

AI-Powered Loan Pre-Approval

Our Solution

We can help you offer instant loan pre-approvals using AI-driven credit scoring models that leverage alternative data sources, expanding access to credit for underserved consumers while maintaining controlled risk.

The Details

Every solution is tailored to your needs. Our capabilities include:

- **Data aggregation:** Integrate structured and semi-structured data sources including bank account transactions, rent and utility payment history, employment and income data via payroll APIs, and telco or eCommerce behavior signals.
- **Feature engineering & scoring model development:** Use Dataiku's visual workflows and AutoML to train creditworthiness models using gradient boosting, logistic regression, and ensemble learning optimized for fairness, explainability, and low false positives.
- **Bias & fairness monitoring:** Use Dataiku's built-in fairness reports to ensure the model does not disadvantage new-to-credit or underrepresented groups, aligning with regulatory guidance (OSFI, FCAC).
- **Real-time scoring pipeline:** Deploy the model as a scoring API and embed it into loan origination systems or customer portals, offering instant pre-approval decisions.
- **Regulatory & auditability layer:** Log predictions and decisions in an audit-ready format and enable transparency into decision factors for customers and regulators.

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Typical Timeline

Week 1–2:

- Define use case, data sources, fairness criteria, and compliance constraints

Week 3–4:

- Build, train, and validate AI credit models in Dataiku

Week 5–6:

- API deployment and integration with pre-approval front end

Week 7–8:

- Pilot with live applicants, monitor KPIs, retrain as needed

Total Timeline: 8 weeks

Cost

Contact sales@celestialsys.com for pricing.

Expected Outcomes



Expanded reach to new customer segments and markets



Less pressure on underwriting and loan processing teams



Faster loan application and pre-approval processing



Improved credit access for underserved individual applicants