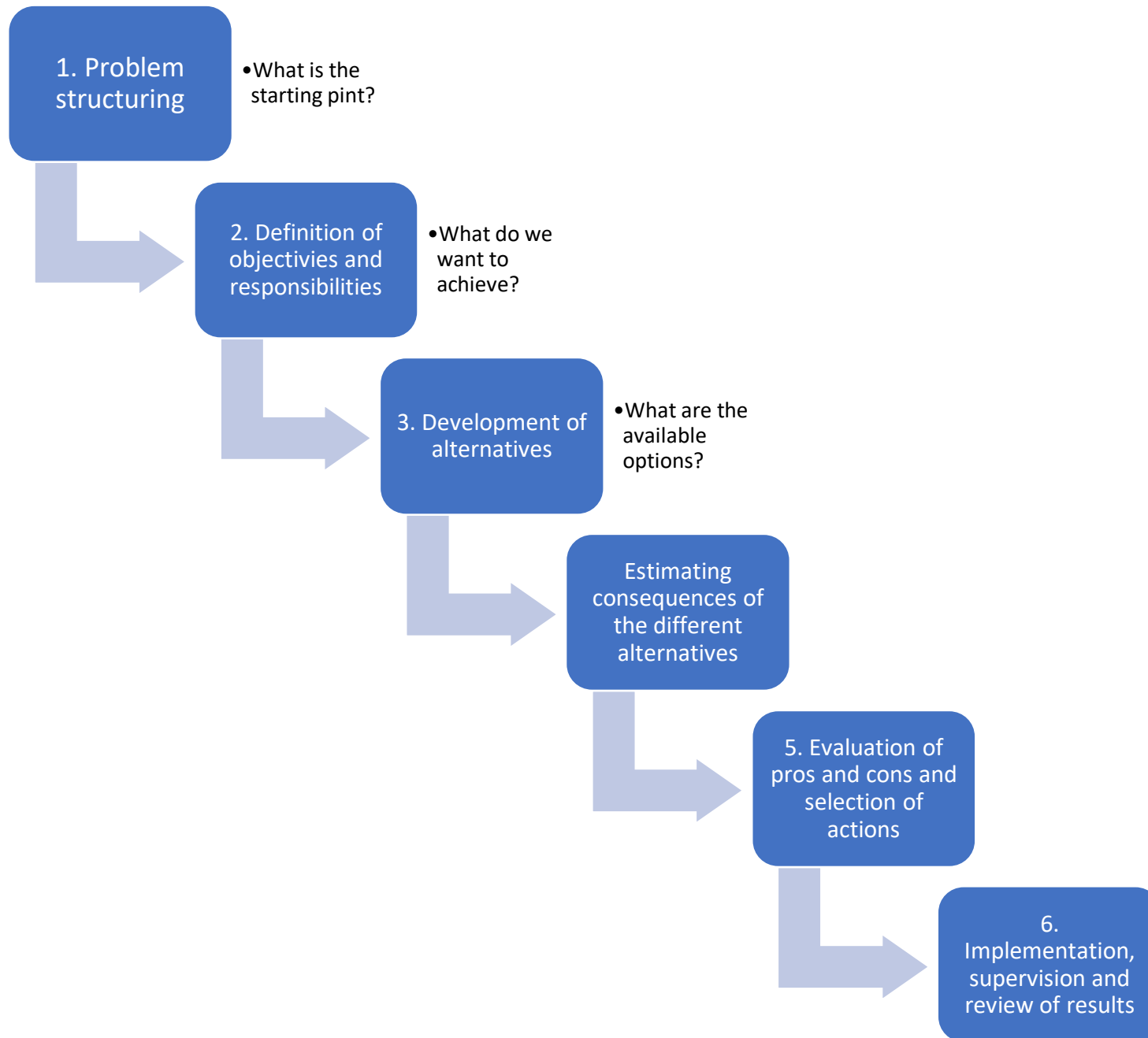
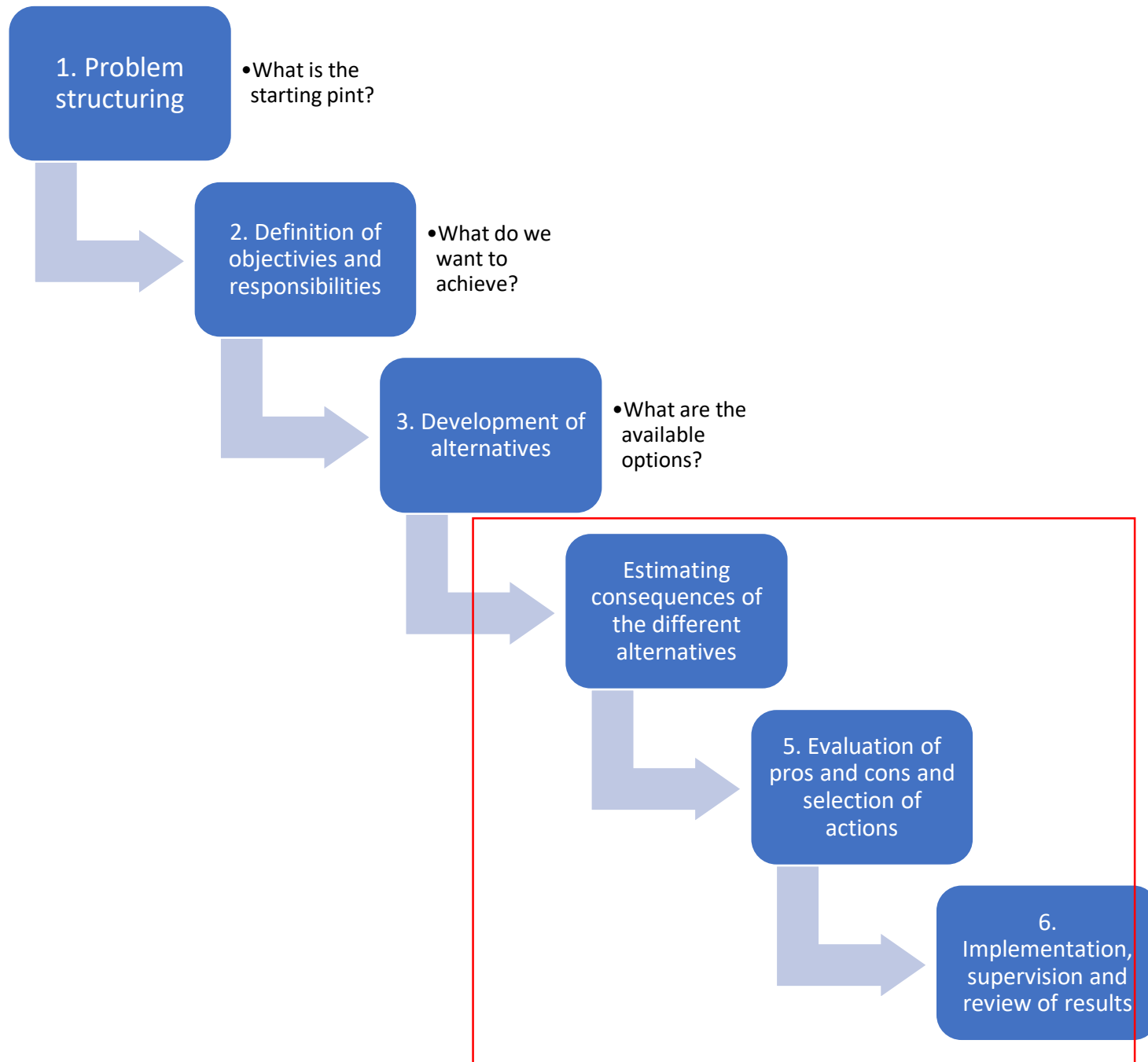


