

FINAL PRESENTATION · STRATEGIC INSIGHTS

SLU International Student Compliance Dashboard

From Raw Institutional Data to Validated Compliance Monitoring

TEAM 3 — 5 ACTIVE MEMBERS

Mohamed Slama

Lazarus Tamunotonye

Saurabh Singh

Oluwakemi Iroko

Mohammad Shahnawaz Sajid (Team Lead)



Live Dashboard



[Data Studio Dashboard Link - CLICK HERE](#)

Why International Student Compliance Matters at SLU

THE COMPLIANCE STAKES

01 F-1 Visa Pipeline

Deposit payment, I-20 issuance, and I-901 SEVIS fee are sequential prerequisites for international student enrollment and legal entry to the United States.

02 Regulatory Exposure

Non-compliance risks institutional SEVIS certification, student visa denials, and enrollment revenue loss.

03 Operational Visibility Gap

SLU lacked a unified monitoring system connecting applicant records with government compliance data.

THREE-SOURCE DATA LANDSCAPE

APPLICANT

34,341 raw rows deduplicated

CONNECT

6,875 unique students ·

SEVIS

3,524 records ·

Bridge-Table Workaround Team 3 engineered **student_system_mapping** to enable Connect↔SEVIS cross-system analysis, converting a data-availability constraint into a validated integration solution.



Supabase PostgreSQL



◆ Google Data Studio

Building a Reliable Analytical Foundation

Profiling · Cleaning · Validation · PostgreSQL Integration



PROFILING

34,341

raw Connect rows

6,875

unique students after dedup (~80% duplicates)

3,524

SEVIS records · 126 columns each



QUALITY ISSUES IDENTIFIED

- **16 Connect columns** 100% NULL (Bank Statement, Sponsor Letter, Passport, all financial fields).
- SEVIS funding columns contained **date-string misalignment** from CSV export.
- **975 records (27.7%)** had Program_End_Date before Program_Start_Date.
- **919 expired passports, 942 expired visas** before date of entry.



VALIDATION & INTEGRATION

16 checks

6 PASS · 6 FAIL · 4 WARNING

4 tables

connect_data · sevis_data ·
student_system_mapping · data_quality_log

PostgreSQL → Looker Studio

Schema student_data · SSL on port 6543 ·
connection pooling



OVERALL ASSESSMENT

Significant data quality issues required immediate attention before dashboard development

Compliance Patterns & Risk Disparities Emerge

9 Major Insights · 6 Notable Disparities · 9 Risk Indicators



HERO COMPLIANCE RATES

22.0%

Deposit Rate

CRITICAL

34.8%

I-20 Issued

CRITICAL

45.5%

I-901 Paid

AMBER

42.4%

Advisor Assigned

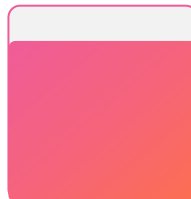
AMBER

Across 6,875 Connect + 3,524 SEVIS records



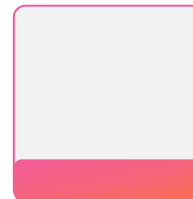
DEPOSIT → I-20 CONVERSION GAP

82.7%



Deposit-paid students
with I-20

21.2%



Non-deposit students
with I-20

61.5 percentage-point gap = single strongest predictor of document completion



ADVISOR ASSIGNMENT LEVER

47.9%

Deposit rate
for assigned students



2.9%

Deposit rate
for unassigned

16.5x differential — advisor assignment is the most operationally actionable lever



REGIONAL & EDUCATION-LEVEL DISPARITIES

26.3% **Bachelor's I-901**
263 of 357 unpaid · 57pp gap vs Doctorate 83.3%

36.8% **Africa Region**
620 of 981 unpaid · largest absolute gap

15.6% **Nepal**
76 of 90 unpaid · lowest among top-10 countries

Interactive Compliance Monitoring Built and Validated

Google Data Studio + Supabase PostgreSQL

14/14 SQL Reconciliation PASS

DASHBOARD ARCHITECTURE

5 SECTIONS · 13 VISUALS · 4 FILTERS

- 1 High-Level Compliance Overview — 4 KPI scorecards (Total / I-20 / Deposit / I-901)
- 2 Eligibility Breakdown — Gender donut, Education level bars, Top 15 countries
- 3 Document Compliance Monitoring — Deposit donut, I-20 donut, Deposit vs I-20 grouped bar
- 4 Government Fee Payment Tracking — I-901 donut, Fee by Education, Fee by Region
- 5 Regional & Risk Insights — Top 10 Fields, Funding Tiers, Risk Alert callout

