



# Understanding the data model

## Use case integrated audit IAS

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# Internal Audit Service

- *Internal auditor of the Commission, agencies and other bodies.*
- *10 audit units, 1 specialized in IT audit*
- *Increase in demand integrated audit, data analytics, IT expertise.*

# Consultancy engagement data analytics

- *Topic: Accounting for invoices technical interventions*
- *Integrated team : accountancy and IT expertise required*

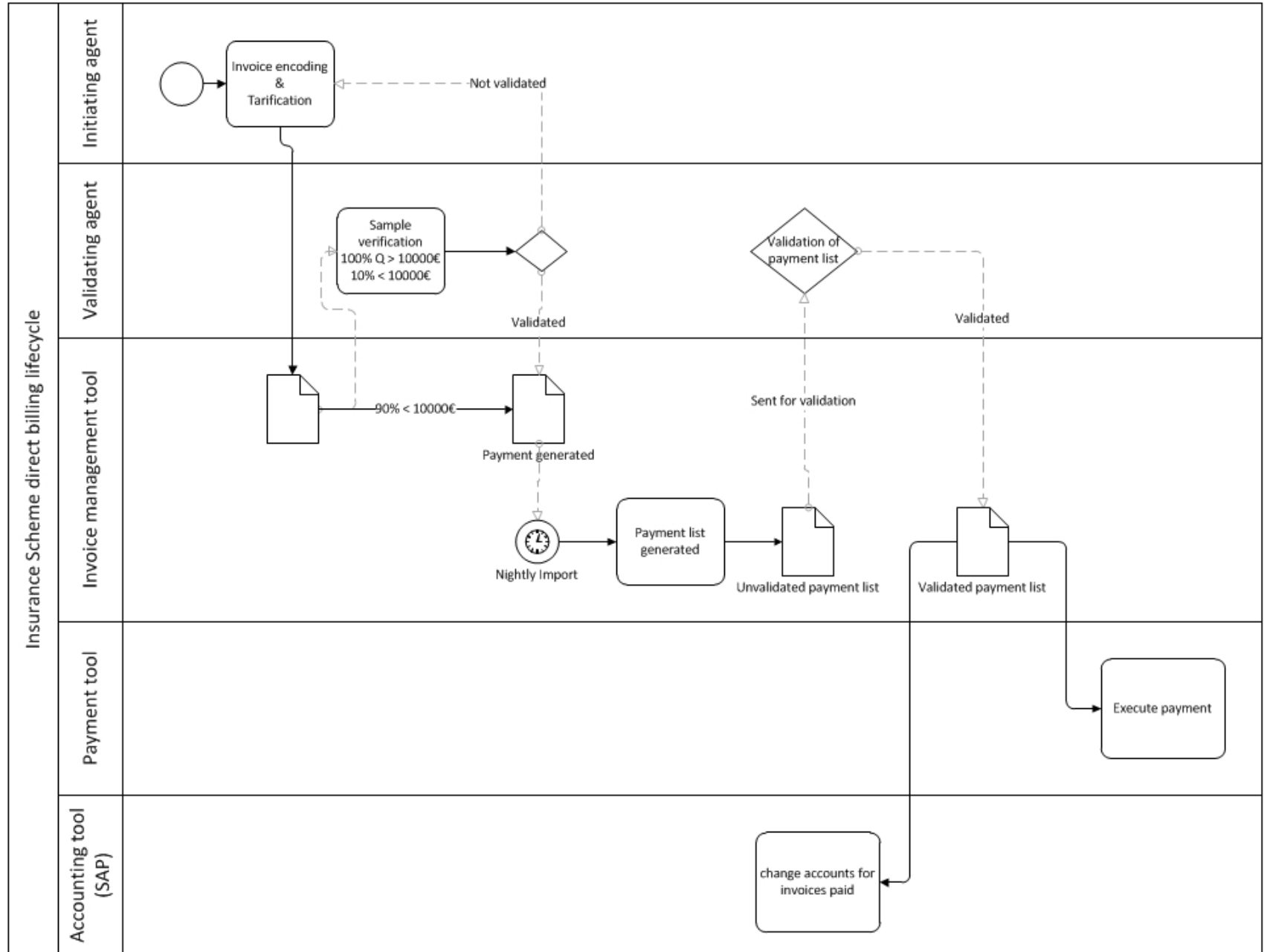
# Challenges faced

- *Understanding accountancy principles (provisions)*
- *Understanding data flow , data model, data integrity*

