



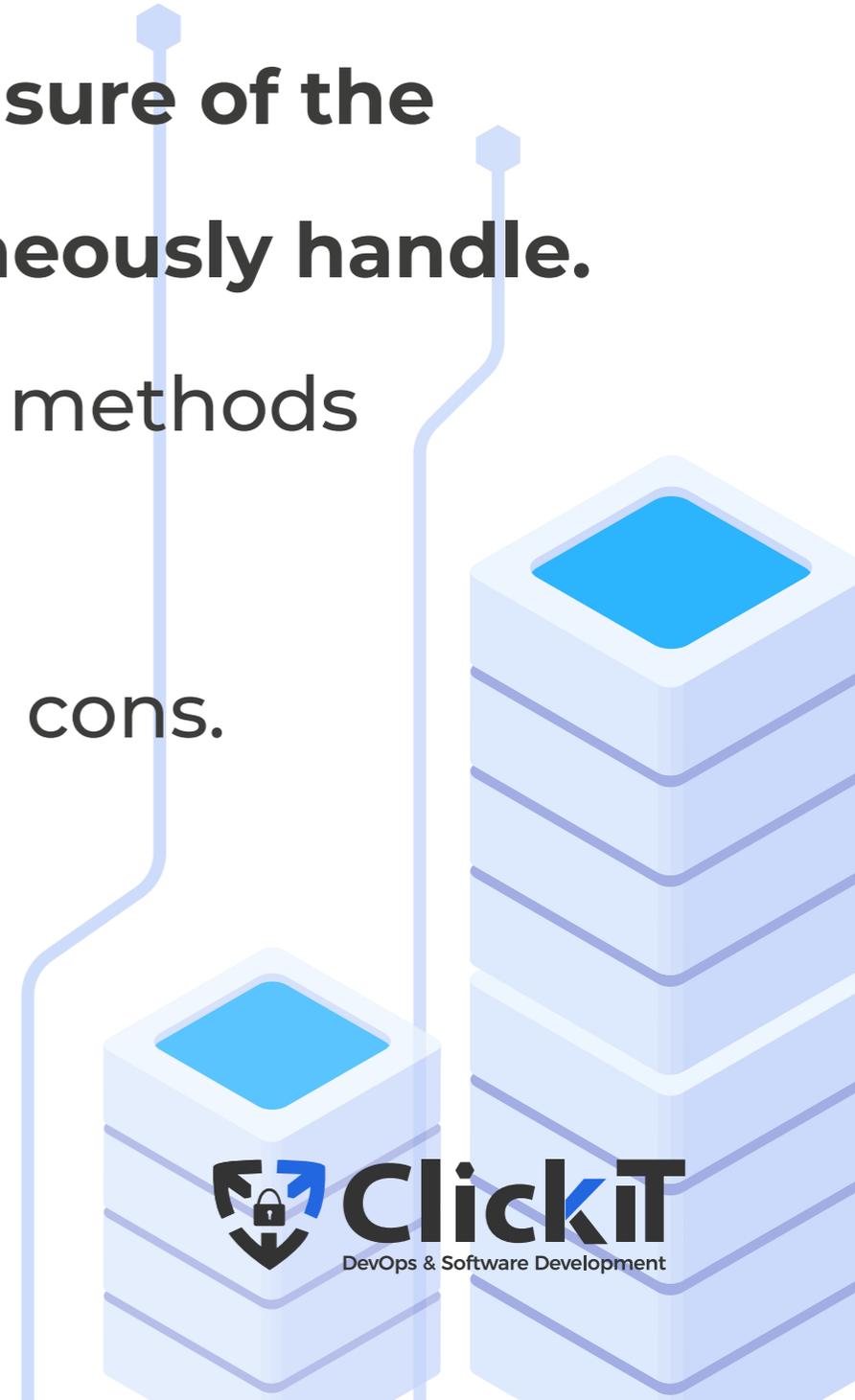
Vertical vs. Horizontal Scaling:

The best scalability option for your app

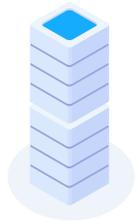
The scalability of an application is **the measure of the number of client requests it can simultaneously handle.**

Horizontal and vertical scaling are the two methods implemented for capacity planning.

Both scaling solutions come with pros and cons.



Data

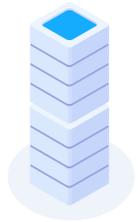


Vertical Scaling: Data is executed on a single node.



Horizontal Scaling: Data is partitioned and run on multiple nodes.

Data Management



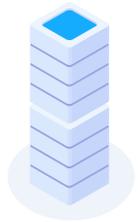
Vertical Scaling: Easy to manage, share data reference.



Horizontal Scaling: Complex task as there is no shared address space.



Downtime

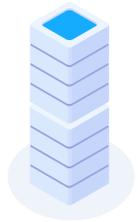


Vertical Scaling: Downtime while upgrading the machine.



Horizontal Scaling: No downtime.

Upper limit

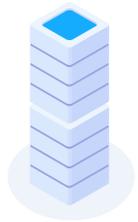


Vertical Scaling: Limited by machine specifications.



Horizontal Scaling: Not limited by machine specifications.

Cost



Vertical Scaling: Lower licensing free.



Horizontal Scaling: Higher licensing free.

So, the question is not about finding out what's best but **is about identifying the perfect scalability model for your IT requirements.** It all depends on your application architecture scalability requirements.