

Change Scenarios

Scenarios:

Case 1:

- The actual payment process is removed from the model.
- Now the payment will be done in parallel to the process of delivery and the assembling.
- Now the manufacturing start earlier because the payment will be done in parallel. So the manufacturer gets his money at the same time as before, but he has to deliver his CPU's earlier. It would be possible that the manufacturer adapts this payment process to the supplier, too.
- Because of the payment is done in parallel the time period lowers by 1 hour. Cause of the reliability of 100% of the payment, there's not much impact on this dimension.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	average number of batches		3			parallele aktivität										
2																
3																
	ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability			
4	1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%			
5	2	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00						
6		0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63						
7			D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585			
8	3			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
9	4			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
10																
11	5			do money transfer	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
12				receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
13	5			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18						
14				receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98						
15				send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33				30	919,461767	0,95877456
16											30,00	949,46	0,95877456			
17	6	0,10	U1	recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999			
18											37,5	1160,6	94,02%			

Public Model – Calculation Result:

Time: 37,5h

Costs: 1160,6€

Reliability: 94,02%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability			
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%			
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%			
3	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00						
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63						
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585			
4			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
5			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
6			do money transfer	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
6			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18						
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98						
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33						
			assembling the PCs	8,00	2	20	100,0	99,00%	424,24						
			diagnosis routine	1,00	1	20	5,0	99,00%	25,25				57,3	2275,52237	0,89996192
	0,10	U1	recycling of defects	1,00	1	20	5,0	99,00%	25,25				0,1	2,52525253	0,999
	0,90	D1								57,30	2.305,52	0,89996192			
			SUM						146,46	64,8	2.305,52	88,25%			
7			recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999			
										64,8	2516,6	88,25%			

Private Model – Calculation Result:

Time: 64,8h

Costs: 2516,6€

Reliability: 88,25%

Case 2:

- The actual payment process is removed from the model.
- The payments will be done per batch. For each batch, there is a parallel payment process.
- This model is negative for the manufacturer, because he gets his money per batch, so he has to wait longer for all the money. He also has to adapt this process for the supplier, otherwise he has to pay all the money for the supplier in advance.
- In this case the time reduces, because of the parallelism per batch, but the costs increase a lot, because the payment process is done 2 times more. (in this case: 3 batches)

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability			
1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%			
2	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00						
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63						
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585			
3			receive payment details information	1,00	1	30	2,5	100,00%	32,50				1,00	32,50	100,00%
			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50				1,00	32,50	100,00%
			do money transfer	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
3			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18						
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98						
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33				10,00	306,49	0,9860649
			SUM						30,00	1.204,46	0,95877456				
4	0,10	U1	recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999			
										35,5	1350,6	94,02%			

Public Model – Calculation Result:

Time: 35,5h

Costs: 1350,6€

Reliability: 94,02%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability			
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%			
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%			
3	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00						
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63						
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585			
4			receive payment details information	1,00	1	30	2,5	100,00%	32,50				1,00	32,50	100,00%
			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50				1,00	32,50	100,00%
			do money transfer	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00				0,50	15,00	100,00%
4			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18						
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98						
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33						
			assembling the PCs	8,00	2	20	100,0	99,00%	424,24						
			diagnosis routine	1,00	1	20	5,0	99,00%	25,25				19,00	755,98	0,96644221
	0,10	U1	recycling of defects	1,00	1	20	5,0	99,00%	25,25				0,1	2,52525253	0,999
	0,90	D1													
5	0,10	U1	recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	57,30	2.560,52	0,89996192			
										0,6	14,6464646	0,999			
										62,8	2706,6	88,25%			

Private Model – Calculation Result:

Time: 62,8h

Costs: 2706,6€

Reliability: 88,25%

Case 3:

- The actual payment process is removed from the model.
- The payments will be done after assembling the PCs.
- In this case the assembler pays after all the batches are received and all the PCs were assembled. The manufacturer has also do adapt this process to the supplier, otherwise he has to pay the supplier in advance.
- Because the payment is done in the same way like bevor the first batch, there is no impact on the numbers for the assembler.

