

# Preventing Payment Fraud on Your Campus

May 18, 2023 (2:15 - 3:15 PM)

**touchnet**

A Global Payments Company

# Presenters



**Robyn Bongartz**  
Director, Accounts Receivable  
**Wichita State University**



**John McElroy**  
Product Strategy  
**TouchNet**

# Agenda

- 1 Introductions
- 2 Common Threats
- 3 Level of Risk
- 4 Payments Fraud Tools
- 5 Operational Fraud Tools
- 6 Payment Technology Considerations
- 7 Questions

# About TouchNet



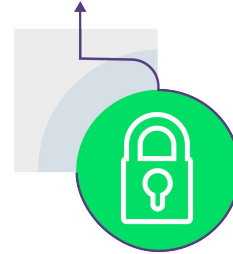
## Dedicated Expertise in Higher Education

- 30+ year expertise in higher ed software development
- Simplifies the business of higher ed
- Thought leader in the higher ed community



## Unmatched Integration with SIS systems and vendors

- Process payment or permission transactions with real-time updates
- 250+ certified partners and more than 3,500 campus connections
- Plug and play, secure environment



## Built-in Payment Security and Compliance

- Central, secure, PCI-compliant payment system
- Protects sensitive institutional and student information
- Complies with applicable data privacy laws

# About Wichita State University (WSU)



- 16,921 Students
- Founded 1895 (Public University)
- Main Campus, WSU Downtown, WSU South, WSU West
- Research Institution
- Combine traditional learning with applied learning
- Innovation Campus

# Our Platforms

Banner by



Payment Platform (we use TouchNet Payment Gateway)  
With Merchant Services: ACH, Credit Cards w/Complisce Services (fka PCI-EZ)

## **Student Self Service/One Stop**

- eBills, Refunds, Deposits
  - We use a Service Fee
- Payment Plans
- Advisor (Student Cashiering)
- 3rd Party/Sponsor Payments

## **Non-Student**

- Online Stores (uStores)
- Hosted Payment Pages (uPay)
  - 12 Partners connected
- Omni Channel POS (MPOS)
- Retail Cashiering (CME)
- Departmental Deposits

# Common Threats

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# Various Types of Fraud around Campus

## Common Types

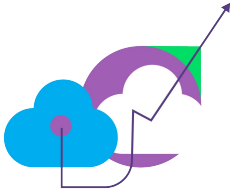
- Admissions
- Academic
- Purchasing
- Financial Aid
- Accounts Payable
- **Payments**

## Payments

- Payments in
  - Payments out
- 
- Credit cards
  - Debit cards
  - ACH
  - International
  - Payment Alternatives



# Fraud Statistics



198%

The **Education** sector had a 198% increase in fraud in 2021

Source: ITRC 2021 Data Breach Report



2.8M

In 2021, **2.8 million cases** of fraud cases reported

Source: Federal Trade Commission



\$5.8B

A total of \$5.8 billion was lost to fraud in 2021.

