

Business Process Management Caring Pharmacy

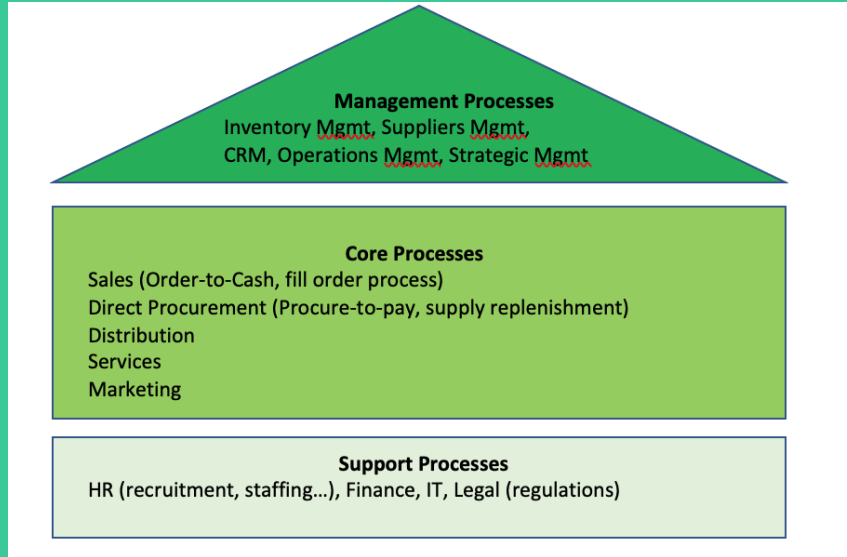


Caring Objectives

- Pharmacy Chain in Portugal
- O2C BPM redesign
 - Customer dissatisfaction
 - Inability to handle some tasks



Process Identification: Designation Phase



Delimit scope to only one core and narrow process: O2C

- involves less stakeholders
- interacts with less departments
- yields larger impact
- avoids future/related problems
- solves specific problems