Serious games and scenathons
Javier Sierra, USAL

TRANSCEND
Kick-off meeting

15-16 February 2023
Hotel NH Collection Salamanca Palacio de Castellanos
Salamanca, Spain





Main problems:

- 1. Lack of communication between stakeholders**
- 2. Inefficient regulation**
- 3. Difficulties to understand the effects of climate change**



Getting into the comfort zone



Preferencias entre las distintas acciones

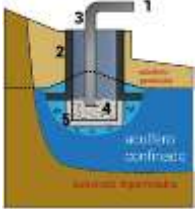




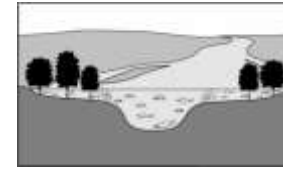
Reservoir



Environmental prices



Aquifer recharge



Regulation + Environmental flow



Irrigation modernization

Canals



Teledetection + Regulation



Irrigation expansion



Financial prices



Buyback



Resource prices



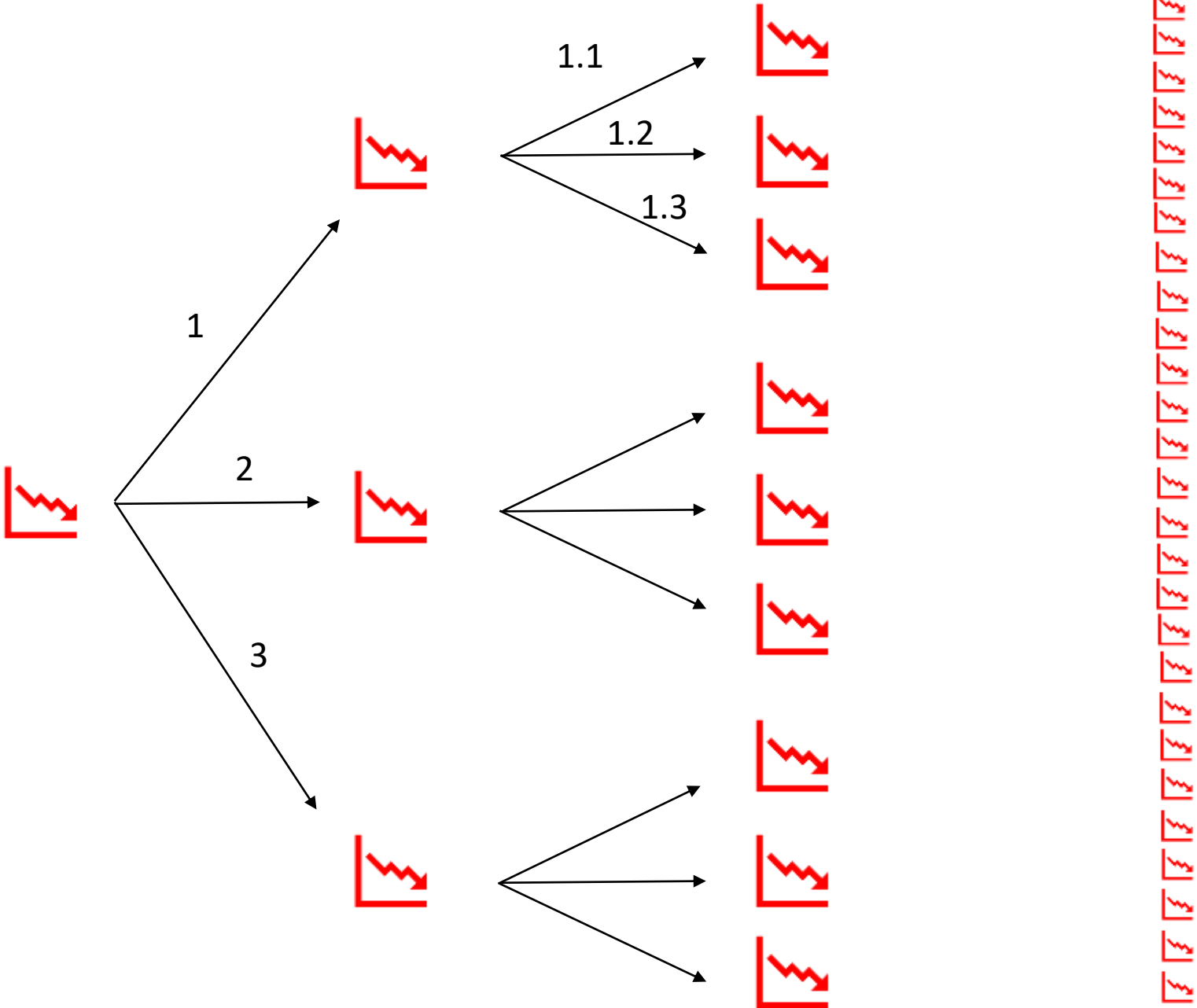
Insurance

2025 (1)