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability			
1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%			
2	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00						
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63						
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585			
3			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18						
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98				10,00	306,49	0,9860649
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33	30,00	919,46	0,95877456			
3			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%			
			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%			
			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%			
4	0,10	U1	recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999			
										38,5	1160,6	94,02%			

Public Model – Calculation Result:

Time: 38,5h

Costs: 1160,6€

Reliability: 94,02%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (n persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability				
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%				
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%				
3	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00							
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63							
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585				
4			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18							
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98							
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33							
			assembling the PCs	8,00	2	20	100,0	99,00%	424,24							
			diagnosis routine	1,00	1	20	5,0	99,00%	25,25				19,00	755,98	0,96644221	
	0,10	U1	recycling of defects	1,00	1	20	5,0	99,00%	25,25					0,1	2,52525253	0,999
	0,90	D1														
			SUM							57,3	2.275,52	0,89996192				
4			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%				
			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%				
			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%				
			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%				
5	0,10	U1	recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999				
										65,8	2516,6	88,25%				

Private Model – Calculation Result:

Time: 65,8h

Costs: 2516,6€

Reliability: 88,25%

Reactions to the changes of my partners:

Supplier 1:

- The recycling of unused CPUs is not offered any more
- As a result, the task is removed and there will be no professional recycling any more
- In this scenario the costs are reduced by 15 euros, but the impacts on the other dimensions are minimal

average number of batches			3	parallele aktivität									
ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability	
1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%	
	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00				
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63				
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585	
2			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%	
3			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%	
4			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%	
5			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%	
6			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18				
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98				
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33				
										37,9	1145,9	94,11%	

Public Model – Calculation Result:

Time: 37,9h

Costs: 1145,9€

Reliability: 94,11%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability	
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%	
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%	
	0,15	U1	receive confirmation	0,00	0	0	0,0	99,00%	0,00				
	0,85	D1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63				
		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585	
3			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%	
4			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%	
5			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%	
6			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%	
7			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18				
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98				
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33				
			assembling the PCs	8,00	2	20	100,0	99,00%	424,24				
			diagnosis routine	1,00	1	20	5,0	99,00%	25,25				
	0,10	U1	recycling of defects	1,00	1	20	5,0	99,00%	25,25	57,3	2275,52237	0,89996192	
	0,90	D1									0,1	2,52525253	0,999
										65,2	2502,0	88,34%	

Private Model – Calculation Result:

Time: 65,2h

Costs: 2502,0€

Reliability: 88,34%

Supplier 2: There is no direct impact for the assembler.

Supplier 3: Due to the survey the time for the process increases by 3 hours. The costs increase by 60 euros and the reliability is lowered by 2 percent.

Manufacturer 1:

- Adding replacement of defect CPUs after the loop
- As a result, the time and costs increase a little and the realibility decrease a little

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability		
1			average number of batches	3										
1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%		
			receive confirmation	0,00	0	0	0,0	99,00%	0,00					
			receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
			send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585		
2			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
3			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
4			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
5			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
6			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18					
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98					
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33	30	919,461767	0,95877456		
			Replacement of defect CPUs	6,00	1	20	50	95,00%	178,95			0,6	17,8947368	0,995
			recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999		
										39,1	1178,5	93,55%		

Public Model – Calculation Result:

Time: 39,1h

Costs: 1178,5€

Reliability: 93,55%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability		
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%		
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%		
			receive confirmation	0,00	0	0	0,0	99,00%	0,00					
			receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
			send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585		
3			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
4			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
5			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
6			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
7			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18					
			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98					
			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33					
			assembling the PCs	8,00	2	20	100,0	99,00%	424,24					
			diagnosis routine	1,00	1	20	5,0	99,00%	25,25	57,3	2275,52237	0,89996192		
			recycling of defects	1,00	1	20	5,0	99,00%	25,25			0,1	2,52525253	0,999
			Replacement of defect CPUs	6,00	1	20	50	95,00%	178,95			0,6	17,8947368	0,995
			recycling of unused CPUs	6,00	1	20	25,0	99,00%	146,46	0,6	14,6464646	0,999		
										66,4	2534,5	87,81%		

Private Model – Calculation Result:

Time: 66,4h

Costs: 2534,5€

Reliability: 87,81%

Manufacturer 2:

- For me there are only the same changes like in scenario 1.

Manufacturer 3:

- Adding of the replacement and removing of the recycling quite neutralize the impacts on the dimensions.

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability		
1			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%		
5			receive confirmation	0,00	0	0	0,0	99,00%	0,00					
7			receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
3	0,15	U1	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585		
3	0,85	D1	receive confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
3		D2	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
2			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
0			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
1			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
2			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
3			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18					
4			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98					
5			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33	30	919,461767	0,95877456		
6	0,10	U1	Replacement of defect CPUs	6,00	1	20	50	95,00%	178,95			0,6	17,8947368	0,995
7	0,90	D1												
8										38,5	1163,8	93,64%		

Public Model – Calculation Result:

Time: 38,5h

Costs: 1163,8€

Reliability: 93,64%

ID level 1	p of XOR	ID level 2	activity	time (hours) / person	human resource (in persons)	human resource (EUR/hour)	technical resources costs total (EUR)	reliability	total costs (EUR)	avg time	avg costs	avg reliability		
1			analyse the need for the actual number of subcomponents	30	2	25	10	99%	1.525,25	30	1.525,25	99%		
2			order required products	4,00	1	25	10,0	100,00%	110,00	4	110,00	100,00%		
5			receive confirmation	0,00	0	0	0,0	99,00%	0,00					
7	0,15	U1	receive confirmation of the order with updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
5	0,85	D1	send confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63	0,85	21,4646465	0,981585		
3		D2	receive confirmation of the updated delivery dates	0,50	1	25	0,0	99,00%	12,63					
7			receive payment details information	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
8			send inquiry about payment details	1,00	1	30	2,5	100,00%	32,50	1,00	32,50	100,00%		
5			do money transfer	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
0			receive money receipt confirmation	0,50	1	30	0,0	100,00%	15,00	0,50	15,00	100,00%		
7			notification of the next just-in-time CPU batch shipment	2,00	1	20	5,0	99,60%	45,18					
2			receive shipment of the next CPU batch	6,00	1	20	75,0	99,50%	195,98					
3			send confirmation of batch receipt	2,00	1	20	25,0	99,50%	65,33					
4			assembling the PCs	8,00	2	20	100,0	99,00%	424,24					
5			diagnosis routine	1,00	1	20	5,0	99,00%	25,25	57,3	2275,52237	0,89996192		
6	0,10	U1	recycling of defects	1,00	1	20	50	99,00%	25,25			0,1	2,52525253	0,999
7	0,90	D1												
8	0,10	U1	Replacement of defect CPUs	6,00	1	20	50	95,00%	178,95			0,6	17,8947368	0,995
9	0,90	D1												
0										65,8	2519,9	87,90%		

Private Model – Calculation Result:

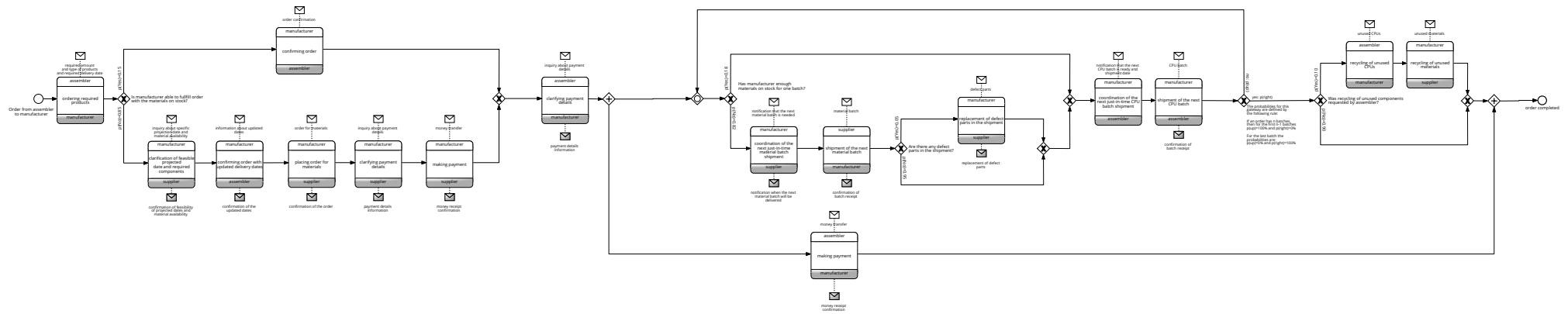
Time: 65,8h

Costs: 2519,9€

Reliability: 87,90%

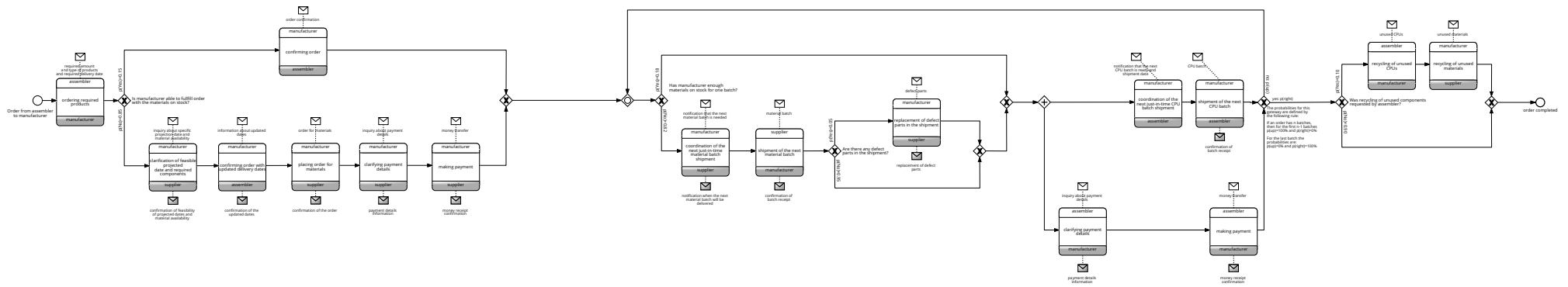
Assembler_Choreographie

