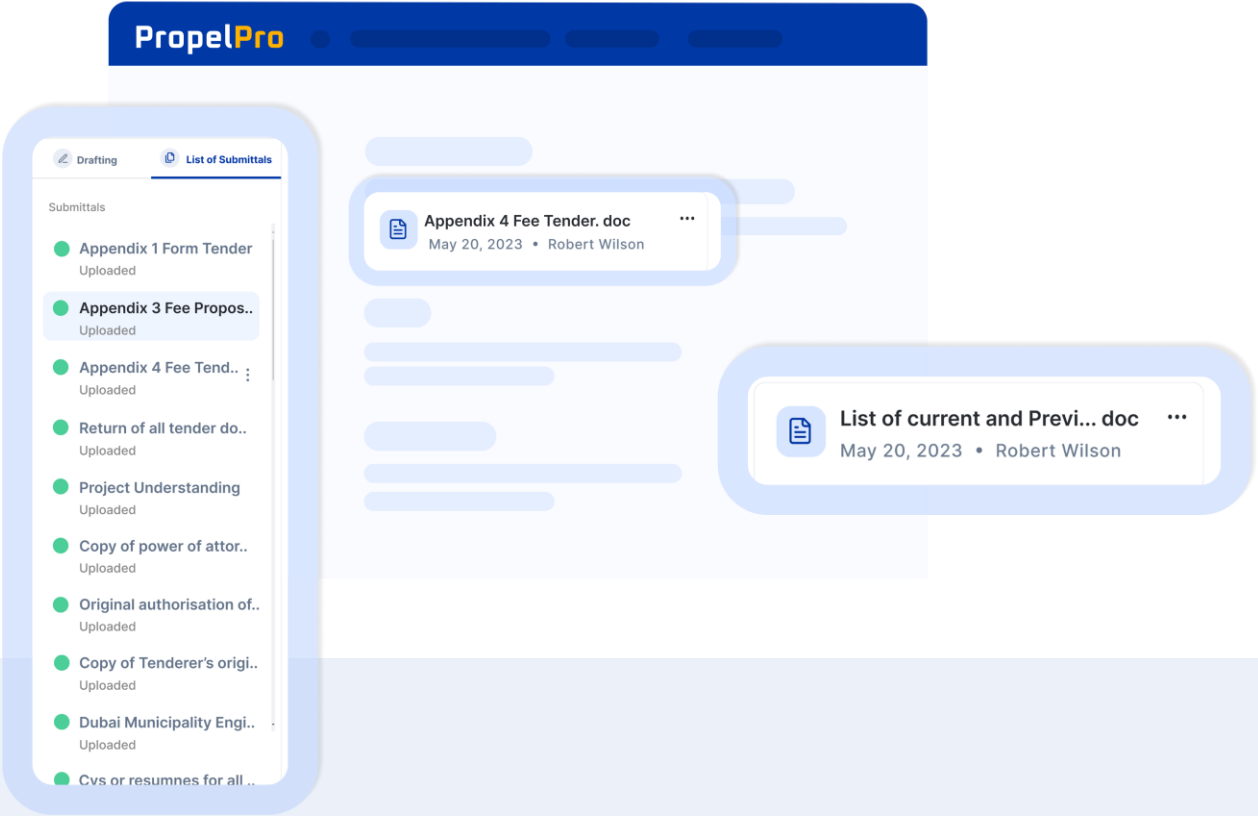
Publish Draft



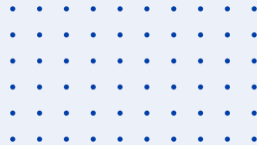
Finalize and publish your proposal draft with a single click. Once your content is ready, PropelWrite locks the version for review or submission—ensuring consistency, preventing accidental changes, and keeping your team aligned.



List of Submittals



Automatically generate a comprehensive list of documents required for submission. PropelWrite compiles this based on tender requirements—ensuring you never miss a mandatory form, annexure, or attachment during proposal packaging.



Version History



PropelWrite automatically saves versions as you work, allowing you to view, compare, or restore previous iterations at any time. Never lose progress, and confidently manage changes across your proposal lifecycle.

PropelPro

← Version 2

Sections

Cover Letter

Completed

Executive Summary

Completed

Company Profile

Completed

Table of Content

In Progress

Project Understanding

In Progress

Methodology & Apprao..

In Progress

Project Timeline

In Progress

Team Composition

In Progress

Similar Project Unders..

In Progress

budget & Cost Breakdo..