2035 (3)

2045 (9)

2055 (27)

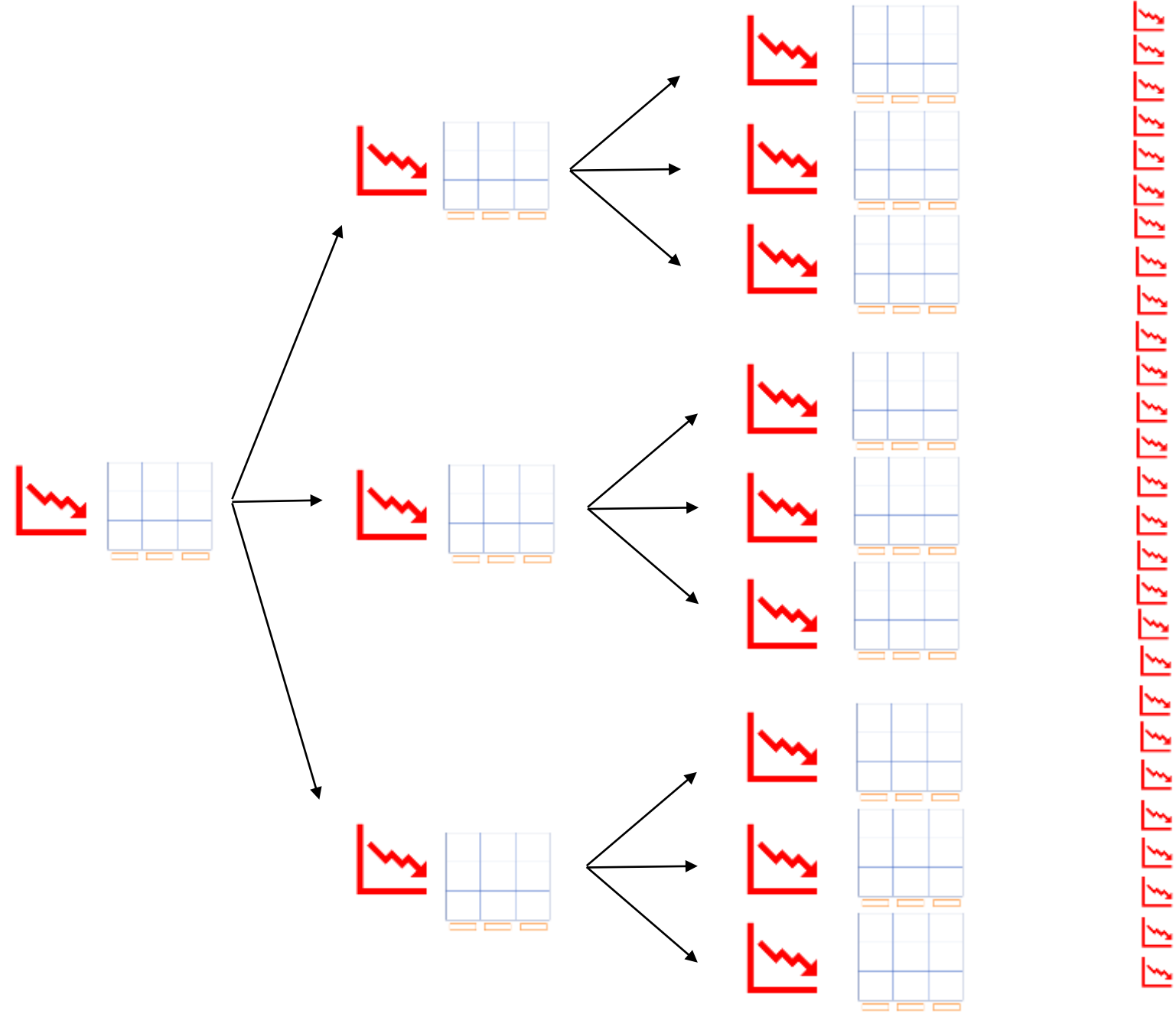


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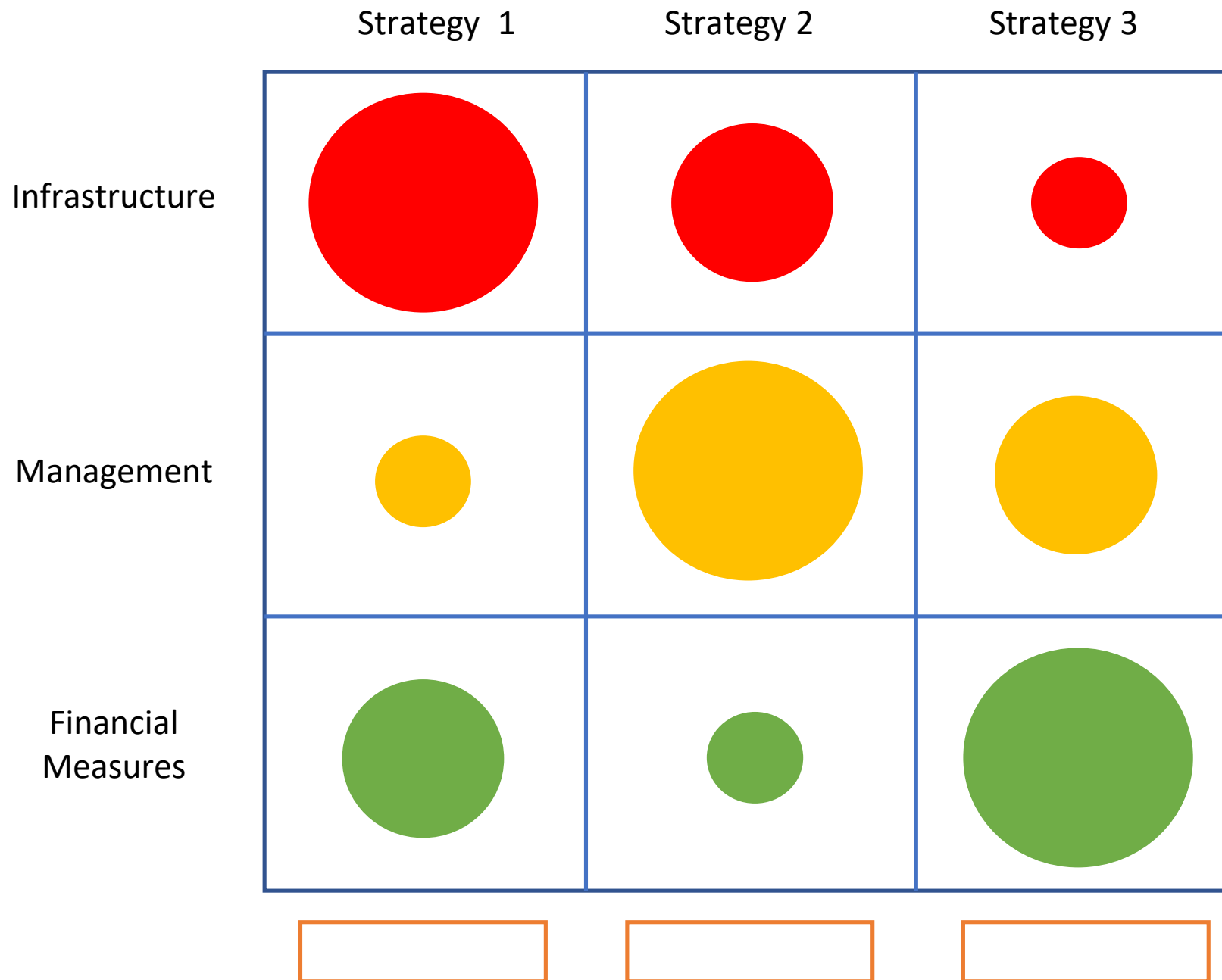
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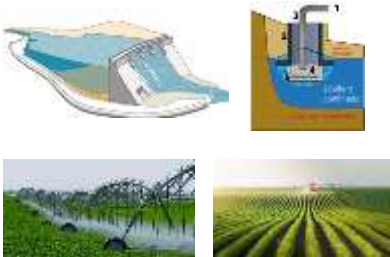


	Strategy 1	Strategy 2	Strategy 3
Infrastructure			
Management			
Financial Measures			



Example of
“Decision card”

