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Monetize Credential Sharing

A Data Driven Approach

Adobe Primetime Account IQ

Measure. Manage. Monetize

01. The Context

Credential Sharing – A quick status for the Media and Entertainment Industry

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How big is the problem?

What makes Credential Sharing a true problem across the M&E industry?

Credential sharing is at record levels and there is no end in sight for the trend. A broad study conducted in Feb 2022 by Leichtman Research Group (LRG) found that **29% of all D2C streaming video accounts are being shared** with others outside the household. Younger viewers are more apt to share: 34% of those 18 to 34, compared to 14% of those ages 35+, have at least one D2C service that's fully paid for by someone else

No service is unaffected, from the largest premium content providers to niche distributors.

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Credential Sharing in now COMMON and
EXTENSIVE

At least 22% of US residents – 46 million people – are using credentials "borrowed", purchased or stolen from outside their household to access video content without paying for it – according to a Cartesian 2020 study

Between 22% to 45% of the users said that they share their credentials

22-40%

Nearly 4 in 10 Americans are mooching off someone else's streaming account, about a third do so without permission from the account holder

LendingTree Survey, 2021

Credential Sharing is becoming ACCEPTED

Credential sharing has long been tolerated, at times encouraged, because it helped grow brand awareness and provided a reliable conduit of new subscribers

The assumption is being challenged by both new market realities and the sheer magnitude of revenue lost to the behaviour

Credential sharing, app-based sharing, and illegal live streaming have ushered in a new age of digital pirates and attitudes among consumers regarding fair use.

Parks Associates, Video Piracy: Ecosystem, Risks, and Impact

Then

Netflix ✔
@netflix

Replying to @netflix

Love is sharing a password.

12:00 PM · Mar 10, 2017 · Twitter Web Clie

Now

"Our relatively high household penetration - when including the large number of households sharing accounts - combined with competition, is creating revenue growth headwinds."

Letter to Netflix shareholders, April 19, 2022

Credential Sharing is becoming
NORMAL

A 2021 Aluma Insights study found 50% of Gen Zs and 40% of Millennials share video streaming credentials with others living outside their home.

...since the barriers to using shared credentials are low, many individuals engage in this behaviour without hesitation, often for multiple services

The Threat of Credential Sharing & Theft, Cartesian study, 2021

Perceptions towards sharing online entertainment services or using unlicensed content

US Broadband Households

● Agree   ● Highly Agree

Because movies/music should be available to everyone for free

Because the movie/music companies still make lots of money

As long as somebody else is paying for the service

If you never would have otherwise watched/listened too them

If you can't afford to pay for them yourself

If you only do it occasionally

Because no one ever gets in trouble for it

0%   25%

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02. What is the impact?