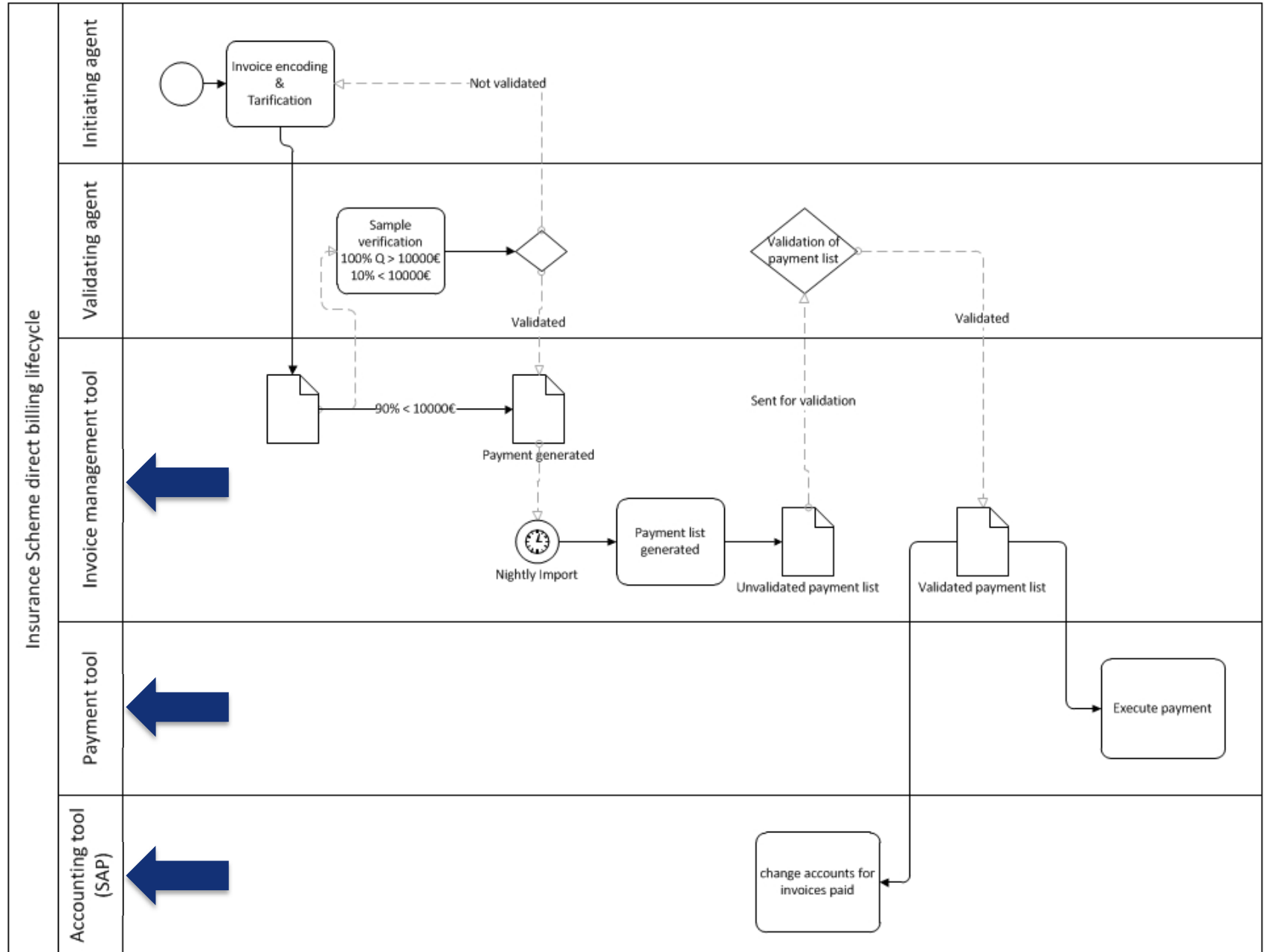
# Training integrated audit IAS

- *Use case developed based on consultancy engagement*
- *2<sup>nd</sup> pilot course given in June*

