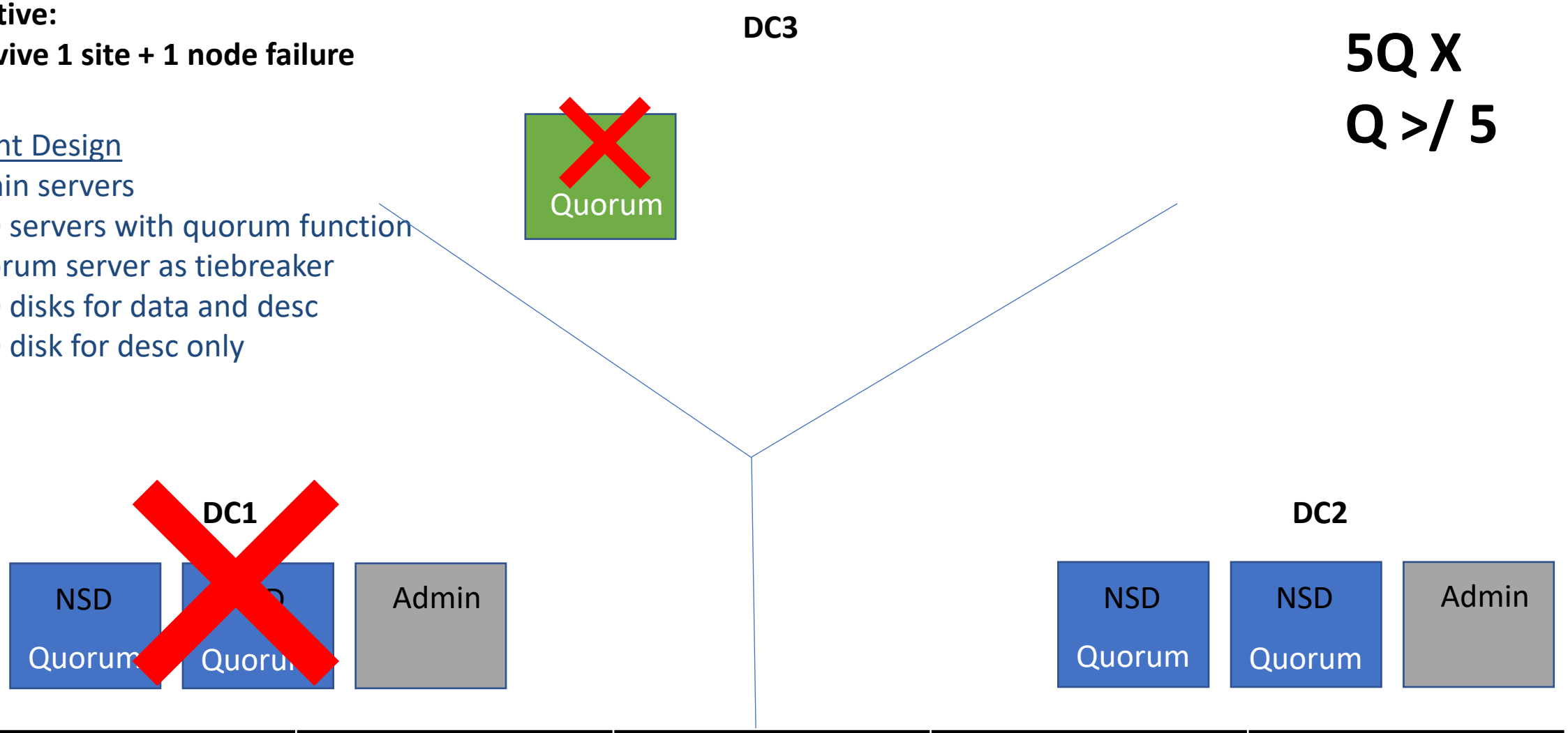
Objective:
1. survive 1 site + 1 node failure

5Q X
Q >/ 5

Current Design
2 admin servers
4 NSD servers with quorum function
1 Quorum server as tiebreaker
4 NSD disks for data and desc
1 NSD disk for desc only



