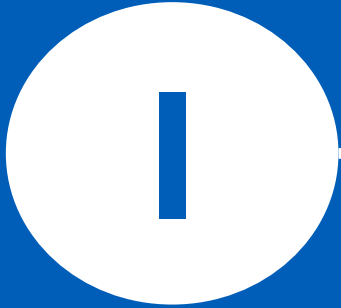
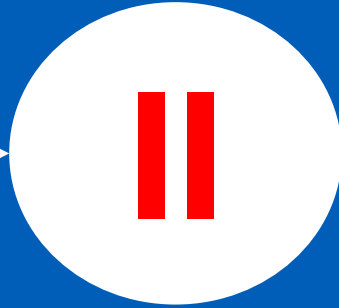


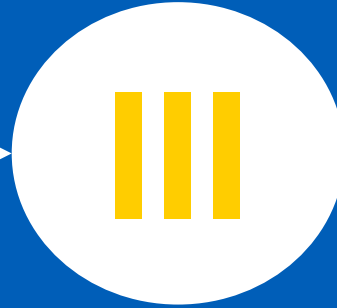
**Conceptual
Foundations
of AIS**



**Transaction
cycles**



AIS control



**AIS investments
and
outsourcing**



**Database
design**

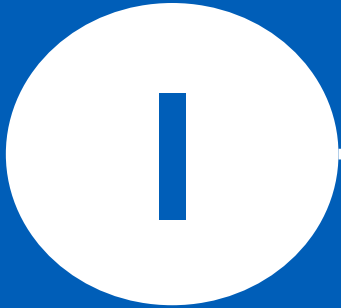


Aalto University
School of Business

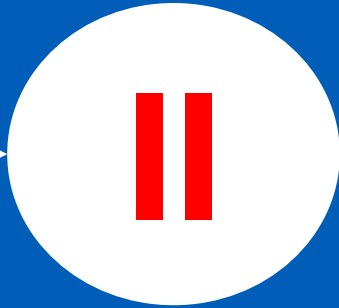
Transaction cycles

by David Derichs ©
Lecture 2

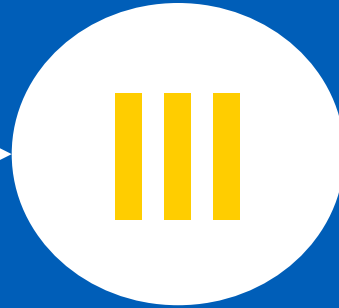
Revenue
cycle



Purchasing
cycle



Payroll
cycle

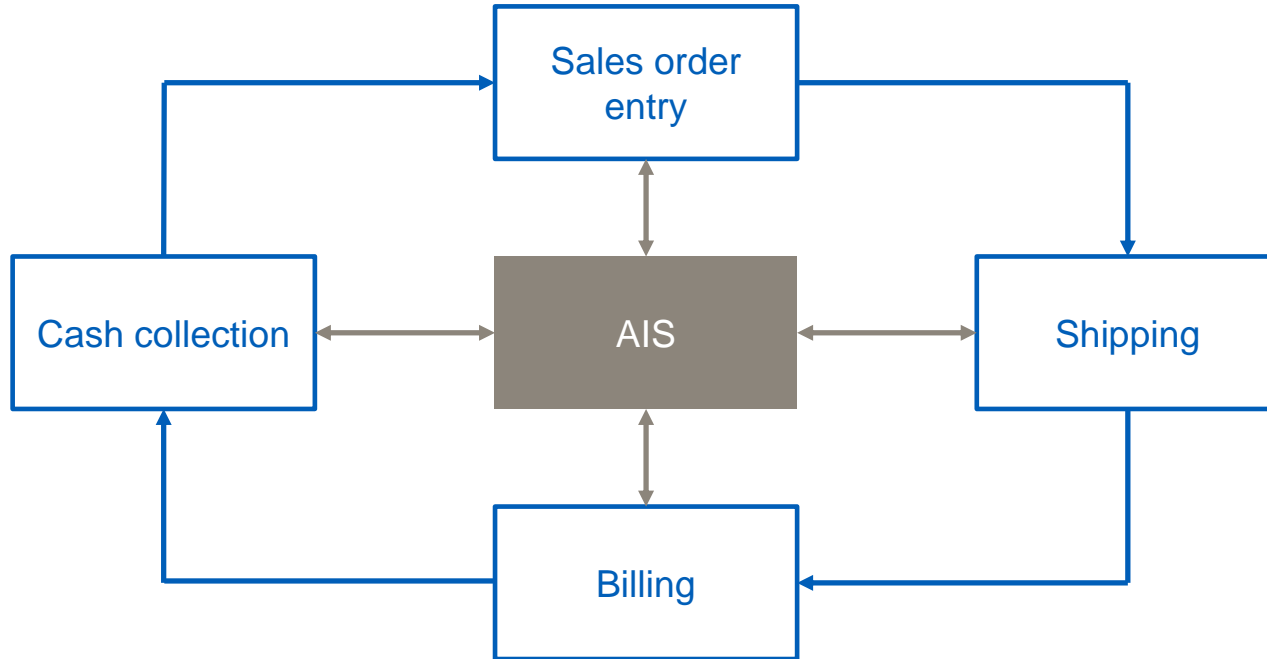


Case:
Business
Intelligence



I. The Revenue Cycle

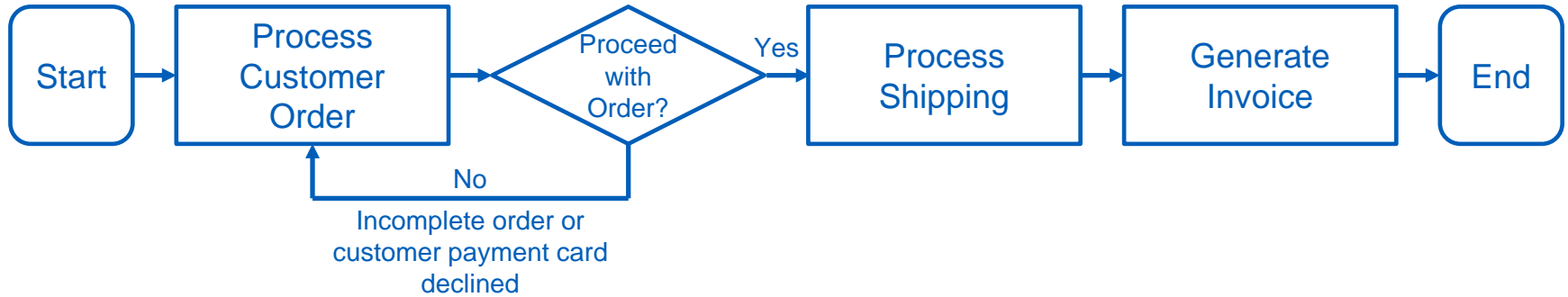
The revenue cycle



What are general threats to the revenue cycle?

1. Inaccurate or invalid master data
2. Unauthorized disclosure of sensitive information
3. Loss or destruction of data
4. Poor performance

Flowchart: Sales order entry and shipping process (1/3)



What are threats to the sales order entry and shipping process?

1. Incomplete/inaccurate orders
2. Invalid orders
3. Uncollectible accounts
4. Stockouts and excess inventory
5. Loss of customers
6. Picking wrong item or quantity to ship
7. Theft
8. Shipping errors (fail to ship the goods, wrong quantities, wrong items, ship to wrong address, duplication)

'Amazon, why am I deluged by unwanted parcels?'

Free goodies may seem like Christmas every day, but for one reader they became a problem



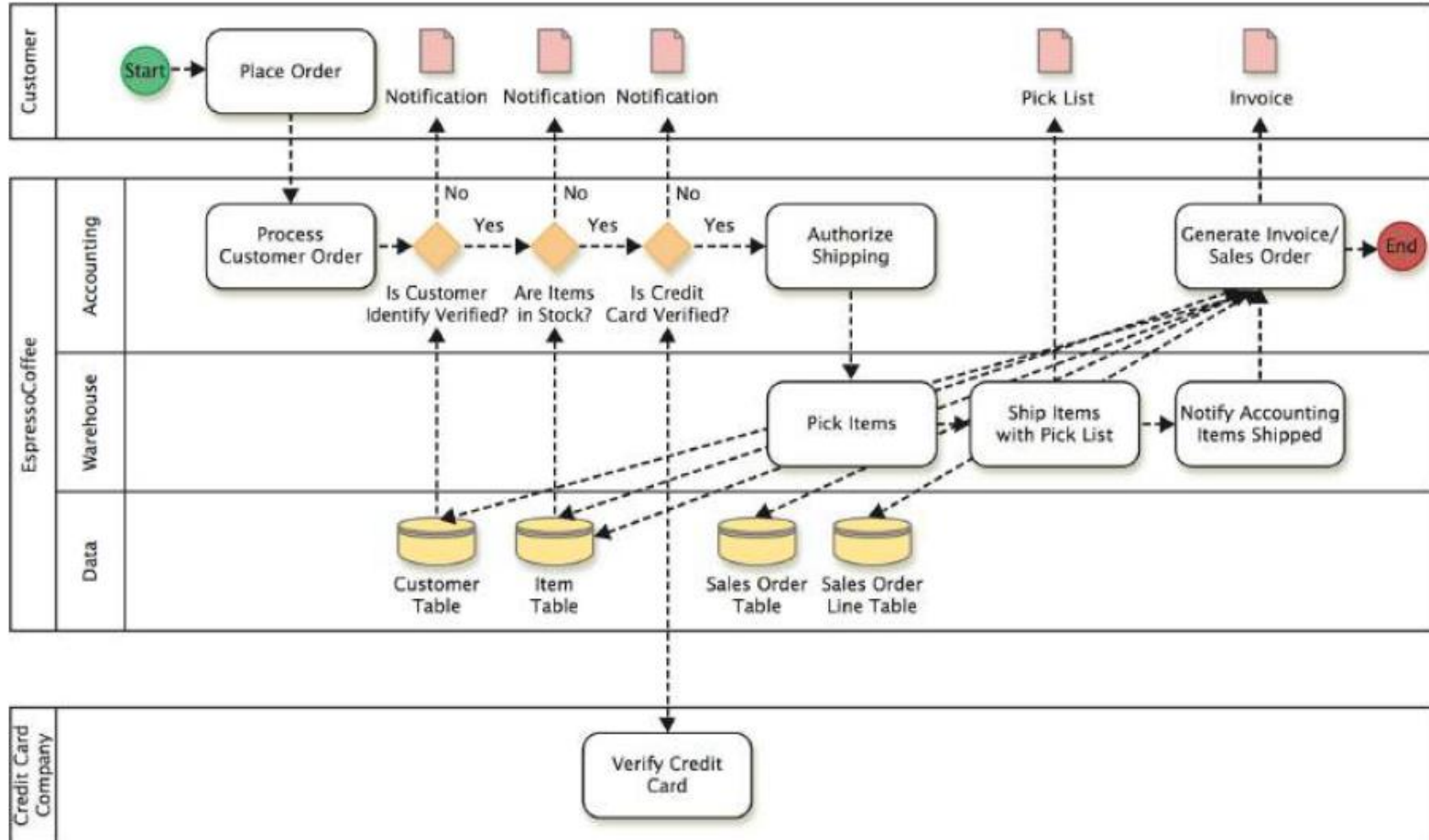
▲ Tiffany Crow received Amazon parcels she didn't order or pay for. Photograph: Alicia Canter for the Guardian

