VERTEX®

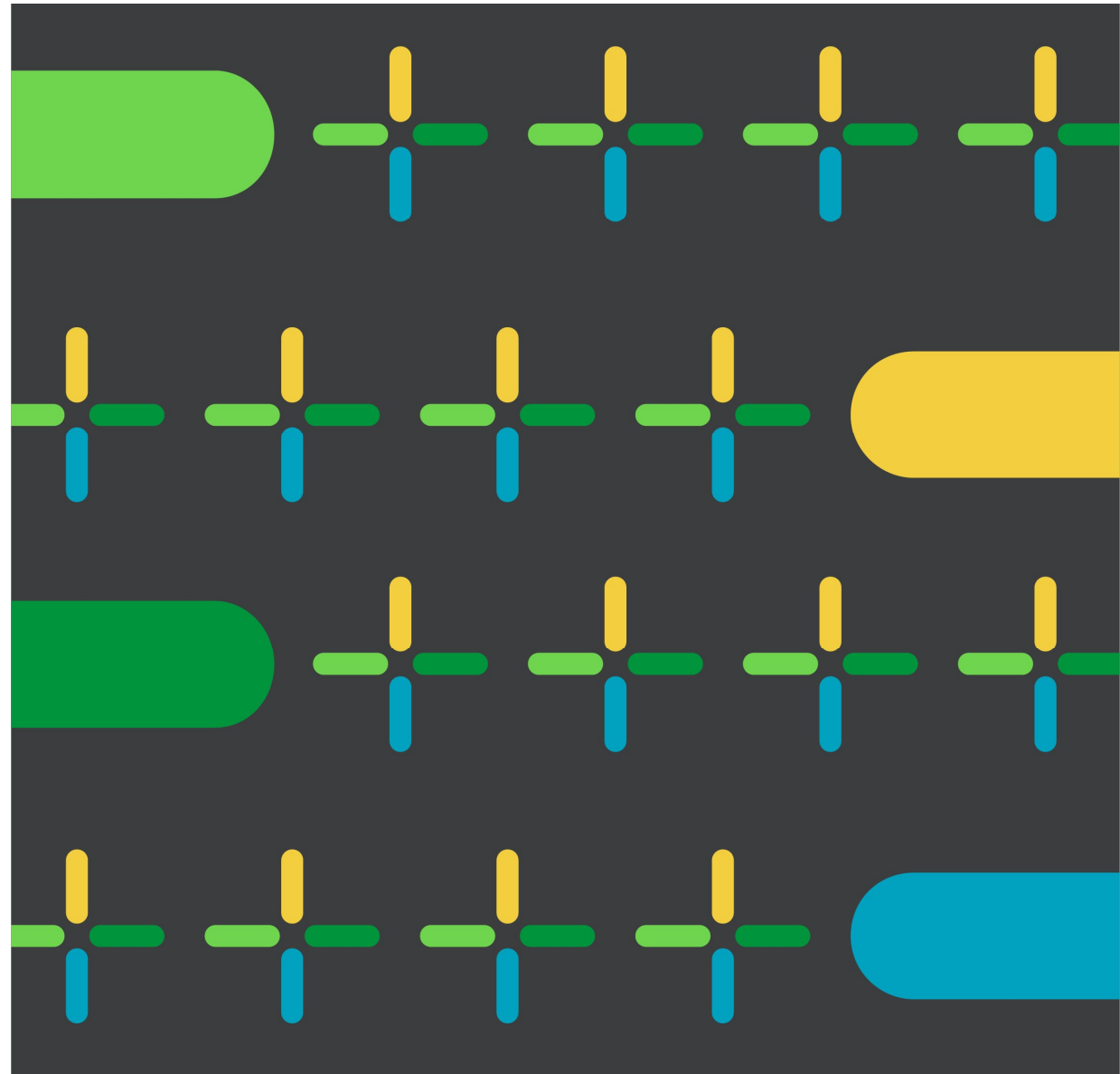# Sachertorte and Vertex: what do they have in common?

14 June 2023, Vienna

Das Geheimnis der Sacher-Torte: Warum es Sie heute noch gibt

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The Sacher-torte:
Something new was required

- 1832 – Prince Klemens Wenzel von Metternich needed a dessert that would **live up to the highest standards** of his special guests

- Franz Sacher (16 years old) was asked to create the dessert that "**wouldn't disgrace the Prince** that evening"

- Franz realized that the traditional deserts would **not be able to fulfil this request**, he knew that he had to come up with something new.

- Franz Sacher created an outstanding desert that was deemed "**presentable at court**"

- Because of the high quality it became a **standard in the world**

- Because of the **continued high quality**, in 2023, **after 191 years, it is still a standard in the world**

SAP S/4HANA and ViDa:
Something new is required

- 2023 – The world of VAT is becoming more and more digital, and the transaction VAT data needs to **live up to the highest compliance standards**

- More and more countries are requesting data transfers in (almost) real-time: Accurate and Compliant "that **doesn't disgrace the company**"

- Companies realize that the traditional, home grown VAT determination solutions are **not able to fulfil this request**

- A Tax Engine is designed to create first time right data, that is deemed "**presentable at tax authorities**"

- Because of the high-quality output, it is becoming rapidly the **new standard for use with SAP S/4HANA**