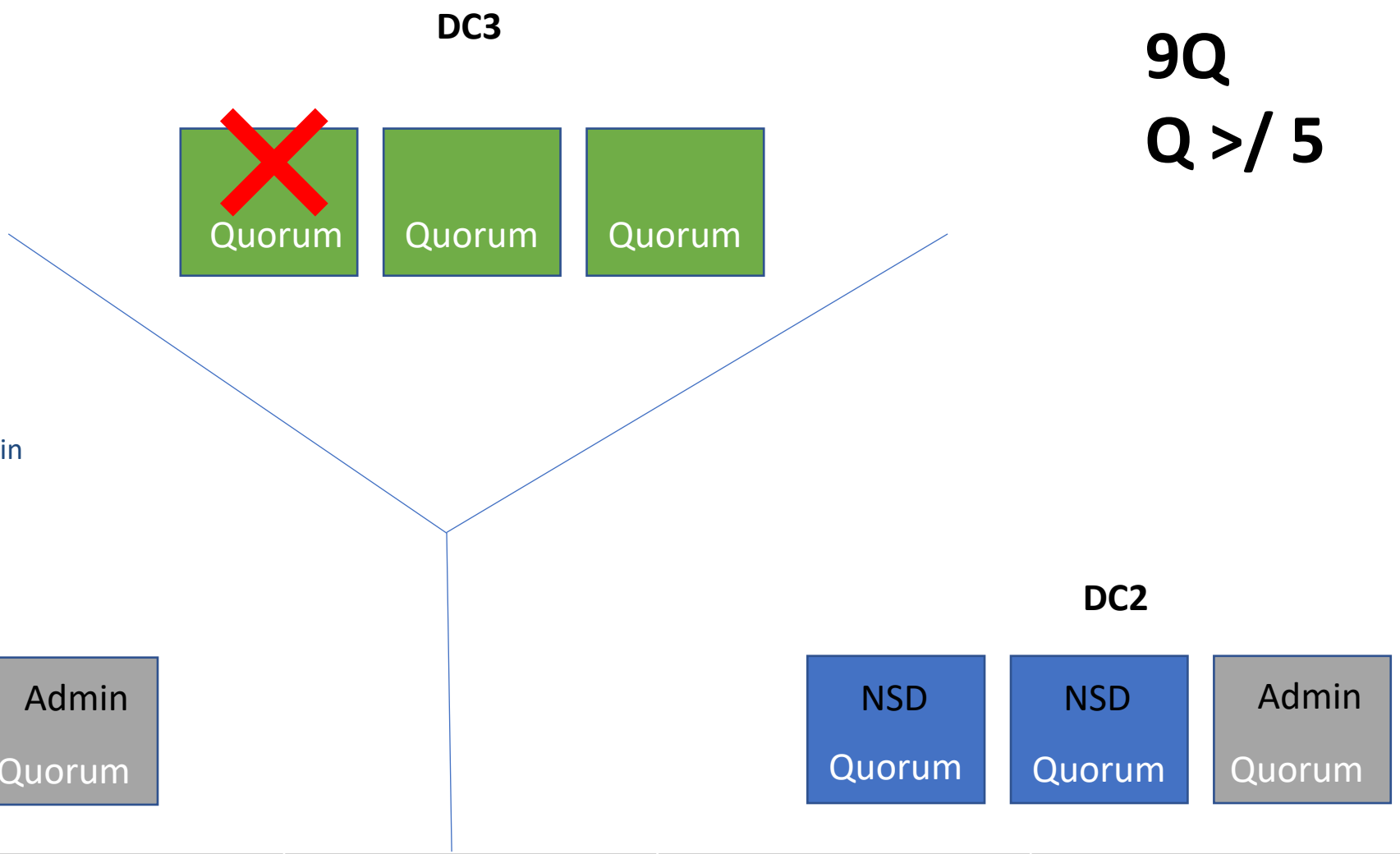
FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	2	2	1	5
Site + 1 x Quorum Node	0	2	0	2 out of 5. QUORUM NOT Maintained.