Change Scenario1



Assembler_Choreographie

Change Scenario2

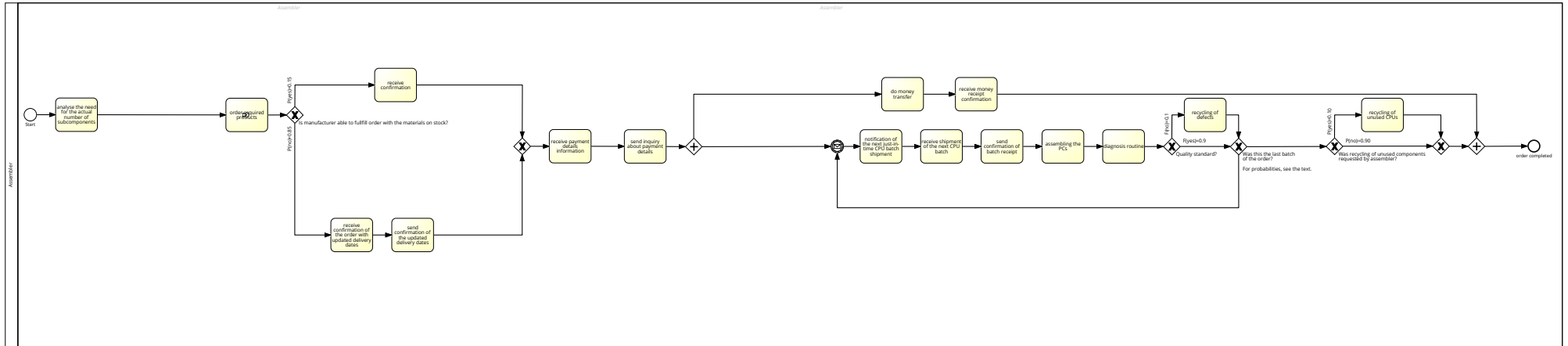


Assembler_Private Change Scenario1



Supplier

