

Aug 13 2021

Privacy Video-Streaming Ecommerce

3 Shifts Edition (Aug 13 2021): Apple's child protection features, Salesforce's media ambitions, Amazon expands resale services

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1. Apple's new child protection features – and what they mean for user privacy

- Last week, **Apple announced 3 new features aimed at protecting children and reducing the spread of child sexual abuse material (CSAM)**. The features – expected to be rolled out in the US on iOS 15, iPadOS 15, watchOS 8, and macOS Monterey as early as next month – include a **controversial approach to detecting CSAM on user devices**, updates to the Messages app to protect children from sexually explicit images, and updates to Siri/Search to provide resources on certain searches. Apple's announcement **has been met with backlash and criticism, renewing the debate around big tech's role in privacy and surveillance**.
- **The most controversial feature is the on-device CSAM detection**, which **determines whether images about to be uploaded to iCloud are part of a known set of 200K child abuse images** in the nonprofit National Center for Missing & Exploited Children (NCMEC) database. Apple will **alert authorities if a user is found to possess more than a certain threshold of known CSAM**. The threshold is not disclosed but Apple claims it's "set to provide an extremely high level of accuracy and ensures **less than a one in one trillion chance per year of incorrectly flagging a given account.**"

- The CSAM detection works through a technology (NeuralHash) that **turns photos into hashes** (character strings) and matches them to hashes of images in the NCMEC database (matching even visually similar cropped/edited images). Apple uses techniques that prevent it from even seeing matches until a user meets the threshold. At that point, Apple will manually verify all the matches, **disable the user's account, and alert NCMEC** (which works with law enforcement as a reporting center for CSAM). There is an appeals process if an account is mistakenly flagged. Apple has emphasized that **CSAM matching only works if iCloud Photos** (on by default) **is enabled, which means users can opt out**.
- The also-controversial **Messages feature** works on child accounts set up with Family Sharing, where parent accounts have opted in. It uses **on-device machine learning to determine whether images are sexually explicit**. For a recipient, the explicit image in a Messages thread is hidden, with a warning underneath and option to block the sender. If a child taps/clicks on it, a pane pops up describing that it can be harmful and tells them **their parents will be notified if they view it**. Similarly, a child about to send an explicit photo will be warned and parents alerted if it is sent. (For 13- to 17-year old accounts, parents are not notified though children still get the warnings.)
- The **third update involves enhancements to Siri and Search to offer expanded resources and guidance** to users asking about how to report CSAM or child exploitation. Siri and Search will also intervene when users search for CSAM-related content, explaining the topic is harmful and sharing resources for getting help.
- Apple's moves are viewed by some as a long time coming. **Apple submitted only 265 reports of CSAM in 2020**, despite its own engineer privately calling it "the greatest platform for distributing child porn." In contrast, Facebook submitted 20M+ reports of CSAM in 2020. This is, in large part, because **companies have a duty to report but not a duty to look for CSAM** – and Apple didn't look. **The EU and the UK, however, have some brewing regulations that may require companies to start looking on their servers**.
- **The criticism of Apple has primarily centered on its decision to analyze the data client-side on the device rather than in the cloud**. Many cloud-based platforms such as Google, Dropbox, Microsoft, Facebook, Reddit, and Twitter already scan users' files for illegal and policy-violating content (including CSAM) – most using a Microsoft-built algorithm called PhotoDNA which was donated to NCMEC. Stratechery analyst Ben Thompson is calling Apple's moves a "mistake" – making the case that "**[o]ne's device ought to be one's property, with all of the expectations of ownership and privacy that entails**." He draws a **bright line between user-owned devices and company-owned cloud servers**.
- **7,000+ organizations and individuals have signed a petition asking Apple not to implement CSAM detection or the Messages feature** – calling them a "backdoor" that could undermine user privacy. People have raised the specter of **governments putting pressure on Apple to include non-CSAM images** on the hash list. In China, for instance, Apple has been accused of giving in to government pressure to store Chinese user data and encryption keys locally in China (though Apple says it still controls the keys). Critics say

that **on-device monitoring could also serve as a blueprint to circumvent end-to-end encryption at the endpoints**.