Source: Federal Trade Commission

# Fraud Techniques

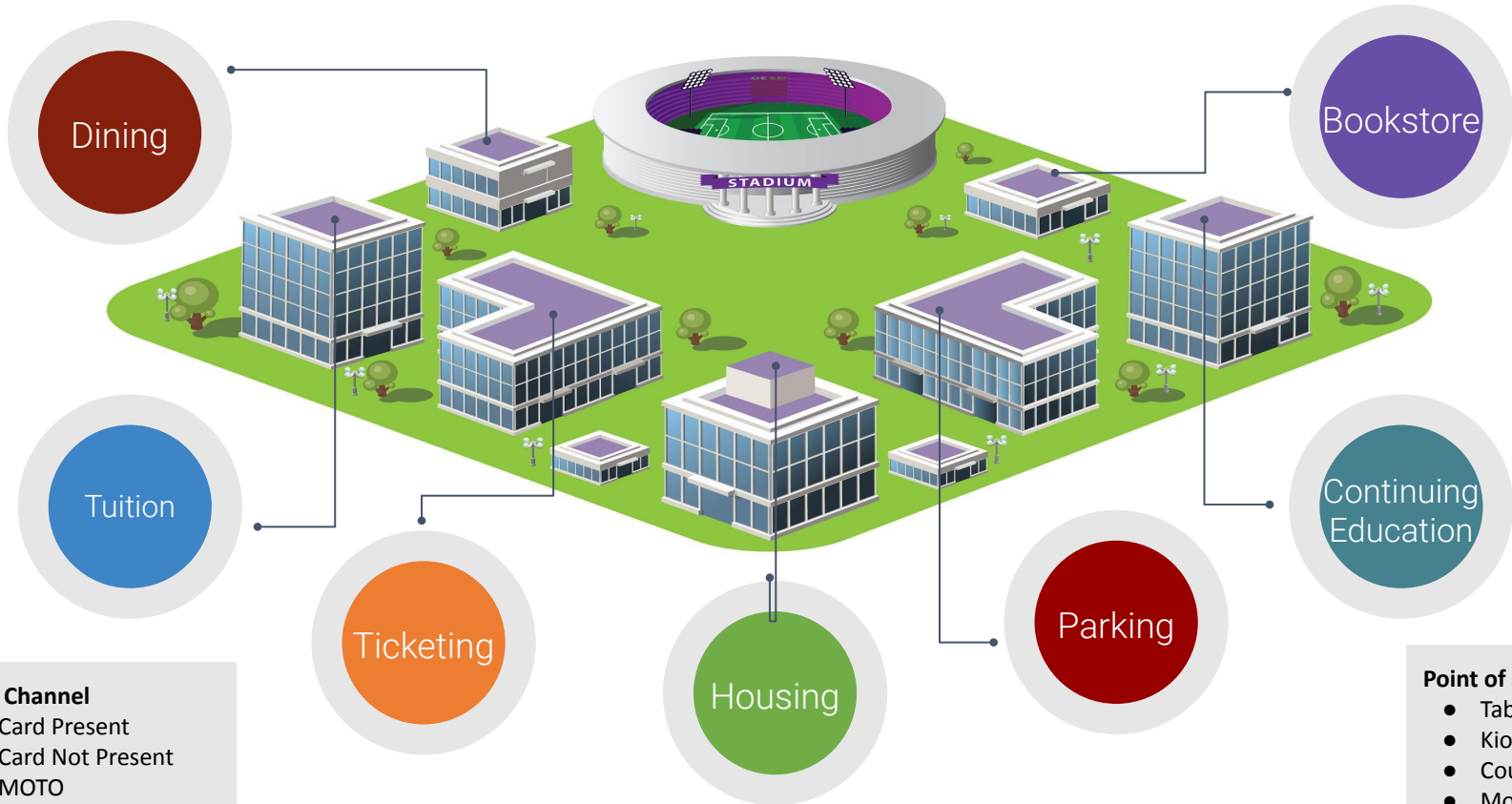
- Phishing/smishing
- Malware or spyware
- Ransomware
- Social engineering
- Account takeover
- Hacking
- Skimming
- Exploiting public WiFi networks



# Level of Risk

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# Payment Risk at Every Point of Interaction



# Considering a Merchant's **Level of Risk**



- Student Account Related
- Campus ID Balance Refresh
- Donations

- Refunds
- Retail
  - **Tickets** and Events
  - Merchandise

# Ticketing Vendors Under Attack

## Virginia Tech Police investigate fraud claims after ticketing website goes down

The screenshot shows the Virginia Tech ticketing website interface. At the top, there is a navigation bar with 'Home' and 'Ticket Office Info'. Below this is a decorative banner with a hexagonal pattern. A prominent orange message box states: "Due to technical difficulties our ticketing website is currently down. Please check back later." Below the message are buttons for "View Calendar" and "No events are currently on sale. Check back later." A category dropdown menu is visible, set to "All Categories". At the bottom, a blue banner advertises "CYBER SECURITY BLACKSBURG".

## The Cornell Daily Sun

The screenshot shows a news article from The Cornell Daily Sun. The headline reads: "Cornell's Ticketing Service Compromised: Information Breach on Partner Platform Costing Students". The article is by Carlin Reyna. The main image shows a group of people, including a man in a red jacket, standing in a line at night. A caption below the image says: "Fans line up to enter Lynah Rink ahead of Cornell's game against Harvard, one of many ticketed events affected by the outage." The article text is partially visible, mentioning "Fans line up to enter Lynah Rink ahead of Cornell's game against Harvard, one of many ticketed events affected by the outage."

## The Heights

The screenshot shows a news article from The Heights. The headline reads: "Students Report Fraudulent Credit Card Activity Following Purchases From University Ticketing Website". The article is by Olivia Joung and Natalie Arndt. The main image shows the entrance to the Boston College Police Department (BCPD) building. A caption below the image says: "The Boston College Police Department (BCPD) is currently investigating reports of fraudulent credit card activity following purchases of online tickets for campus events, according to an email University administrators sent to the BC community on Friday." The article text is partially visible, mentioning "The Boston College Police Department (BCPD) is currently investigating reports of fraudulent credit card activity following purchases of online tickets for campus events, according to an email University administrators sent to the BC community on Friday."