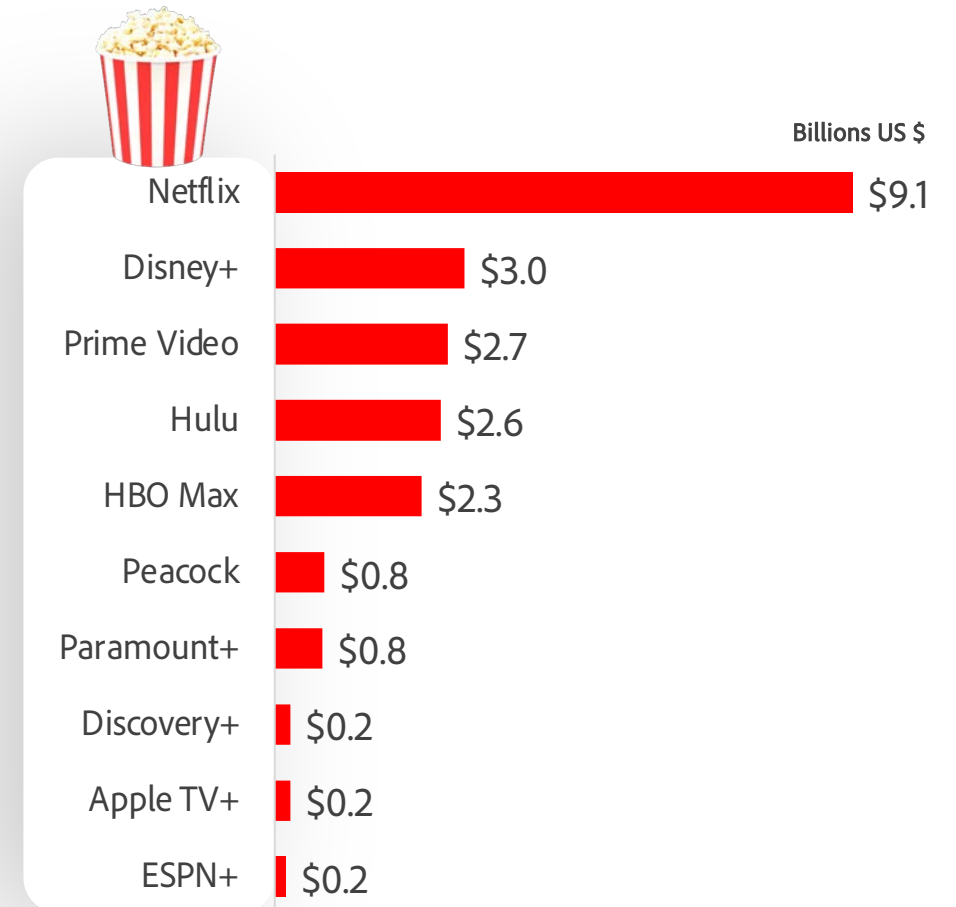Revenue Loss? Bad Advertising? Customer Churn?

All of them and much more ...

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Credential Sharing is costing streaming service companies

BILLIONS
US$ 25B

Estimated credential sharing revenue loss to U.S. streaming companies according to Citi analyst Jason Bazinet.

☐ In 2021, the US SVOD industry lost more than $25B in revenue to credential sharing

☐ New players lose less revenue from credential sharing, but they also have significantly fewer subscribers than the top five providers. As their services grow, so will the number of borrowers and their impact

Billions US $

Netflix	$9.1
Disney+	$3.0
Prime Video	$2.7
Hulu	$2.6
HBO Max	$2.3
Peacock	$0.8
Paramount+	$0.8
Discovery+	$0.2
Apple TV+	$0.2
ESPN+	$0.2

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Credential Sharing – Impact
Limited Business Growth and Brand Impact

☐ Failing to act allows the problem to grow. Unless action is taken, streaming video will follow the path of streaming music where free content is expected.

☐ Ill-conceived strategies, poor execution and missteps make for great headlines and social media posts.

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Credential Sharing – Impact
Poor End User Experience

Lacking Intelligence: Solutions today fall short of managing credential sharing and penalize legitimate subscribers

Repetitive authentication forces users to repeatedly remember and enter credentials, often awkwardly through connect device interfaces

Device limits require time-consuming registration processes to activate new devices and deactivate old devices, often right at kick-off

Multi-factor authentication adds additional steps and points of failure

Concurrency limits don't distinguish between household members

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Credential Sharing – Impact
Unrealized Monetization

Conversions
Turn borrowers into subscribers and drive incremental revenue opportunities

Advertising
If ad dollars are important to your business, target borrowers with a higher ad load

Audience insights
Lack of insights deters targeting, personalized recommendations and managing churn

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03. Challenges and Strategies

Understanding the Credential Sharing challenge is important. Whatever the size and maturity of your organization, an iterative approach is ideal to profitably managing credential sharing
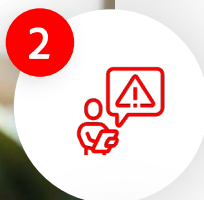

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Credential Sharing Challenges

1

Is Credential Sharing actionable?

