



Combat Application Fraud with Voyatek's Fraud Firewall

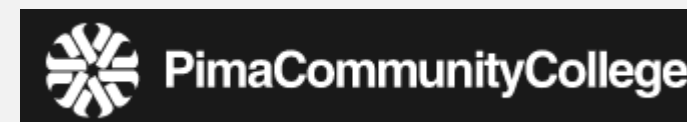
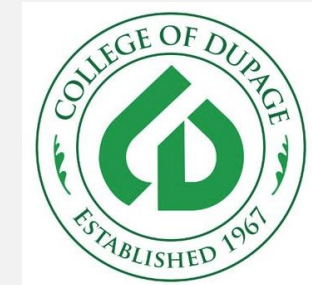
Heather Hutchings
Lead Analytics Consultant, Higher Education





20+ years
60+ institutions

- Business process analytics
- Assessment and strategy
- Data governance
- Data integration/warehousing
- Data modeling and visualization
- Analytics platform admin/hosting
- Customized training





Data is everywhere
Data is disconnected



Student Information System (SIS)/ Enterprise Resource Planning (ERP)



Admissions Systems (CRM)



Learning Management Systems (LMS)



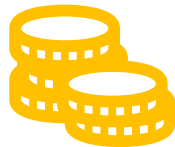
Case Management Systems (CMS)



