



Thomson Reuters Labs™

# Tax as a Computational Legal System

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## Who Qualifies as Your Dependent

### Dependents, Qualifying Child for Child Tax Credit, and Credit for Other Dependents

Follow the steps below to find out if a person qualifies as your dependent, and to find out if your dependent qualifies you to take the child tax credit or the credit for other dependents. If you have more than four dependents, check the box on the right side of page 1 of Form 1040 (just above the *Dependents* section) and include a statement showing the information required in columns (1) through (4).



*The dependents you claim are those you list by name and SSN in the Dependents section on Form 1040.*

**Before you begin.** See the definition of *Social security number*, later. If you want to claim the child tax credit or the credit for other dependents, you (and your spouse if filing jointly) must have an SSN or ITIN issued on or before the due date of your 2018 return (including extensions). If an ITIN is applied for on or before the due date of a 2018 return (including extensions) and the IRS issues an ITIN as result of the application, the IRS will consider the ITIN as issued on or before the due date of the return.

### Step 1 Do You Have a Qualifying Child?

A qualifying child is a child who is your...

Son, daughter, stepchild, foster child, brother, sister, stepbrother, stepsister, half brother, half sister, or a descendant of any of them (for example, your grandchild, niece, or nephew)

AND

was ...

Under age 19 at the end of 2018 and younger than you  
(or your spouse, if filing jointly)

or

Under age 24 at the end of 2018, a student (defined later), and younger than you  
(or your spouse, if filing jointly)

or

Any age and permanently and totally disabled (defined later)

AND

Who didn't provide over half of his or her own support for 2018 (see Pub. 501)

AND

2018 TAXES

FEDERAL REFUND \$0

PREVIOUS TAXES

MYBLOCK

ACCOUNT SETTINGS

SIGN OUT

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SELF-EMPLOYED

OVERVIEWFEDERALSTATEFILE

YOUR INFOINCOMEDEDUCTIONS CREDITSTAXES WRAP-UP

W-2 Wages, salaries, an...Income Wrap-UpMy Summary

FORM W-2  
Now, tell us about this **W-2**.