- Because of the continued high investments made in keeping up with the latest standards (IT and ViDA), it is **expected to be around for many decades to come**
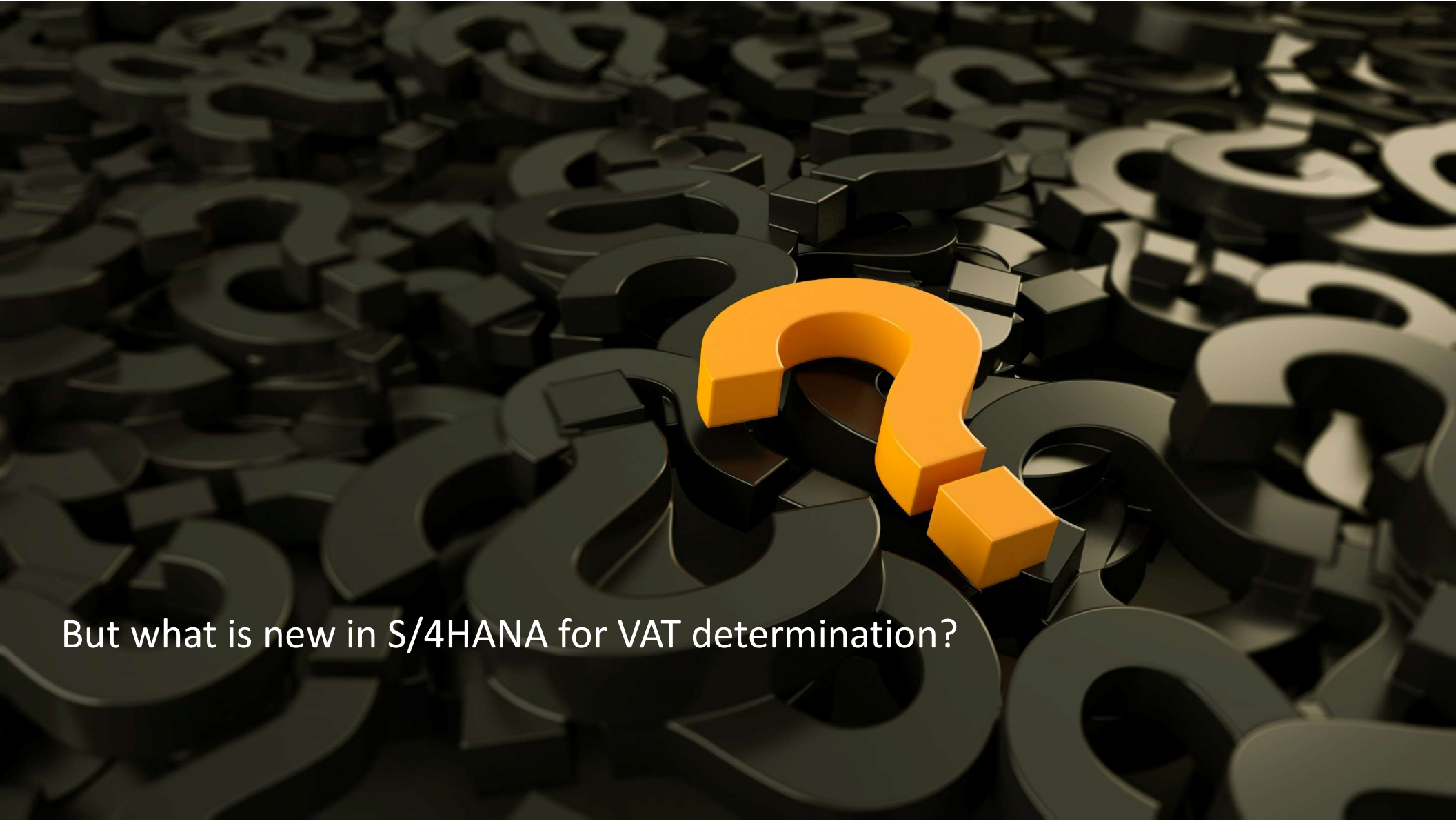
Are you migrating to SAP S/4HANA?

Some benefits of SAP S/4HANA

- Easier to update business models

- Simpler to bring acquisitions into the ERP environment

- Lower ownership costs

- Faster analytical insights

- More accurate forecasting

- Speedier period-end closings

- Assets maintained proactively

- Simpler user interface

- Tedious tasks automated

But what is new in S/4HANA for VAT determination?

The initial design, >30 years ago: Sales transactions

Access sequence 1: Cross border scenario

| Tax departure country | ➕ | Tax destination country | ➕ | | | | | Validity date | ＝ | Tax code + VAT rate |

Access sequence 2: If it was not a Cross border scenario, it is a domestic transaction

| Tax departure country | ➕ | | | Customer Tax Classification | ➕ | Material Tax Classification | ➕ | Validity date | ＝ | Tax code + VAT rate |

Access sequence 3: If it was not a Domestic scenario, it must have been a Cross border scenario

| Tax departure country | ➕ | Tax destination country | ➕ | Customer Tax Classification | ➕ | Material Tax Classification | ➕ | Validity date | ＝ | Tax code + VAT rate |

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The current design in S/4HANA: Sales transactions

Access sequence 1: Cross border scenario

| Tax departure country | + | Tax destination country | + | | | Validity date | = | Tax code + VAT rate |

Access sequence 2: If it was not a Cross border scenario, it is a domestic transaction

| Tax departure country | + | | | Customer Tax Classification | + | Material Tax Classification | + | Validity date | = | Tax code + VAT rate |

Access sequence 3: If it was not a Domestic scenario, it must have been a Cross border scenario

| Tax departure country | + | Tax destination country | + | Customer Tax Classification | + | Material Tax Classification | + | Validity date | = | Tax code + VAT rate |

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The current VAT determination functionality in S/4HANA

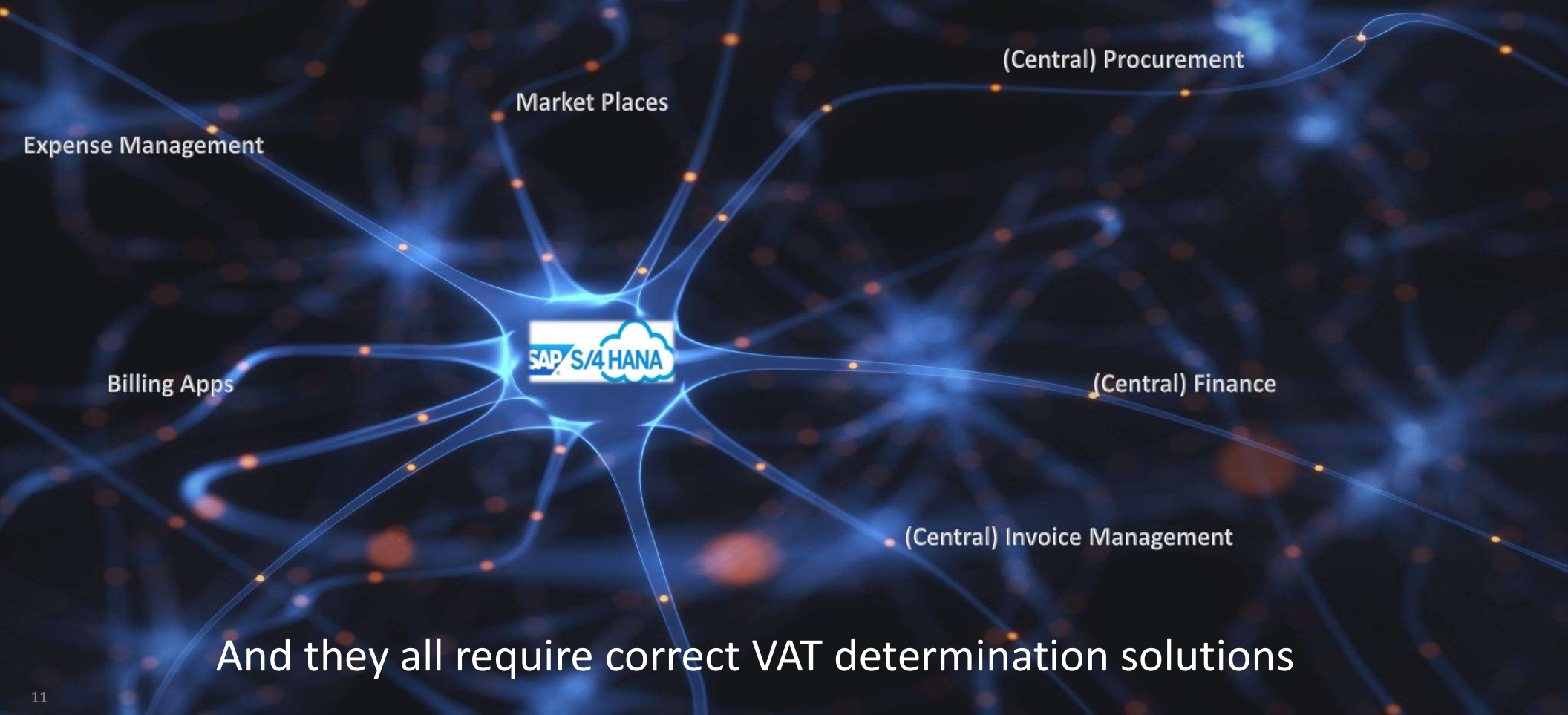Robust framework for A-B transactions:

- Domestic transactions
    - if party A is established in the country
    - if no exemption certificates apply
    - if not within a VAT group
- Intra Community Supplies of goods
    - if correct legal partner for VAT is determined
- Export transactions

How complex is your business?

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Your VAT challenge is broader than native SAP alone

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We connect more financial platforms to S/4HANA than ever!

(Central) Procurement

Market Places

Expense Management

SAP S/4 HANA

Billing Apps

(Central) Finance

(Central) Invoice Management

And they all require correct VAT determination solutions

ViDA, e-invoicing, e-filing: Data must be first time right!

ITR

Direct Tax   Indirect Tax   Transfer Pricing   Jurisdictions ⌄   Expert Analysis ⌄   Events ⌄

Viva la ViDA? Will the EU's grand plan for VAT be as revolutionary as promised?

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By Peter Boerhof   February 17, 2023

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Staffing S/4HANA projects

There are numerous SAP consultants globally

But there are also numerous S/4HANA migrations

SAP Indirect Tax Specialists worldwide: Are they available for your project?

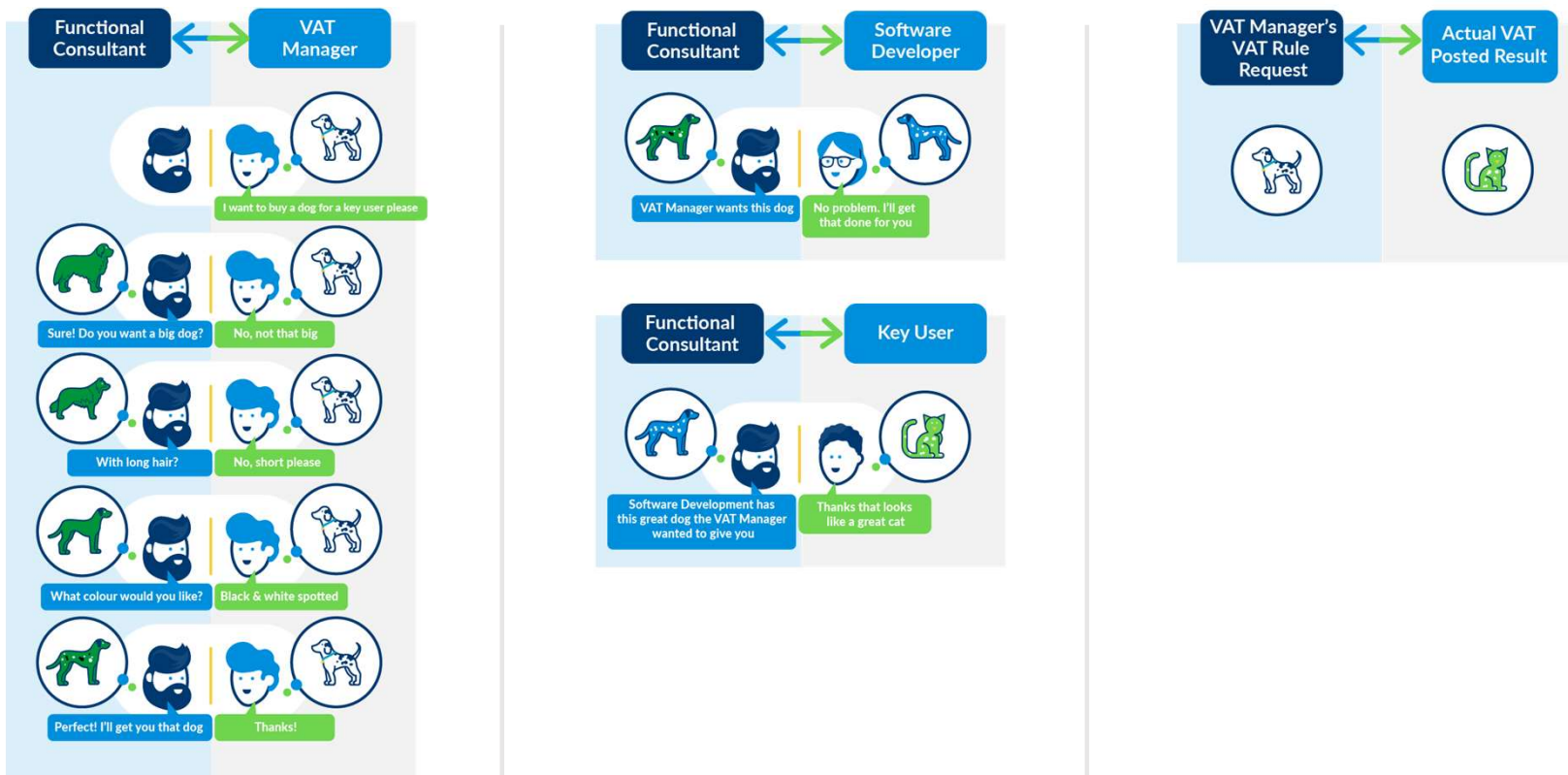Skill set for Indirect Tax design in SAP is hard to find WORLDWIDE!