Testing / Tutoring Systems



Human Resources Systems



Finance Systems



Advancement / Alumni / Fundraising Systems



Cloud



Siloed



Visibility

Student Success Analytics (SSA) Cloud



 Human Resources

 Finance

 External / Public Data



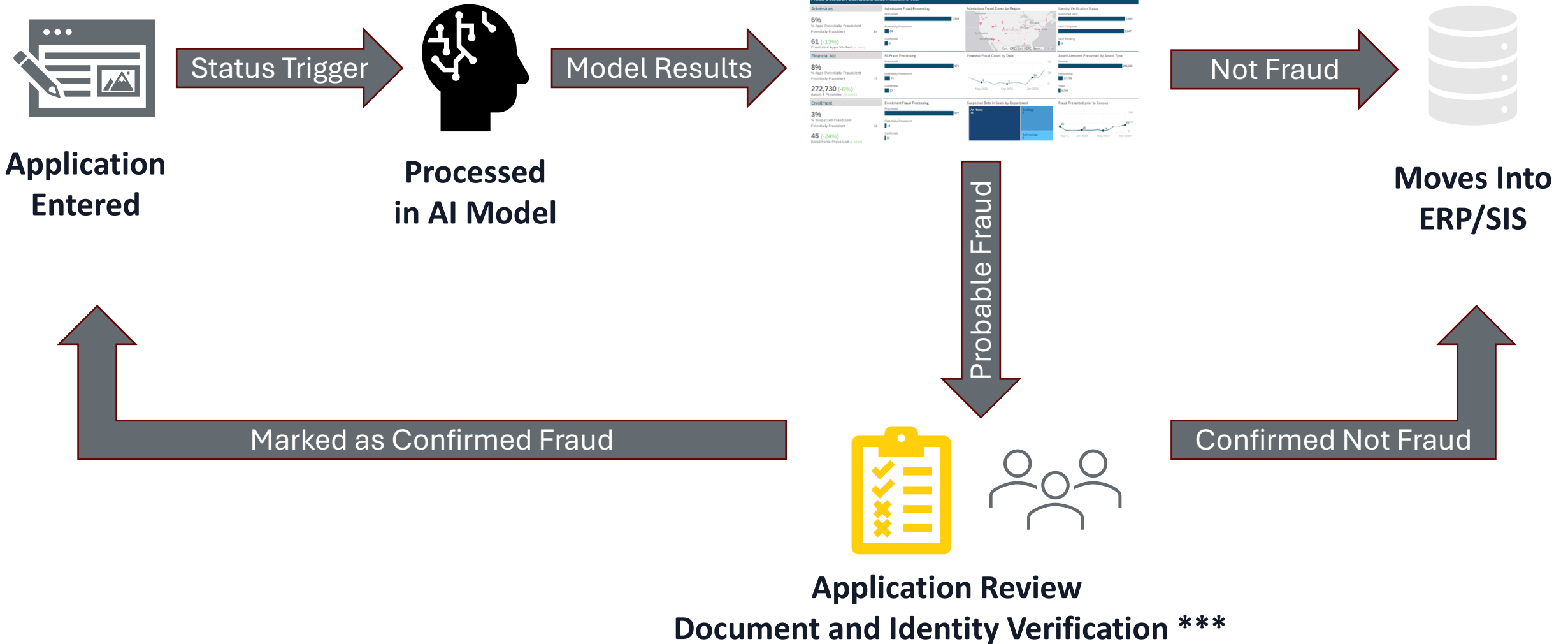
Prevent Fraud



Application Fraud Firewall

Our innovative solution uses adaptive AI to analyze admissions, financial aid, enrollment, and public records data to swiftly identify suspicious activities and empower institutions to focus resources on real students.

Admissions Application Business Process Flow



A blurred background image showing several people in a meeting or office setting. One person in the foreground is pointing towards the right. The overall tone is professional and collaborative.

Live Demo

- Data used is generated, but realistic and representative of fraud in the real world
- Your institutional data sources and definitions are applied during implementation to support your goals and business processes