In Progress

Risk Management plan

In Progress

Project Work Timeline

Timeframe for Completion of Work

SR. NO.	DOCUMENT DESCRIPTION	
1.	Payment of the cost of Bid Document	...
2.	Earnest Money Deposit (EMD)	...
3.	An affidavit duly notarized	...
4.	Self-certified sheet demonstrating fulfillment of pre-qualification conditions	...
5.	Joint venture details (if applicable)	...

Financial offer in the format generated on portal at the time of bid submission Financial offer in the format generated on portal at the time of bid submission.

Version History

April

Version 1

Current version

Kavi Shukla

Version 2

08 June, 21:22pm

Kavi Shukla

Version 3

08 June, 20:12pm

Kavi Shukla

Version 4

08 June, 20:12pm

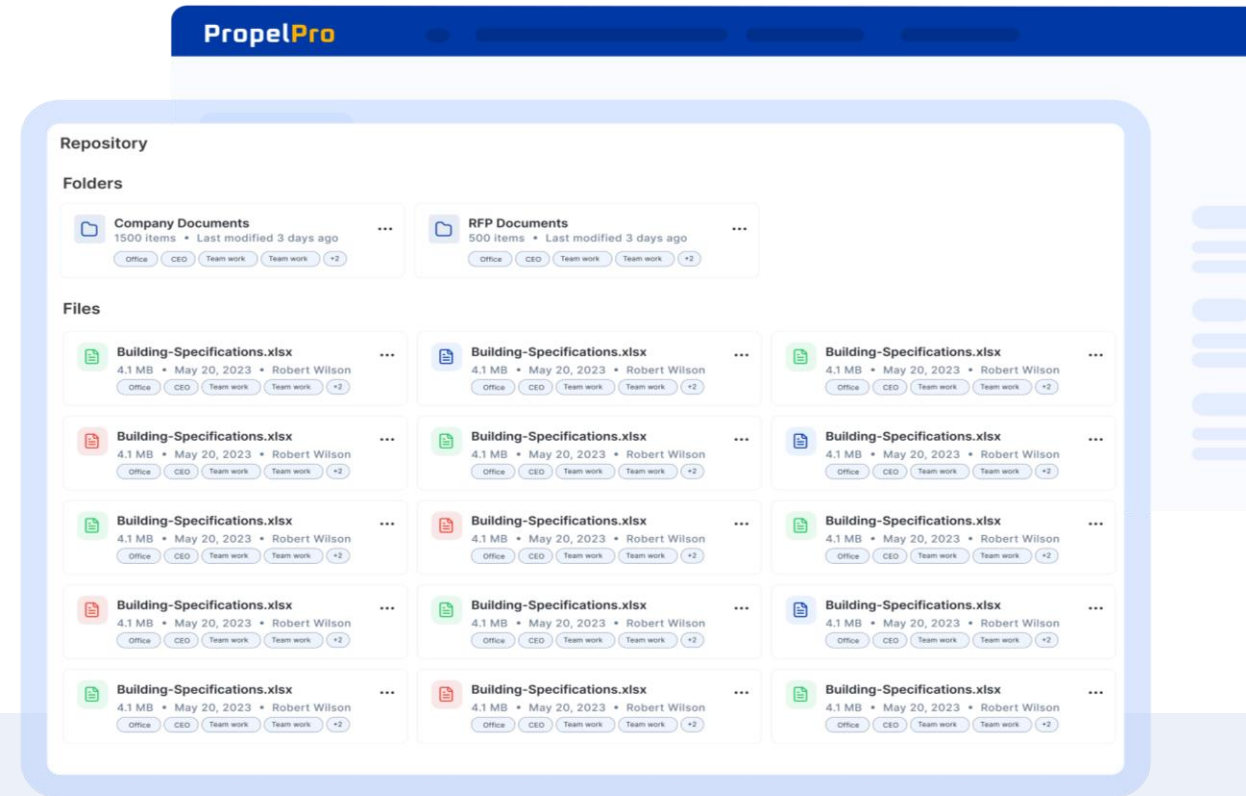
Kavi Shukla

Restore Version

DMS Repository



Seamlessly connect with your Document Management System (DMS) to access company documents, credentials, and past submissions. PropelWrite not only pulls approved content directly from your DMS but also identifies reusable sections, suggests similar content from earlier proposals, and learns from past projects to draft smarter and faster. Save time by leveraging your organization's existing knowledge base.



Customer Testimonials



Anil Bethu

Senior Manager of Waste & Water Treatment –

Thermax

Video link- [PropelPro Testimonial - Thermax](#)



Sharwari Dhotarkar

Automation Lead – **Thermax**

Video link- [PropelPro Testimonial - Thermax](#)



**THANK
YOU**