Manufacturer

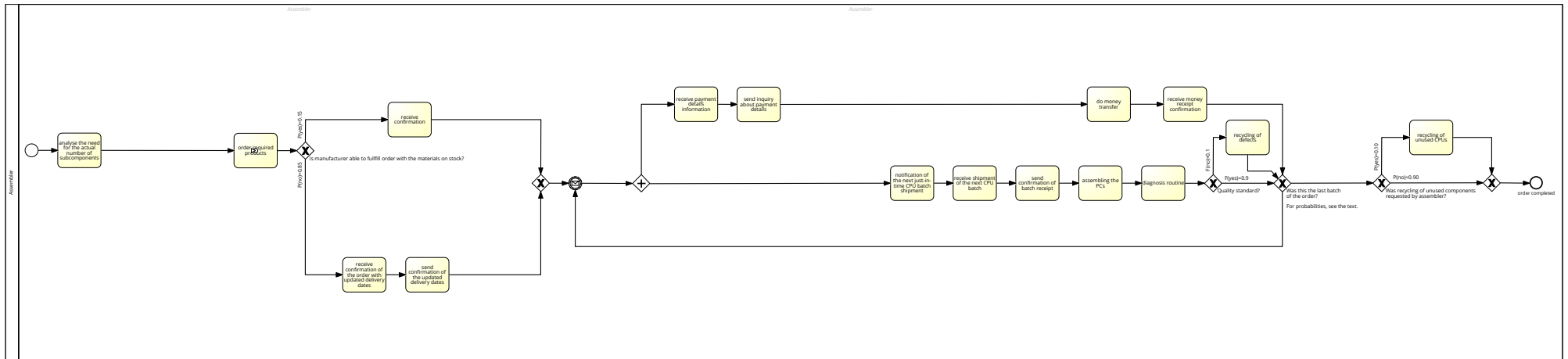


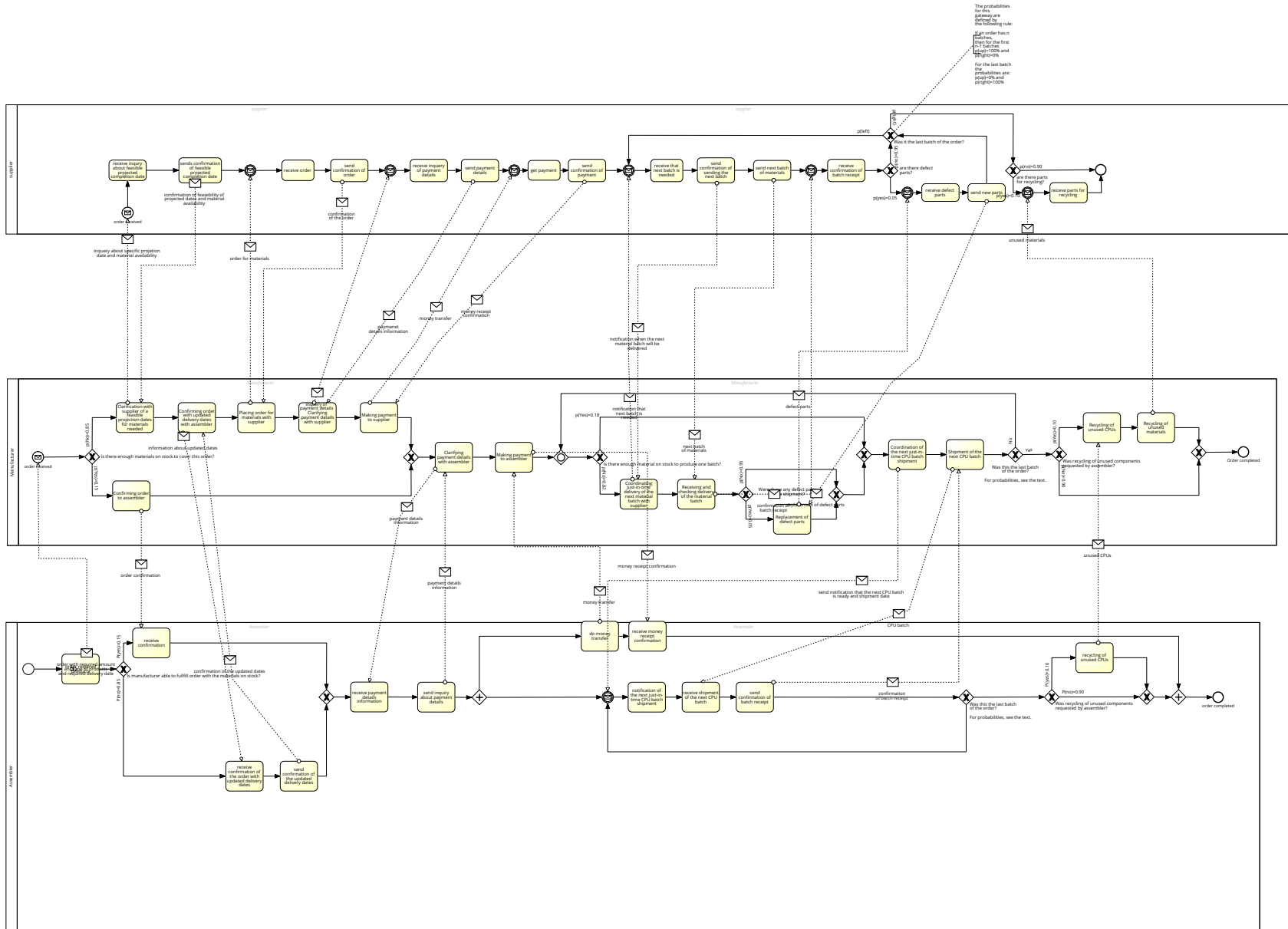
Assembler_Private Change Scenario2

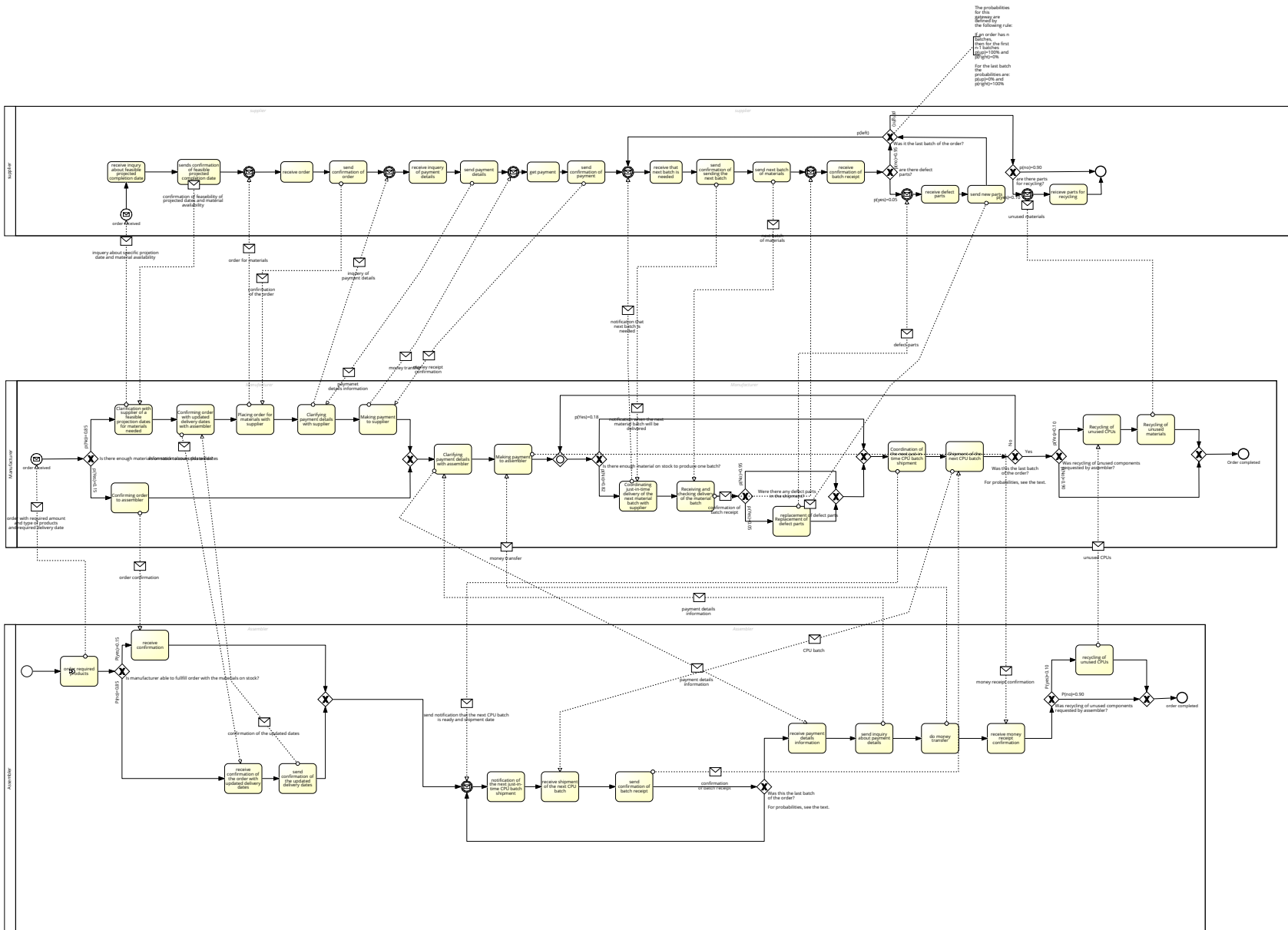