When Tiffany Crow's doorbell rings, her heart sinks and she immediately wonders: what will it be this time?

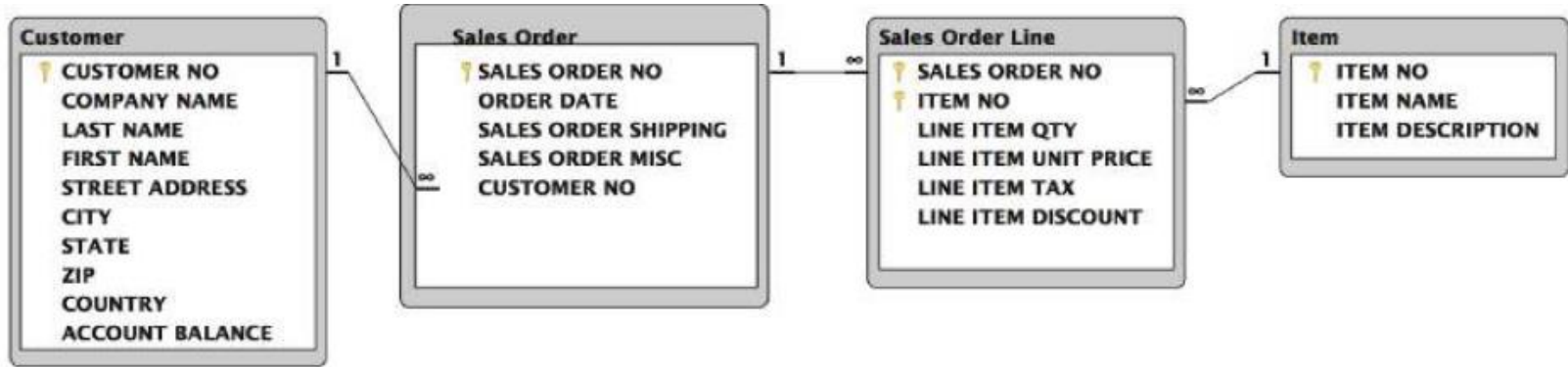
A box of £25 wireless speakers, more fitness wristbands, or a further batch of projectors? What is certain is she will have to spend more time disposing of the item, as well as all the packaging.

Since January, Crow has been bombarded with hundreds of parcels from [Amazon](#), which despite her repeated pleas, have not stopped arriving at her home in Greenwich, south-east London. What started as a minor inconvenience has over the past few months turned into "a bit of a nightmare" as she has been forced to spend hours each week dealing with the unwanted packages.

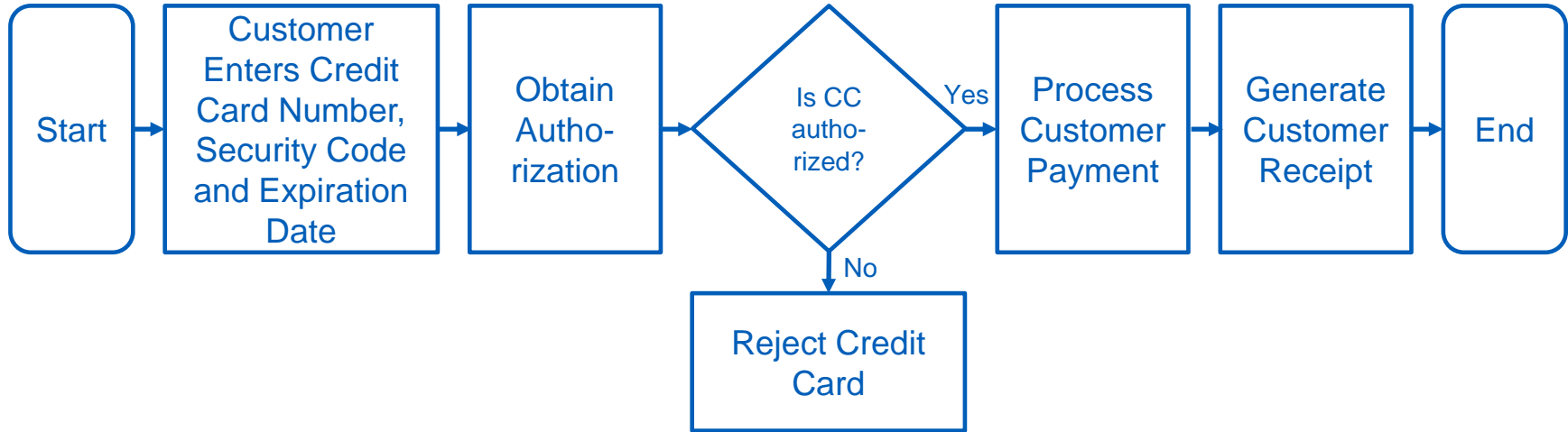
Business process map (BPMN 2.0): Sales order entry and shipping process (2/3)



Database tables: Sales order entry and shipping process (3/3)



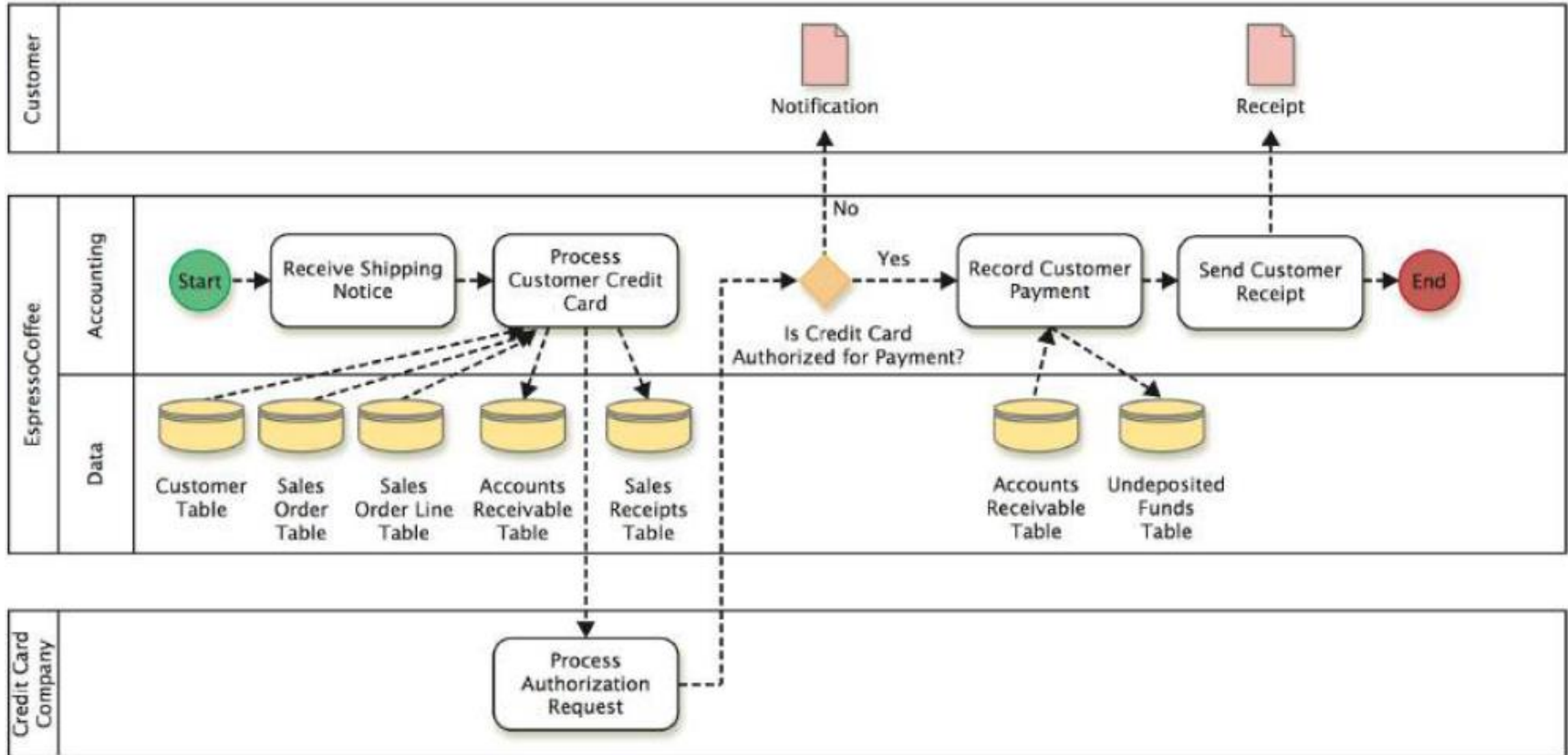
Flowchart: Billing (1/2)