# Payments Fraud Tools

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# Fraud Tools

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## Quick List



### Payments

CVV & AVS

3-D Secure (3DS)

ReCAPTCHA Ver. 3

e-Wallets & tokenization

EMV & Contactless

P2PE (CP) & SRED (CNP)

ACH Account Validation and  
Payment Blocker

Overpayment Restrictions

Payment Returns (refunds)



### Operations

Red Flag Monitoring

Refund Controls (MFA)

Chargebacks

VOIDS & Approval Queues

Merchant ID Controls

Statement Monitoring

Cash Monitoring (IRS 8300)



# Payments Fraud Tools

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# Card Not Present



## Payments Focused

**CVV & AVS**  
**SRED Device for VT/Call Center**  
**ReCAPTCHA Ver. 3**  
**Digital Wallets (tokenization)**  
**3-D Secure 2.1 (3DS)**

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EMV/Chip & Contactless/NFC  
P2PE (CP) & SRED (CNP)  
Mobile Wallets

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ACH Account Validation and  
Payment Blocker  
Overpayment Restrictions  
eRefunds and Payment Returns



## Applications

Campus Merchants  
Student Finance  
ID Management  
Virtual Terminals  
Student ID Declining Balances



# Card Not Present: eCommerce



**C**ard **V**erification **V**alue (CVV)

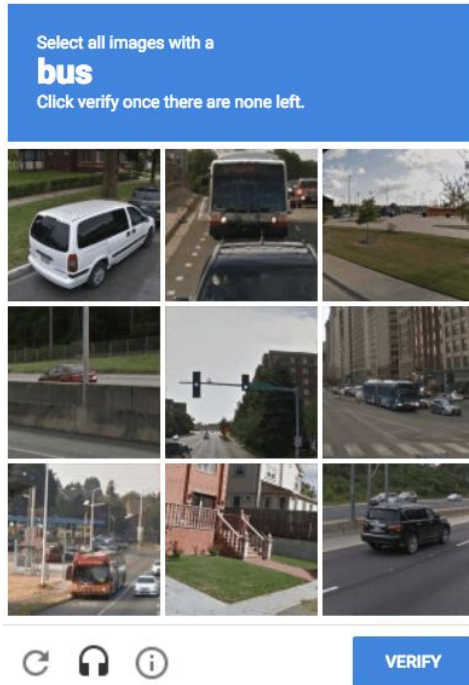


**A**ddress **V**erification **S**ervice (AVS)

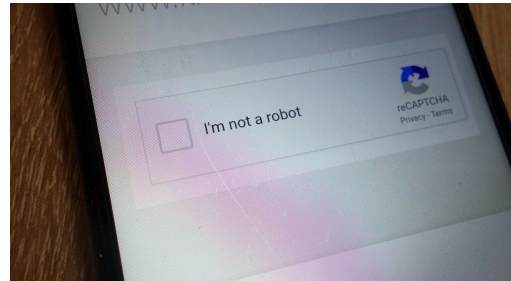
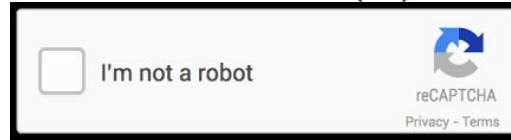
As an added bonus, including AVS and CVV information during the request helps your transactions **qualify for lower Interchange rates.**

# Card Not Present: eCommerce

## CAPTCHA



## ReCAPTCHA (v3)



4/12 - 4/19 (score 0.0 and 1.0)  
0.9 | 238,349 (98.3%)  
0.7 | 3,187 (1.3%)  
0.3 | 721 (0.3%)  
0.1 | 167 (0.1%)

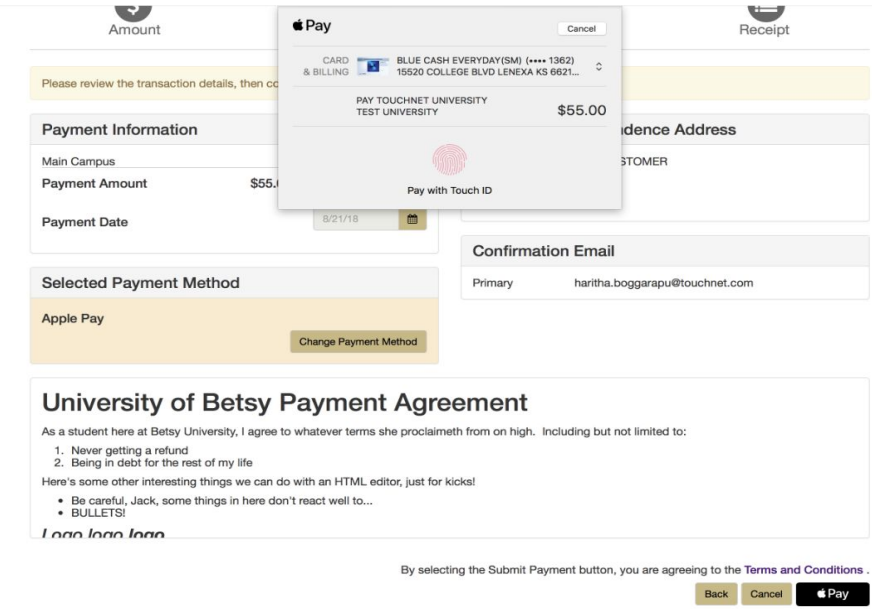
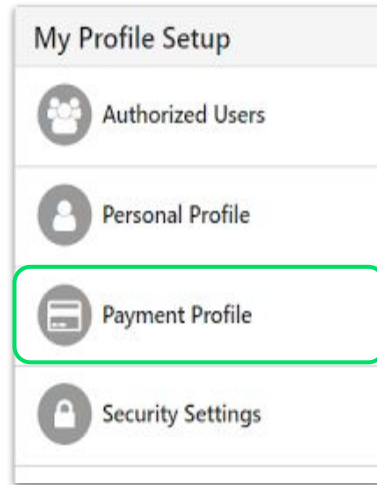
## ReCAPTCHA (v3) Data Points