Supplier

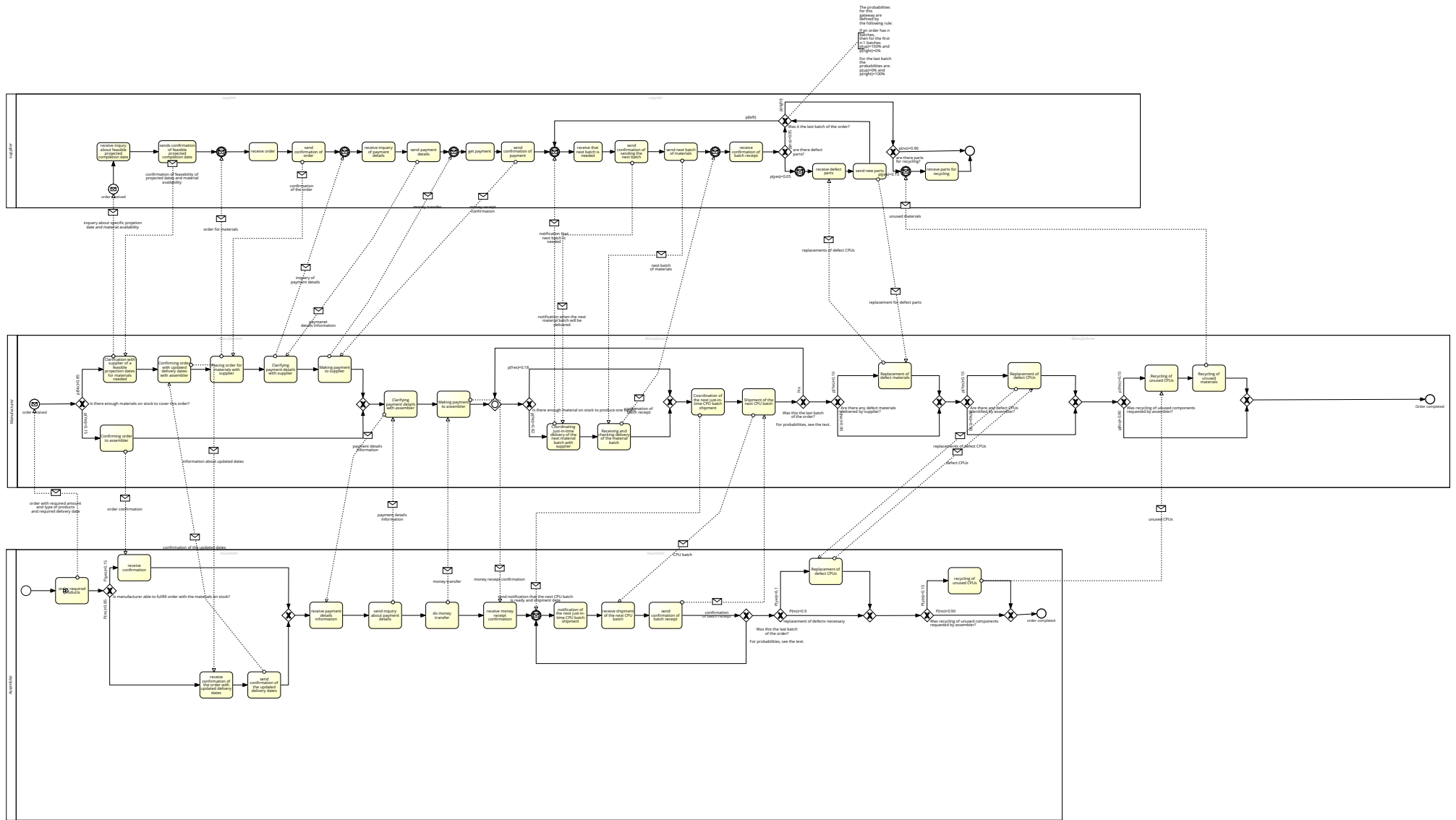
Manufacturer



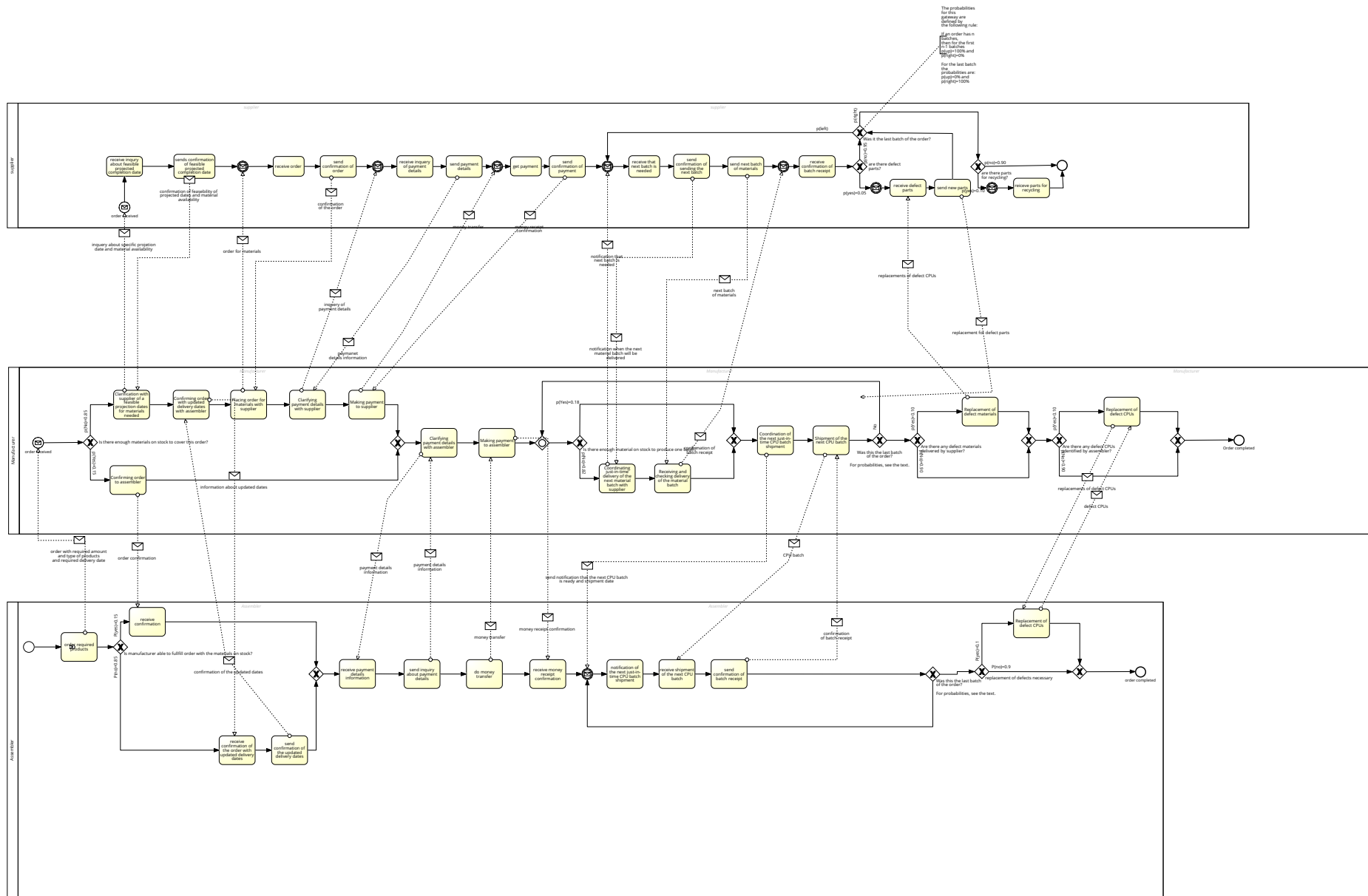




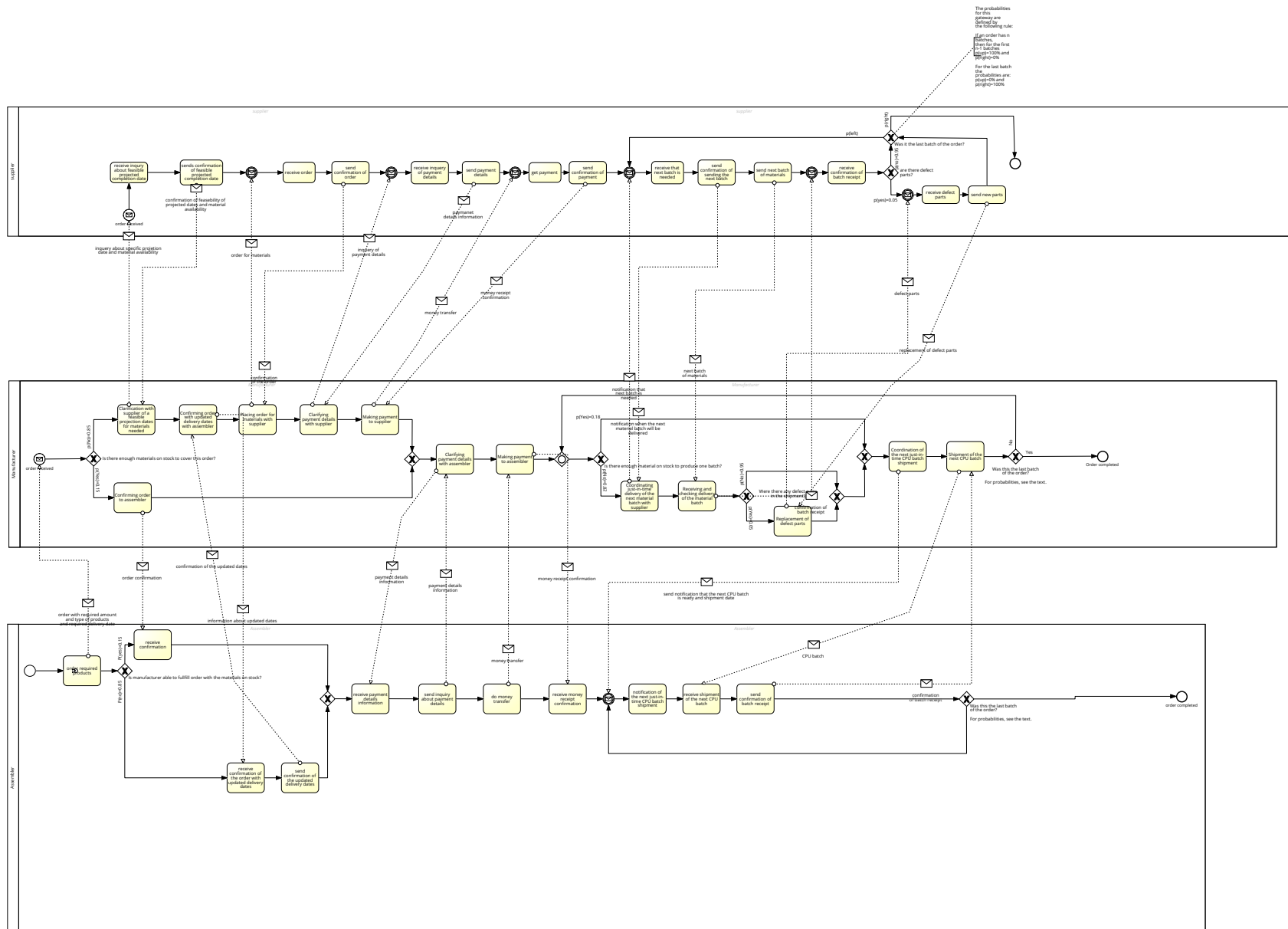
Public_Model_Manufacturer_Scenario2



Public_Model_Manufacturer_Scenario3



Public_Model_Supplier_Scenario1



Public_Model_Supplier_Scenario3