Whose W-2 is this?  
☐ NerdWallet  
☐ Mr

Employer's Information

b Employer identification number (EIN)  
01-0101011

c Employer's name  
NerdWallet

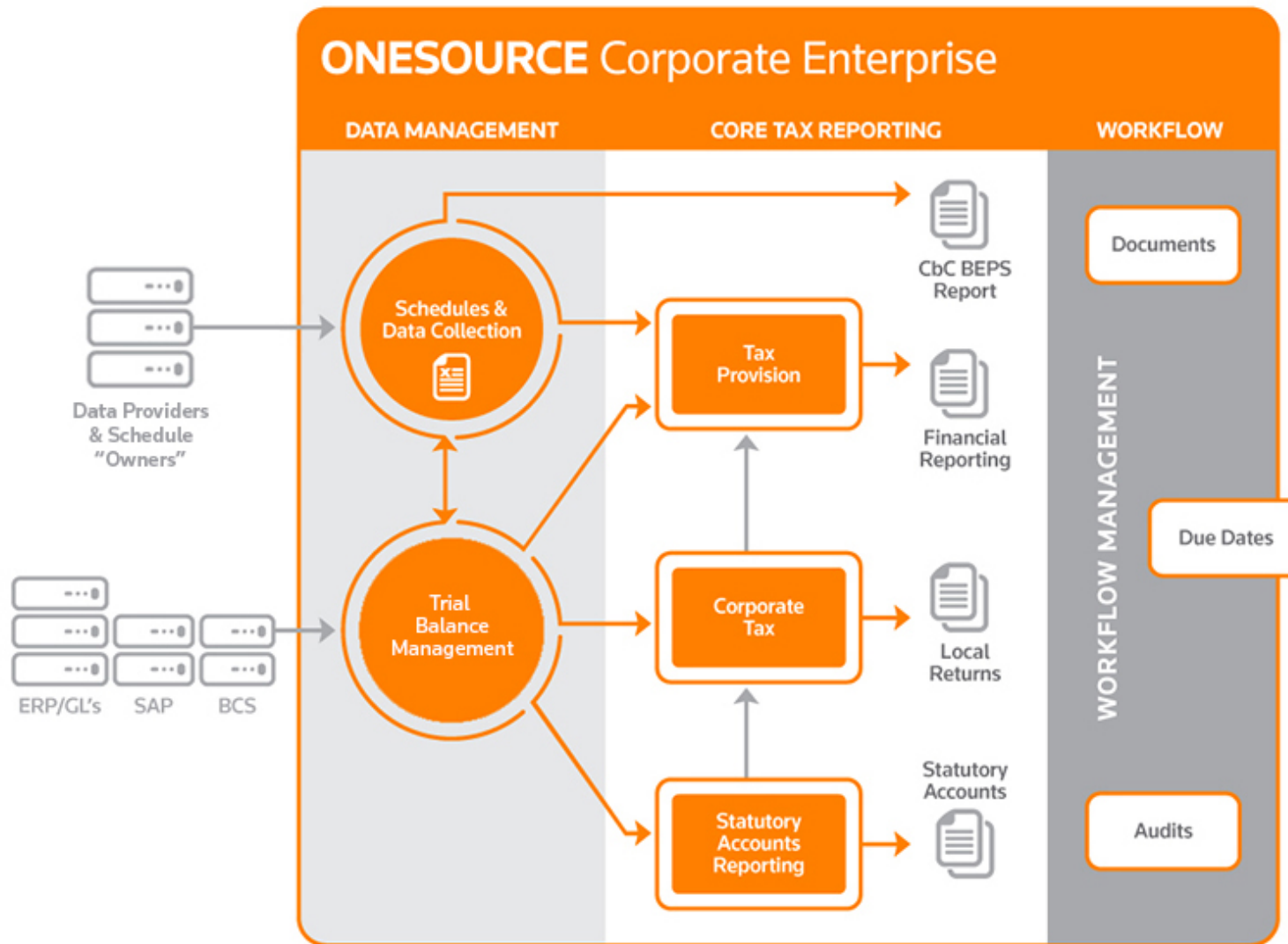
In care of (optional)

☐ This is a foreign address. [Learn more](#)

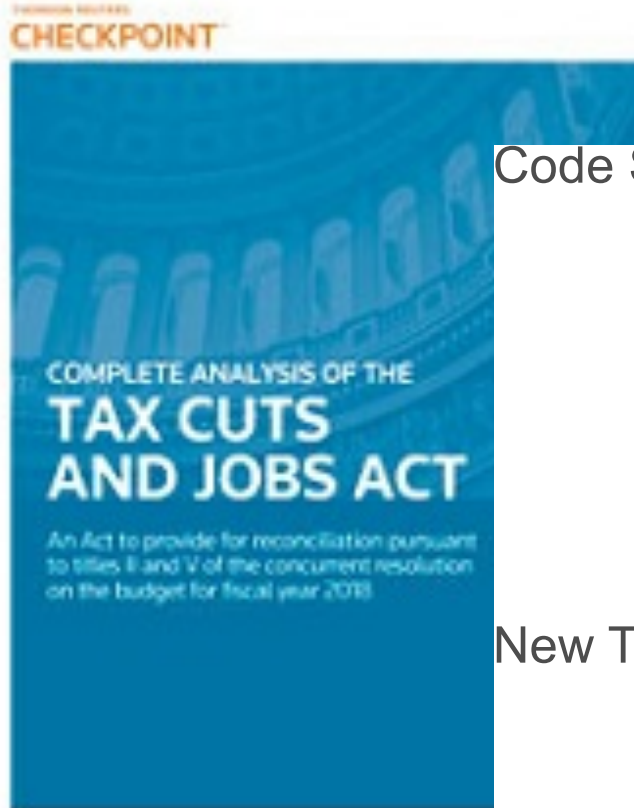
c Employer's address

Why is a human in the loop still necessary?