- IP address
- Resources loaded, including styles or images
- User Google account information
- Behavior, like scrolling on a page, moving the mouse, clicking on links, time spent completing forms, and typing patterns
- Browser history
- CSS information
- Browser plug-ins
- Cookies

# Card Not Present: eCommerce

## Digital Wallets and Tokenization

- Enable Payment Profiles
  - Tokenized
- Apple Pay
- Google Pay



# Card Not Present: Mail Order/Tel Order (MOTO)

## Virtual Terminal/Call Center

- Landline/Phone - Connect a P2PE (or E2EE) device to the payment application.



ID TECH SREDKey 2

- VoIP
- Video (Zoom, Teams, etc)



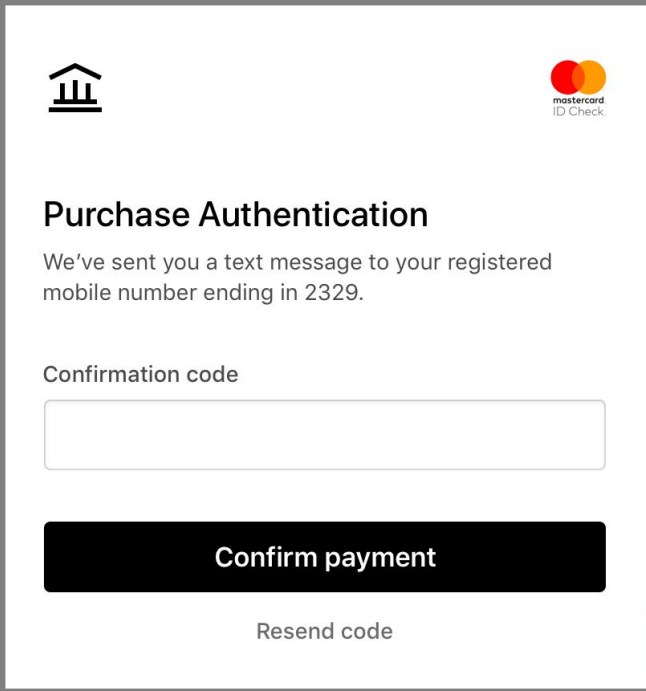
# Latest Tools





# Card Not Present: 3-D Secure (3DS2)

## Suspicious card transaction?

- Embedded, Frictionless Authentication of cardholder's identity in real-time.
- Utilizes a Greater Number of Data Points to Authenticate Transactions
- Authenticated transactions cannot be disputed by the cardholder as fraud
- Compatible with iOS and Android



### Purchase Authentication

We've sent you a text message to your registered mobile number ending in 2329.

Confirmation code

**Confirm payment**

[Resend code](#)



# Passkeys - “Key to the Future”

## Why passkeys?

***Passwords are a problem.***



Knowledge-based



Hassle to use and remember

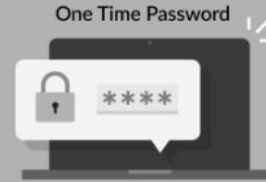


Easy to phish, harvest, replay

**89%** of organizations experienced a phishing attack in the past year.\*

\*HYPR, 2022 State of Passwordless Security Report - Download the Report [here](#).

Legacy authentication solutions don't address the security problem and/or are not usable enough for large-scale consumer utilization.