Objective:

1. **survive 1 site + 1 node failure**

9Q

Q >/ 5



Proposed Design

2 admin servers with quorum function

4 NSD servers with quorum function

3 Quorum server as tiebreaker

4 NSD disks for data and desc

3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)

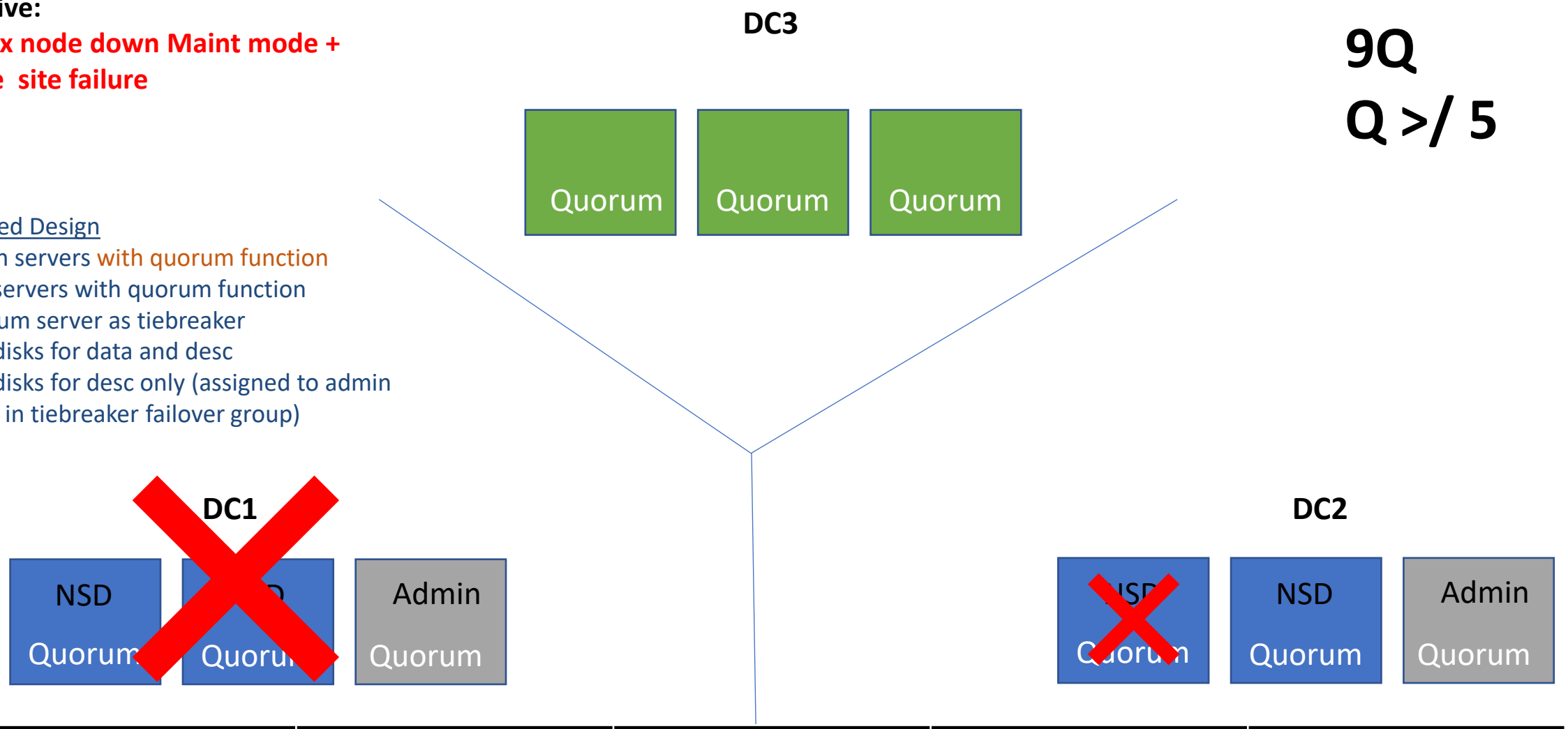
FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	3	3	3	9
Site + 1 x Quorum Node	0	3	2	5 out of 9. QUORUM Maintained.