# Thomson Reuters ONESOURCE



# Tax as a Computational Legal System



Code Sec. 280F limits the Code Sec. 179 expensing and cost recovery deduction with respect to certain passenger autos (the luxury auto depreciation limit). Under pre-Act law, for passenger autos placed in service in 2017, for which the additional first-year depreciation deduction under Code Sec. 168(k) is not claimed, the maximum amount of allowable depreciation deduction is \$3,160 for the year in which the vehicle is placed in service, \$5,100 for the second year, \$3,050 for the third year, and \$1,875 for the fourth and later years in the recovery period. This limitation is indexed for inflation.

New Tax Law 2018: For passenger automobiles placed in service after Dec. 31, 2017, in tax years ending after that date, for which the additional first-year depreciation deduction under Code Sec. 168(k) is not claimed, the maximum amount of allowable depreciation is increased to: \$10,000 for the year in which the vehicle is placed in service, \$16,000 for the second year, \$9,600 for the third year, and \$5,760 for the fourth and later years in the recovery period. For passenger automobiles placed in service after 2018, these dollar limits are indexed for inflation. For passenger autos eligible for bonus first-year depreciation, the maximum first-year depreciation allowance remains at \$8,000. (Code Sec. 280F, as amended by Act Sec. 13202)

# VAT (Value-Added Tax)

## How a Value-Added Tax Works

In a country with a value-added tax, businesses collect the tax on their sales and pay it on their purchases from other businesses. Here's how a 10% VAT would apply to the production and sale of a shirt.



### STEP 1

Farmer grows cotton and sells to textile maker for **\$1.00**



### STEP 2

Textile maker makes fabric and sells to clothes maker for **\$5.00**



### STEP 3

Clothes maker sews shirt and sells to retailer for **\$12.00**



### STEP 4

Clothing retailer sells shirt to consumer for **\$20.00**

Sale price with VAT	\$1.10		\$5.50		\$13.20		\$22.00
VAT collected by seller	\$0.10		\$0.50		\$1.20		\$2.00
Credit for VAT paid in previous stage	N.A.		-\$0.10		-\$0.50		-\$1.20
Net VAT collected	\$0.10	+	\$0.40	+	\$0.70	+	\$0.80
Total VAT collected							\$2.00