Infrastructure



Strategy 2



Strategy 3



Management



Financial
measures



Effects of the different actions

Reservoir

Acquifer recharge

Irrigation modernization, canals

Irrigation expansion

Financial prices

Resource prices

Environmental prices

Regulation + Environmental flow

Teledetection + Regulation

Buyback

Insurance

Environmental

Economic

Cost



+10



+9



+9



+3



-5



-3



-2



0



+2



+9



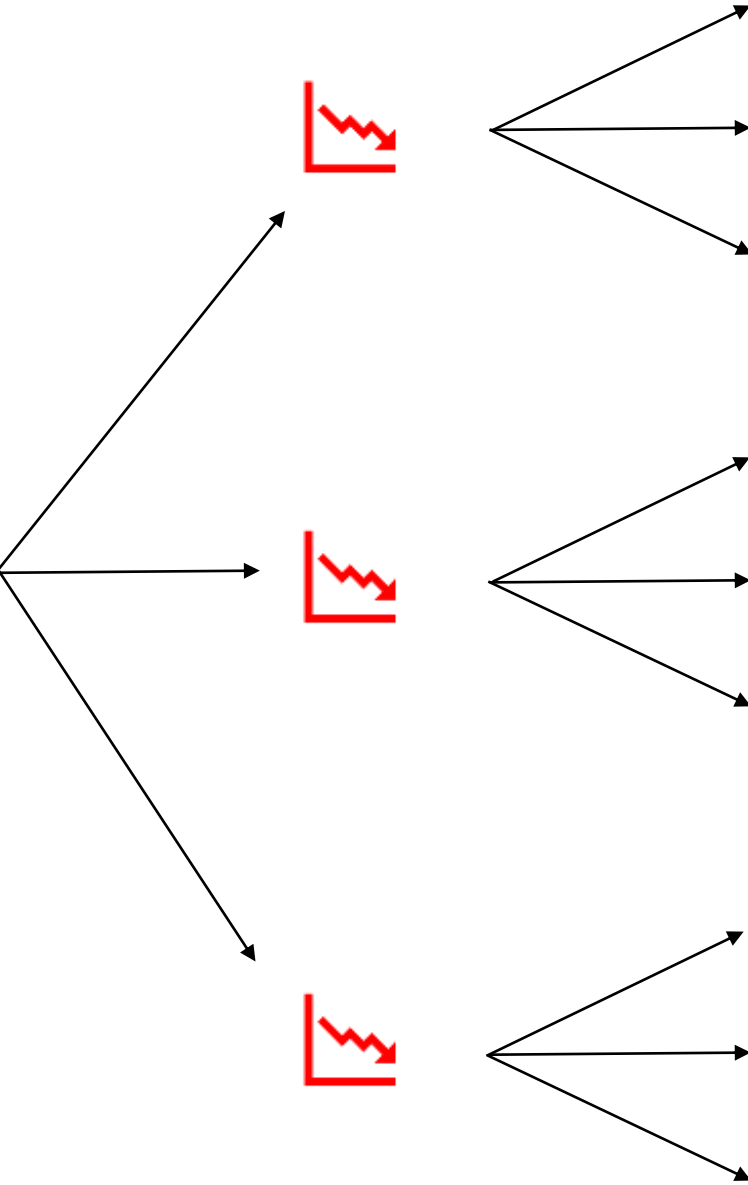
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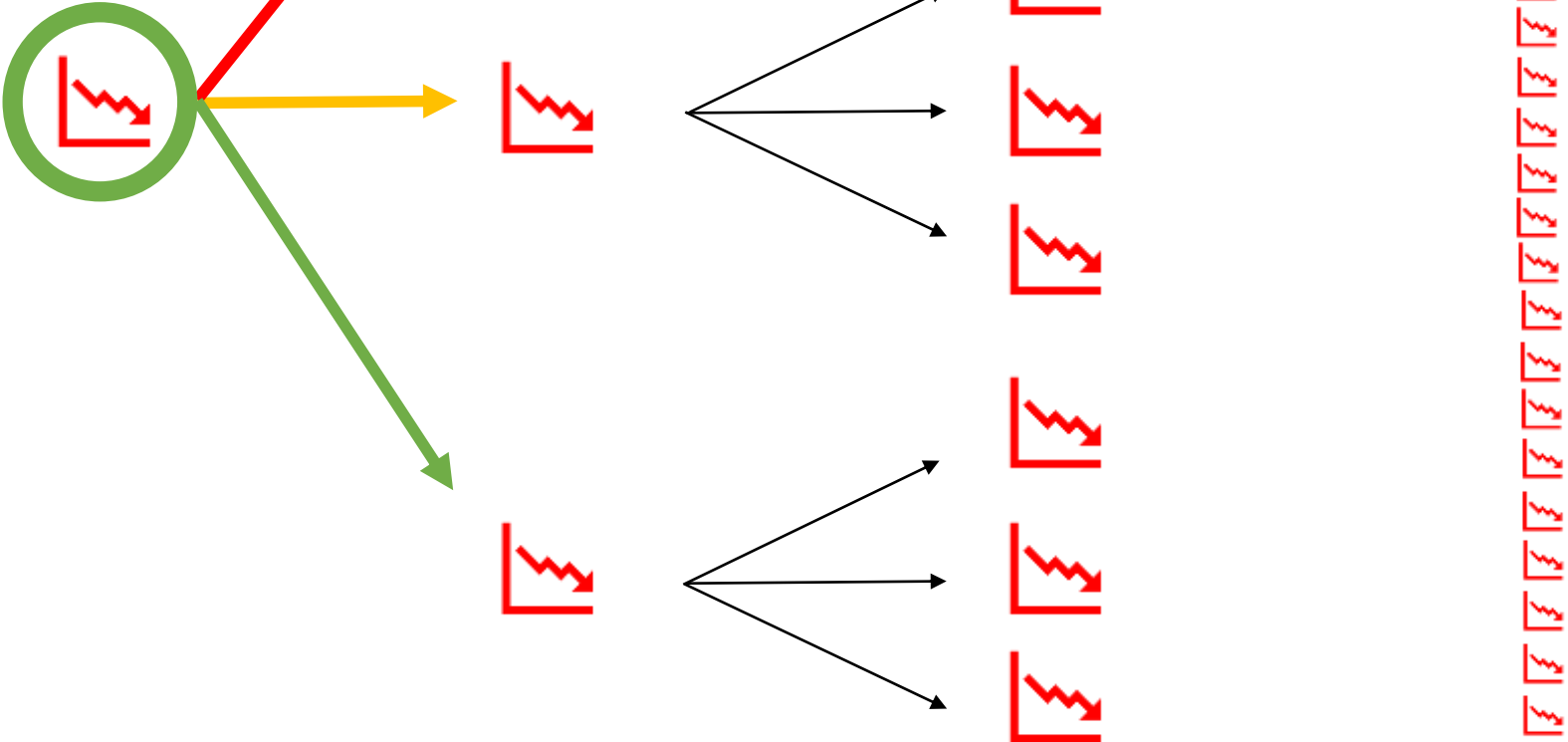


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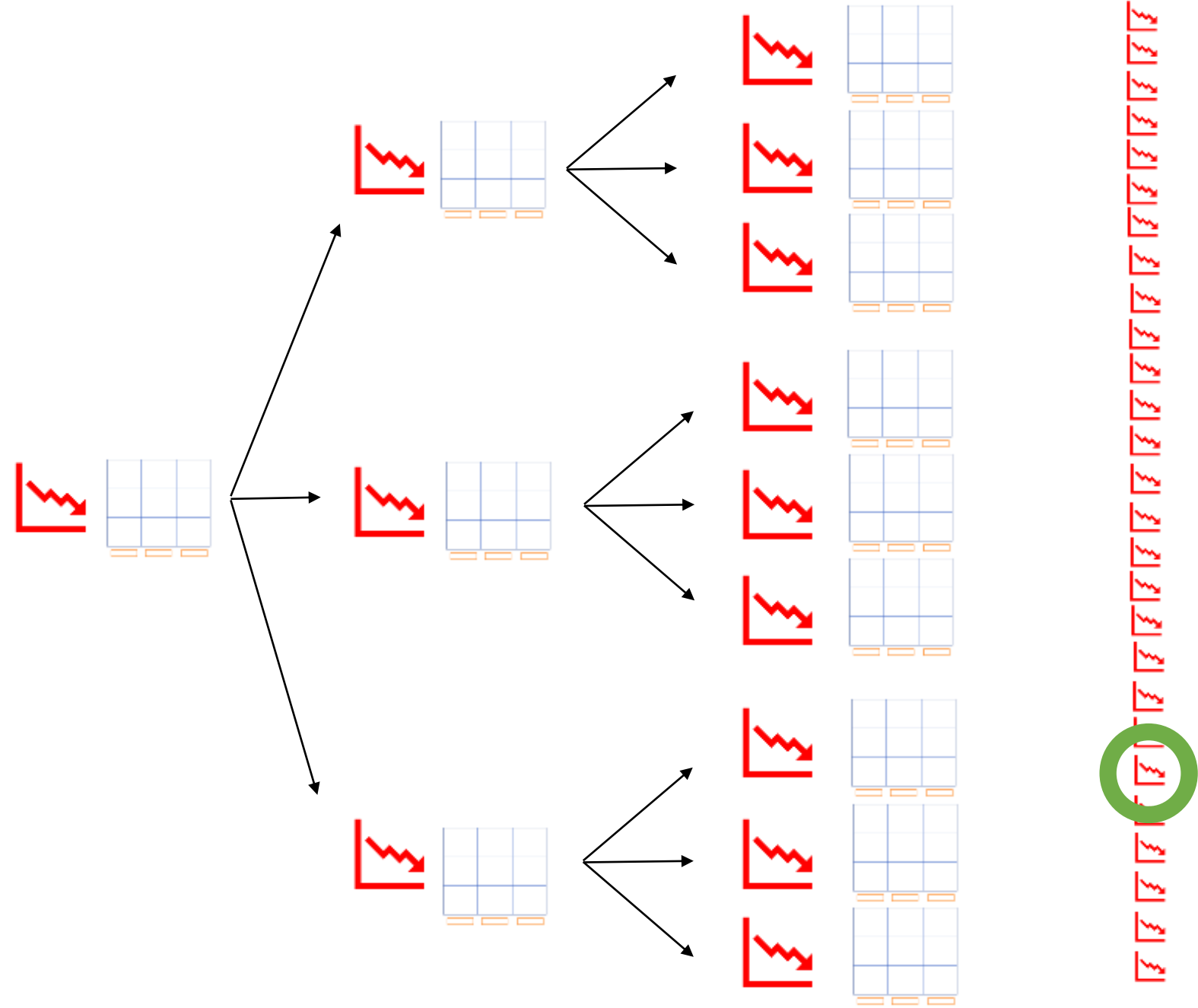