Objective:

Take 1 x node down Maint mode + survive site failure

9Q

Q >/ 5



Proposed Design

2 admin servers with quorum function

4 NSD servers with quorum function

3 Quorum server as tiebreaker

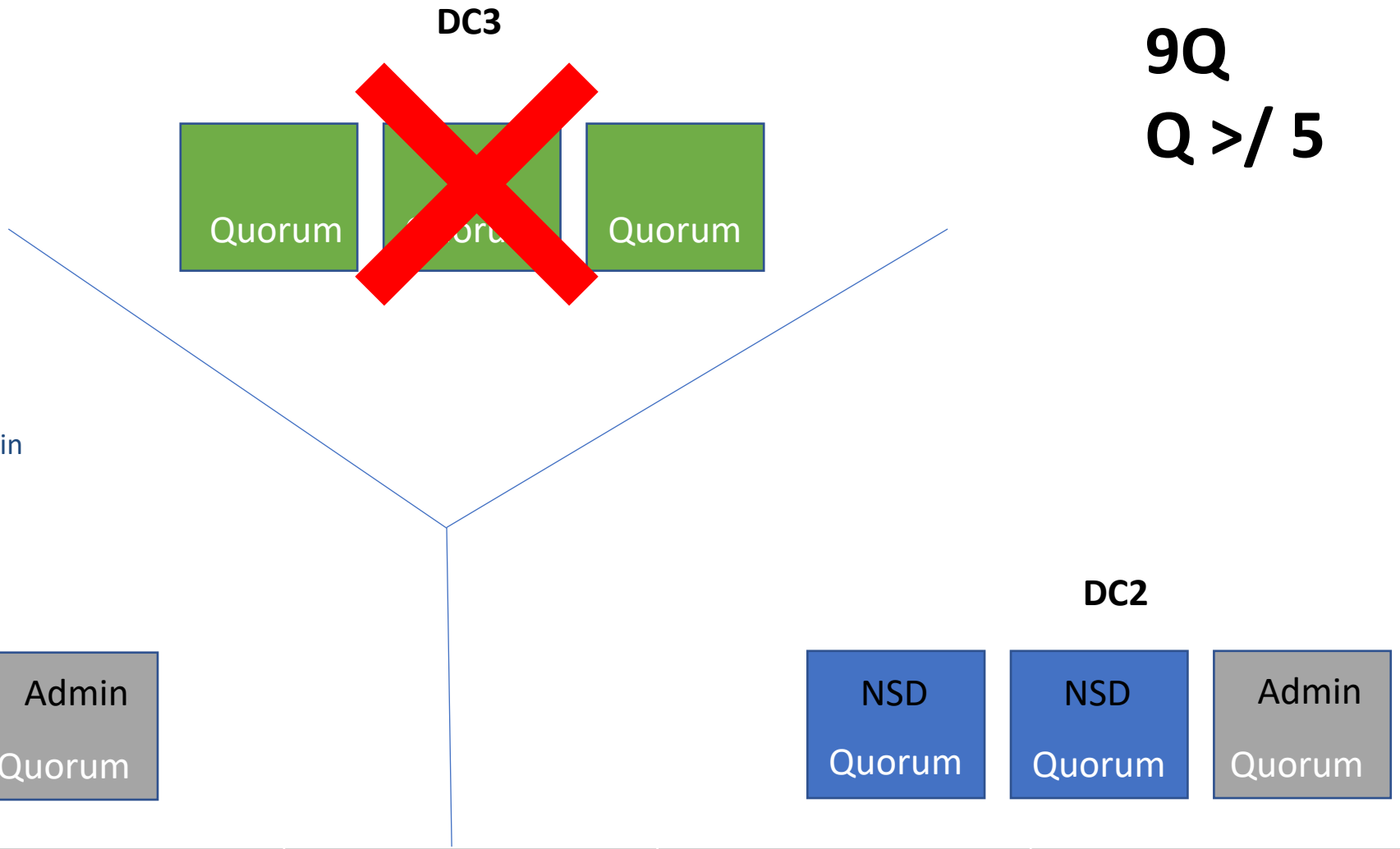
4 NSD disks for data and desc

3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)

FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	3	3	3	9
Take 1 x node down Maint mode + survive site failure	0	2	3	5 out of 9. QUORUM Maintained.