# VAT Tax Carousel Fraud

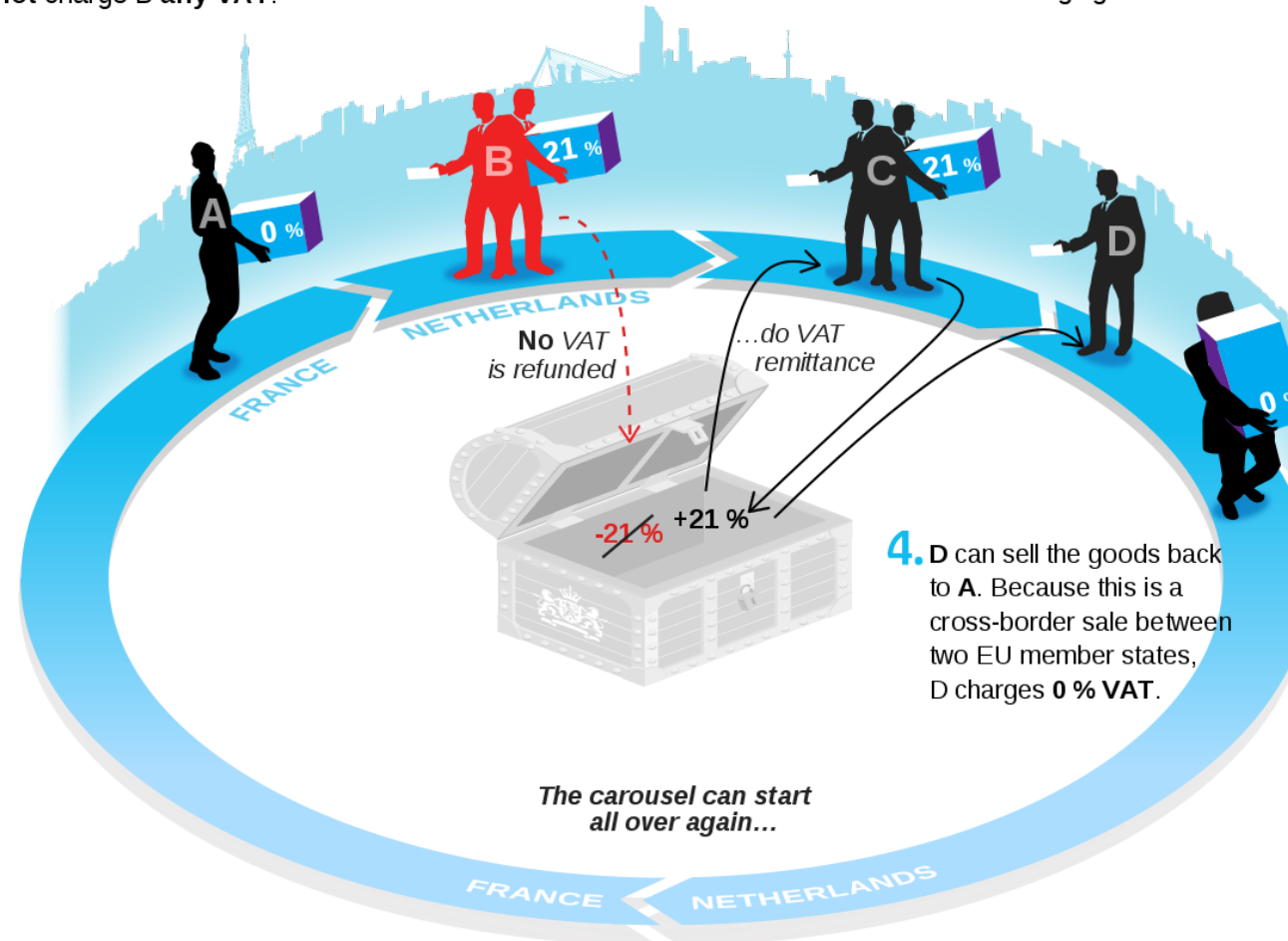


# VAT Tax Carousel Fraud

## Missing trader fraud

In carousel VAT frauds, a merchant fails to remit VAT to the taxing authority, despite charging his buyers the price of the sold goods plus VAT.

1. **Business A** delivers goods to **B** in the Netherlands. Because this is a cross-border sale within the EU, A does not charge B any VAT.
2. **B** sells the goods to **C** and charges him 21 % VAT. He has to remit this to the taxing authority, but **fails** to do so. He commits **fraud**.
3. **C** has paid 21 % worth of VAT to **B**, which he can deduct on his VAT return. C delivers the goods to **D** and charging VAT.