Functional skills ABAP skills Functional and ABAP skills International Tax SUT/VAT/GST

VERTEX
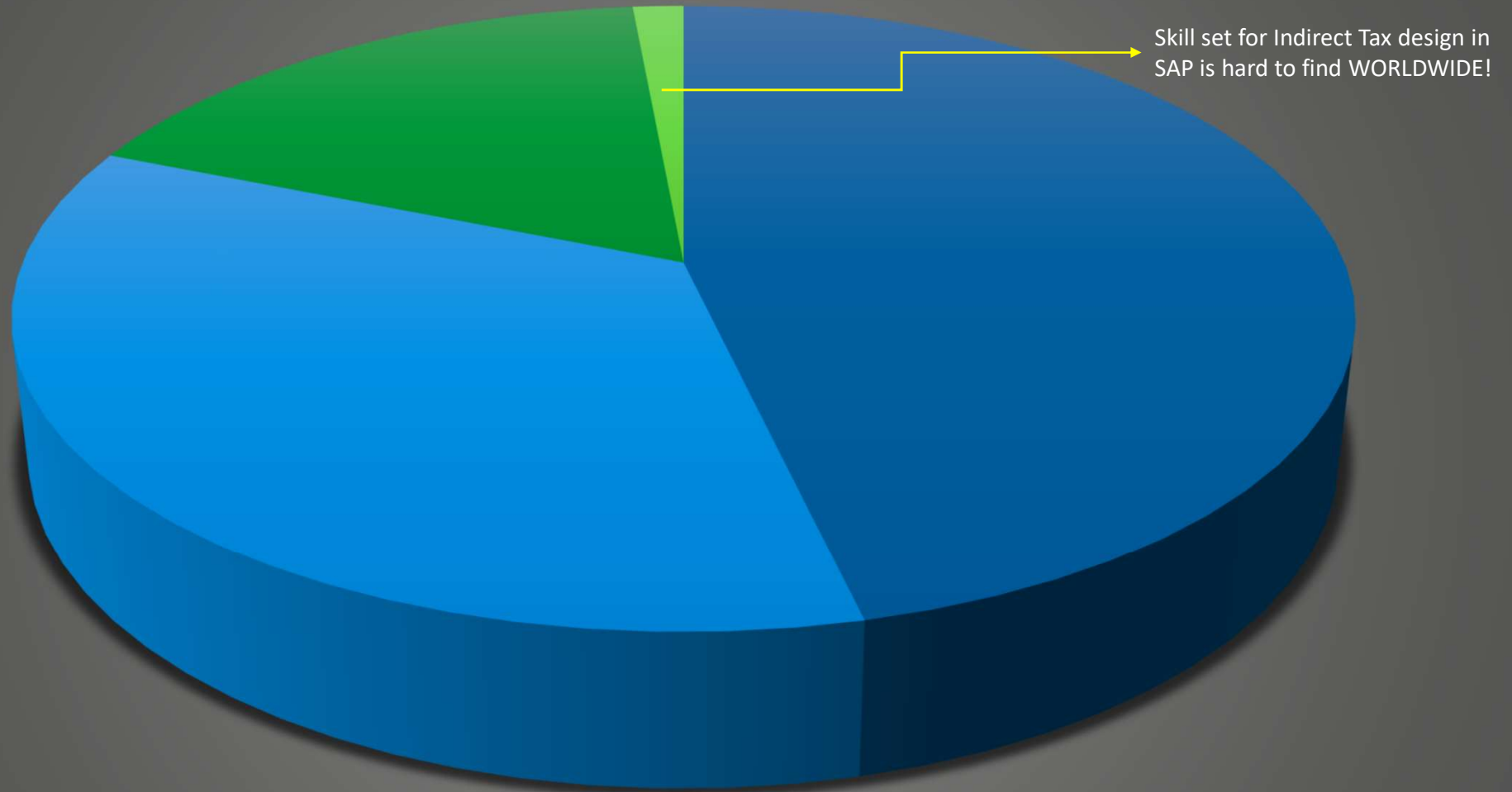
Language

Solutioning Indirect Tax in SAP:
Does everybody speak the same "language"?

Do we get a correct level of **understanding** if staff with **different professional backgrounds** talk with each other?

Don't just paint the leaves green, fix the roots for a healthy tree
Fix the root causes, "work-arounds" and "plasters" are no longer an option
Implement your tax process correctly, don't "just" make it work….

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Spending your budget wisely

What comes first…..?

Reporting

Determination

A chain is only strong if all links are strong…..

Reports are only correct if all underlying data is correct

Are VAT determination cost in
S/4HANA transparent to you?

VAT determination cost in S/4HANA transparent?

Business case calculations, project plans, Statements of Work, budget calculations….
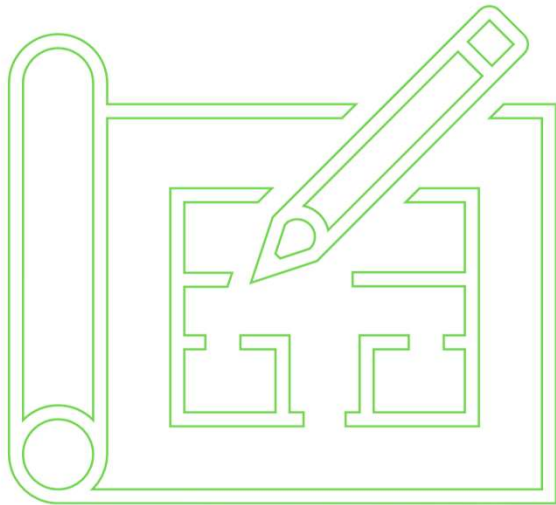
Total budget $ xx.xxx.xxx

Tax Engine implementation cost: $ xxx.xxx

Additional cost or not?

Did your implementation plan contain transparent VAT determination cost?

Often SAP S/4HANA implementation projects don't state a realistic calculation for implementing fully automated and compliant VAT determination process.