Yes, but there are no easy answers. Detailed data and sophisticated models are required to understand and assess the impact

2

Aggressive action might risk customer retention

Acting aggressively and indiscriminately on credential sharing risks offending good customers and is unlikely to convert the borrowers

3

Detecting Credential Sharing is difficult

Legitimate and illegitimate behaviour can look similar. Without deep analysis it's easy to misclassify. Processing vast amount of data requires resources

4

Actionability requires robust data and insights

Segmentation and targeted action on shared accounts requires enhanced data and sophisticated analytic tools

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Managing Credential Sharing with data driven iterative strategies

Given the Industry content and challenges, what's needed is a data driven iterative strategy which leverages subscriber activity modeling to measure, manage and monetize credential sharing

02. Incremental targeted action
Leverage insights gained to create custom credential sharing segments and take targeted actions using Adobe or other preferred solutions

03. Track and measure impact
Define operational processes to track and measure the impact of targeted actions over a subsequent period of weeks or months

01. Analyze and understand
Use proprietary machine learning models to surface behavioral patterns and subscriber activity insights

04. Iterate
Iterate based on favorable or unfavorable results to expand or adjust actions leading to optimal monetization over time

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Credential Sharing – Actionability Strategies
Targeted Actions

Below are examples of actions that could be applied as part of the iterative strategies to improve viewing experience and optimize monetization:

Adjust how often users need to log in	Charge the account to share outside the household	Send customizable onscreen messages	Export a list of top offenders for offline communication	Change the number of concurrent streams allowed	Change the ad load for an account	Require multi-factor authentication	Deny authorization and/or logout the user or device	Deny playback to the viewer

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04. Adobe Solution

The Adobe approach is based on an iterative strategy which leverages our big data expertise and proprietary AI/ML enriched subscriber activity modelling to help service providers measure, manage and monetize credential sharing.

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Primetime Account IQ

Measure. Manage. Monetize

Account IQ enables video streaming services to **identify** and **understand** credential sharing activity, **measure** the impact of applying **actions**, and effectively **monetize** subscriber behavior.
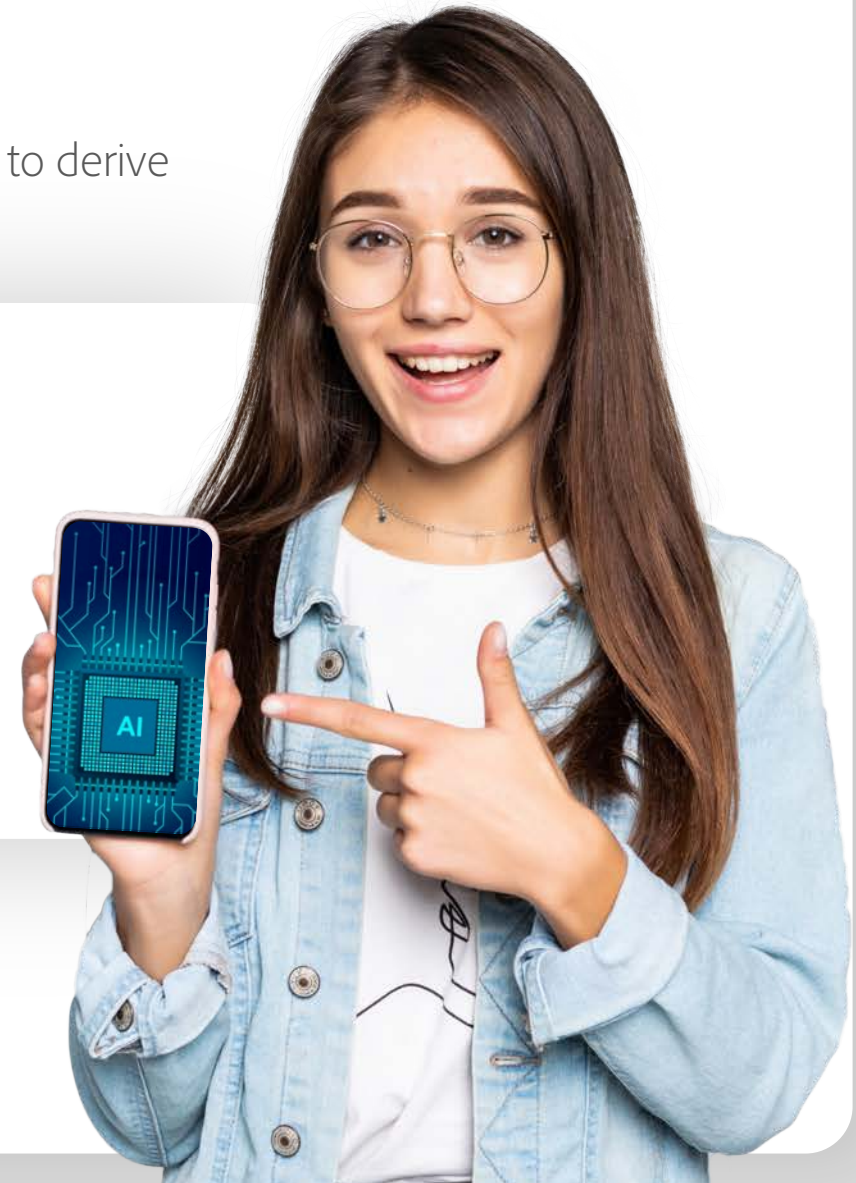
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Account IQ
Sophisticated ML based approach