Explanatory Factors to Guide Review Actions

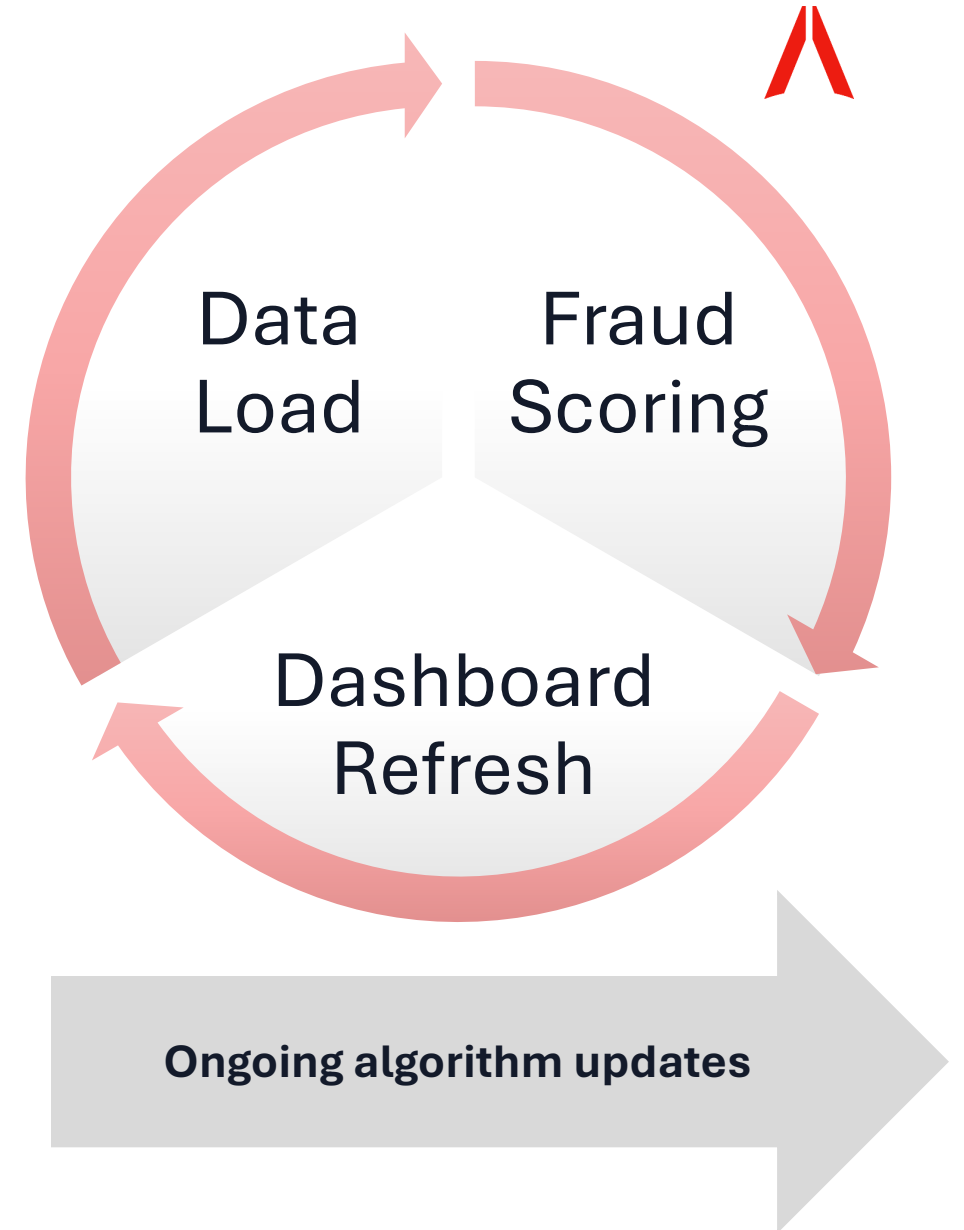


- SHAP scores explain an application's score, and how each factor impacts the final fraud score (positively or negatively)
- The size of the bar indicates the size of the impact
- % impact reflects how much of the final score was attributed to a particular factor
- The SHAP score for a factor may depend on other factors in the model

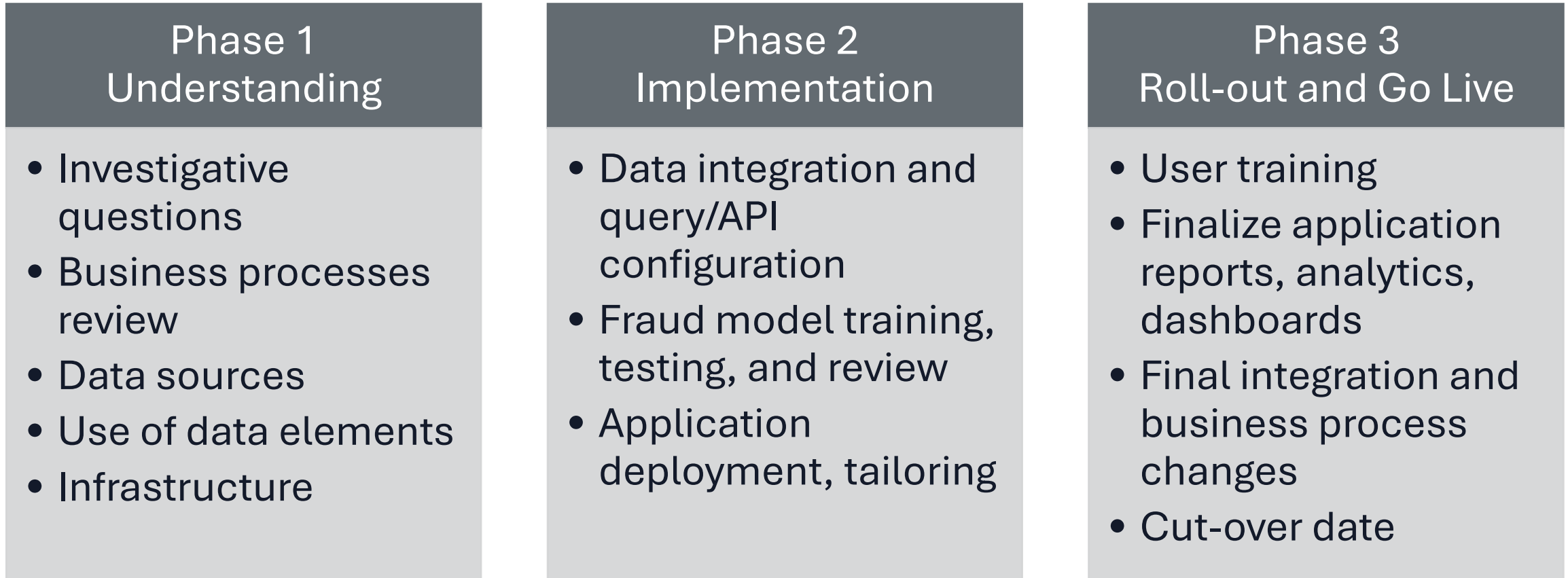
			Measures	Score	% Impact
Rank	Factor	Value			
1	Completion Time	1 days			32%
2	Distance	15 miles			21%
3	Online Only	No			13%
4	Age	38			6%
5	Employed	Unemployed & Not Seeking Employment			5%
6	Readmit Student	No			4%
7	New College Stu	Yes			4%
8	Full Part Time Enr	Full-time			4%
9	Email Domain	hotmail			3%
10	Sig Match Perc	100			3%