Process Identification: Evaluation Phase

01. IMPORTANT

Profitability and
continuity

02. DYSFUNCTIONAL

Feedback from
customers and
employees

03. FEASIBLE

Minimal future
resources required

Process Description



Order-to-Cash Process

Start: client requesting an
order

End: client paying for
and receiving that order



Customer

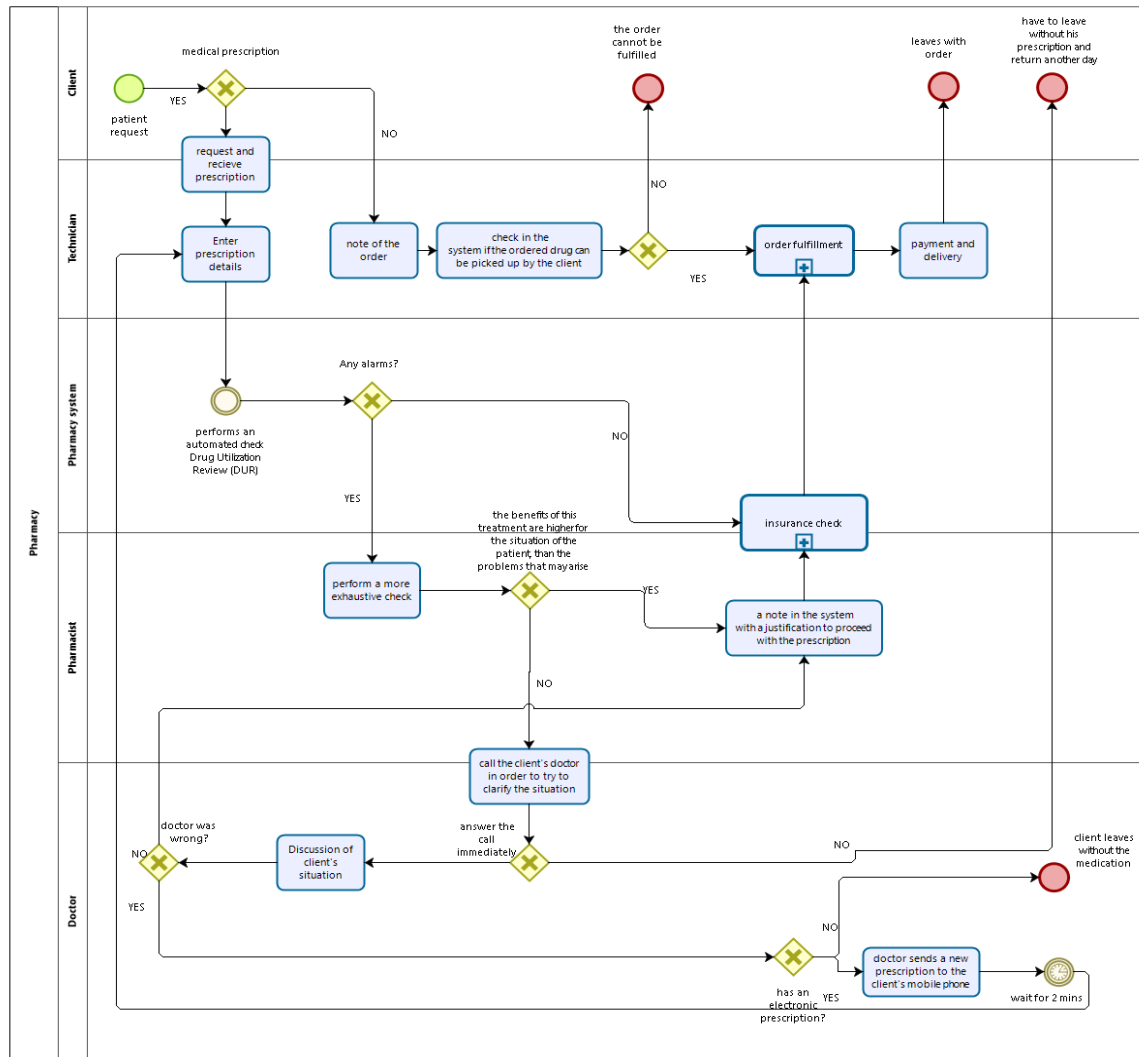
Externally: client
Internally: employee



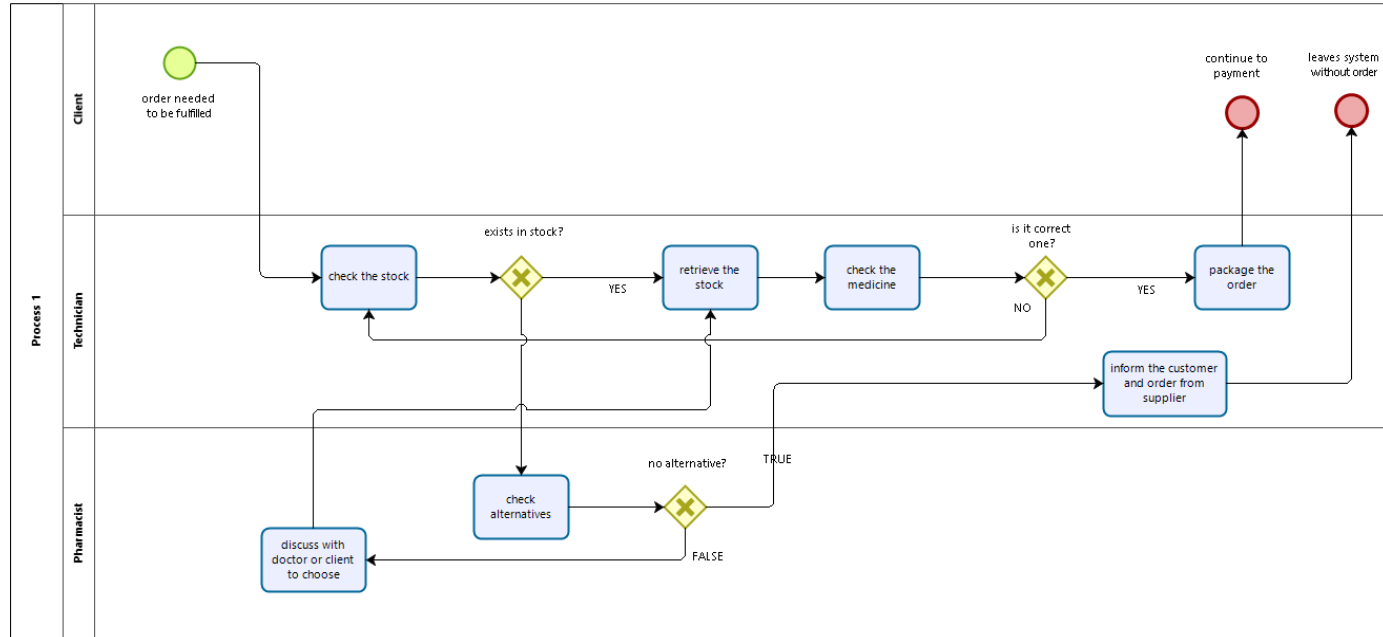
Purpose/Goal

Solve customer
dissatisfaction
Restore pharmacy's
reputation

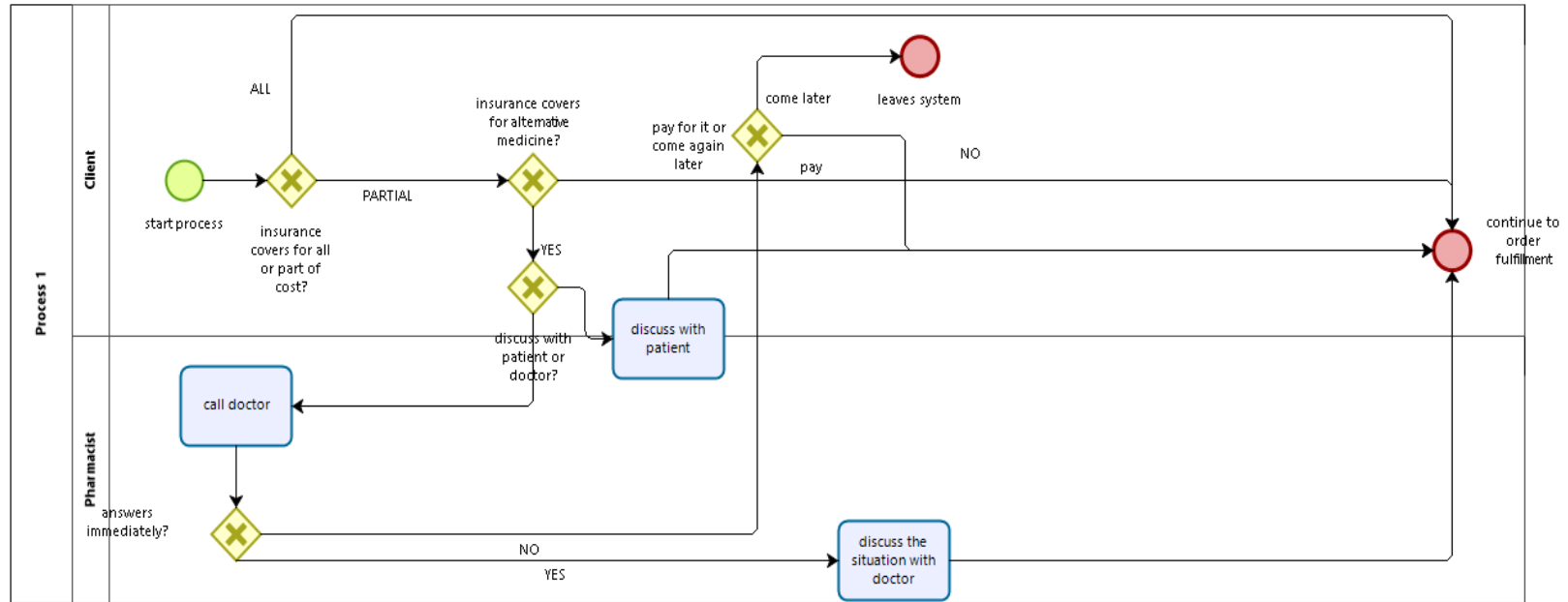
AS-IS Process



Order Fulfilment



Insurance Check



Value-Added Analysis

Step	Performer	Class
Patient request	Client	VA
Wait	Client	NVA
Request and receive prescription	Technician	BVA
Takes note of the order without prescription	Technician	NVA
Register/fulfill the order without prescription	Technician	VA
Enter prescription details	Technician	BVA
Review alarm from Drug Utilization Review (DUR)	Pharmacist	VA
Call the client's doctor in order to try to clarify the situation with alarm	Pharmacist	VA
Discuss replacement with the patient if insurance doesn't cover the medicine	Pharmacist	VA
Call the client's doctor if insurance doesn't cover the medicine	Pharmacist	BVA
Get the medicine if the pharmacy has it	Technician	BVA
Choose alternatives for the medicine with doc and client (call doc again)	Pharmacist	BVA
Receive the payment from the client	Technician	VA