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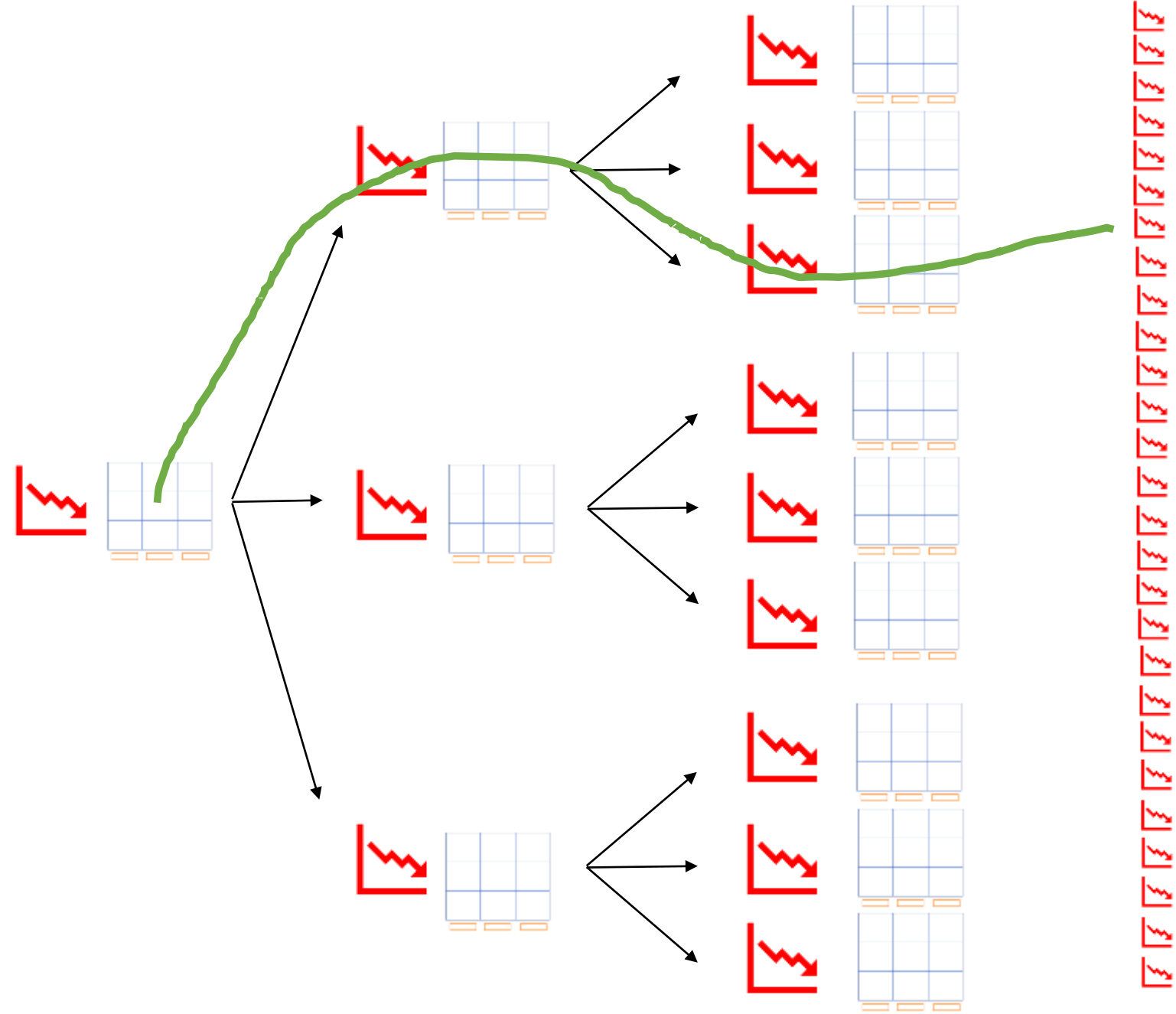