| How It Works

- Real-time or daily application scoring
- Explanatory scoring provided for transparency
- Verification results fed back into the model for machine learning
- Automated and human algorithm review and updates



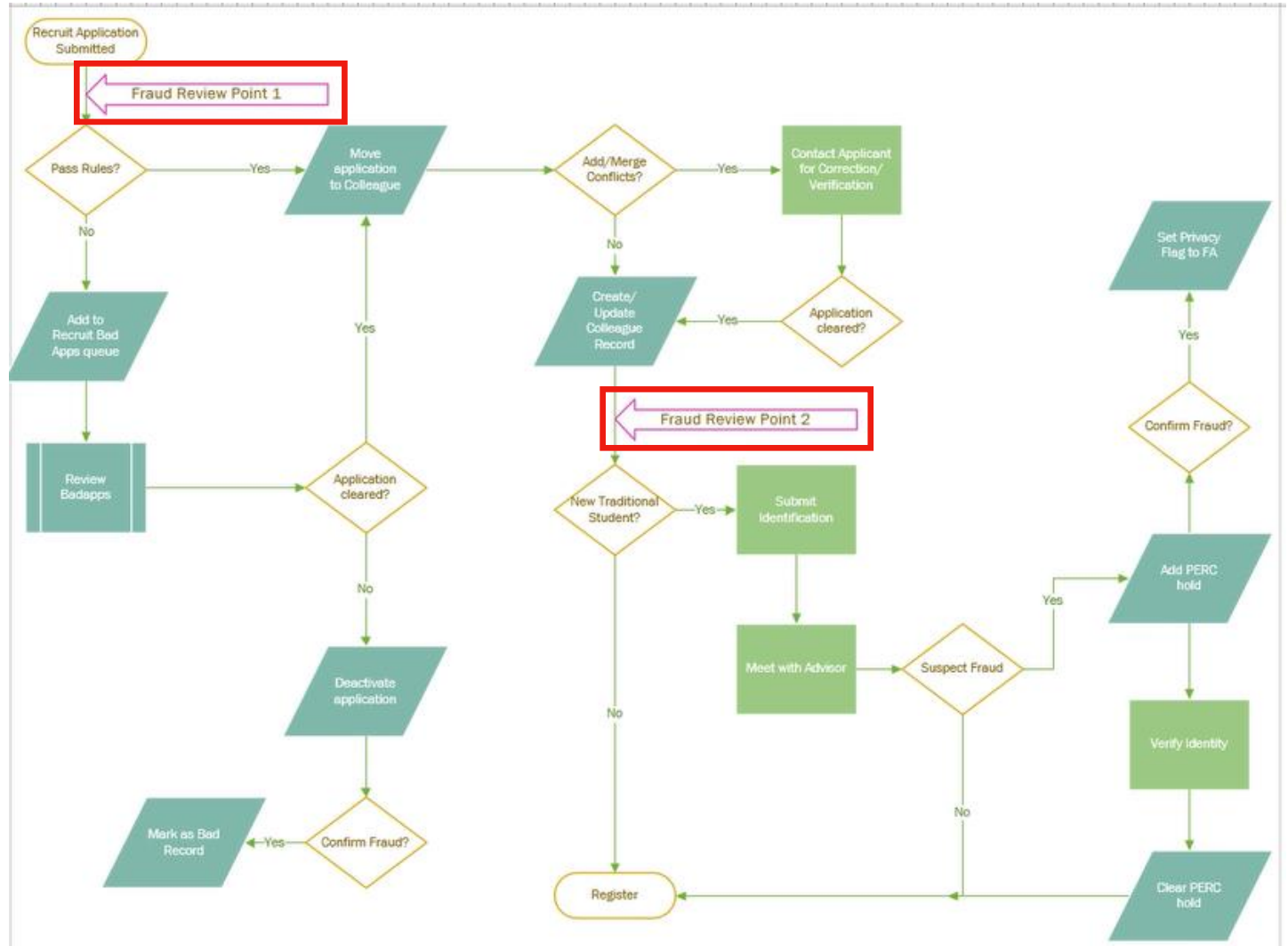
Typical Implementation Process and Timeline