Account IQ data analysis powered by Adobe Sensei uses multiple ML-based models to derive critical elements not directly present in terabytes of raw streaming data

- ☐ **Velocity analysis** between streams reveals distinct individuals

- ☐ Connecting overlapping devices and locations identify **independent clusters** of activity

- ☐ Well-defined usage categories facilitate **behaviour** interpretation

- ☐ An expertly trained model quickly identifies patterns at **scale**

The resulting system identifies individual accounts with specific usage patterns that delivers a complete picture and **high confidence** in identifying password sharing

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Account IQ
Account Profile Characterization

The ML analysis process augments each account with **enhanced data** supporting **confident decisions** & actions

- ☐ The minimum number of devices in use
- ☐ The minimum number of active individuals
- ☐ Geographic metrics such as distinct locations & total span
- ☐ Sharing probability
- ☐ A usage pattern classification

Categorizing individual accounts into **usage patterns** such as Traveler or commuter, Close family and friends, Second home, etc., contextualizes sharing activity into **understandable group behavior**

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Account IQ
Insightful Dashboards and Reports

Informative graphs and charts

Get a quick understanding of the scope and impact of sharing behaviors.

Detailed data reporting

Account IQ provides a wide variety of reports on user data tailored to meet the specific needs of customers. For example, reports that compare user data across partners and content categories to highlight shared risk, and reports on password-sharing behaviors that can help businesses see the impact of sharing on revenue and user experience.

Account IQ
Powerful Analytics and Tracking Tools
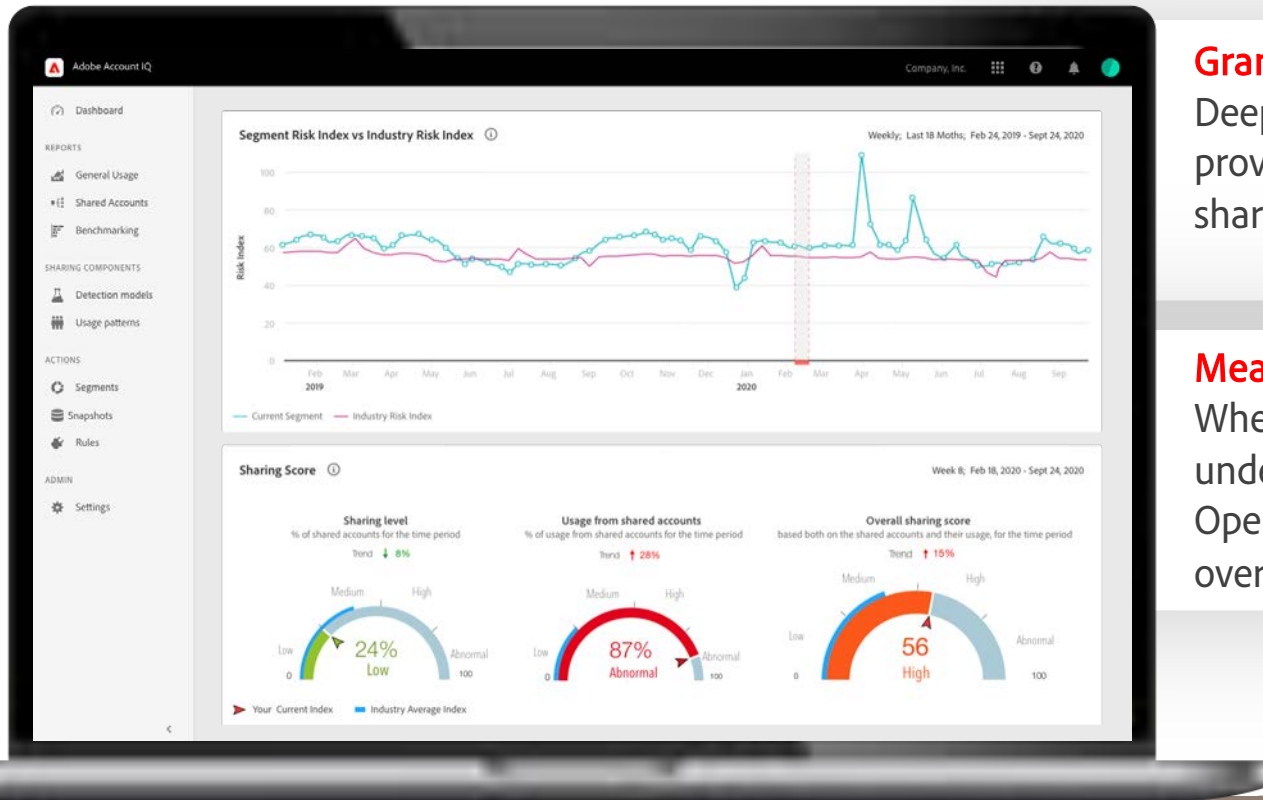
Granular analytical tools and reporting
Deeper reports on user behavior metrics and viewer segmentation provide more detailed insights into cohorts and patterns of password sharing.