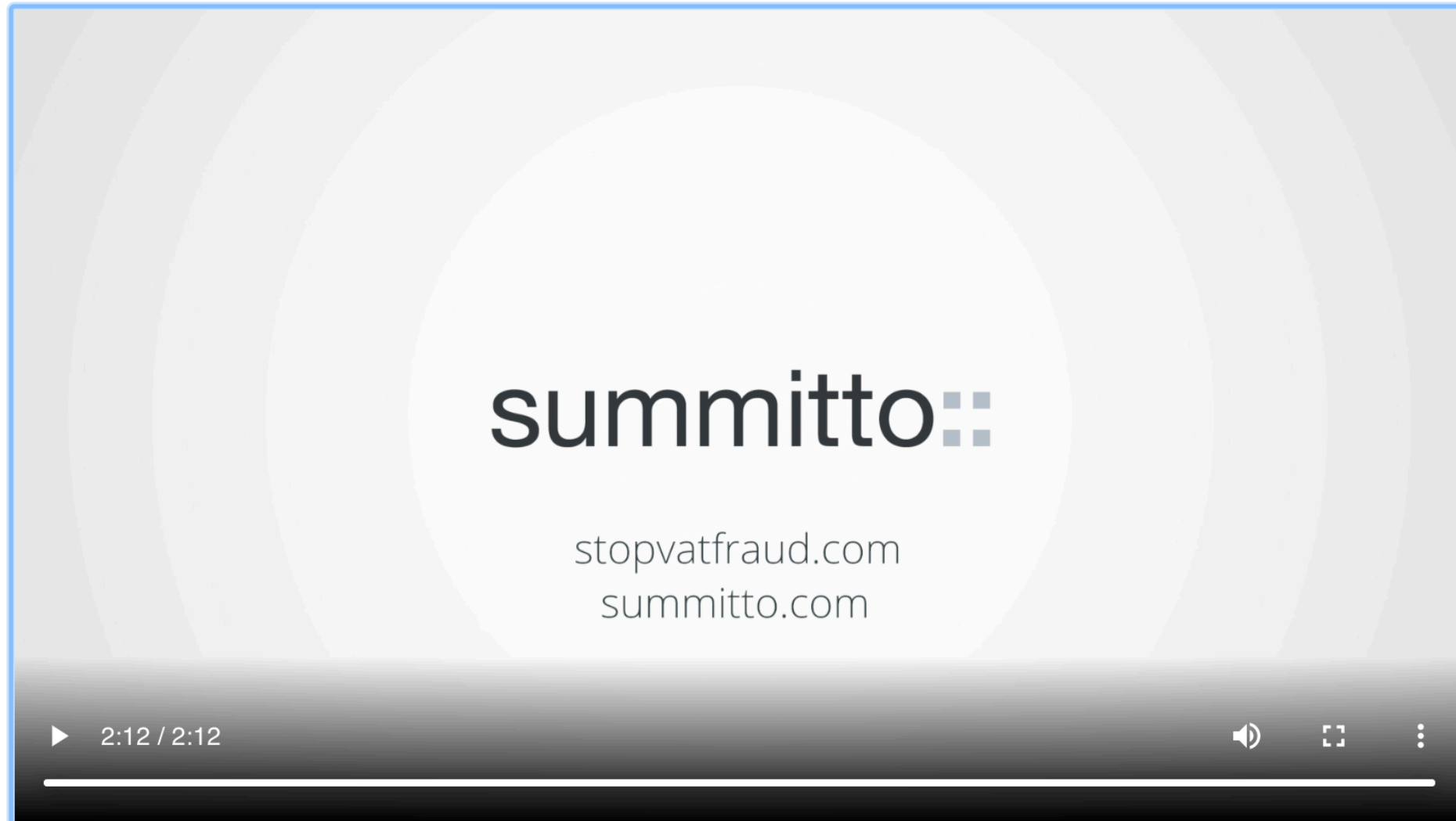


4. **D** can sell the goods back to **A**. Because this is a cross-border sale between two EU member states, D charges **0 % VAT**.



## Summitto Solution (TR Investment)

[https://blog.summitto.com/video/2019\\_1203\\_SUMMITTO\\_VAT\\_FRAUD\\_V4.17.mp4](https://blog.summitto.com/video/2019_1203_SUMMITTO_VAT_FRAUD_V4.17.mp4)