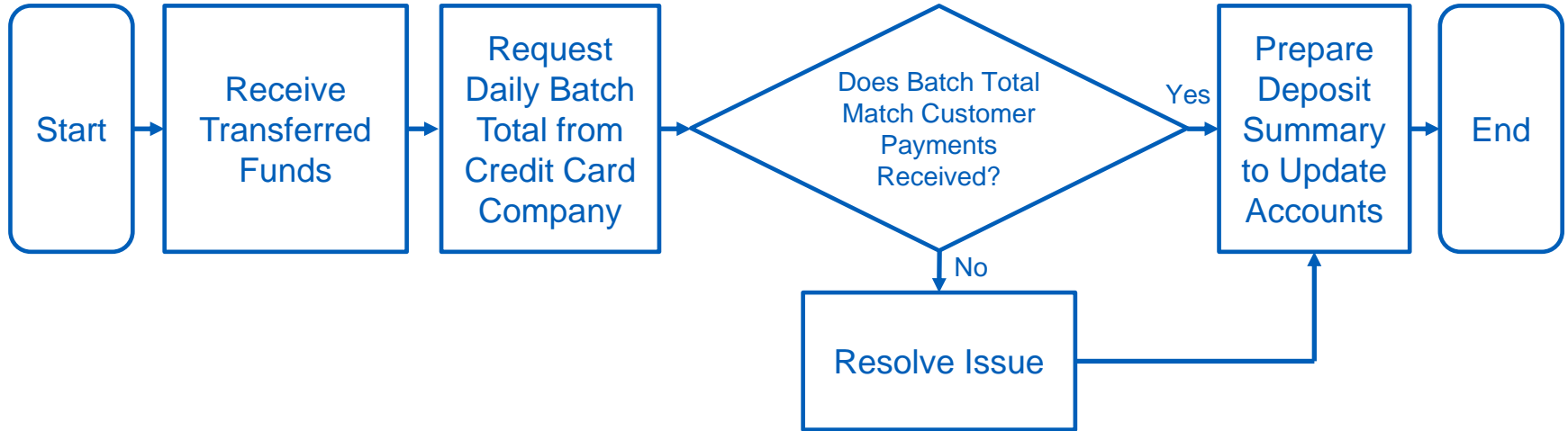
What are threats to the billing process?

1. Failure to bill customer
2. Billing errors
3. Posting errors in accounts receivable
4. Inaccurate or invalid credit memos

Business process map (BPMN 2.0): Billing (2/2)



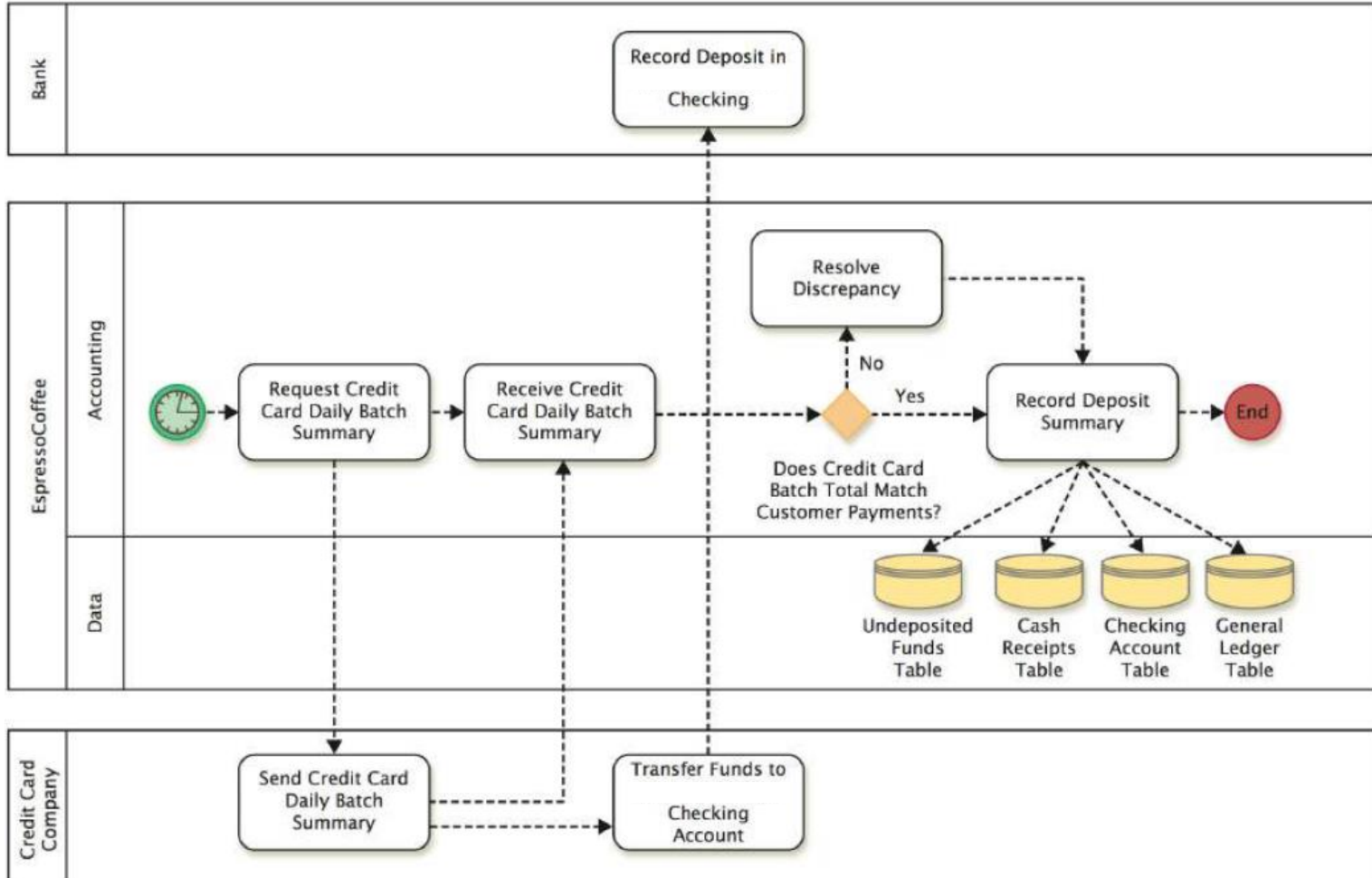
Flowchart: Cash collection (1/2)



What are threats to the cash collections process?

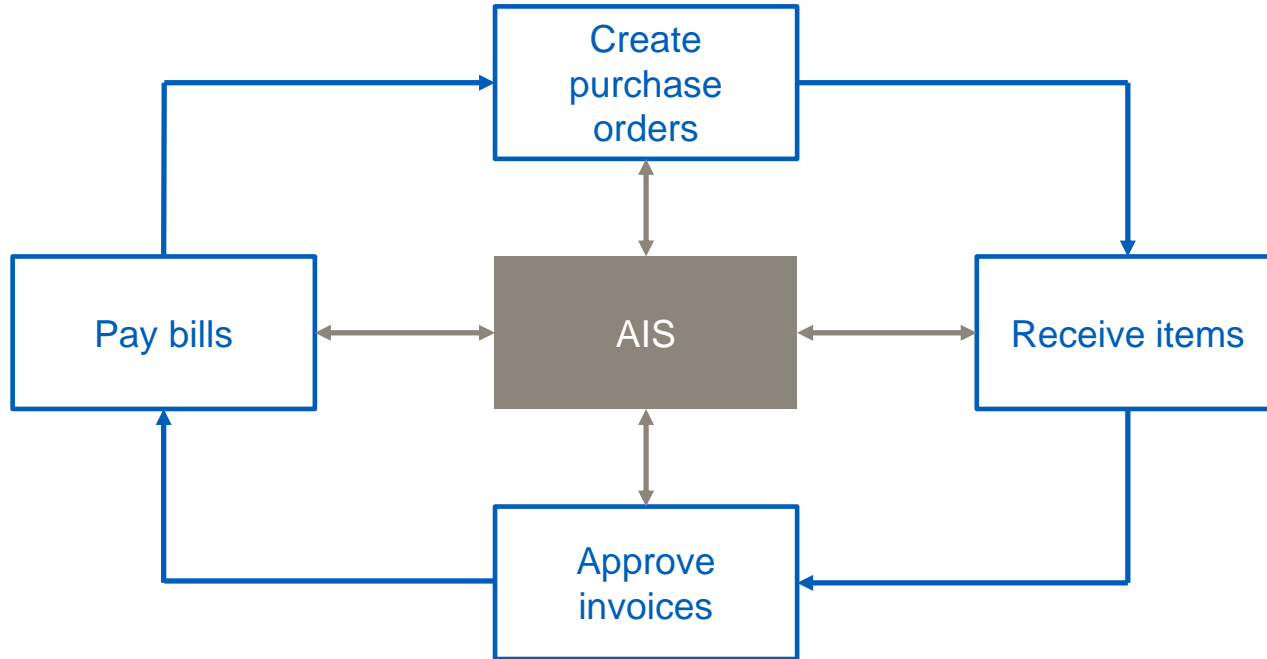
1. Theft of cash
2. Identity theft
3. Cashflow problems

Flowchart: Cash collection (2/2)