Measure the effect of actions and initiatives
Whether rolling out a limited test or a large-scale program, understanding the effect of your actions is key to optimizing results. Operation impact reports allow you to measure and visualize results over an extended period.
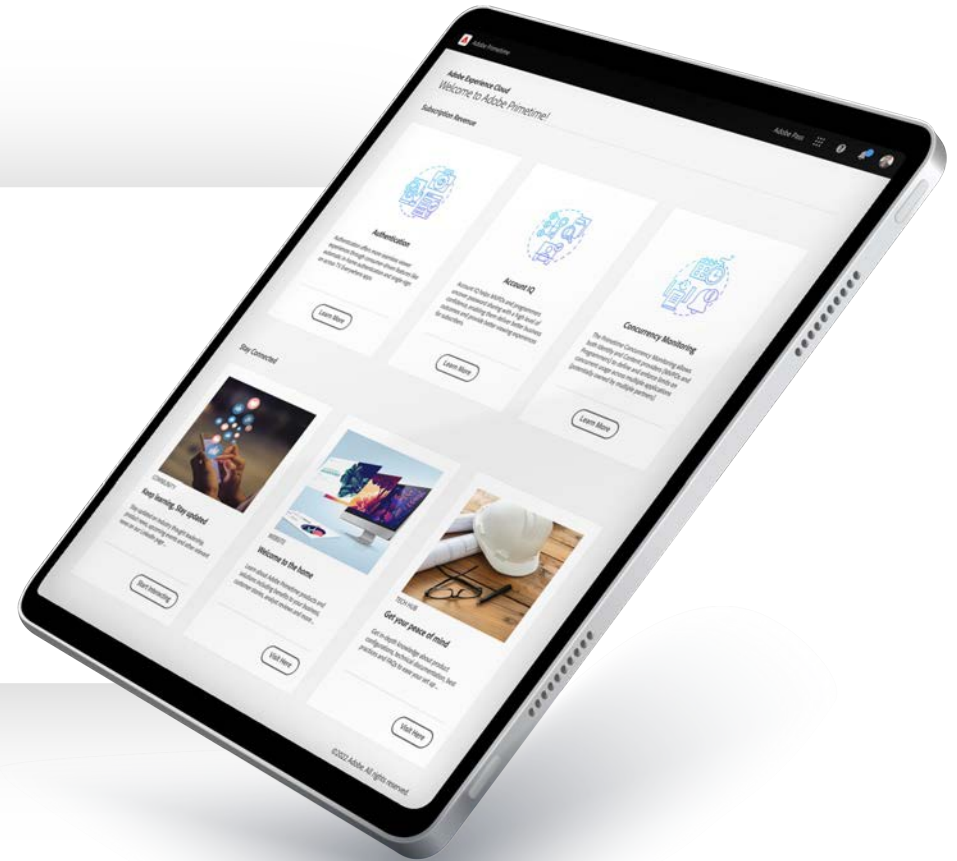
Account IQ
Integrates with Adobe and 3ʳᵈ Party Solutions