FIDO Alliance 2



# Payments Fraud Tools

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# Card Present



## Payments Focused

CVV & AVS  
SRED Device for VT/Call Center  
ReCAPTCHA ver. 3  
Digital Wallets (tokenization)  
3-D Secure 2.1 (3DS)

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## EMV/Chip & Contactless/NFC P2PE (CP) & SRED (CNP) Mobile Wallets

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ACH Account Validation and  
Payment Blocker  
Overpayment Restrictions  
eRefunds and Payment Returns



## Point of Sale (POS)

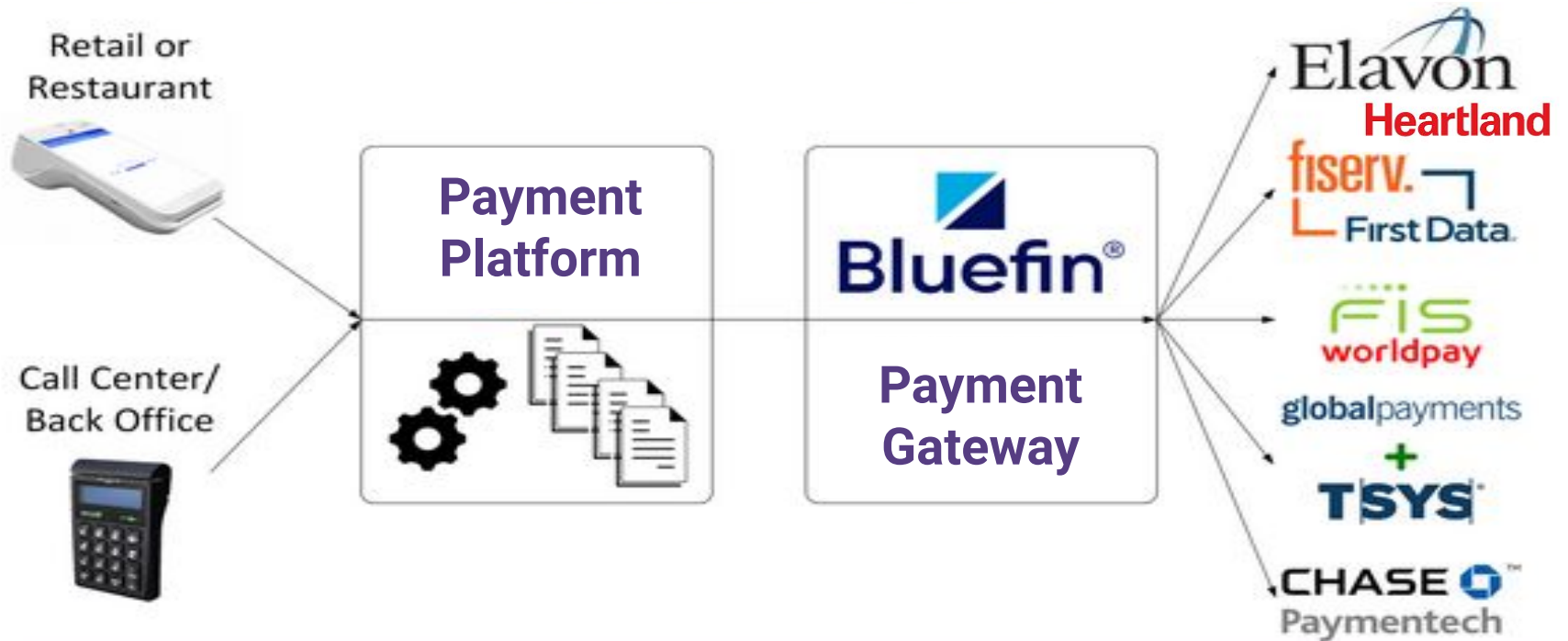
Marketplace uStores POS  
Student Account Advisor  
Dining (OneCard)  
Retail (Vital)  
Self checkout (Nextep)  
Standalone devices



# Card Present: EMV/Chip & Contactless/NFC



# Card Present: P2PE (CP) & SRED (CNP)



# WSU Marketplace – Point of Sale (POS)

## Use Cases


- Dental & Medical Clinics
- Campus Recreation
- Ulrich Museum
- Safekeeping Groups
  - Student Groups raise over \$47000 in 2022 using Marketplace & Marketplace POS. \$26000 in person-to-person sales with an iSMP4 & cellular enabled iPad.