4 Filters: Country · Education Level · I-20 Status · Intake Period cascading scope to all charts simultaneously.

SQL VALIDATION

14 / 14

PASS RATE

M1–M10 SEVIS metrics + Connect-1 through Connect-4 supplemental queries

RECONCILIATION METHODOLOGY

- check_circle Each SQL query executed against Supabase live database.
- check_circle Results captured character-for character with zero tolerance.
- check_circle Dashboard values recorded in default unfiltered state.
- check_circle Field-by-field comparison — zero mismatches detected.

✓ 100% validation pass rate dashboard certified for operational use in compliance monitoring.

Compliance Scorecard June 2026

All metrics SQL-validated against Supabase PostgreSQL · Zero tolerance reconciliation

3,524

Total SEVIS Students

BASELINE

34.8%

I-20 Issuance Rate

↓ RED < 40%

22.0%

Deposit Payment Rate

↓ RED < 40%

45.5%

I-901 Fee Paid Rate

⚠️ AMBER 40–70%

42.4%

Advisor Assignment Rate

⚠️ AMBER 40–70%

47.9%

Zero-Funding Students

! HIGH RISK > 40%

◆ 2 RED · 2 AMBER · 1 HIGH RISK only Total Population sits at baseline. Every compliance metric requires active intervention.

Deposit Payment is the Strongest Predictor of I-20 Issuance

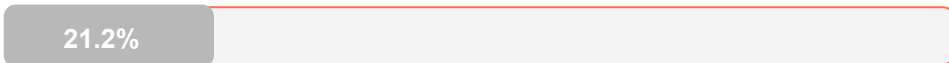
A 61.5 percentage-point conversion gap defines the most actionable compliance lever

I-20 ISSUANCE RATE BY DEPOSIT STATUS

Deposit Paid (n=1,512)



No Deposit (n=5,363)



61.5 pp GAP

Source: M5/M6 SQL queries · validated against Supabase PostgreSQL · 14/14 reconciliation PASS

THE FINDING

Deposit status is the **single strongest predictor** of document completion in the dataset. Among **22,430 raw records** without I-20, **21,120 (94.2%)** also lack deposit payments, confirming a dual-requirement compliance challenge.

OPERATIONAL IMPLICATION

- `arrow_forward` Front-load deposit requirement in all student onboarding communications.
- `arrow_forward` Prioritize deposit-payers for I-20 processing to clear highest-ROI queue.
- `arrow_forward` Trigger automated I-20 issuance upon confirmed deposit receipt.

⚡ The 61.5pp conversion gap is the single most actionable compliance lever identified in the dataset.

Three High-Risk Clusters Drive Non-Compliance

Education-level and regional concentration of unpaid I-901 fees

BACHELOR'S I-901

26.3%

compliance rate

 **263 of 357** students unpaid



57 pp gap vs Doctorate (83.3%)

Highest-risk education cohort
immediate outreach target

AFRICA REGION

36.8%

compliance rate

-  **620 of 981** students unpaid
-  **Largest absolute gap** by region

Countries:

Ghana · Nigeria · Zimbabwe · Kenya

Requires multilingual
communication strategy.

NEPAL CLUSTER

15.6%

compliance rate

 **76 of 90** students unpaid



Lowest among top-10 source
countries

Near-total fee non-compliance ·
assign dedicated advisor.

🚩 Combined: **959 unpaid students** concentrated in 3 identifiable clusters actionable for targeted intervention.

Five Data-Backed Action Clusters

Each recommendation tied to a validated metric and a specific intervention target

01 INTAKE

Intake-Level Improvements

Front-load deposit requirement in onboarding · automate I-20 trigger on confirmed deposit receipt.

↗ Lever: 61.5 pp conversion gap

02 REGIONAL

Region-Specific Communication

Multilingual campaigns for Africa (620 students) + Nepal (76 students) via cultural liaisons.

👤 Target: 696 unpaid students

03 DOCUMENTS

Document Compliance Drive

Financial documentation outreach for 1,688 zero-funding students · scholarship and funding info sessions.

📋 Scope: 47.9% of population

04 SEVIS FEES

Government Fee Monitoring

Automated 30/60/90-day I-901 reminders · bulk payment facilitation events and wire-transfer guidance.