II. The Purchasing Cycle

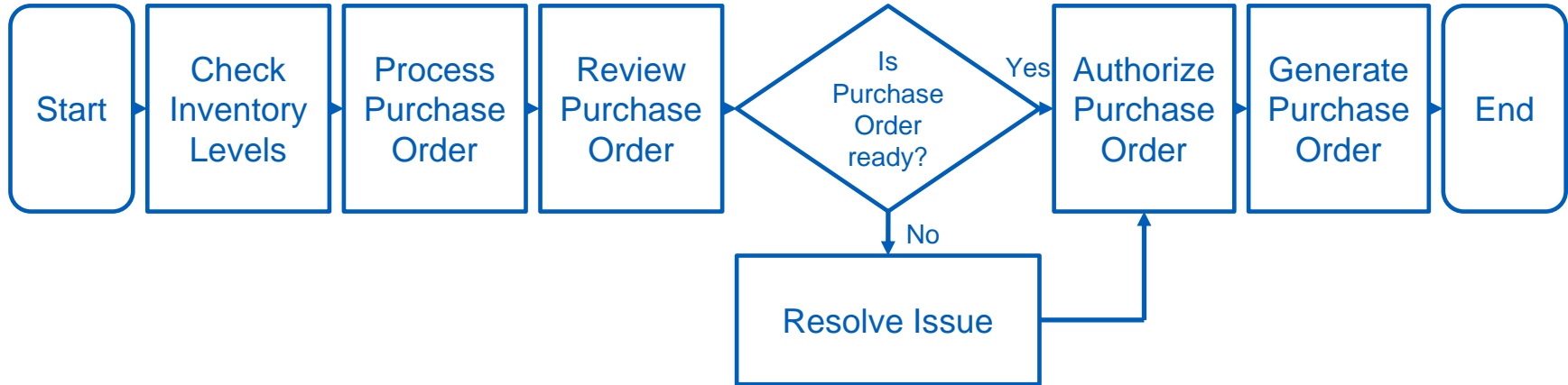
The purchasing cycle



What are general threats to the purchasing cycle?

1. Inaccurate or invalid master data
2. Unauthorized disclosure of sensitive information
3. Loss or destruction of data
4. Poor performance

Flowchart: Create Purchase Order (1/2)



What are threats to the create purchase order process?

1. Stockouts and excess inventory
2. Purchasing items not needed
3. Purchasing items at inflated prices
4. Purchasing goods of poor quality
5. Unreliable suppliers
6. Purchasing from unauthorized suppliers
7. Kickbacks

Amazon destroys millions of unsold products

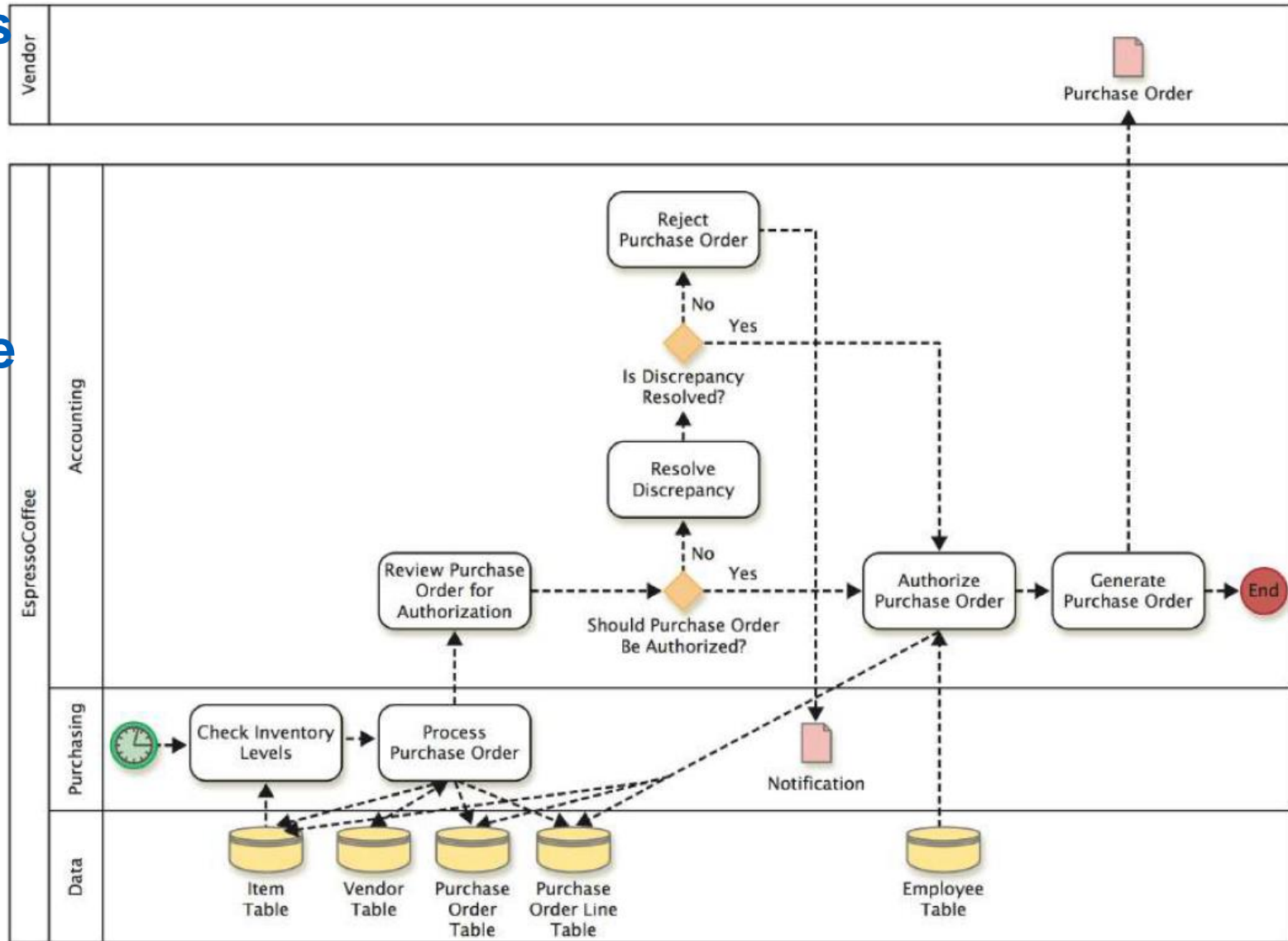


Every year, **Amazon** destroys about three million unused products in France alone. Unsold goods that have spent too much time in the distribution centres are thrown away.

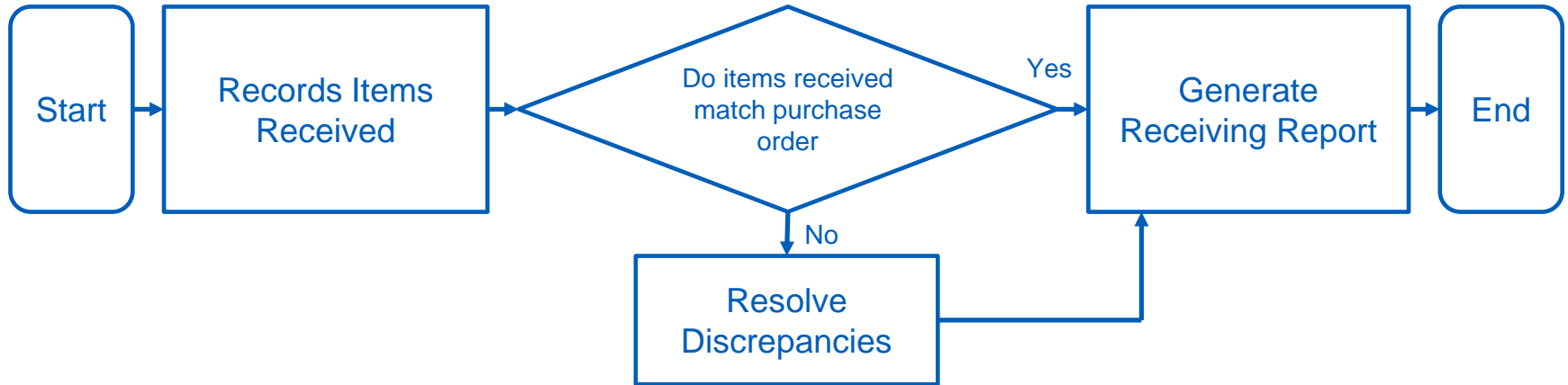
Unsold supplies thrown onto the dump

An undercover report for Capital, a programme on French TV channel M6, reveals that Amazon's distribution centres destroy unsold products and stock on a large scale. A reporter got a job in the distribution centre in Saran (near Orléans) and encountered containers where unsold products, from toys to TVs, are scrapped.

Business process map (BPMN 2.0): Create Purchase Order (2/2)