- **Apple has kicked off a mini PR campaign to clarify and defend its new features**. One of its primary defenses is the narrowness of the monitoring – it only covers photos uploaded to iCloud, only hashes are matched and only to known CSAM. For Apple, **the most controversial aspect – the on-device monitoring – is what will allow it to eventually expand end-to-end encryption**. Right now, iCloud photos and device backups (incl. Messages) are not encrypted – which means **Apple can already do a server-side iCloud scan for CSAM today** (and apparently has before though not en masse). Apple dropped its plans to encrypt backups in 2018 after the FBI said it would hamper investigations, but its recent moves could be a **stepping stone to finally encrypting iCloud data** – even after the EU/UK laws are passed.
- Governments around the world are largely supportive of Apple. **Law enforcement agencies have been concerned about the growth of end-to-end encryption, and the challenges in investigating child abusers, criminals, and extremists**. Tech firms, under growing scrutiny, have lately ramped up child protections. **Google** recently added features to limit ad-targeting for teens and made YouTube uploads private by default for children under 18 (among other privacy-oriented features). **Instagram** also limited ad-targeting for teens and made new child accounts private by default.
- Apple has had to walk a fine line and make some hard tradeoffs to arrive at its answer: On-device monitoring (and on-device user control point) rather than server-side scanning. **The real question here is how much do we trust Apple. Because the slippery slope features prominently in the most cogent arguments against Apple**. Will Apple hold the line if its feet are held to the fire by a government? Will it be tempted to add non-CSAM information to its on-device monitoring? How do we even hold Apple accountable? **It may turn out that Apple was prescient in its decisions here but nevertheless it will still face a major near-term cost in user trust**.

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2. Will Salesforce+ become the “Netflix for business professionals”?

- This week, **Salesforce announced a new business-media streaming service called Salesforce+**, which will debut during the Dreamforce conference in Sep 2021. Salesforce+ will air **live shows, on-demand videos, and podcasts** with content for business professionals in "every role, industry, and line of business" (though Salesforce is expected to be targeting sales, marketing, and service roles).
- **Salesforce is just the latest organization to invest in its own captive content/media arm** – following in the footsteps of Andreessen Horowitz (and other VCs), Coinbase (and other crypto firms), HubSpot, Robinhood, and DraftKings. Stripe also has its own publishing arm, LinkedIn has been building out its editorial team, and Peloton is becoming a global content brand extending beyond its equipment. Newsletter TheSkimm is reportedly considering a sale to a non-media company.
- **Original content for Salesforce+ will be developed by Salesforce Studios and, eventually, co-created with its customers and community**. Salesforce has hired **50 editorial staff** for Salesforce Studios, including script writers and broadcast producers, with plans to hire more as it ramps up programming. Hundreds of other employees are supporting Salesforce+ in marketing and product/digital functions.
- **Salesforce+ will launch with 6 original series**, including: (1) **Leading Through Change** – a video conversation series on leadership through the pandemic, which has garnered 700M+ views across 70+ episodes since launching Mar 2020; (2) **Connections** – 50+ episodes with marketers, for marketers; (3) **The Inflection Point** – a 10-part series with CEOs sharing their backstories and values; (4) **Boss Talks** – a career advice series hosted by Salesforce's Chief Philanthropy Officer; and (5) **Simply Put** – short-form videos with practical advice for digital sales and ecommerce. The 6th series will highlight individuals from underrepresented communities who are re-skilling for new careers.
- The Dreamforce conference will also offer **4 broadcast channels with 100+ hours of content**: Prime Time (Olympics-style live news/highlights), Trailblazer (learning from Salesforce users), Customer 360 (success stories), and Industries (industry-specific content).
- Salesforce+ will be available online starting on Sep 14 2021, and through a **standalone mobile app** later. Viewers will be able to **customize their experience**, focusing on the content most relevant to their role (e.g. sales), industry (e.g. financial services), or theme of interest (e.g. AI). **Salesforce+ will start as a free service without subscription or 3rd-party ads**, though industry observers have speculated that it could turn to sponsored content in the future. For now, its primary goal appears to be pulling more users into its ecosystem with engaging and accessible content.
- Salesforce is facing greater competition from upstart CRM platforms. While still growing at around 20% year-over-year, it has struggled to find its next growth engine. **Its \$28B Slack acquisition (which recently closed) was a play to infuse collaboration across its product suites, increase engagement, and reduce churn among existing customers**. Salesforce+ fits into its ambition to own more share of mind among professionals – **it hopes to drive users to "want to use our products and want to engage more with us."**