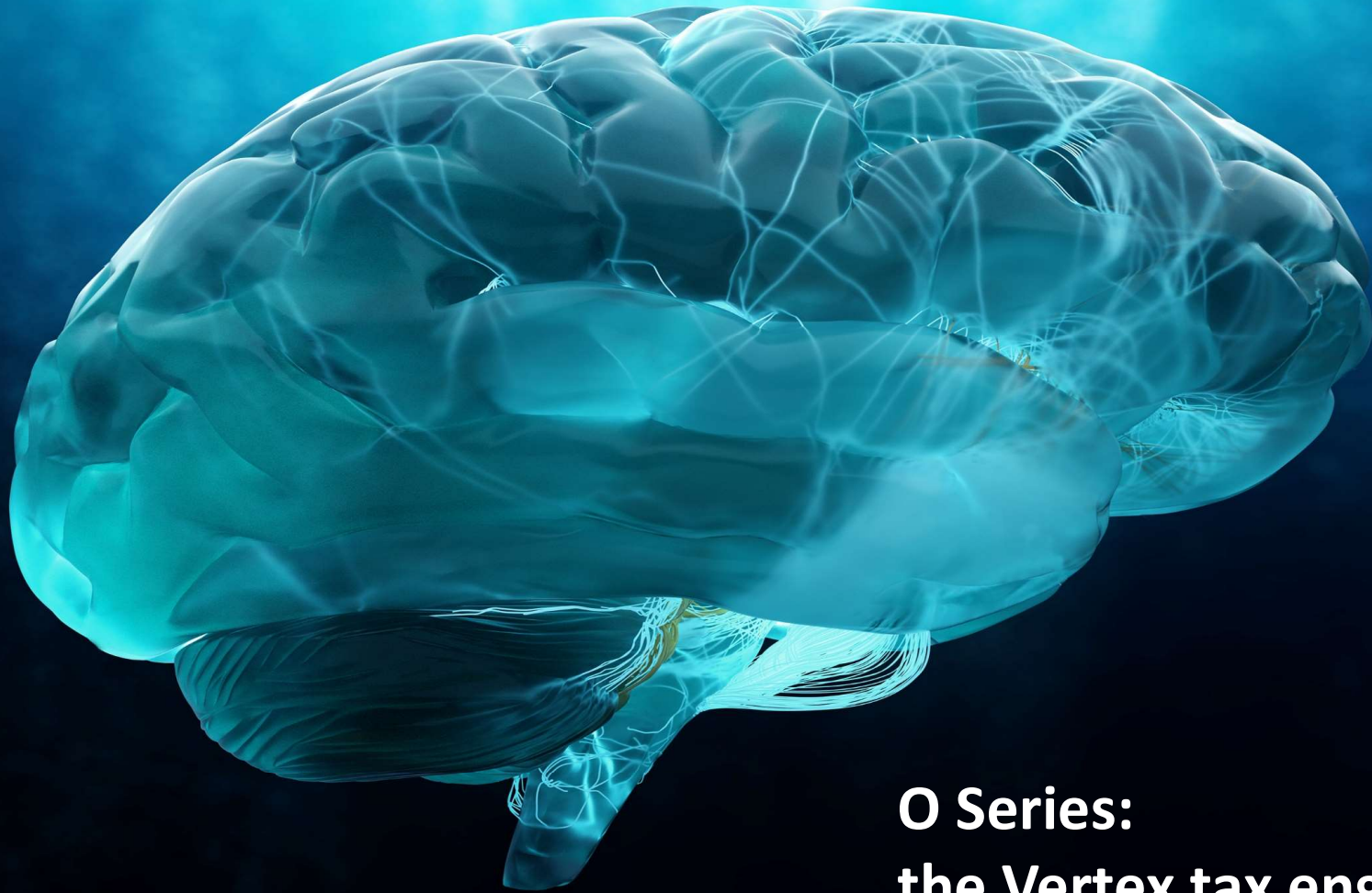VAT determination cost are famous "Hidden Cost"; a well-kept secret in many organizations

VERTEX

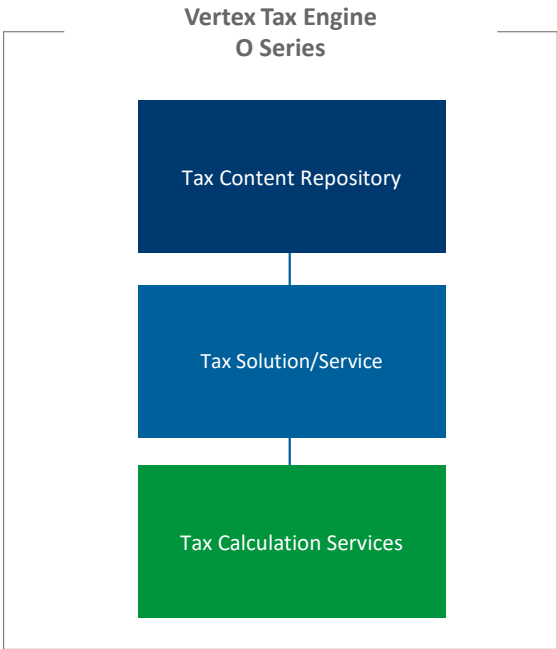# Determining the legal partner for VAT purposes in SAP

What does it take to ensure we always determine the correct "Legal partner for VAT purposes" in a sales transaction in SAP?

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O Series:
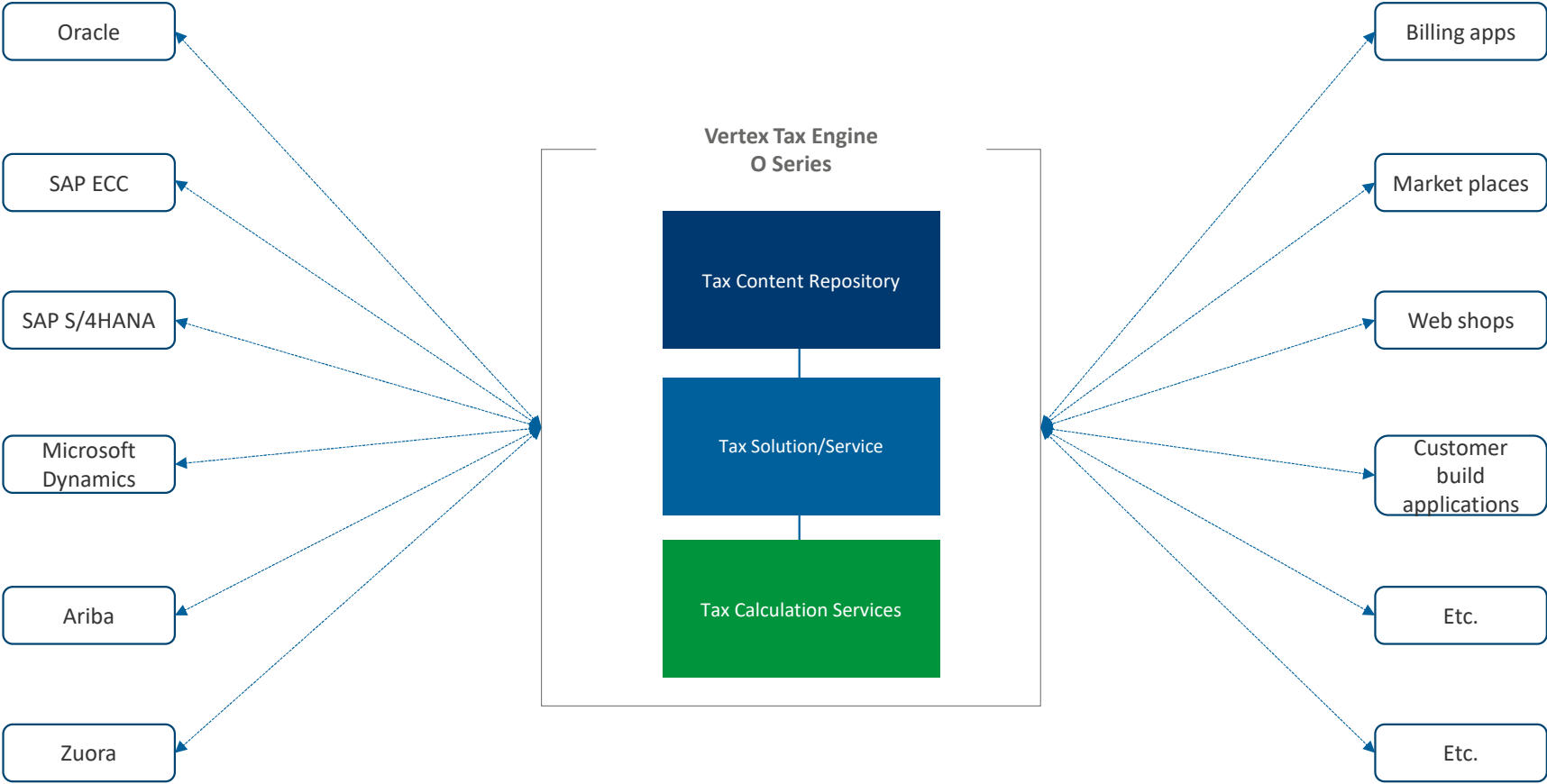the Vertex tax engine