Issue register

Issue	Priority	Description	Data and assumptions	Qualitative impact	Quantitative impact
Employee overloading and customer dissatisfaction	1	the employee is unable to serve all customers during regular work hours, having to make more time to be able to serve customers or sometimes does not even attend them	Arrival rate (λ) - average number of new instances of the process that are created per time unit = 220 customers per day or 27.5 customers per hour, mean inter-arrival time = $1/27.5$ it's about every 2.18min	The way the process is performed in terms of quality and efficiency affects the reputation and competitiveness of the organization.	The pharmacy has 4 technicians and 3 pharmacists, receiving each 1000€ and 1300€ respectively, it means 1h cost 5.42€ and 4.17€ accordingly

KPI per segment (simulation for 30 replications, avg per replication)	Current situation
Customer performance:	
Return Rate	dissatisfied
Time-related process performance:	
Process duration (avg time)	6 min 56 sec
Total time (m)	1517 min
Total time waiting resource (m)	113.53min
Cost-related process performance:	
Total cost	148.05
Technician	66.96
Pharmacist	81.09
Employee performance:	
Resource utilization	56.26%
Technician	50.18%
Pharmacist	62.34%

TO-BE Process

Exploitative Redesign (Heuristics)

Task Level

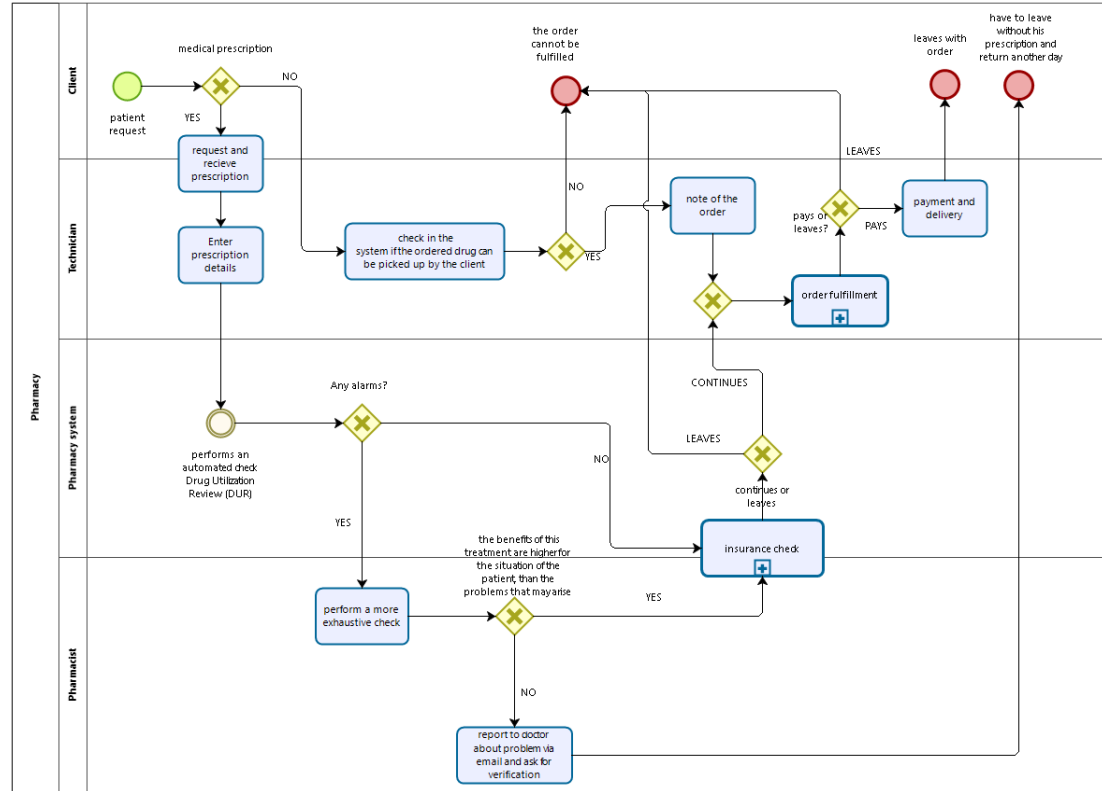
- Task Elimination

Flow Level

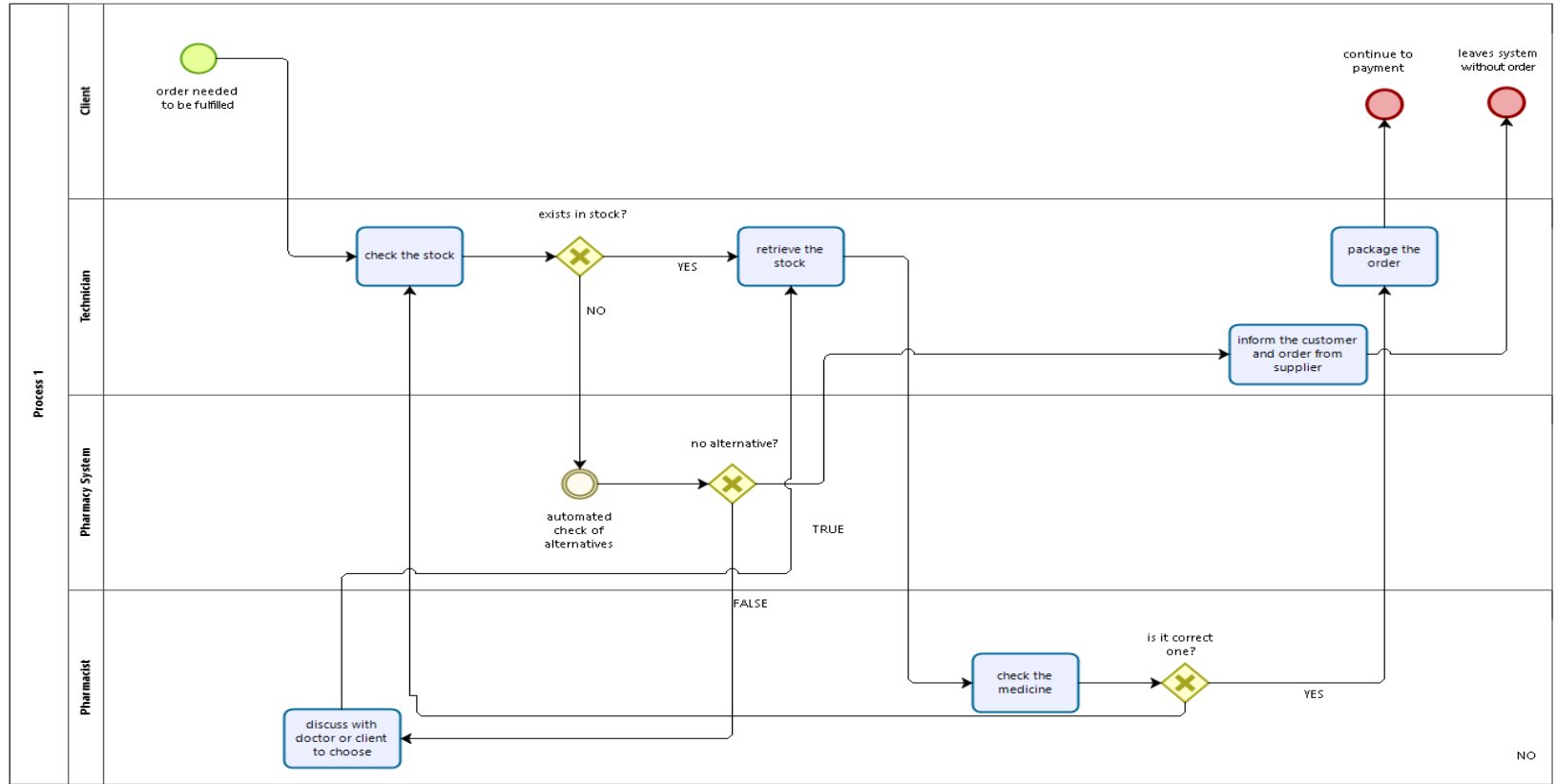
- Re-sequencing

Process Level

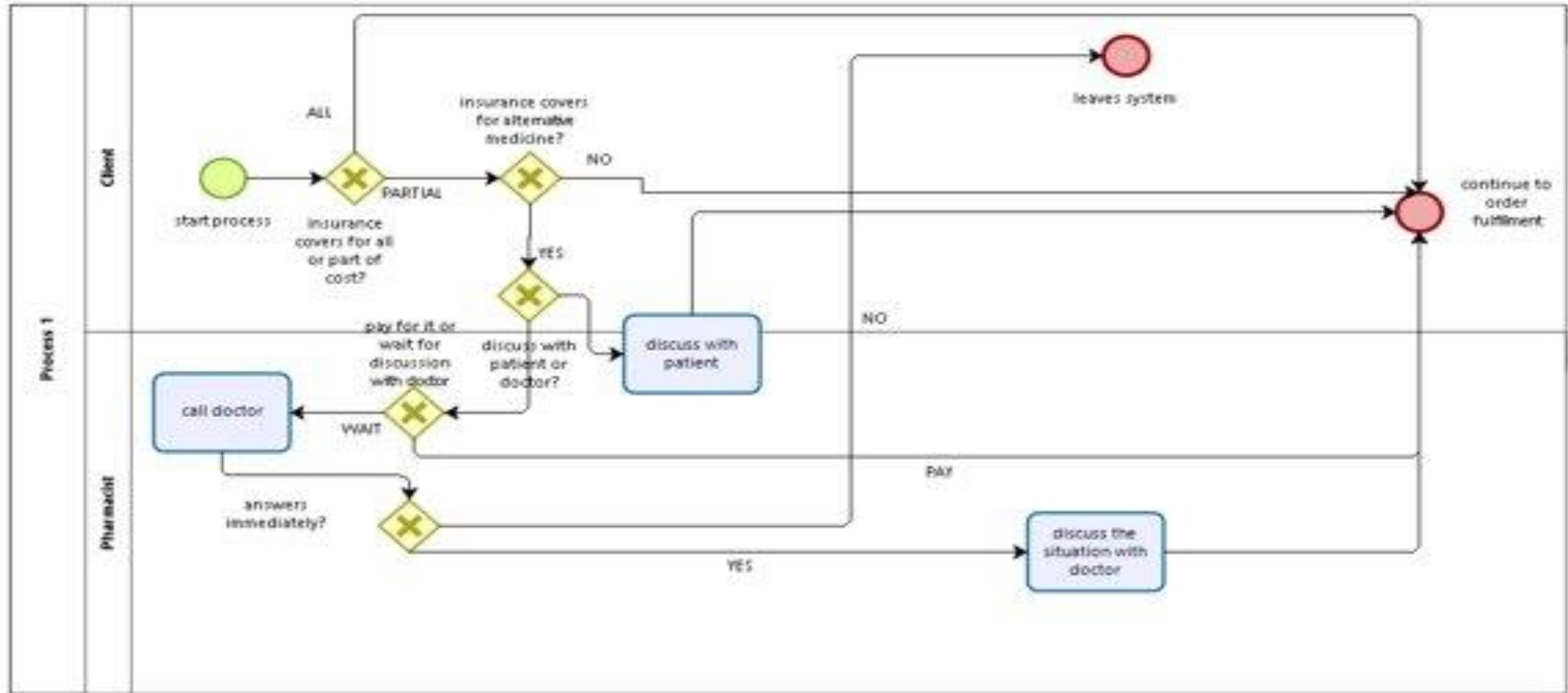
- Resource optimization
- Communication optimization
- Automation



Order Fulfilment



Insurance Check



Future Improvements



New Technologies

- Prescription/medical history sharing platform



Machineries/Techniques

- Benchmark
- Employee Input



More pleasant queue

- Brand
- Safety



Other Processes



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Thank you!

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