Objective:
Survive 2 x site failures

9Q
Q >/ 5



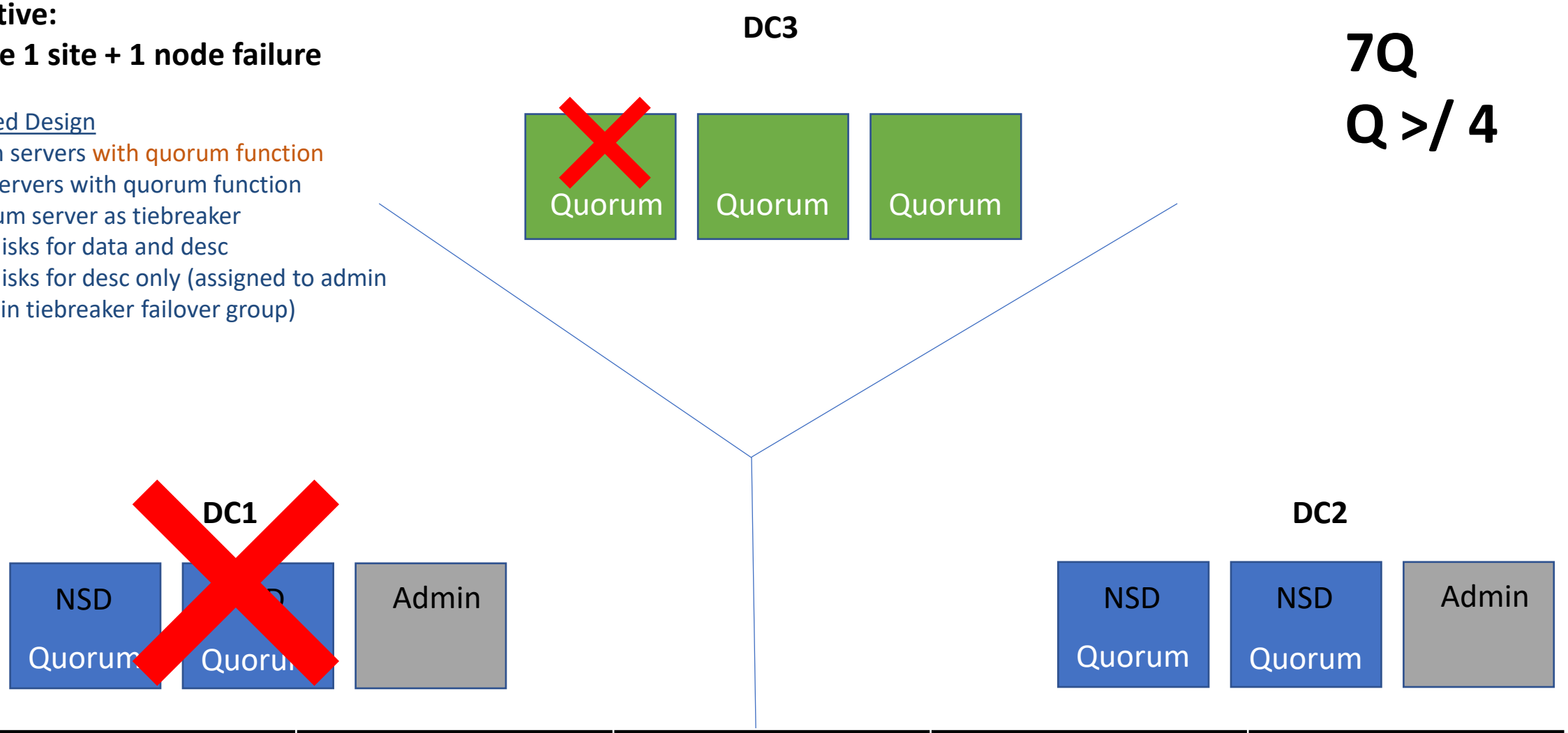
Proposed Design
2 admin servers with quorum function
4 NSD servers with quorum function
3 Quorum server as tiebreaker
4 NSD disks for data and desc
3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)

FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	3	3	3	9
Take 1 x node down Maint mode + survive site failure	0	3	0	3 out of 9. QUORUM NOT Maintained.