O Series – Vertex's flagship

Vertex O Series content: Indirect tax rules & rates

- Jurisdictional content
  - Coverage of Federal Level Taxes and Sub-jurisdictional treatment
  - What is/isn't in the European Union
    - Aegean Islands; French DOMTOMS; Canaries; Ceuta/Melilla etc
- Place of supply content
  - Goods v services
  - Different types of service
  - Complex areas of place of supply
- Related VAT functionality
  - Exceptional Supplier/Customer treatment
    - Net exporters; qualifying disabled; research charities; NATO etc
  - Recoverability – Blocking Orders and Partial Exemption
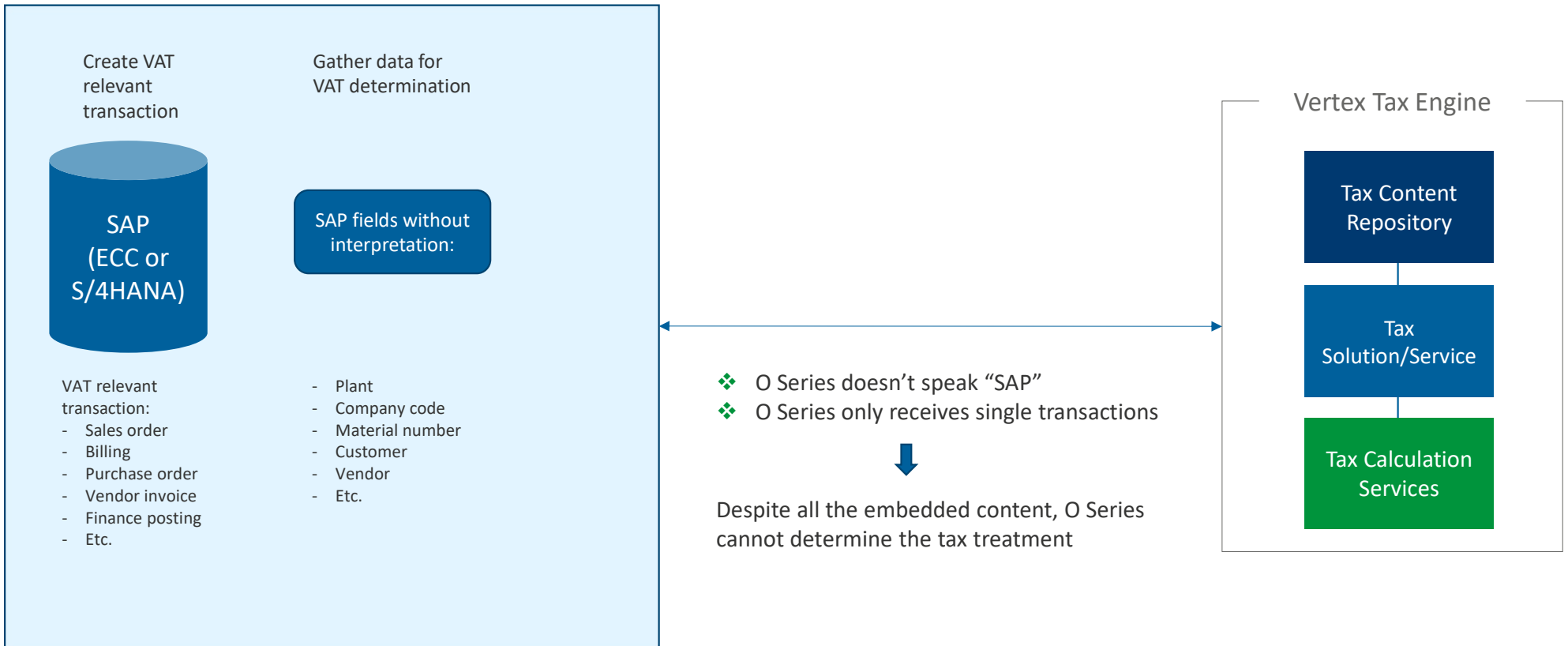
Examples of EU specific VAT content
- Chain transactions with multiple parties involved
- EU triangulation
- Domestic and extended reverse charge
- High Seas/ Out of the scope for VAT transactions
- VAT groups
- Major exporter schemes (Italy, France, Ireland)
- Free trade zones / Bonded / VAT warehouses
- Cross border Call-off & Consignment
- (Mini) One Stop Shop
- Various types of Services
- Supply & Install
- Distance selling
- Imports (Deferrals, Import license, Onward EC Sales etc.)
- Establishments, NON-Established businesses
- Etc.

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O Series connects with the world....

Oracle

SAP ECC

SAP S/4HANA

Microsoft Dynamics

Ariba

Zuora

**Vertex Tax Engine
O Series**

Tax Content Repository

Tax Solution/Service

Tax Calculation Services

Billing apps

Market places

Web shops

Customer build applications

Etc.

Etc.

...but there is no universal language

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Connecting SAP without a "translator"

Create VAT relevant transaction

Gather data for VAT determination

SAP (ECC or S/4HANA)

SAP fields without interpretation:

VAT relevant transaction:
- Sales order
- Billing
- Purchase order
- Vendor invoice
- Finance posting
- Etc.

- Plant
- Company code
- Material number
- Customer
- Vendor
- Etc.

❖ O Series doesn't speak "SAP"
❖ O Series only receives single transactions

Despite all the embedded content, O Series cannot determine the tax treatment

Vertex Tax Engine

- Tax Content Repository
- Tax Solution/Service
- Tax Calculation Services

"Translate" SAP language to O Series language

Create VAT relevant transaction

Gather data for VAT determination

SAP (ECC or S/4HANA)

VAT relevant transaction:
- Sales order
- Billing
- Purchase order
- Vendor invoice
- Finance posting
- Etc.