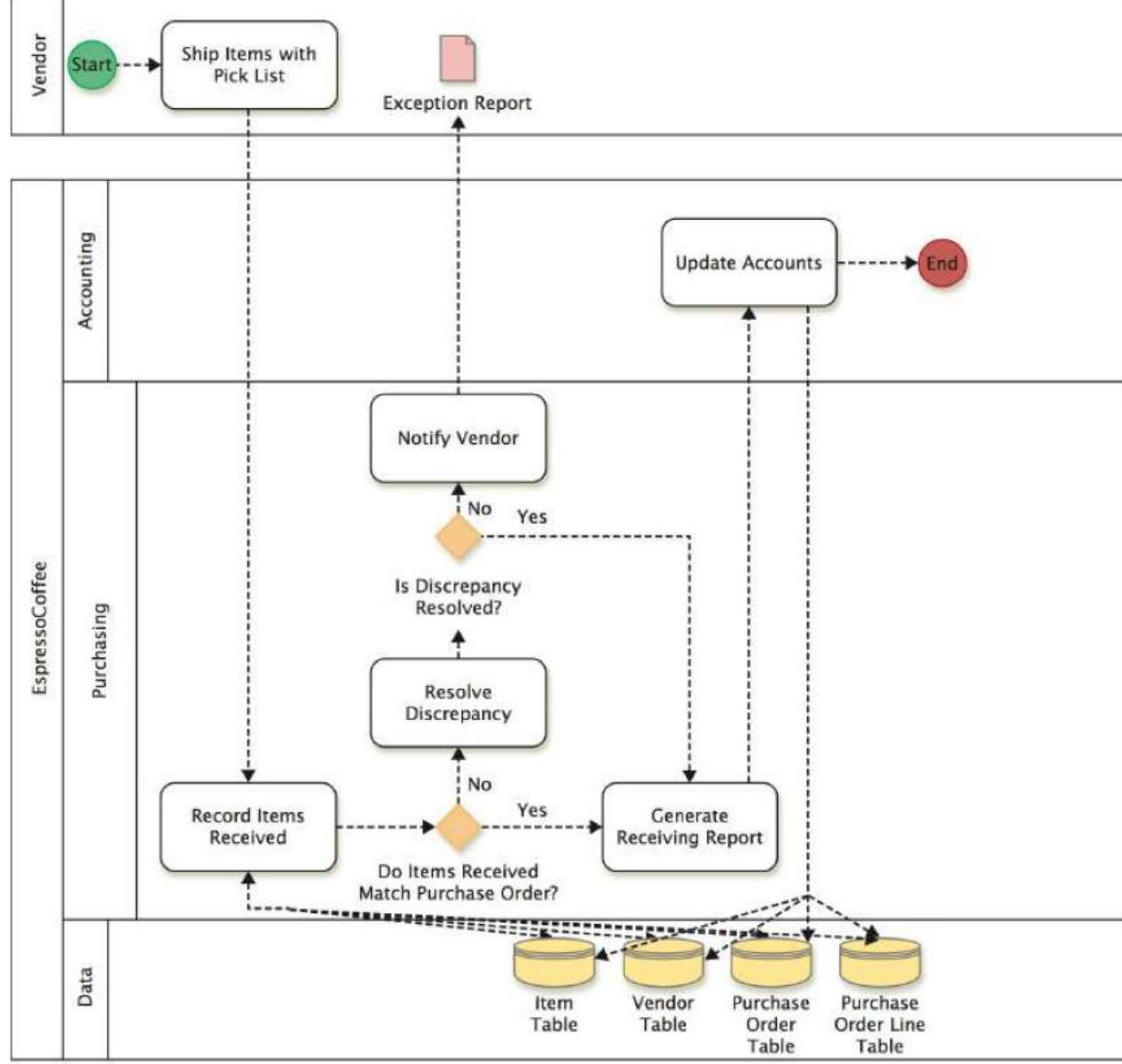
Flowchart: Receive items (1/2)



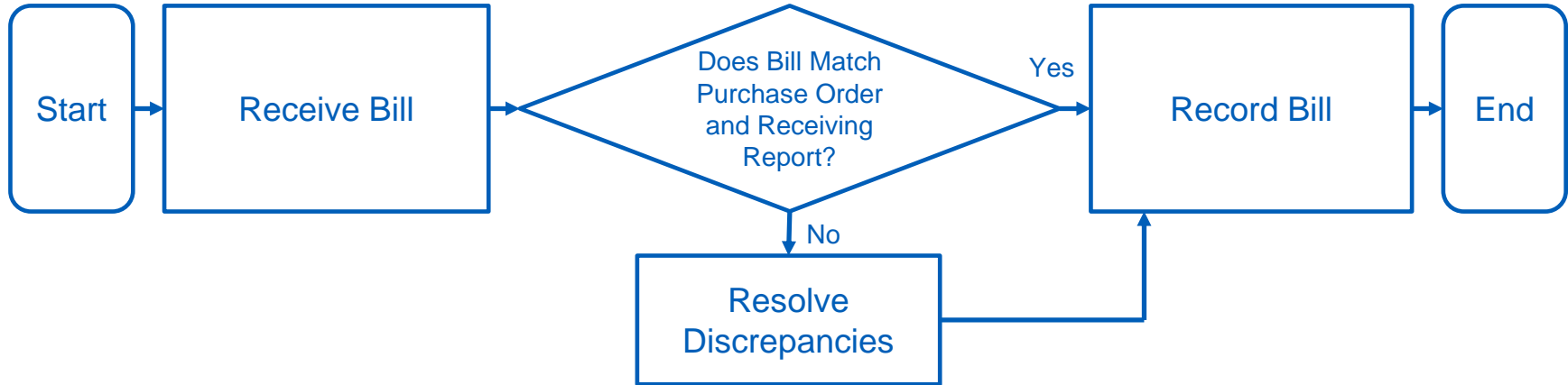
What are threats to the receive items process?

1. Accepting unordered items
2. Mistakes in counting
3. Verifying receipt of services
4. Inventory theft

Business process map (BPMN 2.0): Receive items (2/2)



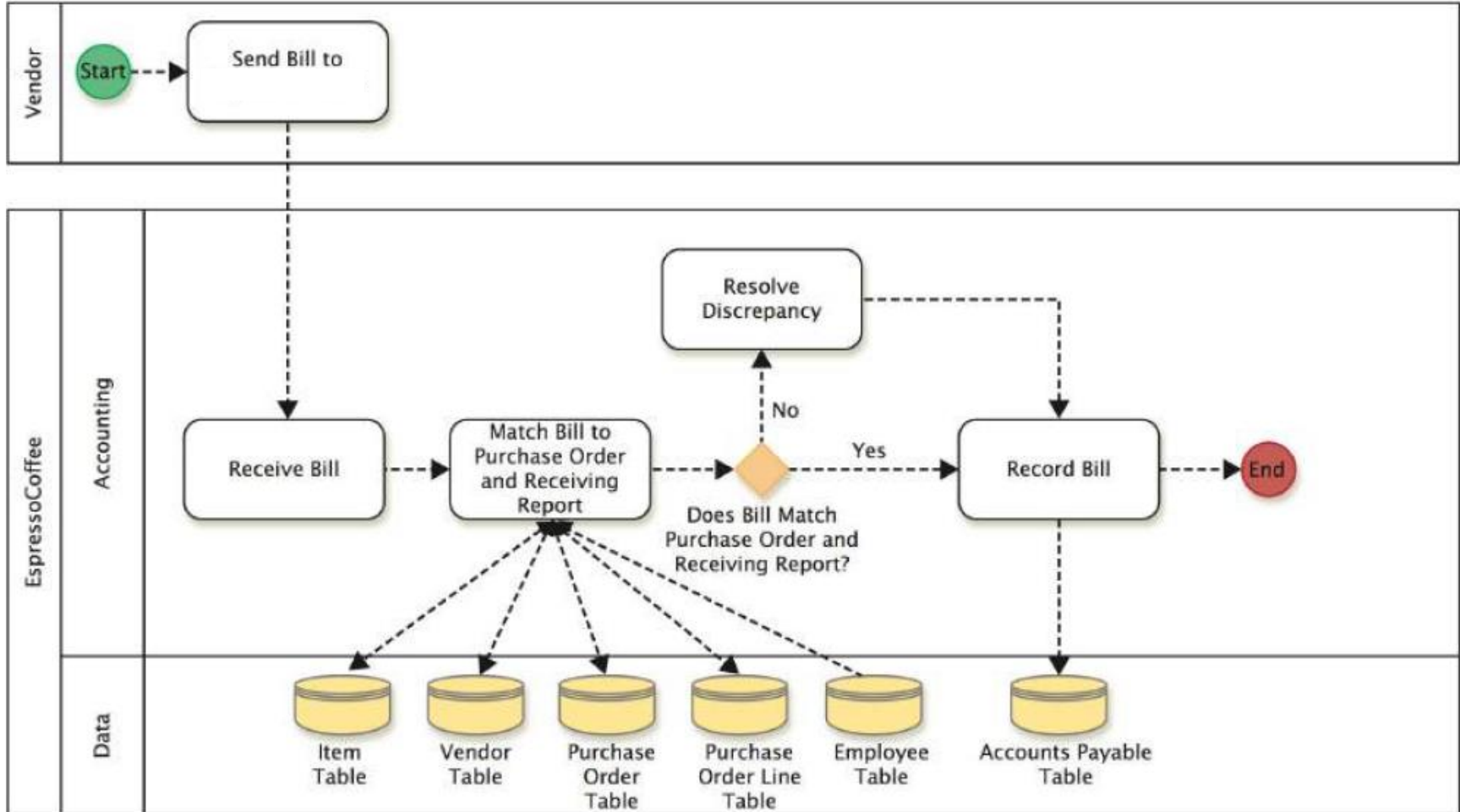
Flowchart: Approve invoices (1/2)



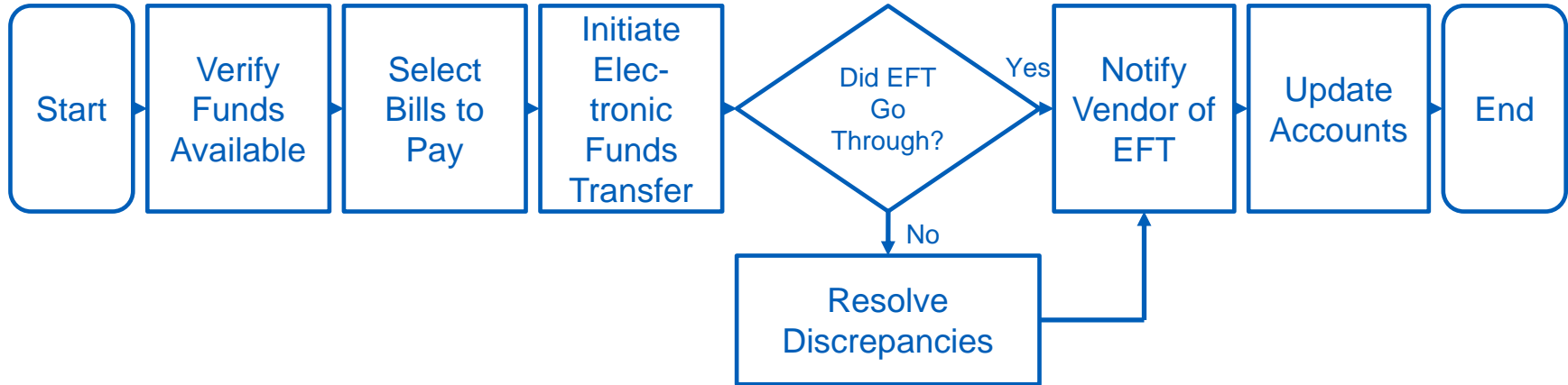
What are threats to approve invoices process?