# Marketplace

Wichita State University Mall

All Stores



Welcome to Wichita State University Mall

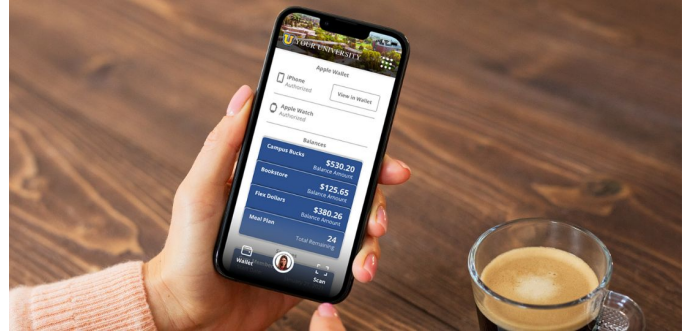
 <p>Accounts Receivable Training</p>	 <p>WICHITA STATE UNIVERSITY AFRICAN AMERICAN FACULTY AND STAFF ASSOCIATION</p>	 <p>Sigma Iota <i>Alpha Sigma Lambda - Sigma Iota</i></p>	 <p>Alpha Eta Society <i>National Scholarship Honor Society for the Allied Health Professions</i> Wichita State University College of Health Professions</p>
	<p>African-American Faculty and Staff Association</p>	<p>Alpha Sigma Lambda - Sigma Iota</p>	<p>Coll of Health Professions Alpha Eta Honor Society</p>

## Use Cases

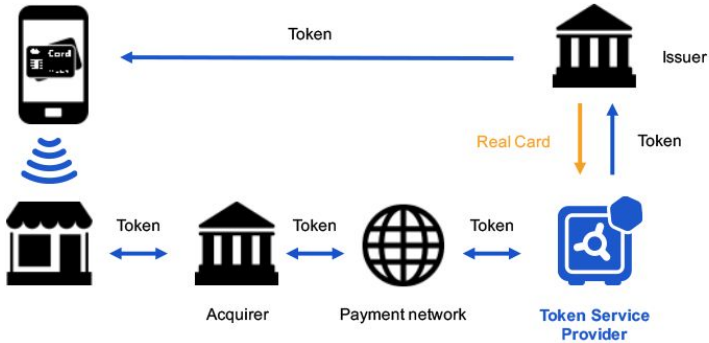
- Zero dollar functionality
  - Registration for free events (Passage2Success)
- 135 active uStores
  - New stores added each year
- Student group dues
- Departments or groups can open a ticket to request new store. Requestors are provided a list of questions they can complete with the details needed for setup.



# Mobile Wallets



## Campus ID / Declining Balance



# Payments Fraud Tools

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## Other



### Payments Focused

CVV & AVS  
SRED Device for VT/Call Center  
ReCAPTCHA ver. 3  
Payment Profiles (tokenization)  
3-D Secure (3DS)

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EMV/Chip & Contactless/NFC  
P2PE (CP) & SRED (CNP)  
Mobile Wallets (Tokenization)

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**ACH Account Validation and  
Payment Blocker  
Overpayment Restrictions  
eRefunds and Payment Returns**



# Nacha<sup>®</sup>

Web Debit Account Validation Rule

Manages the development, administration, and governance of the ACH Network, the backbone for the electronic movement of money and data in the United States, and is an association for the payments industry.

The ACH Network processes electronic financial transactions – such as Direct Deposit and Direct Payments – for consumers, businesses, and federal, state and local governments.

# Other: ACH Account Validation & Payment Blocker

## Web Debit Account Validation Rule

- Effective March 19, 2021
- Account information must be validated on first use

## Debit Blocker (with your Bank/ODFI)

- Prevents transactions from being authorized from your account

## ACH Restricted Account Database - “Blacklist”





# Other: Overpayment Restrictions

- Limit overpayments by
  - Payment method
  - Student type

Overpayment + Refund is a Common way to commit money laundering or fraud



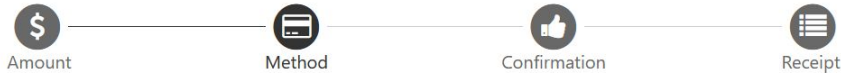
# Other: Payment Returns (Refunds)

- Payment method in, payment method out
- Refund to the same payment method/account used
- If you charge a stolen card, you return to the same stolen card (they want a refund via check or ACH)



# What WSU is doing? – ACH Validation

## Account Payment



\* Indicates required information

Amount: \$100.00  
Method:\*

### Account Information

\* Indicates required fields

You can use any personal checking or savings account.  
Do not enter other accounts, such as corporate account numbers, credit cards, home equity, or traveler's checks.  
Do not enter debit card numbers. Instead, enter the complete routing number and bank account number as found on a personal check.

\*Name on account:   
\*Account type:   
\*Routing number: (Example)   
\*Bank account number:   
\*Confirm account number:

### Option to Save

Save this payment method for future use

Save payment method as:   
(example My Checking)

Set as your preferred payment method. You can choose a different payment method prior to submitting any payment.

### Refund Options

You must enroll in Two-Step Verification to save this as a Refund Method. Please proceed to Security Settings in My Profile to enroll.

# What WSU is doing? – Account Blocker

## Restricted Accounts

Use this page to restrict ACH checking and savings accounts. Any attempted ACH transaction using a restricted account through any TouchNet commerce application or Web API will receive a -1748 Declined - Account Restricted error.