+

SAP fields without interpretation:

- Plant
- Company code
- Material number
- Customer
- Vendor
- Etc.

Vertex Accelerator

=

Vertex fields (O Series language)
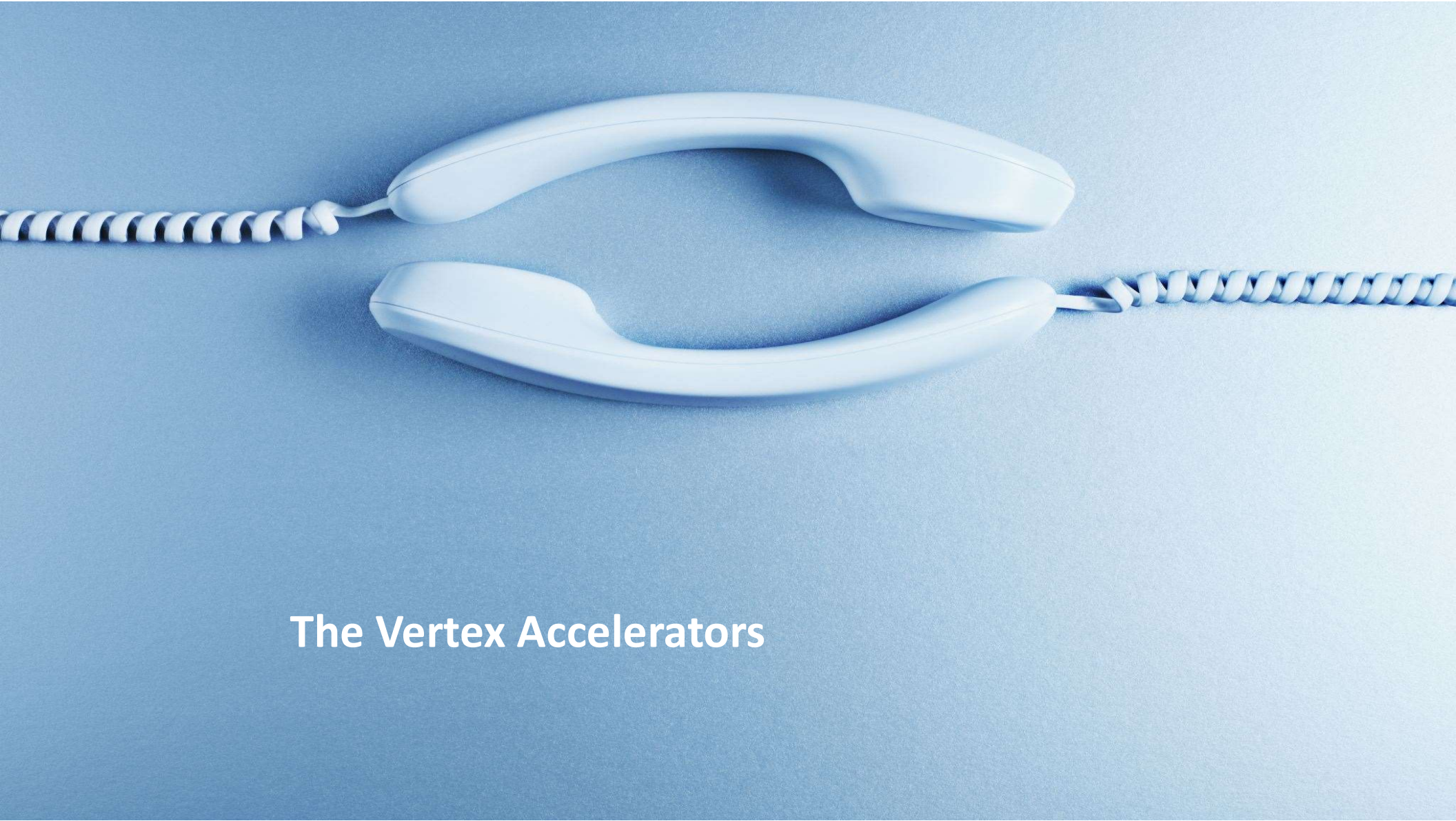
Vertex Tax Service API

← send/receive VAT data →

❖ O Series now understands "SAP"
❖ O Series now understands multiple legs in a transaction

↓

O Series can now determine the correct tax treatment

Vertex Tax Engine

Tax Content Repository

Tax Solution/Service

Tax Calculation Services
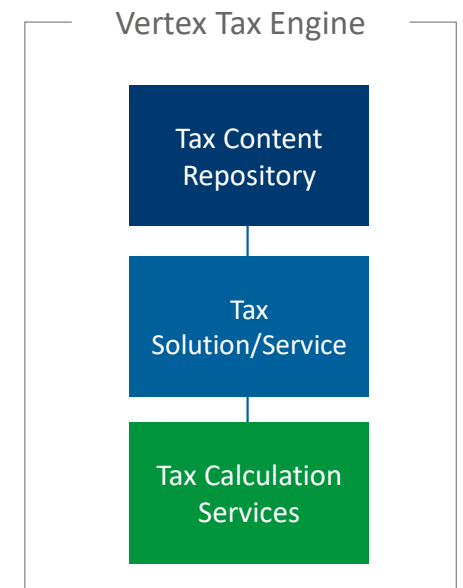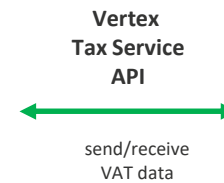
The Vertex Accelerators