1. Errors in supplier invoice
2. Mistakes in posting to accounts payable

Business process map (BPMN 2.0): Approve invoices (2/2)



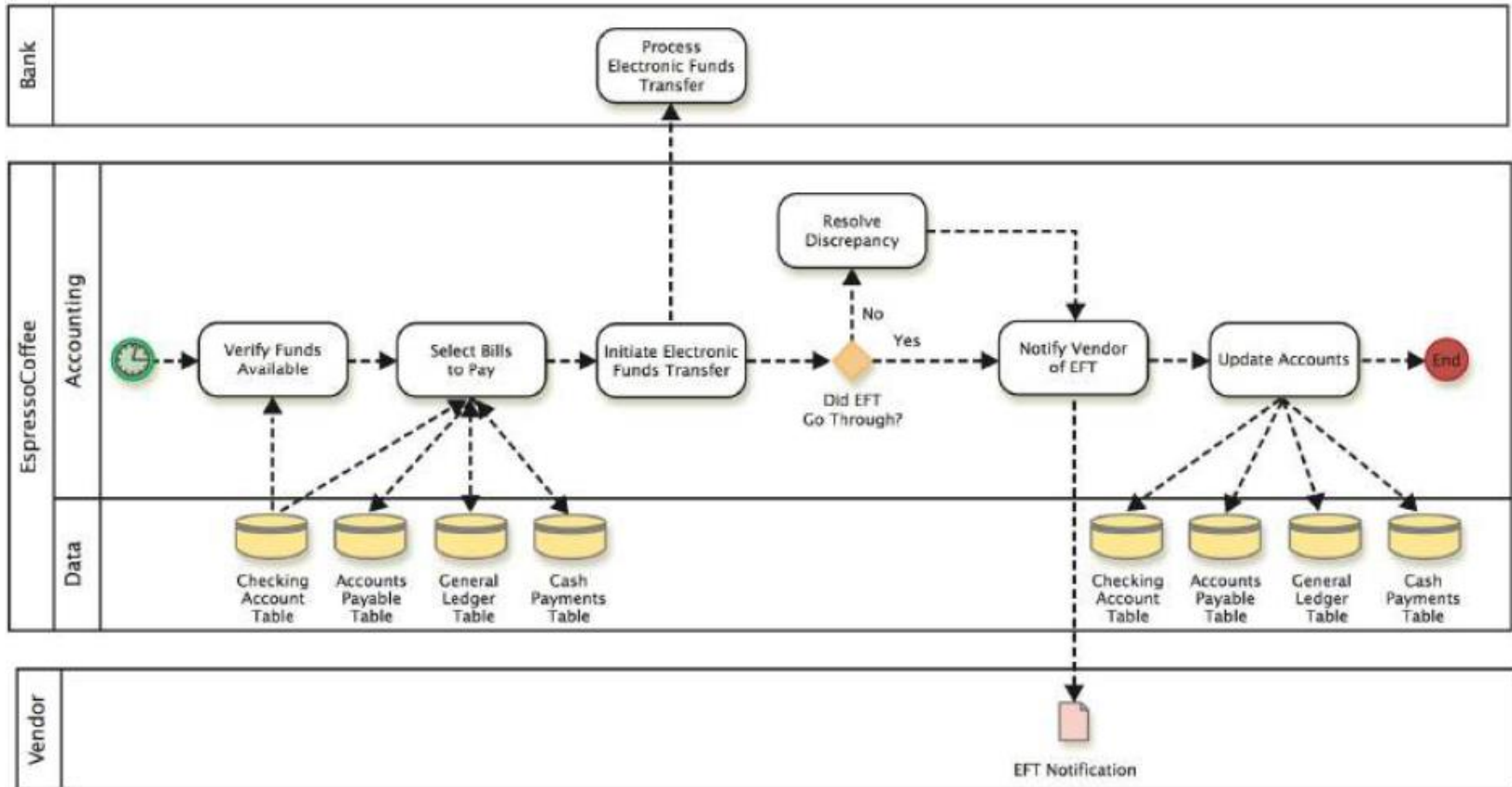
Flowchart: Pay Bills (1/2)



What are threats to pay bills process?

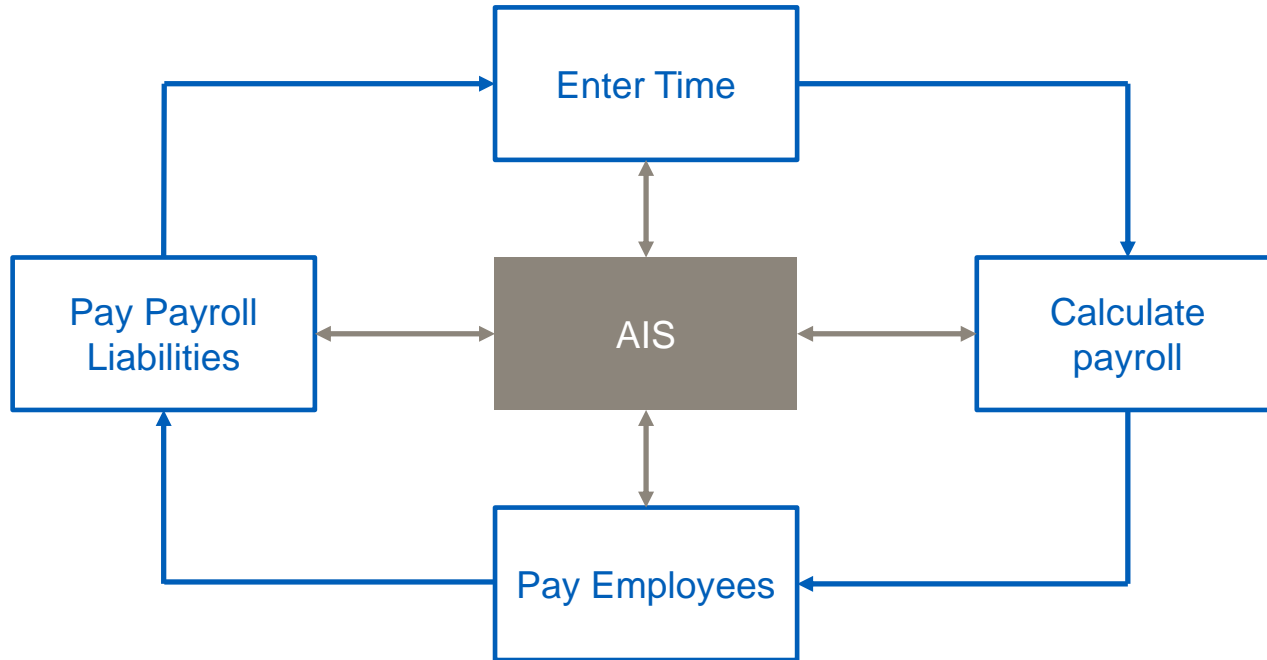
1. Failure to take discounts
2. Pay for items not received
3. Duplicate payments
4. Theft of cash
5. Check alteration
6. Cash flow problems

Business process map (BPMN 2.0): Approve invoices (2/2)