Objective:
survive 1 site + 1 node failure

Proposed Design
2 admin servers with quorum function
4 NSD servers with quorum function
1 Quorum server as tiebreaker
4 NSD disks for data and desc
3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)

7Q
Q >/ 4

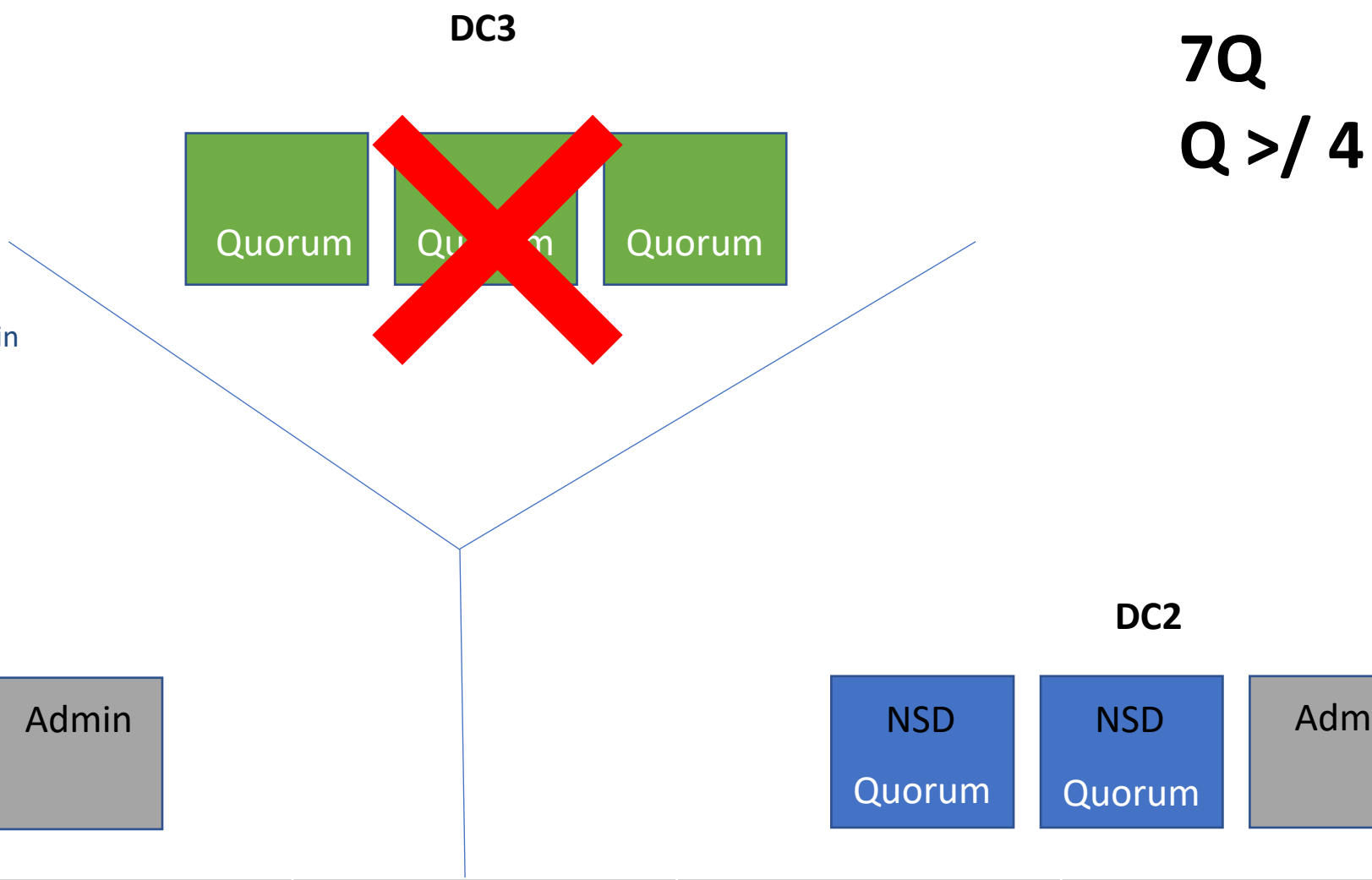


FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	2	2	3	7
Site + 1 x Quorum Node	0	2	2	4 out of 7. QUORUM Maintained.

