

Investigating Third-Party SDKs: An Overview and Practical Steps to Reduce Risk

[Daniel Goldberg](#), Partner, Frankfurt Kurnit Klein & Selz (dgoldberg@fkks.com)

[Rick Borden](#), Partner, Frankfurt Kurnit Klein & Selz (dgoldberg@fkks.com)

[Justin Antonipillai](#), CEO, WireWheel (justin@wirewheel.io)

[Austin McMichael](#), Head of Partnerships, Transcend (austin@transcend.io)

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Frankfurt Kurnit Klein + Selz PC



Daniel Goldberg
310-579-9616
dgoldberg@fkks.com



Rick Borden
212-705-4884
rborden@fkks.com



Justin Antonipillai
justin@wirewheel.io



Austin McMichael
austin@transcend.io



What is an SDK?

Why are we talking about this now?

What are the concerns around SDKs?

- **Technical** Concerns
 - Lack of standardization
 - Lack of transparency or control for the company
 - Not easily auditable
- **Privacy** Concerns
 - Lack of transparency or control for users
 - Not within reasonable expectation of users
- **Security** Concerns
 - Potential unauthorized data flows
 - Vulnerabilities and misconfigurations

SDK Dark Patterns

What Steps Can Companies Take?

SDK QUESTIONNAIRE

SDK 1:

Purpose:

Vendor:

Data:

Contract:

Configurations:

Additional Analysis:



Full version available at
<https://technologylaw.fkks.com/>

Key	Type	Value
App Privacy Configuration	Dictionary	(2 items)
Privacy Nutrition Label Types	Array	(3 items)
Item 0	Dictionary	(4 items)
Collected Data Type	String	Name
Linked to User	Boolean	YES
Used for Tracking	Boolean	NO
Collection Purposes	Array	(2 items)
Item 0	String	App Functionality
Item 1	String	Product Personalization
Item 1	Dictionary	(4 items)
Collected Data Type	String	Photos or Videos
Linked to User	Boolean	YES
Used for Tracking	Boolean	NO
Collection Purposes	Array	(1 item)
Item 0	String	App Functionality
Item 2	Dictionary	(4 items)
Collected Data Type	String	User ID
Linked to User	Boolean	YES
Used for Tracking	Boolean	NO
Collection Purposes	Array	(2 items)
Item 0	String	App Functionality
Item 1	String	Product Personalization
Privacy Tracking Enabled	Boolean	NO

In iOS17, SDK developers can include a **privacy manifest** file that outlines the SDK's data practices.

They can also include a **signature** file to show the version came from them.

Backyard Birds-PrivacyReport.pdf
1 page

Contact Info		Tracking	Linked
Name	ExampleSharing.framework Backyard Birds.app/Contents/Frameworks/ExampleSharing.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - App Functionality - Product Personalization	NO	YES
User Content		Tracking	Linked
Photos or Videos	ExamplePhotos.framework Backyard Birds.app/Contents/Frameworks/ExamplePhotos.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - App Functionality	NO	NO
	ExampleSharing.framework Backyard Birds.app/Contents/Frameworks/ExampleSharing.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - App Functionality	NO	YES
Identifiers		Tracking	Linked
User ID	ExampleAdvertising.framework Backyard Birds.app/Contents/Frameworks/ExampleAdvertising.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - Developer's Advertising or Marketing - Third-Party Advertising - Analytics	YES	YES
	ExampleSharing.framework Backyard Birds.app/Contents/Frameworks/ExampleSharing.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - App Functionality - Product Personalization	NO	YES
Usage Data		Tracking	Linked
Advertising Data	ExampleAdvertising.framework Backyard Birds.app/Contents/Frameworks/ExampleAdvertising.framework/Versions/A/Resources/PrivacyInfo.xcprivacy - Developer's Advertising or Marketing - Third-Party Advertising - Analytics	YES	YES

Xcode will aggregate all privacy manifests in an app and summarize in a **report** that the app developer can review to ensure compliance and build privacy nutrition label.

Questions?



Technology Law Blog (<https://technologylaw.fkks.com/>)



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