💰 Target: 1,869 unpaid SEVIS

05 RISK FRAMEWORK

Risk Monitoring Framework

Tiered R1–R11 alert system with severity tiers, response timelines, and intervention ownership.

🛡️ Framework: 11 indicators

⬆️ 5 severity tiers

→ see Slide 10

✓ Recommendations align with Week 4 metadata mandates: intake planning · regional comms · document compliance · fee monitoring · risk framework.

RISK MONITORING FRAMEWORK

Tiered Alert System · 11 Indicators · 5 Severity Tiers

Formalized escalation procedures, response timelines, and intervention ownership

ID	Indicator	Current Value	Threshold	Recommended Action
Critical · 7-day response SLA				
R1	Bachelor's I-901 Rate	26.3%	< 30%	Direct outreach to 263 unpaid · payment session within 7 days.
R2	African Fee Compliance	36.8%	< 40%	Region-specific campaign · cultural liaisons · multilingual instructions.
R3	Nepal Compliance Rate	15.6%	< 20%	Emergency barrier assessment · dedicated advisor for 90 students.
High · 30-day response SLA				
R4	Staff Assignment Gap	57.7% unassigned	> 50%	Hire additional advisors or automated assignment algorithm.
R5	Zero-Funding Students	47.9%	> 40%	Financial documentation drive · scholarship info outreach.
R6	I-901 Overall Rate	45.5%	< 50%	Automated 30/60/90-day reminder system · bulk payment events.
Medium · 90-day response SLA				
R7	Fall 2025 Data Spike	6,855 one-batch	100x norm	Verify Connect export configuration · validate against source.
R8	16 Null Document Columns	100% null	= 100%	Investigate Connect data export · required for full compliance tracking.
Monitor · Ongoing tracking				
R9	Gender Ratio (India)	66:34 M:F	> 2:1	Track term-over-term · no action until ratio exceeds 3:1.
R10	STEM Concentration	72%+	> 70%	Ensure CS/Engineering advisor capacity scales with enrollment growth.
R11	Connect-SEVIS Gap	3,351 missing	—	Investigate integration pipeline · 49% of Connect students lack SEVIS records.

SEVERITY LEGEND

● Critical

● High

● Medium

● Monitor

Response SLA - **CRITICAL: 7 days** · **HIGH: 30 days** ·
MEDIUM: 90 days · **MONITOR: ongoing.**

From Raw Data to Validated Decision Support

A complete end-to-end compliance analytics project suitable for institutional review

◆ KEY INSIGHTS RECAP

- **6 hero KPIs** established as compliance baseline (3,524 / 34.8% / 22.0% / 45.5% / 42.4% / 47.9%).
- **Deposit predictor:** 61.5 pp conversion gap is the strongest actionable lever.
- **Three critical risk clusters:** Bachelor's 26.3% · Africa 36.8% · Nepal 15.6%.
- **Advisor assignment** drives 16.5× deposit rate differential.

✓ INSTITUTIONAL VALUE

- **Validated compliance monitoring system** now live in Looker Studio.
- **14/14 SQL reconciliation PASS** — every metric auditable and reproducible.
- **Decision-support framework** connecting raw data to operational action.
- **Tiered R1–R11 risk framework** formalizes escalation procedures.
- **Dashboard ready** for SLU leadership operational use.

⋮ FUTURE MONITORING ROADMAP

- 1 Deposit-to-I-20 conversion funnel tracking.
- 2 Bachelor's I-901 recovery (**263 students**).
- 3 Africa cluster monitoring (**620 students**).
- 4 Nepal emergency intervention (**76 students**).
- 5 Staff assignment coverage trend.
- 6 Zero-funding documentation drive (**1,688 students**).
- 7 Connect-to-SEVIS record sync investigation (**3,351 gap**).



From raw datasets to validated institutional decision support a complete analytical lifecycle, ready for operational deployment.



Thank You

Questions & Discussion

TEAM 3 — DATA VISUALIZATION ASSOCIATE INTERNSHIP

LT Lazarus Tamuno

SS Saurabh Singh

MS Mouhamed Slama

OI Oluwakemi Iroko

MS Mohammad Shahnawaz Sajid (Team Lead)



[↗ LINK →](#)

[Google Drive Links Video Presentation - CLICK HERE](#)



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[Google Data Studio Live Dashboard - CLICK HERE](#)

Saint Louis University × Excelerate Data Visualization Associate Internship

Week 4 | June 2026