The Accelerators and their usage
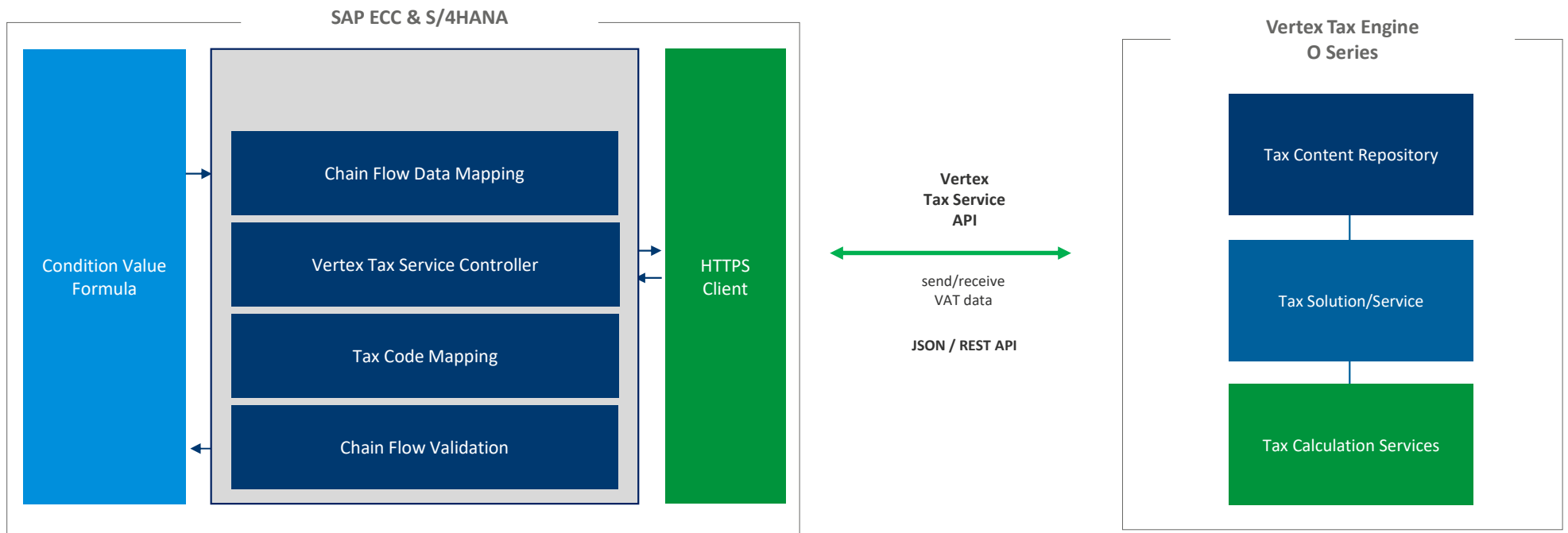
Accelerator 3.1

- RFC connector with SIC

- Multi jurisdictional countries:
  - US/Canada
  - India
  - Argentina
  - Brazil
  - China
  - Etc.

Chain Flow Accelerator (CFA)

- Vertex Tax Service (API)

- Single level indirect tax countries:
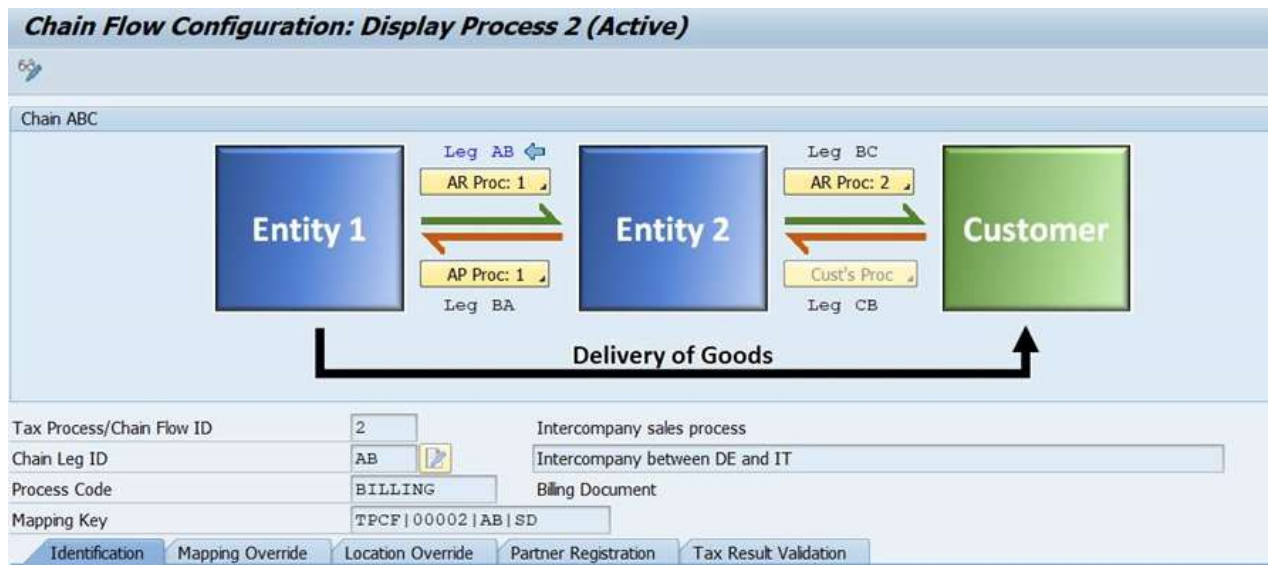 - EU
  - APAC (*)
  - MEA
  - South America's (*)

(*) with exception of the countries
mentioned under "Accelerator 3.1)

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CFA & Vertex Tax Service

SAP ECC & S/4HANA

Condition Value Formula

Chain Flow Data Mapping

Vertex Tax Service Controller

Tax Code Mapping

Chain Flow Validation

HTTPS Client

Vertex Tax Service API

send/receive VAT data

JSON / REST API

Vertex Tax Engine O Series

Tax Content Repository

Tax Solution/Service

Tax Calculation Services

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CFA in SAP

visualization of the flow in SAP

CFA in SAP

Chain Flow Tool: Tax Process Chain List

Process ID	Process Code	Chain Leg ID	Tax Process or Chain Description	Number of entity	Activ...	Chain Leg Description
1	BILLING	AB	General Mapping	2	✓	General Mapping
1	FIAR	AB	General Mapping	2	✓	General Mapping
1	SD	AB	General Mapping	2	✓	General Mapping
1	FIAP	BA	General Mapping	2	✓	General Mapping
1	LIV	BA	General Mapping	2	✓	General Mapping
1	MRKO	BA	General Mapping	2	✓	General Mapping
1	PO	BA	General Mapping	2	✓	General Mapping
2	BILLING	AB	Intercompany sales process	3	✓	Intercompany between DE and IT
2	FIAP	BA	Intercompany sales process	3	✓	Leg BA
2	BILLING	BC	Intercompany sales process	3	✓	Sales to end customer
2	SD	BC	Intercompany sales process	3	✓	Sales to end customer
3	BILLING	AB	Process ABC	3	✓	Intercompany billing: Intra-community Supply
3	FIAP	BA	Process ABC	3	✓	Intercompany AP invoice: Intra-EU Triangulation
3	BILLING	BC	Process ABC	3	✓	Sales/Invoice to end customer: Intra-EU Triangulation Outp..
3	SD	BC	Process ABC	3	✓	Sales/Invoice to end customer: Intra-EU Triangulation Outp..
4	BILLING	CD	High Seas transaction	3	☐	Leg CD
4	SD	CD	High Seas transaction	3	☐	Leg CD

Generic for all flows

Override of generic mapping where necessary

Q&A together with Sachertorte

VERTEX

Thank You

Roger Lindelauf

Director Europe SAP Center of Excellence

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