Flexibility and Integrations to power business growth

Account IQ can be integrated with Primetime Concurrency Monitoring, Customer Journey Analytics, other Adobe Digital Experience products and 3rd party solutions, which enables customers to leverage their preferred tools to optimize actions on credential sharing and maximize business growth.

![Adobe logo] Adobe

05. Benefits & Use Cases

Summary of how your business benefits from Account IQ, real life use cases and recommended strategies

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Account IQ – Unrivalled Benefits
Key Customer Benefits

Generate Incremental Revenues

Generate incremental revenue opportunities from casual sharers and excessive borrowers by promoting upgrade offers and enforcing strict controls

Improve End User Viewing Experience

Make your systems easy to access by eliminating unnecessary security checks for legitimate subscribers, improving overall viewing experience, and creating a positive brand impact

Develop Deeper Audience Understanding

Develop a deeper understanding of your subscribers and their usage patterns for better targeting, personalized recommendations and managing churn

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Credential Sharing – User Scenarios
Use Case: Excessive Sharing

Viewer's credentials are shared with a large group of people

Viewers may receive an in-app offers or have their access restricted

Viewer reacts to in-app messages or restrictions

Excessive sharing

In-app message on screen

| Understanding | Isolate segment | Set the action | Run operation | Iterate | Goal |

1.
System is detecting **excessive** sharing and displaying it in the app dashboard

2.
Use analytics and reports to identify shared accounts and define segment characteristics

3.
Prepare new account offers. Force logout, password change, MFA, etc. Restrict devices, geo, concurrent streams, etc.

4.
Schedule operation on full segment or test on subset (e.g., limited geo, 10% of audience, etc.)

5.
Track operation impact on segment and adjust based on goal effectiveness

6.
Monetize by converting borrowers to subscribers. Return free-loaders to available market.

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Credential Sharing – User Scenarios
Use Case: Casual Sharing

Viewer's credentials are shared with his family members

Viewers may receive an in-app message

Viewer reacts to in-app message

Excessive sharing

In-app message on screen

Understanding	Isolate segment	Set the action	Run operation	Iterate	Goal

1.
System is detecting **moderate** sharing and displaying it in the app dashboard

2.
Use analytics and reports to identify shared accounts and define segment characteristics

3.
Prepare friendly in-app message to segment such as: upsell offer, activity alert, policy reminder, etc.

4.
Schedule operation on full segment or test on subset (e.g., limited geo, 10% of audience, etc.)

5.
Track operation impact on segment and adjust based on goal effectiveness

6.
Monetize by upselling shared accounts & converting borrowers to subscribers

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Credential Sharing – User Scenarios
Use Case: Rewarding Good Behavior

Viewer is watching content only at home location

Viewer will have streamlined experience

Viewer has good viewing experience

Excessive sharing

In-app message on screen

Understanding	Isolate segment	Set the action	Run operation	Iterate	Goal

1.
System identifies the good usage pattern and it shows it in a visual way in the app dashboard.

2.
Use analytics and reports to isolate the accounts with very good behaviour and define segment characteristics.

3.
Reduce friction by eliminating: authentication requirements, concurrent stream limits, device registration, etc

4.
Schedule operation on full segment or test on subset (e.g., limited geo, 10% of audience, etc.)

5.
Track operation impact on segment and adjust based on goal effectiveness

6.
Retain good subscribers. Eliminate reasons to churn.

Want to know more?

Contact the Adobe Pass team (adobepass@adobe.com) for a customized demo or to inquire about an Account IQ pilot.