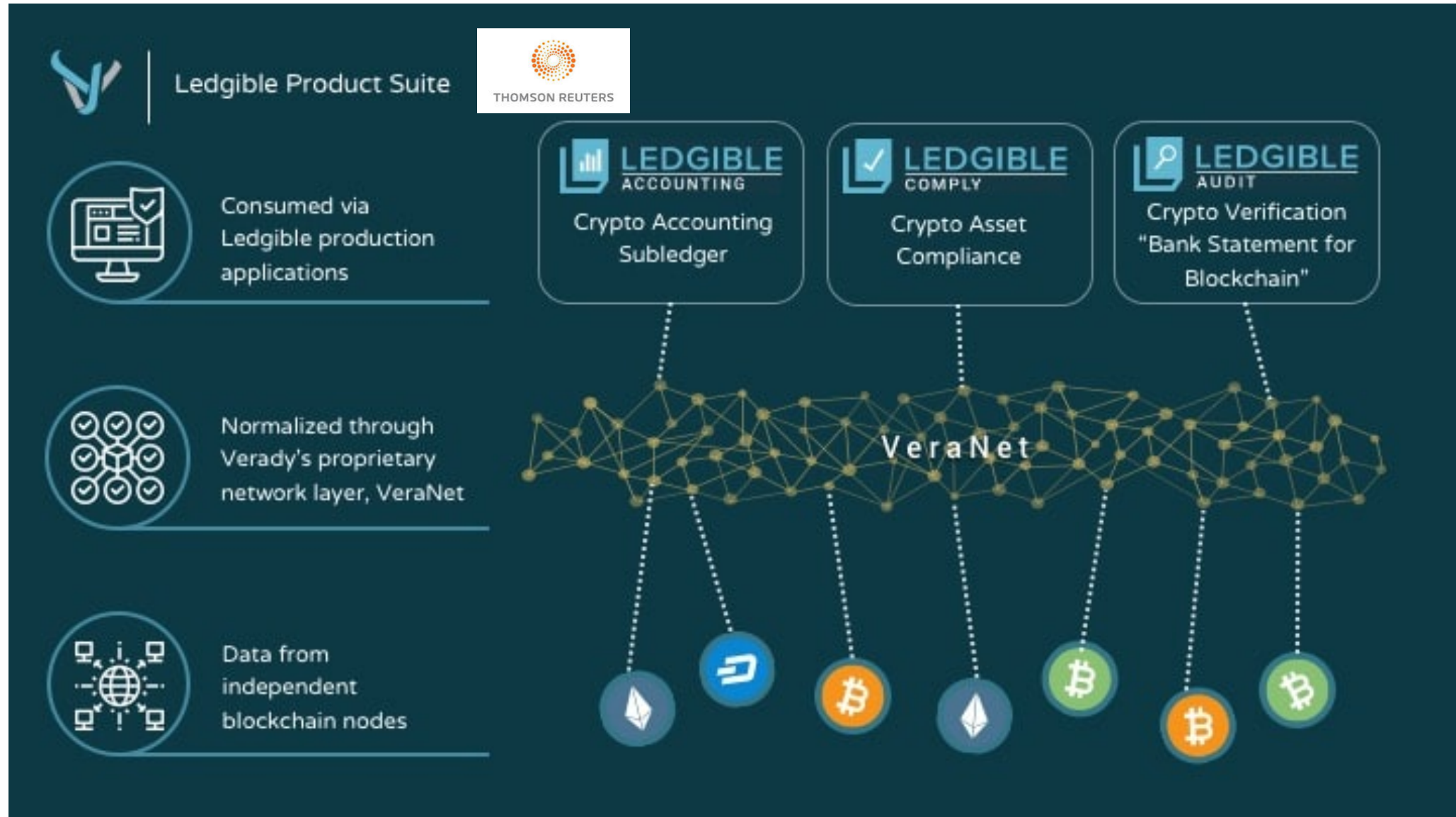


# Taxing Crypto

<b>SCHEDULE 1</b> (Form 1040 or 1040-SR)		<b>Additional Income and Adjustments to Income</b>		OMB No. 1545-0074	
Department of the Treasury Internal Revenue Service		▶ Attach to Form 1040 or 1040-SR. ▶ Go to <a href="http://www.irs.gov/Form1040">www.irs.gov/Form1040</a> for instructions and the latest information.		<b>2019</b> Attachment Sequence No. 01	
Name(s) shown on Form 1040 or 1040-SR			Your social security number		
At any time during 2019, did you receive, sell, send, exchange, or otherwise acquire any financial interest in any virtual currency? <input type="checkbox"/> Yes <input type="checkbox"/> No					
<b>Part I Additional Income</b>					
1	Taxable refunds, credits, or offsets of state and local income taxes	1			
2a	Alimony received	2a			
b	Date of original divorce or separation agreement (see instructions) ▶				
3	Business income or (loss). Attach Schedule C	3			
4	Other gains or (losses). Attach Form 4797	4			
5	Rental real estate, royalties, partnerships, S corporations, trusts, etc. Attach Schedule E	5			
6	Farm income or (loss). Attach Schedule F	6			
7	Unemployment compensation	7			
8	Other income. List type and amount ▶				
9	Combine lines 1 through 8. Enter here and on Form 1040 or 1040-SR, line 7a	9			
<b>Part II Adjustments to Income</b>					
10	Educator expenses	10			
11	Certain business expenses of reservists, performing artists, and fee-basis government officials. Attach Form 2106	11			
12	Health savings account deduction. Attach Form 8889	12			
13	Moving expenses for members of the Armed Forces. Attach Form 3903	13			
14	Deductible part of self-employment tax. Attach Schedule SE	14			
15	Self-employed SEP, SIMPLE, and qualified plans	15			
16	Self-employed health insurance deduction	16			
17	Penalty on early withdrawal of savings	17			
18a	Alimony paid	18a			
b	Recipient's SSN				
c	Date of original divorce or separation agreement (see instructions) ▶				
19	IRA deduction	19			
20	Student loan interest deduction	20			
21	Reserved for future use	21			
22	Add lines 10 through 21. These are your <b>adjustments to income</b> . Enter here and on Form 1040 or 1040-SR, line 8a	22			