Refresh  Not Restricted

Restricted Accounts: 1,494

Restriction Id	ABA Nbr	Acct Nbr	Name	Descriptor	Payment Gateway reference number.	Ancil Data	Restriction
1	301171081	6179	WuShox #1		3709	myWSU ID	Checking
2	323274445	1816	WuShox #2		4687	myWSU ID	Checking
3	323274445	1816	WuShox #3		3345	myWSU ID	Checking

ID: C985V966 Robyn Janene Bongartz

### ▼ HOLD DETAILS

Active filters: Hold Type: RC

Hold Sequence	Hold Type *	Hold Type Description	Reason	Amount	From *	To *	Ori
417054	RC	Returned check			08/06/2013	10/19/2017	

1 of 1  Per Page

# What WSU is doing? – Return CC Payments

Refund								
To refund one or more of each item, enter the quantity returned and/or refund amount.								
Total amount available to refund:						\$390.00		
Item	Stock #	Quantity Ordered	Quantity Not Fulfilled	Quantity Cancelled	Quantity Returned	Refundable Amount	New Quantity Return	Refund Amount
KMA Conference 2021 Member Registration	8806542	1	0	0	0	50.00	0 ▾	
(Modifier)	Member Registration Options : Thursday, Nov. 4 and Friday, Nov. 5 Conference Sessions with Thursday evening banquet					\$225.00		\$ <input type="text"/>
(Modifier)	Member Registration Options : Thursday, Nov. 4 Annual Banquet and Auction					\$45.00		\$ 45.00 <input type="text"/>
(Modifier)	Member Registration Options : Friday, Nov. 5 Conference Sessions, lunch included					\$120.00		\$ 120.00 <input type="text"/>

- ▼ PayPath Home
  - ▶ Priority Actions
  - ▶ Activity Reports
  - ▶ Funding Reports
  - ▶ Refund Reports
  - ▼ Refund Processing
    - Wichita State University (Inactive)
    - Wichita State University - VISA
    -  Wichita State University
    - Audit Log

## Single Refund Summary for the last 30 days

0	Single refund request(s) pending Wichita State U
0	Single refund request(s) pending TouchNet action
0	Single refund request(s) denied
<b>Initiate Single Request(s)</b>	

# What WSU is doing? – In Person Payments

- Computers referred to as Kiosks were removed.
- Cashiers do not have credit card machines.
- Our motto is “Less Cash”. We know we will not be “Cashless”.
  - Partnered with our Campus Credit Union

# Operational Fraud Tools

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# Operational Fraud Tools

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## Operations Focused

**Red Flag Monitoring**

**Refund Controls (MFA)**

**Chargebacks**

Cash Monitoring (IRS 8300)

Voids & Approval Queues

Merchant ID Controls

Statement Monitoring (RECON1)





# Red Flag Notifications

## Manage Red Flag Notifications

### Refund Account Modification

Template Title	Triggering Event	Recipient	Email Action	Text Action
Refund Account Created Notification	User created a refund account	Student or Authorized User		
Refund Account Changed Notification	User has changed their refund account information	Student or Authorized User	<a href="#">View Details/Edit</a> <a href="#">View Sample</a>	

### Authorized User Email Modification

Template Title	Triggering Event	Recipient	Email Action	Text Action
Email Change Notification	Authorized user changed their email address (username)	Authorized User		
Email Change Student Notification	Authorized user changed their email address (username)	Student		

### Mobile Number Modification

Template Title	Triggering Event	Recipient	Email Action	Text Action
Mobile Number Changed Notification	User has changed their mobile number	Student or Authorized User		

# Monitoring and Scheduled Alerts

- Refund Account Modification
- Single IP Address Used for Multiple Accounts
- High Volume of Refund Profile Changes
- Address Changes
- Account Holder Name Change







# Multi-Factor Authentication (MFA) for Profile Changes

The screenshot shows a web application interface for 'Bill+Payment'. At the top right, there are language options for 'English' and 'Español', and a user login status 'Logged in as: Wad'. A navigation bar contains links for 'My Account', 'Make Payment', 'Payment Plans', 'Deposits', 'Refunds', and 'Help'. The main content area is titled 'eRefunds' and includes a sub-header 'eRefunds puts money in your account... FAST!' followed by explanatory text about direct deposit and a warning about not using debit card numbers. Below this is a section titled 'Current Refund Method' which displays 'My refund account - xxxx9876 (awaiting verification)'. A message states 'A passcode was sent to you for Two-Step Verification. Please enter the passcode to update this refund method.' A text input field contains the passcode '325051'. To the right of the input field are three buttons: 'Cancel', 'Resend Code', and 'Verify'.