III. The Payroll Cycle

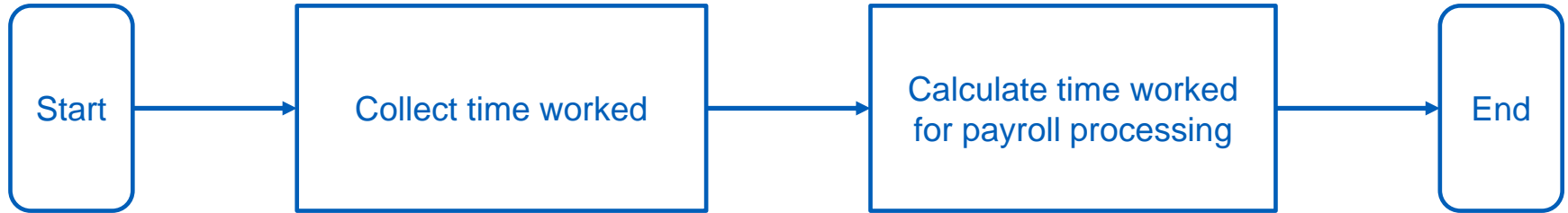
The payroll cycle



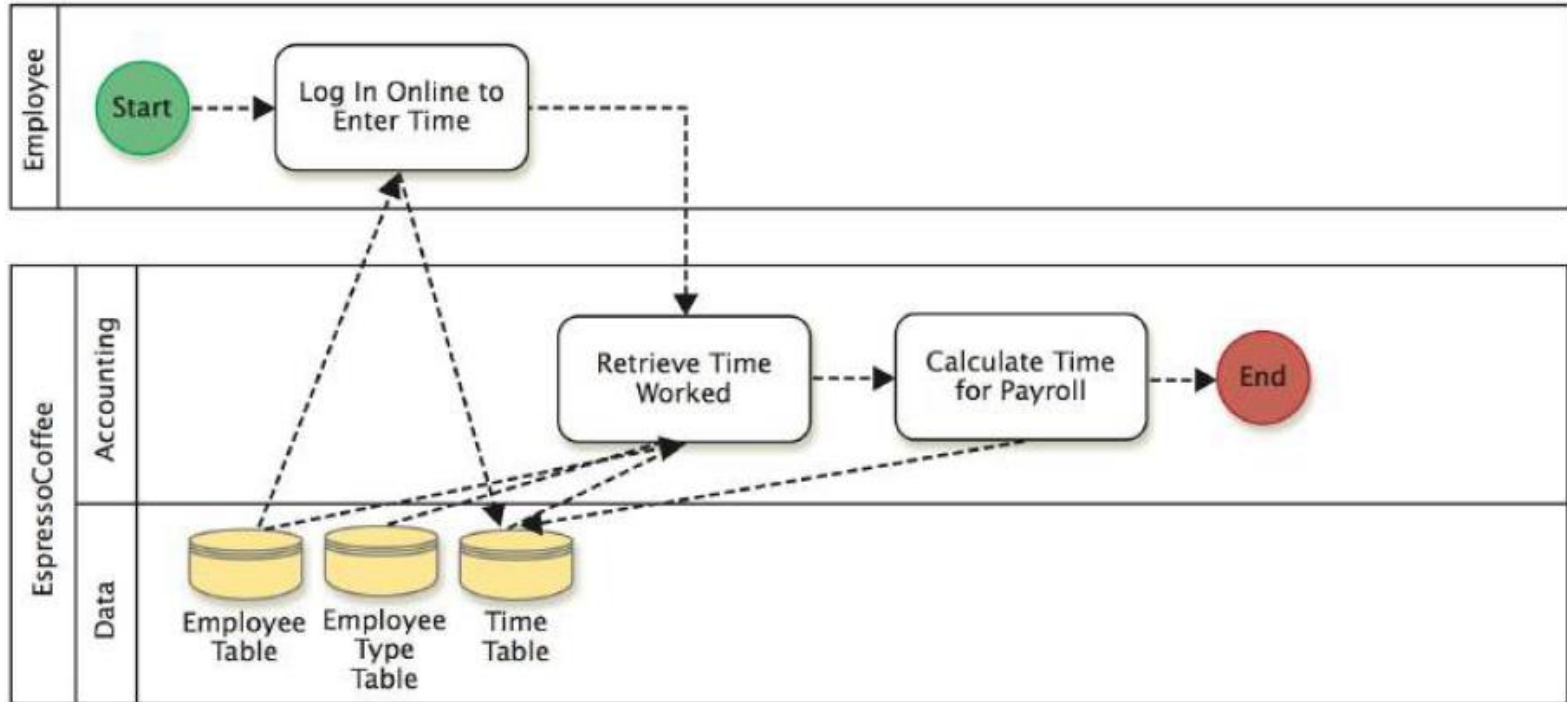
What are general threats to the payroll cycle?

1. Inaccurate or invalid data
2. Unauthorized disclosure of sensitive information
3. Loss or destruction of data
4. Hiring unqualified or larcenous employees
5. Violations of employment laws

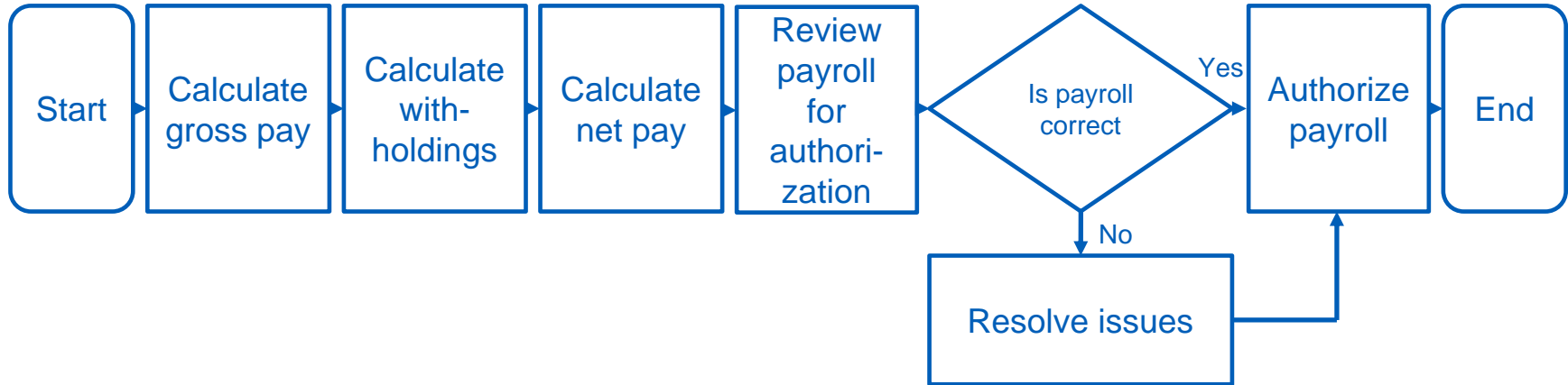
Flowchart: Enter time (1/2)



Business process map (BPMN 2.0): Enter time (2/2)



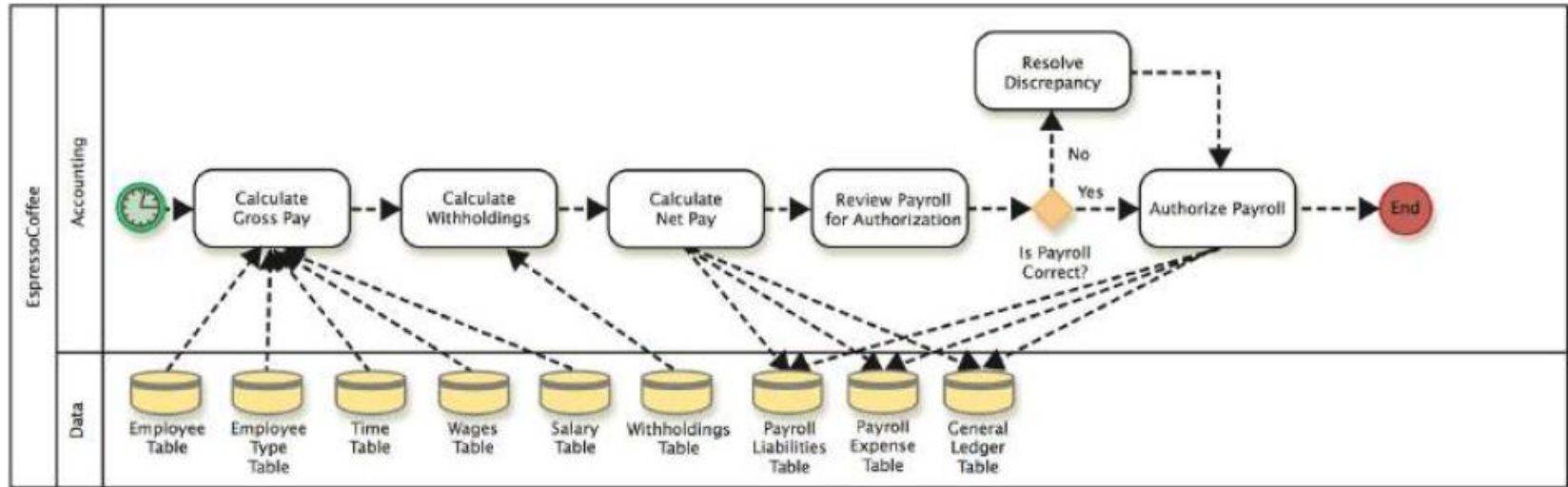
Flowchart: Calculate payroll (1/2)



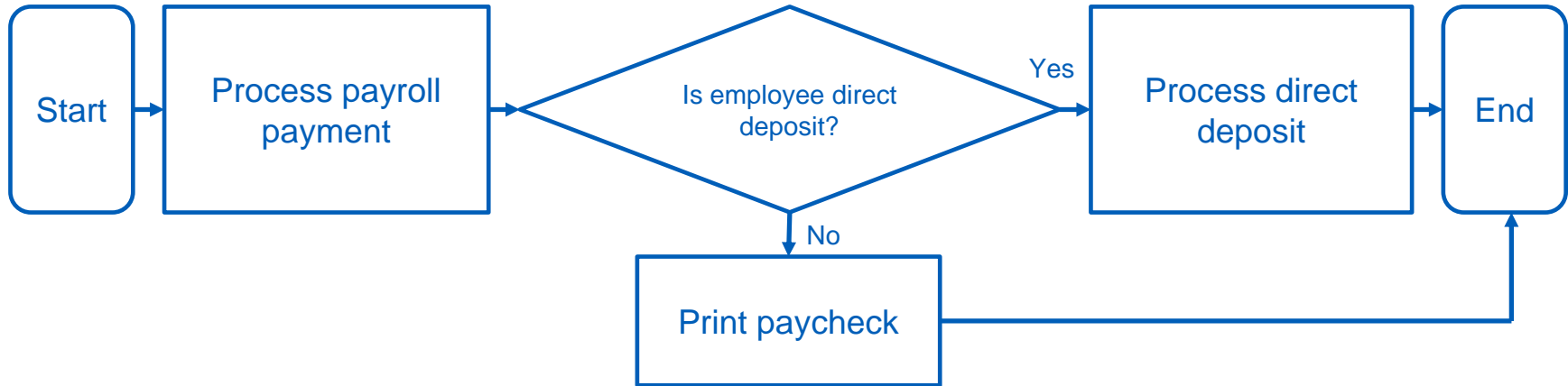
What are threats to the enter time and calculate payroll process?