Example Documented Fraud Detection Workflow



- Combines people and systems
- Identifies automation and any required manual steps
- Establishes fraud review points
- Identifies owners and actions





| Outcomes Delivered



\$172K

Average annual fraudulent financial aid disbursements prevented for community colleges



10x

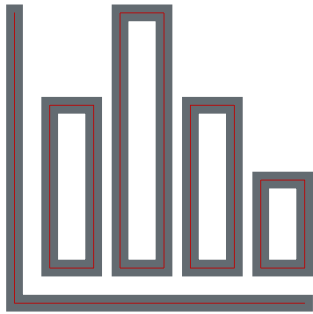
Return on investment in first year of deployment



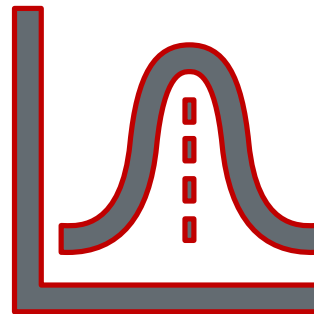
80%

Reduction in manual application review, refocusing staff efforts on student service

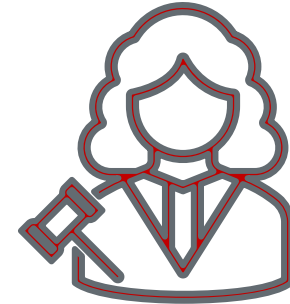
Fraud Health Check



Run Models



Identify Scope of Problem



You Decide!

| Future Direction



- Entered into strategic partnership with Element451 AI-first CRM platform
 - Provide real-time integrated application fraud review and immediate results written back
- Write back to CRM or SIS directly from our dashboard application using “scripted actions”
 - When doing manual review (calls, emails, zoom remote mediated sessions) click a button to clear the “hold” or update the application status “pending identity verification” without having to log into the other system(s) – where CRMs/admissions/FA/identity systems support full two-way APIs
- Partnership with leading identity/document verification provider to further automate and enhance the speed and accuracy of verification
- Further develop the “bots in seats” model to find and block fake students
- Fraud detection and verification for employee onboarding, especially remote employees

| Questions?



Thank you!

highered@voyatek.com

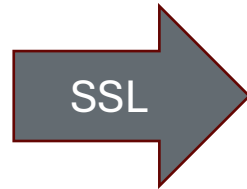
heather.hutchings@voyatek.com



| How Does It Work?



**Institutional
Data**



**Transformation
and Storage**



**Analytics and
Visualizations**



**End Users and
Analysts**

SSA Cloud - Technical Architecture

