enterprise business
organization

server-grade
machines

How does the business organizations can procure the necessary computing services or resources in hosting/delivering the software applications to the customers around the world?

The business organization can choose in-house hosting which is also called as "on-premise" (run at your own hardware) on-premise means running the applications within the own boundaries of the organization itself

For this the business organization has to procure all the infrastructure resources that are required for running the application like
1. Infrastructure
 1.1 Physical space (Real-estate)
 The business organization has lease or procure a physical office/hosting space for a long-term in which they can setup the Infrastructure that is needed in hosting/running the application

 1.2 The physical space in which we host the infrastructure resources should be air-cooled (conditioned) so that it would not heatup the computing resources/devices that leads to degradation of performance

 1.3 24/7 power backup is needed to ensure incase of power failure the software application continues to run without any interruption for the business

 1.4 High-speed Network is required inter-connecting the computers on which we are hosting the application
 1.5 High-speed network devices that supports gigabytes/petabytes of traffic like Routers, firewalls, switches etc
 1.6 security / monitoring devices to protect and monitor the infrastructure from external attacks
 1.7 High-speed dedicated leased internet lines to make the application accessible to the people around the world.

 1.8 For all the above physical hardware resources we need standby resources/devices which can be swapped in, in the event of failure of any of existing resources for continuty of the business

2. Software
Inorder to host/deliver the software application on the above infrastructure we need platform softwares like
 1. operating system
 2. database softwares = for storing and managing the data
 3. application server softwares = for running the software applications
etc

2.1 The business organization has to procure the licensed operating system and other softwares that are required for running the application

2.2 The operating system software and other platform softwares like (database servers, application servers) needs to be installed and configured on the server-grade computers that requires lot of time

3. People and Maintainance
3.1 We need administration team that takes care of setting up the hardware infrastructure, installing the operating system software, application software and make the environment/infrasturcture ready for running the application

3.2 We need Network administration team, that takes care of setting up the network and ensuring there is no security breach or loop holes in hosting and making the application live

3.3 we need operatinal/support team that monitors the application 24/7 and incase of crash they should be able quickly recover the application from the failure

From the above we can understand in-house hosting has lot of pain areas/drawbacks as below
1. The initial investment cost that is required in setting physical space and procure hardware infrastructure in setting up the systems in place to run the application is very huge
2. It is not an one-time investment, over the time the hardware infrastructure will have ware/tear that needs to be maintained/repaired/replaced

3. The Initially time required in setting up the physical space and procure infrastructure resources in hosting/running the business is very huge. This means we cannot start the business on day-zero even after pooling huge captical investment

3. Licensed softwares / renewals are very costly

4. installing/configuring and upgrading the platform software and tools takes lot of time and it is ongoing maintainance that required dedicated team like
 1. administrators
 2. network engineers
 3. support/operational engineers
The cost in managing the man-power resources is very high

From the above we can understand a small-scale/moderate vendor cannot efford in hosting/running their application on in-house (on-premise) infrastructure. For an enterprise it is highly difficult to manage in running the systems.