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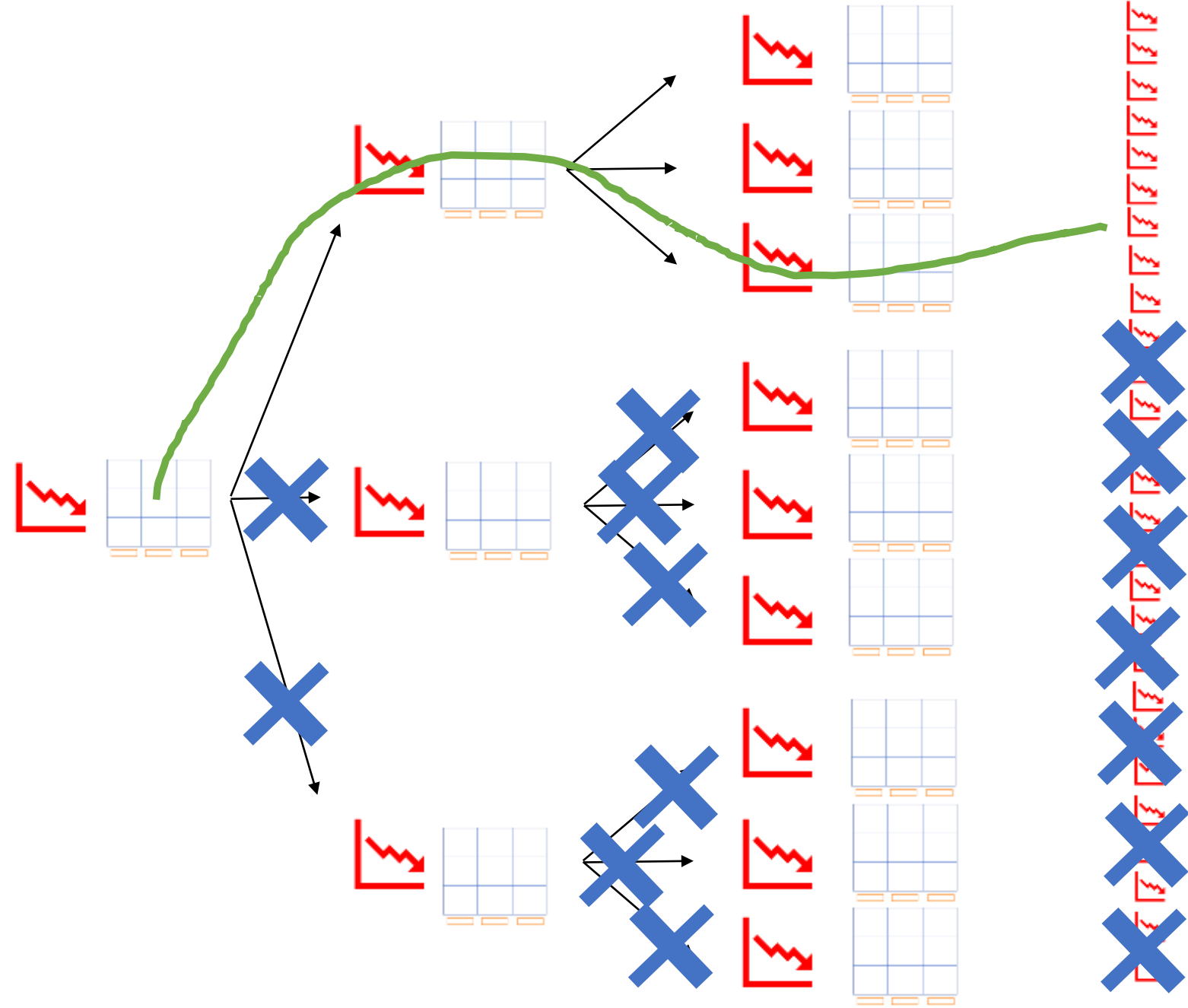


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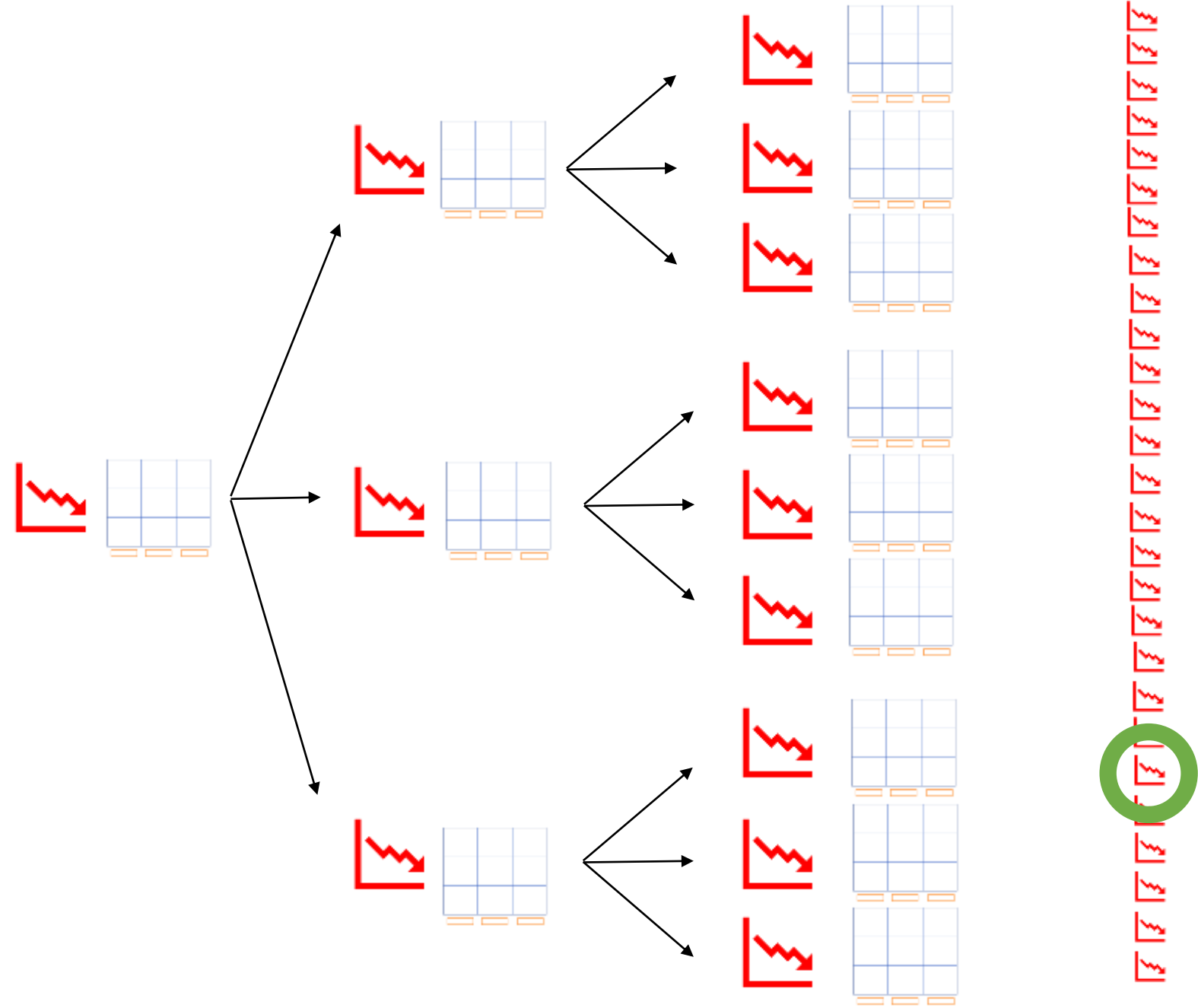


