Transaction Alerts/Controls/Notification Services

Definition/Description
Transaction alerts are generally an issuer-based control that alerts cardholders of particular activities, which can include both purchase transactions as well as non-monetary actions (such as change of address or activation of a new card). Alerts can also be triggered based on preset thresholds (i.e., alert if the credit limit is utilized > x% or if a payment is due).

Applicability

<table>
<thead>
<tr>
<th>Channel</th>
<th>Applicable?</th>
<th>Use Case</th>
<th>Applicable?</th>
<th>Stakeholder</th>
<th>Applicable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-app [merchant app]</td>
<td>NA</td>
<td>Customer onboarding</td>
<td>NA</td>
<td>Merchants</td>
<td>NA</td>
</tr>
<tr>
<td>Mobile browser</td>
<td>Yes</td>
<td>Authentication (onboarding)</td>
<td>NA</td>
<td>Issuers</td>
<td>Yes: internal</td>
</tr>
<tr>
<td>Desktop/laptop computer</td>
<td>Yes</td>
<td>Authentication (transaction)</td>
<td>NA</td>
<td>Issuer processors</td>
<td>Yes: internal</td>
</tr>
<tr>
<td>Phone</td>
<td>Yes</td>
<td>Authorization</td>
<td>Yes</td>
<td>Wallet/online payment providers</td>
<td>Yes: internal</td>
</tr>
<tr>
<td>Post-authorization review</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Acquirer processors</td>
<td>NA</td>
</tr>
</tbody>
</table>

Technical Features/How the Technique Works

A cardholder would receive an alert message based on a particular activity on their account. Alerts can be delivered in a variety of channels, with in-app push notifications, SMS text, and e-mail being the most popular. Outbound calls are generally not used for alerts except in the case of calls to verify suspicious activity. Certain alerts can also be sent by physical mail, but these are generally confirmations related to account information changes.

Alerts can be set up as mandatory, opt out or opt in depending on type of activity involved and the risk tolerance of the bank.

- Mandatory or opt out would generally be used for suspicious activity alerts and payment due notices.
- Opt-in would generally be set up for specific transaction parameters.
  - A further option would be for a cardholder to specify certain transaction types that should be declined.

Types of activity that could generate an alert include:

- Authorization activity
  - Transactions from a certain POS mode (e.g., ecommerce, keyed).
  - Transactions > $x
  - Transaction amount > baseline spending $x
  - All transactions
Transactions at a certain merchant category
- One small CNP transaction followed by a big purchase

Payments
- Payment due
- Payment posted

Account changes
- Authorized user added
- Address change
- Phone change

Geolocation
- New place, first transaction with large amount
- Two card-present transactions at different locations in short period of time

Other
- Card activated
- Replacement card ordered
- Card mailed

Risks Associated with Technique
This technique has few risks since the cardholder opts in to participate.

Customer Impact/Level of Friction
Friction varies based on the delivery channel and frequency of the alerts. Since most alerts do not require a cardholder action, friction is lower than if the customer was specifically required to respond before completing a transaction.

Implementation Considerations
Implementation of this technique requires:

- Determining what types of actions will trigger alerts, to identify which authentication and posting processes need to be linked to a communication process.
- Determining delivery channels, which will drive complexity, especially if one or more channels are managed through a vendor service.
- Determining how opt-in selections are made. Selection needs to be made available through self-service channels (e.g., online, mobile) as well as through an internal console which can be accessed by phone agents and back office personnel.
- Implementing security approaches that, at a minimum, need to log any changes made to alert thresholds.

Integration complexity is moderate and depends on the channels, activity types and level of integration that already exists between them.
Implementers will need to balance their desired level of investment in preventative tools and risk appetite. Alerts will provide additional protection above and beyond internal detection tools as cardholders know their activity the best. However, the bank cannot rely on cardholders to police their usage as a control and typically use alerts in conjunction with a robust fraud mitigation strategy. In addition, the sheer volume of alerts can cause some cardholders to tune out or turn off the functionality.

**Maturity**

Electronic alerts have been in use approximately as long as online banking. Alerting functionality is a key service in mobile banking apps.

**Applicable Industry Standards**

This technique has no applicable industry standards.

**Publicly Available Statistics on Implementations and Use**

Statistics are not available for this technique.

**Further Reading**

https://www.thebalance.com/credit-card-fraud-alert-notifications-4135739

https://usa.visa.com/visa-everywhere/security/transaction-alerts.html

**Source Document:** This technique is extracted from the *Card-Not-Present (CNP) Fraud Mitigation Techniques* white paper. That white paper was developed to provide a high-level document that directs readers to relevant fraud mitigation techniques while providing easy access to details about the solutions. The white paper is available at: https://www.uspaymentsforum.org/card-not-present-cnp-fraud-mitigation-techniques/

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