For Paperwork Reduction Act Notice, see your tax return instructions. Cat. No. 71479F Schedule 1 (Form 1040 or 1040-SR) 2019

# How to Manage Crypto for Tax Purposes? Verady, TR Partner



# Salex-Tax Eligible Product Categories for Iowa:

NEW SUBSECTION . 55B. a. *"Specified digital products"* means electronically transferred digital audio-visual works, digital audio works, digital books, or other digital products.

b. For purposes of this subsection:

(1) *"Digital audio-visual works"* means a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.

(2) *"Digital audio works"* means works that result from the fixation of a series of musical, spoken, or other sounds, including but not limited to ringtones. For purposes of this subparagraph, *"ringtones"* means digitized sound files that are downloaded onto a device and that may be used to alert the customer with respect to a communication.

(3) *"Digital books"* means works that are generally recognized in the ordinary and usual sense as books.

(4) *"Electronically transferred"* means obtained or accessed by the purchaser by means other than tangible storage media, including but not limited to a specified digital product purchased through a computer software application, commonly referred to as an in-app purchase, or through another specified digital product, or through any other means.

(5) *"Other digital products"* means greeting cards, images, video or electronic games or entertainment, news or information products, and computer software applications.

Sec. 167. Section 423.1, Code 2018, is amended by adding the following new subsection:

# Product Taxability Prediction Applet

Enter the actual eligible categories or items as stated in the new legislation. Separate each item by comma followed by a single space. See example in the box.

**Eligible categories or items:**

specified digital products, digital audio-visual works,

For each actual eligible category/item, the algorithm predicts several eligible products from the product taxability matrix. In the box below, specify the number of predictions you want per eligible category/item. For shorter lists of actual eligible categories/items, a large number will give better predictions.

**Predictions per each eligible category/item:**

600

If you have a test set you that you can use to assess model performance, click 'Test' to enter the data. A text to show you model performance will appear on the right. To improve the model, click 'Test' to remove the test set, increase the number of predictions per category/item in the previous box, let the the model re-run (about 3 minutes), and then click 'Test' again.

Test

**Enter test set:**

Software Delivered Electronically, Non-business Use

predicted_items	Model Performance:
Bundled Hardware/Software Maintenance and Phone Tech Support	582 is total number of predicted products
Duplicating machines	60 is number of items in the test set that you provided
Non-Business Use Enterprise Software Delivered Electronically	70.0 is percentage of items in test set that are in the predicted products
Audio monitor	
Optical adapters	
Digital subscriber loop DSL customer premise equipment CPE plain old telephone system POTS splitter	
Network equipment upgrade kit	
Wholesale Prescription Products for Animal Use w/ Prof. Svcs.	
Infrastructure-as-a-Service	
OTC Products for Animal Use-Not Part of Treatment Plan	
Educational material audio tape via Tangible Medium	
Ladder Tag - As Part of Manufactured Tangible Personal Property	
Business Use Application Service Providers	
Cable network tester	
Remote management adapters	
Labor Only	
Information technology service delivery	
Business Use Canned Soft License Elec Delivery	



# Conclusion

Food for thought:

Why is human still needed in the tax determination loop? Can

Can blockchain help prevent some tax fraud?

How are crypto assets to be taxed?

How do we automate keeping up with changing tax laws?