- **Content marketing is far from a new concept, but has been gaining renewed traction lately as a growth play – serving as a conduit to customer acquisition, driving customer engagement and brand loyalty, educating the market on products and strategy, positioning companies as thought leaders, and fostering a community. **In a “cookieless future,” the players with direct customer relationships and 1st-party data – such as large publishers – will have greater power and leverage.****
- **It’s not obvious that Salesforce will achieve its ambitions. High-quality content on the level of Masterclass and TED is hard.** Certainly, Salesforce will have internal competing interests that will put constraints on its media arm’s independence and its ability to produce highly entertaining content. As we’ve seen with Disney+, Netflix, and Apple TV+, **ultra-premium content is what anchors eyeballs to streaming platforms**. Outside of splashy events like Dreamforce, Salesforce may have a hard time drawing regular eyeballs to a “LinkedIn feed in video form.” On the other hand, it’s found surprising success with its Leading Through Change series drawing on the star power of the likes of Metallica’s Lars Ulrich and chef-restaurateur José Andrés – so **perhaps we shouldn’t count Salesforce out.**

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3. Amazon helps sellers resell their returned & overstock inventory

- **Amazon announced two new programs this week aimed at reducing product waste**. The two new programs – **FBA Grade and Resell** and **FBA Liquidations** – are both housed under its Fulfillment by Amazon (FBA) program, which provides fulfillment services to sellers such as storage, picking, packing, and shipment of orders. The announcement comes on the heels of a UK report criticizing **Amazon’s destruction of 130,000 items per week in just one plant**. Amazon has said in response, “We are working towards a goal of zero product disposal and our priority is to resell, donate to charitable organisations or recycle any unsold products.”
- **FBA Grade and Resell will let 3rd-party sellers resell returned items as “used” on Amazon**, rather than having them sent back to sellers or donated. Amazon will evaluate the

condition of each returned item and assign it one of 4 grades: Like New, Very Good, Good, or Acceptable. The seller can then price the used item and manage the advertising and selling process (just like a new item). The program is now live in the UK, expected to be in the US by the end of 2021, and in Germany, France, Spain, and Italy by early 2022.

- **FBA Liquidations** makes it easier for sellers to recover part of the value (typically 5-10%) from overstocked and returned inventory. **Sellers can sell their inventory wholesale to Amazon's network of bulk-resale liquidation partners**, avoiding storage, disposal or shipping fees. (Liquidators are contractually restricted from reselling the products directly on Amazon.) The program is currently live in the US, France, Germany, Spain, and Italy, and will roll out in the UK this month.
- **Amazon previously launched FBA Donations in 2019, which donates returned and overstock items on behalf of sellers to charitable organizations.** (It was launched in the wake of other reports in 2019 that it was destroying hundreds of thousands of unsold products in the UK and millions of products in France.) Amazon says it has **donated 67M+ items to date** in countries including the US, UK, France, Italy, Germany, Czech Republic, and Poland, reaching a rate of 50K items per day in Nov 2020.
- **Amazon's 3rd-party marketplace model has been under pressure over the last two years.** Its sellers have been growing restless at Amazon's growing fees, and many have defected to Shopify. Amazon announced this week that it would **cover customer claims up to \$1,000 (80% of claims) for defective products**, even products sold by 3rd-party sellers, at no cost to sellers. It may also step in to cover higher amounts if a seller is unresponsive or refuses a valid claim. This pivot is likely a proactive effort to fend off further scrutiny, after two California appeals courts ruled that **Amazon can be held liable for 3rd-party products sold on its platform**, most recently in May 2021. Last month, it was also sued by the US Consumer Product Safety Commission, which is trying to make Amazon responsible for recalls of 3rd-party products.
- Amazon's expansion of its resale and "circular economy" services may also be an effort to **capitalize on the growing secondhand movement**. Consumers are increasingly seeking out sustainable products – in one survey, 78% of respondents were more likely to purchase an environmentally friendly product and 64% were willing to pay a premium for it. ThredUP estimates the **secondhand fashion market will reach \$80B by 2029**. This year has seen splashy IPOs by **Poshmark** (\$3B valuation) and **ThredUP** (\$1.7B valuation), along with a slew of financings for secondhand startups from sneaker resale to Gen Z clothing. **Buyback schemes** from brands like **Patagonia, Arcteryx** and **Levi's** are also hot. **Some believe used furniture is up next**, with IKEA and smaller furniture brands launching buyback programs and IKEA opening up its first secondhand store late last year.

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