# WSU - Additional Fraud Controls

- Merchant Training Through Campus Guard
- Monthly Meetings

COURSE ▲	CATEGORY	ASSIGNED LEARNERS	COMPLETED LEARNERS	DATE ENROLLED	OPTIONS
Wichita State University - PCI for Stude...	PCI DSS	49	43	-	
Wichita State University - PCI for Merch...	PCI DSS	259	206	-	
Wichita State University - PCI for IT 20...	PCI DSS	21	21	-	
Wichita State University - PCI for Execu...	PCI DSS	41	38	-	

# Chargeback Tips

- Monitoring
- Timing
- Documentation
- Portal
- Notifications
- CVV2, AVS, 3DS
- EMV/Contactless



# What Can Institutions Do?

- AVS & CVV Settings
- Click to Agree (Non-Refundable) Cancellation Policies
- Signed Agreements & Clear Disclosures
- Receipts & Confirmations
- Log-in History
- Robust Rebuttals & Directly Addressing the Claims
- Accounting & Reconciliation (\*Manual Adjustments in ERP)
- Payment Processor's Dispute Portal

# Payment Technology Considerations

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# Recap Fraud Tools and Considerations



## Card Not Present (CNP)

- Consider CVV2 and AVS
- Captcha 2 or Recaptcha
- Leverage stored profiles with tokenization (eWallets)
- Push for 3-D Secure



## Card Present (CP)

- Require merchants to accept EMV/chip cards
- Accept contactless cards and e-Wallets
- Use P2PE or E2EE
- Regularly check for skimmers



## Operational / Other

- Use payment blockers
- Set limit on overpayments
- Monitor audit reports, alerts, and chargebacks
- Use two-factor or multi-factor authentication (MFA) where available
  - Especially around refunds



# Key Takeaways



Fraud is Growing



Campuses are  
Complex

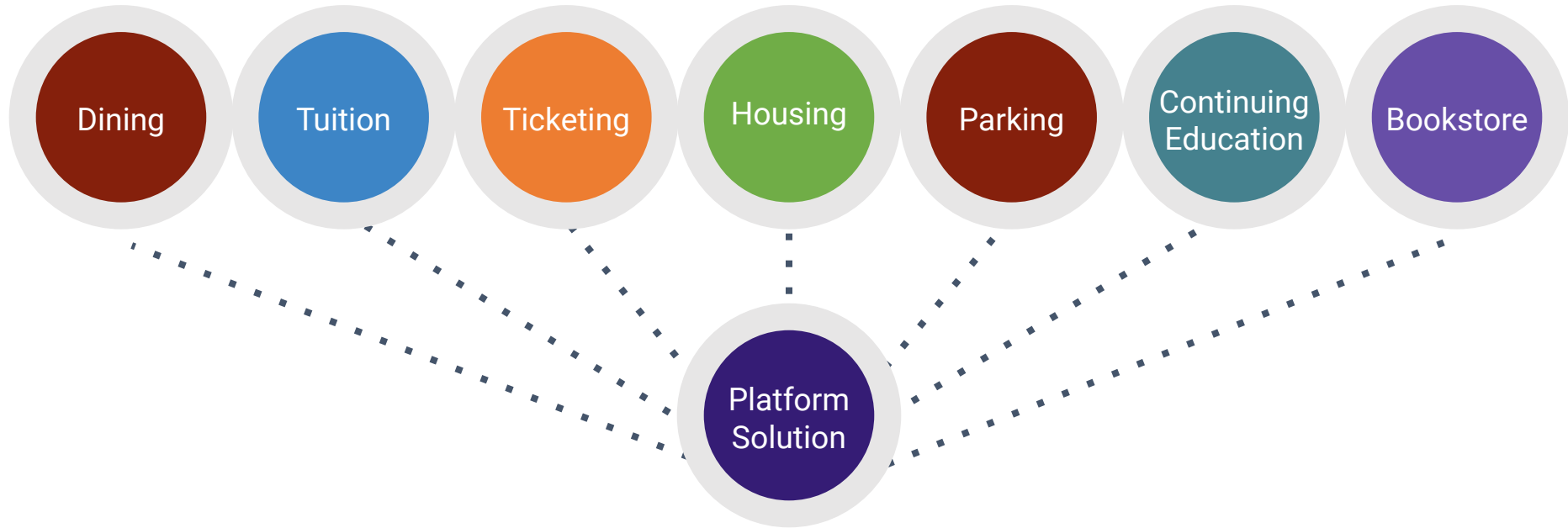


Leverage fraud  
tools available



A Platform is the  
Key to your Strategy

# Centralized Campus Commerce Management



# Questions?

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## Contact Information

John McElroy  
Touchnet  
[john.mcelroy@touchnet.com](mailto:john.mcelroy@touchnet.com)

Robyn Bongartz  
Wichita State University  
[robyn.bongartz@wichita.edu](mailto:robyn.bongartz@wichita.edu)