# Understanding the data flow



# Understanding the data flow



# Understanding the data model

INVOICES	
PK <sup>+</sup>	<u>INVOICE_ID</u>
FK1	INVOICE_SCANNR INVOICE_TYPE PERSON_ID PERSON_ID_OBTAINED_FROM INVOICE_DATE DATE_START DATE_END LAST_EXAM_DATE TOTAL_AMOUNT_CURRENCY TOTAL_AMOUNT_IN_EURO AMOUNT_TO_BPAID INVOICE_COMMENT INVOICE_REFERENCE SYSADMIN_DATE_MODIFY SYSADMIN_REASON_MODIFY TARIFICATION_BYPASSED_FLAG PAYMENT_DATE

INVOICE INJECTIONS	
PK	<u>INVOICE_INJECTION</u>
FK2	PAYMENT_ORDER_ID PAYMENT_AFFILIATE
FK1	INVOICE_SCANNR INVOICE_TYPE DATE_CREATE USER_CREATE DATE_PAYMENT

PAYMENT ORDERS	
PK	<u>PAYMENT_ORDER_ID</u>
	PAYMENT_DATE PAYMENT_AFFILIATE AMOUNT_TO_BPAID AFFILIATE_BANK_NUMBER AFFILIATE_COUNTRY AFFILIATE_BANK PAYMENT_ORDER_EXECUTED_FLAG

TARIFICATION COMMENTS	
PK	<u>COMMENT_ID</u>
	OBJ_CD OBJ_ID OST_CD PER_ID_DEFINER PER_ID_CLOSER CMT_CONTENT DATE_CREATE USER_CREATE DATE_MODIFY USER_MODIFY SYSADMIN_DATE_MODIFY SYSADMIN_REASON_MODIFY

- *Test requested : average throughput time for invoice payments?*



# Understanding the data model

INVOICES		INVOICE INJECTIONS		PAYMENT ORDERS		TARIFICATION COMMENTS	
PK <sup>+</sup>	<u>INVOICE_ID</u>	PK	<u>INVOICE_INJECTION</u>	PK	<u>PAYMENT_ORDER_ID</u>	PK	<u>COMMENT_ID</u>
FK1	INVOICE_SCANNR INVOICE_TYPE PERSON_ID PERSON_ID_OBTAINED_FROM <u>INVOICE_DATE</u> DATE_START DATE_END LAST_EXAM_DATE TOTAL_AMOUNT_CURRENCY TOTAL_AMOUNT_IN_EURO AMOUNT_TO_BPAID INVOICE_COMMENT INVOICE_REFERENCE SYSADMIN_DATE_MODIFY SYSADMIN_REASON_MODIFY TARIFICATION_BYPASSED_FLAG PAYMENT_DATE	FK2	PAYMENT_ORDER_ID PAYMENT_AFFILIATE		<u>PAYMENT_DATE</u> PAYMENT_AFFILIATE AMOUNT_TO_BPAID AFFILIATE_BANK_NUMBER AFFILIATE_COUNTRY AFFILIATE_BANK <u>PAYMENT_ORDER_EXECUTED_FLAG</u>		OBJ_CD OBJ_ID OST_CD PER_ID_DEFINER PER_ID_CLOSER CMT_CONTENT DATE_CREATE USER_CREATE DATE_MODIFY USER_MODIFY SYSADMIN_DATE_MODIFY SYSADMIN_REASON_MODIFY

- *Test requested : average throughput time for invoice payments?*

# Conclusion

- *Design of tests prone to error when not understanding the business process*
- *Crucial to understand IT tools and processes behind*
- *Unexpected recommendations stemming from business analytics efforts*