1. Unauthorized changes to payroll master data
2. Inaccurate updating of master data
3. Inaccurate time and attendance data
4. Errors in processing payroll

Business process map (BPMN 2.0): Calculate payroll (2/2)



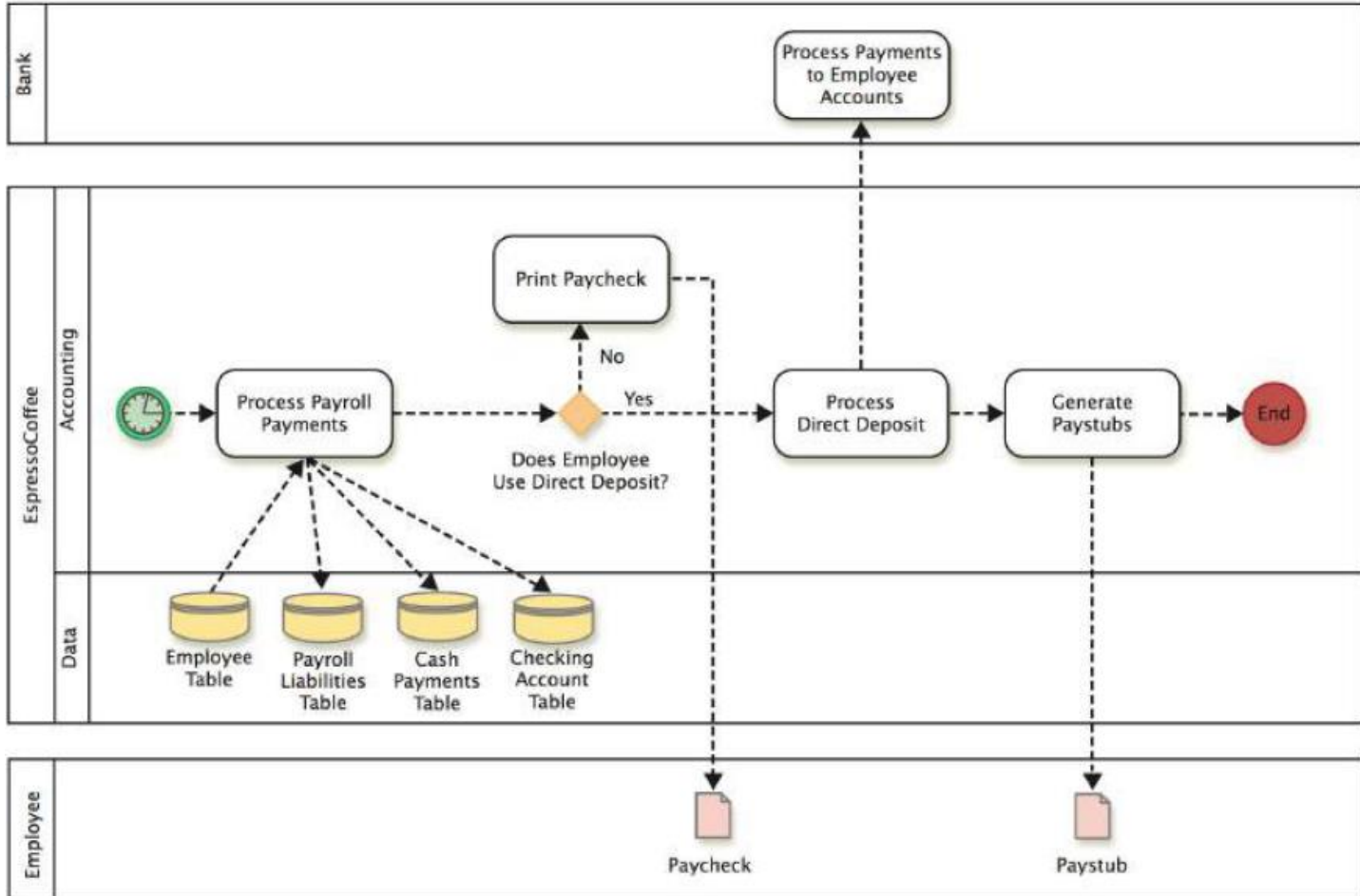
Flowchart: Pay employees (1/2)



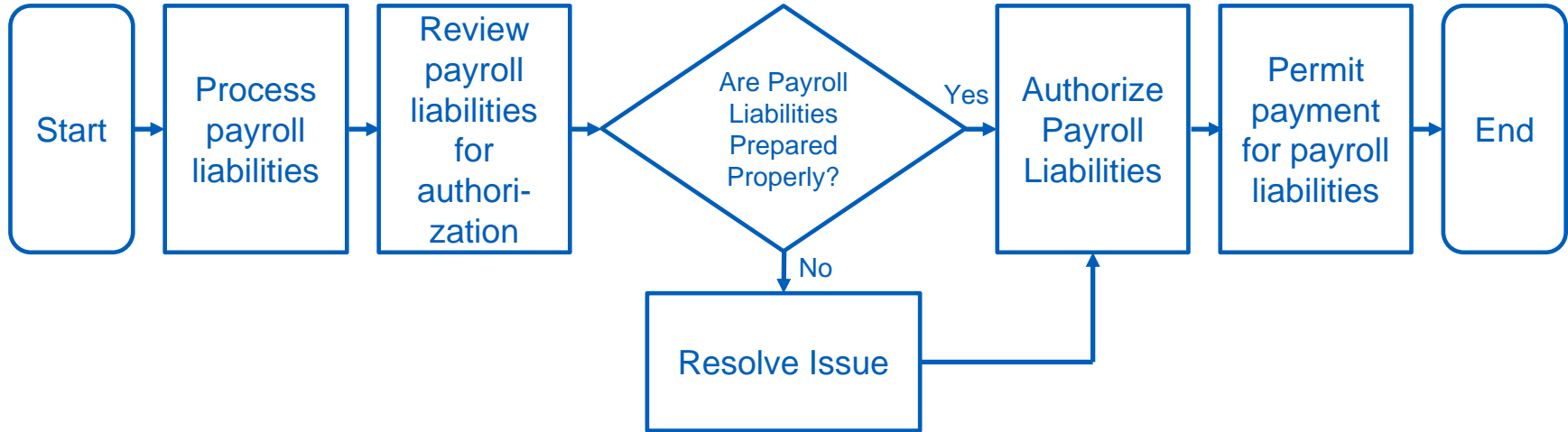
What are threats to the enter time and calculate payroll process?

1. Theft or fraudulent distribution of paychecks
2. Failure to make required payments
3. Untimely payments
4. Inaccurate payments

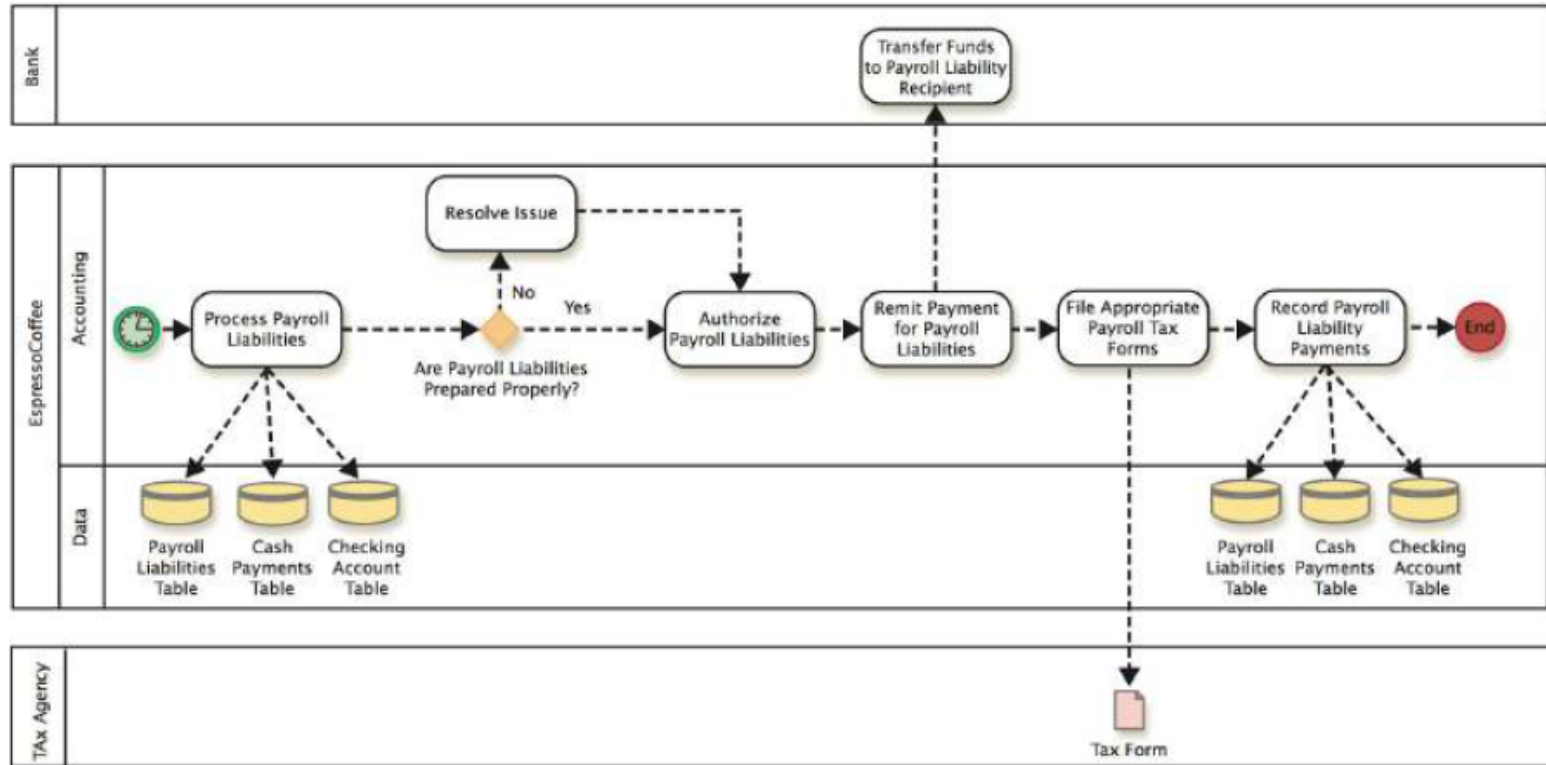
Business process map (BPMN 2.0): Pay employee (2/2)



Flowchart: Pay payroll liabilities (1/2)



Business process map (BPMN 2.0): Pay payroll liabilities (2/2)



IV. Case: Business Intelligence

In class case: Maintaining KONE people flow

1. How does KONE maintenance make money?
2. What are the levers for productivity?
3. How can BI increase profitability?
4. How can BI increase revenues?

Thank you! Questions?