Objective:
survive 1 site + 1 node failure

Proposed Design
2 admin servers with quorum function
4 NSD servers with quorum function
1 Quorum server as tiebreaker
4 NSD disks for data and desc
3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)

7Q
Q >/ 4

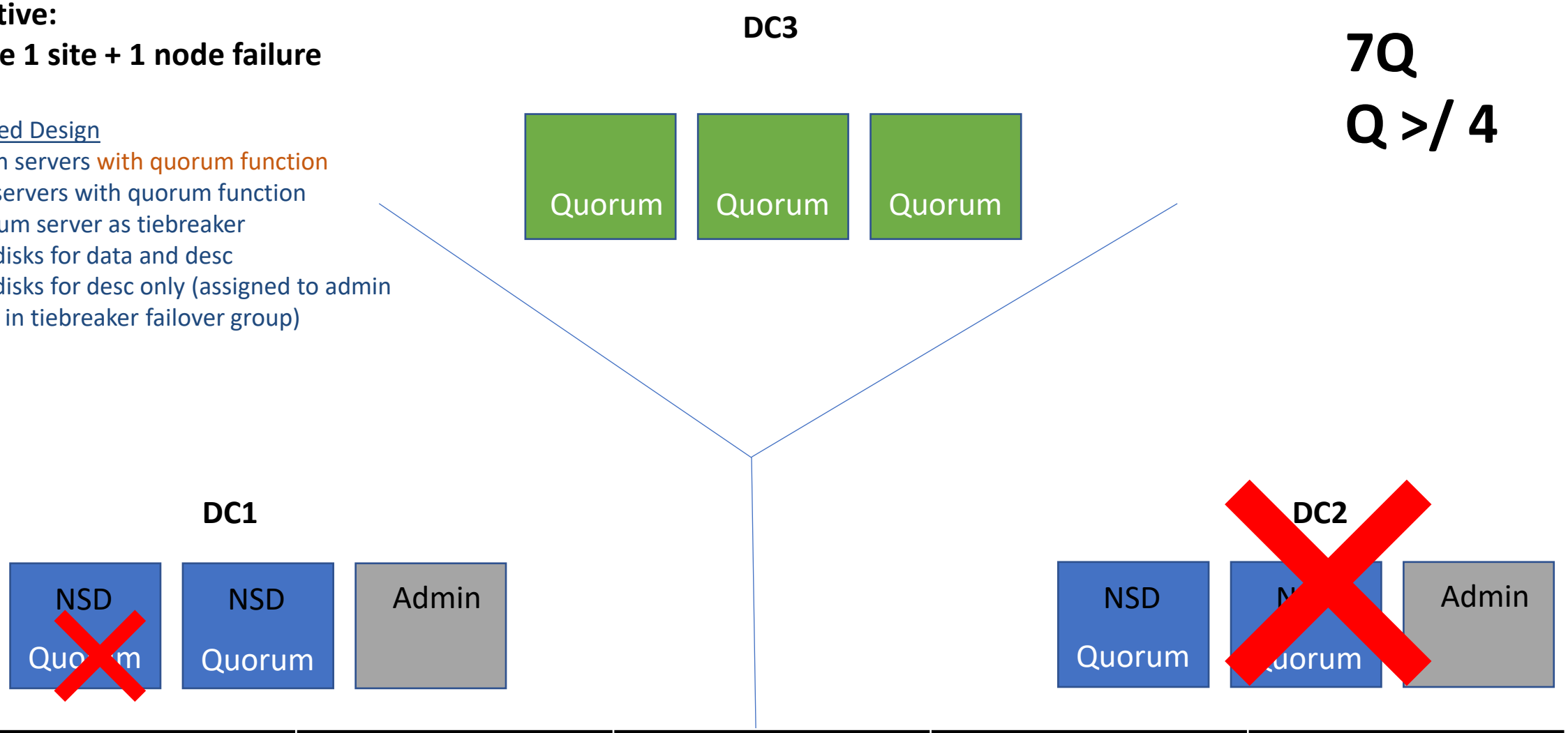


FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	2	2	3	7
Site + 1 x Quorum Node	1	2	0	3 out of 7. QUORUM Not Maintained.

Objective:
survive 1 site + 1 node failure

7Q
Q >/ 4

Proposed Design
2 admin servers with quorum function
4 NSD servers with quorum function
1 Quorum server as tiebreaker
4 NSD disks for data and desc
3 NSD disks for desc only (assigned to admin servers in tiebreaker failover group)



FAILURE SCENARIO COUNT	DC1 Quorum	DC2 Quorum	DC3 Quorum	Total Quorum
	2	2	3	7
Site + 1 x Quorum Node	1	0	3	4 out of 7. QUORUM Maintained.