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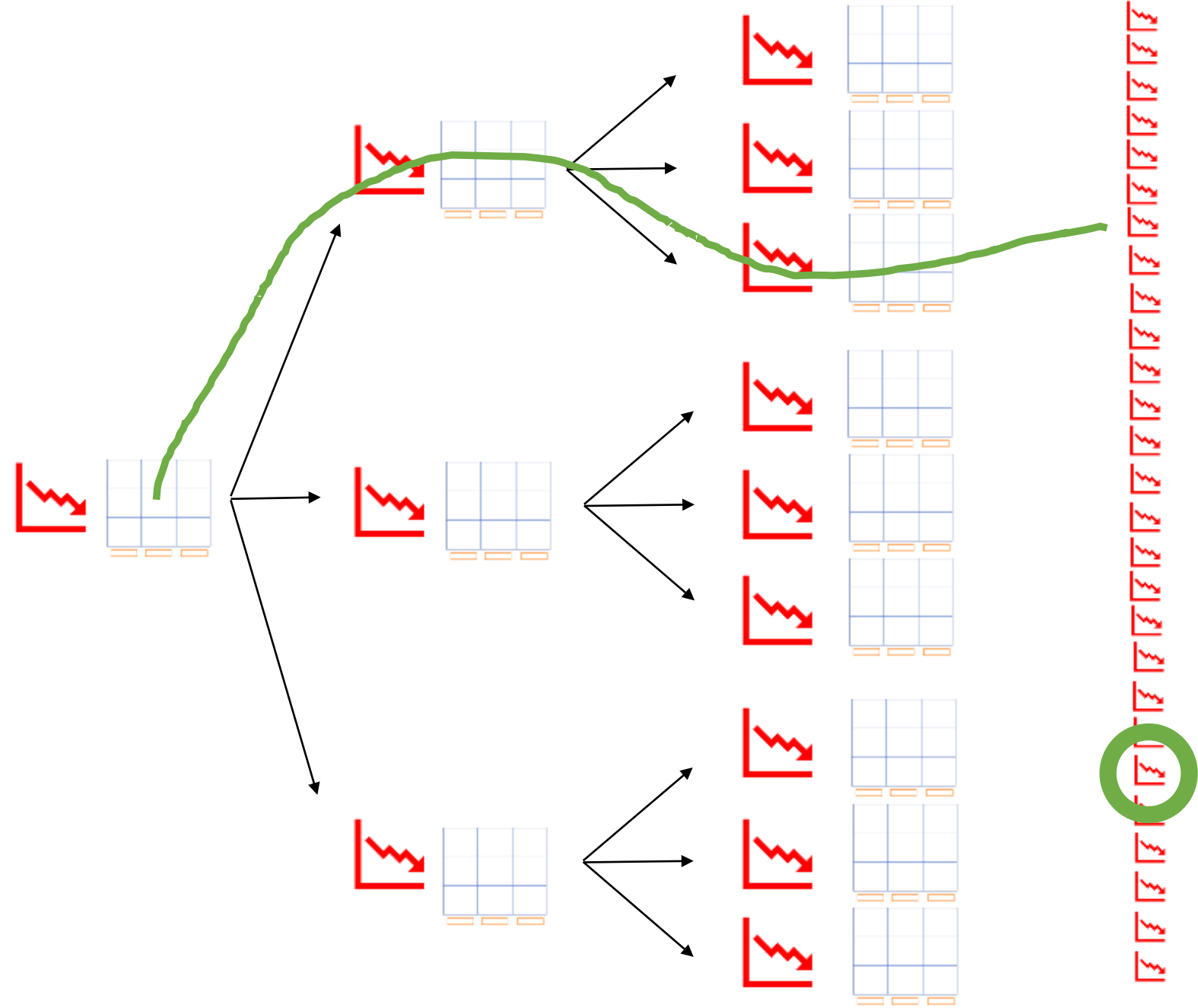


2025 (1)

2035 (3)

2045 (9)

2055 (27)



?

RESPUESTAS AMBIENTALES SERIOUS GAMES

Respuestas 2035

1	1.11%
2	-22.69%
3	-42.85%

Respuestas 2045

1.1	13.08%
1.2	8.46%
1.3	-1.69%
2.1	-33.49%
2.2	-43.16%
2.3	-54.18%
3.1	-72.18%
3.2	-74.65%
3.3	-87.64%

Respuestas 2045

1.1.1	71.28%
1.1.2	42.07%
1.1.3	28.63%
1.2.1	26.11%
1.2.2	25.93%
1.2.3	13.48%
1.3.1	13.39%
1.3.2	2.06%
1.3.3	-2.61%
2.1.1	-9.68%
2.1.2	-11.96%
2.1.3	-14.49%
2.2.1	-22.70%
2.2.2	-24.47%
2.2.3	-25.50%
2.3.1	-38.15%
2.3.2	-39.88%
2.3.3	-42.19%
3.1.1	-45.77%
3.1.2	-51.72%
3.1.3	-54.69%
3.2.1	-59.04%
3.2.2	-64.32%
3.2.3	-69.67%
3.3.1	-76.52%
3.3.2	-77.19%
3.3.3	-81.45%



Next steps:

- **Delphi method: consensus, dissent, priorities...**
- **Refine the serious game**
- **Increased complexity**
- **More specific and detailed actions / outcomes**

