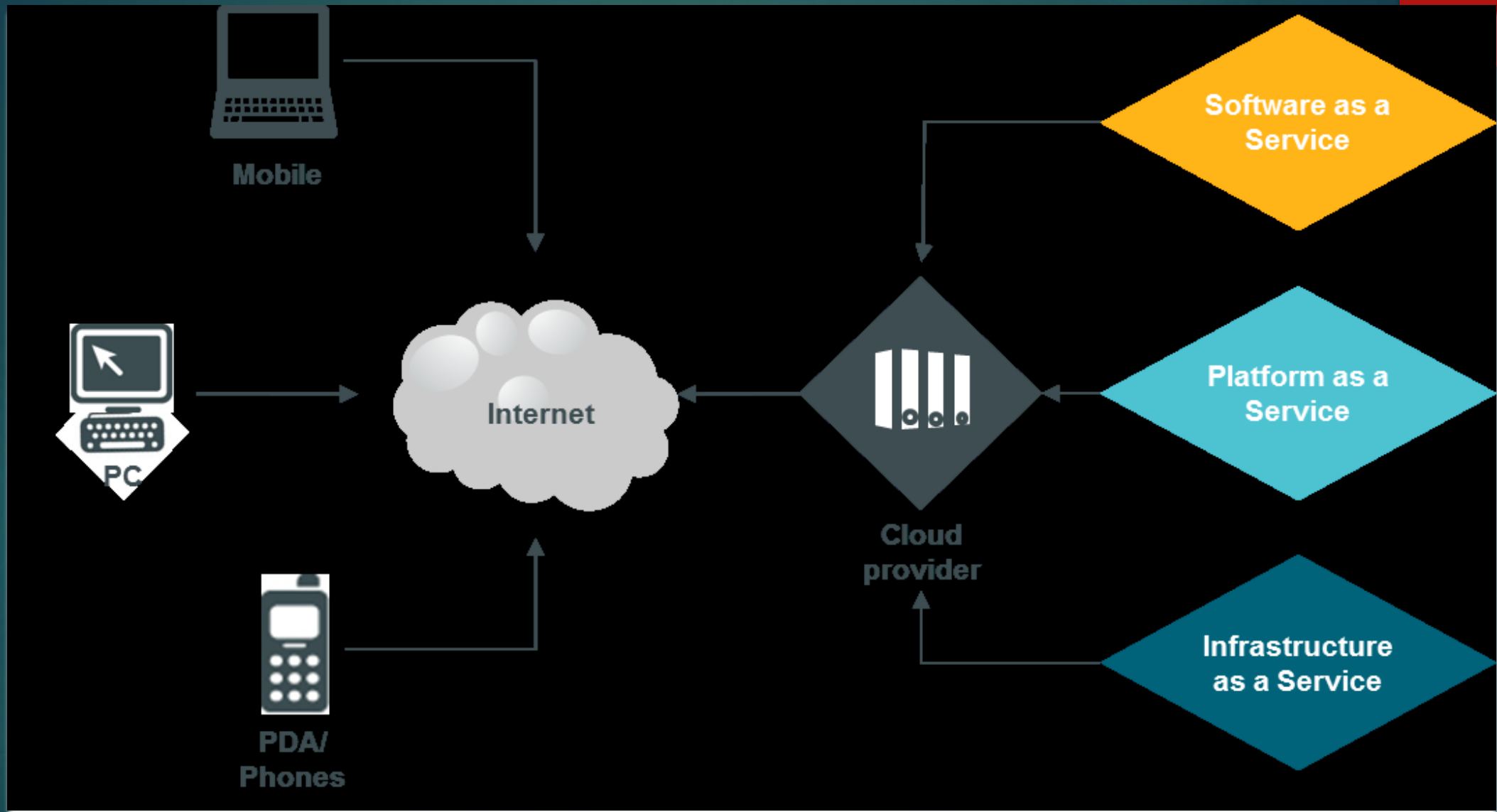
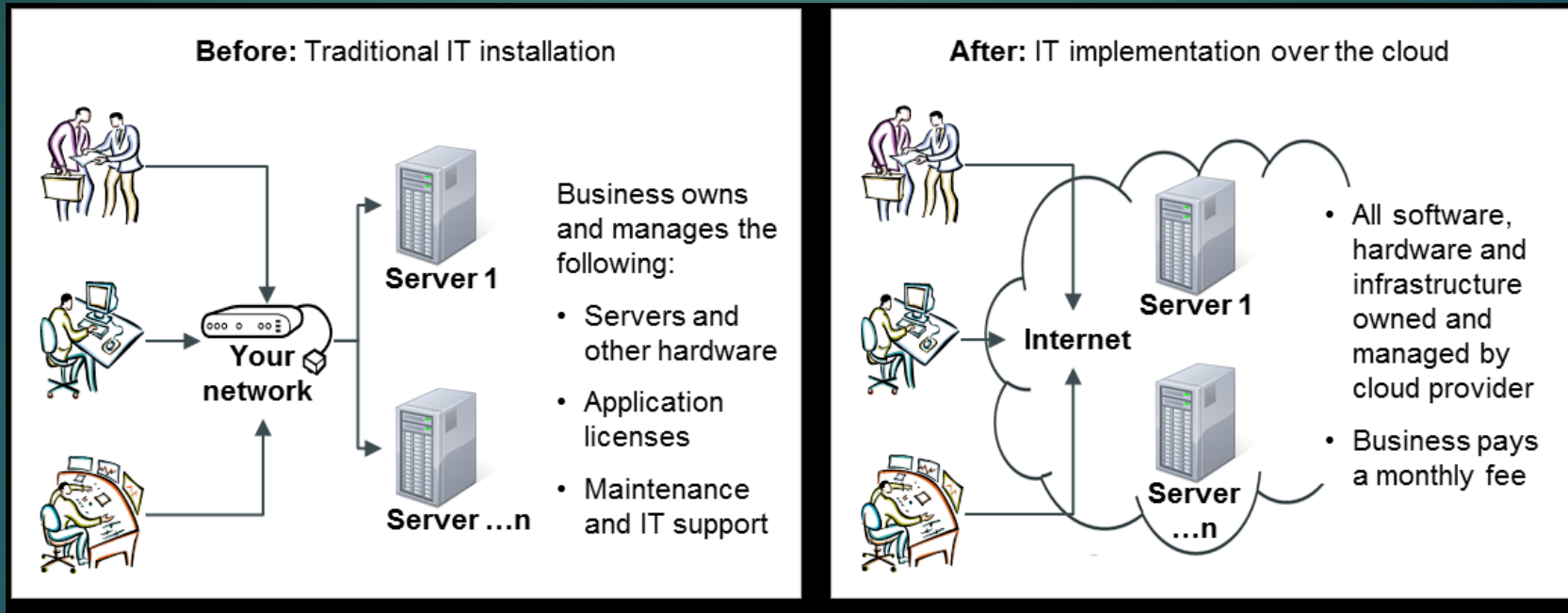


Introduction to Cloud Computing

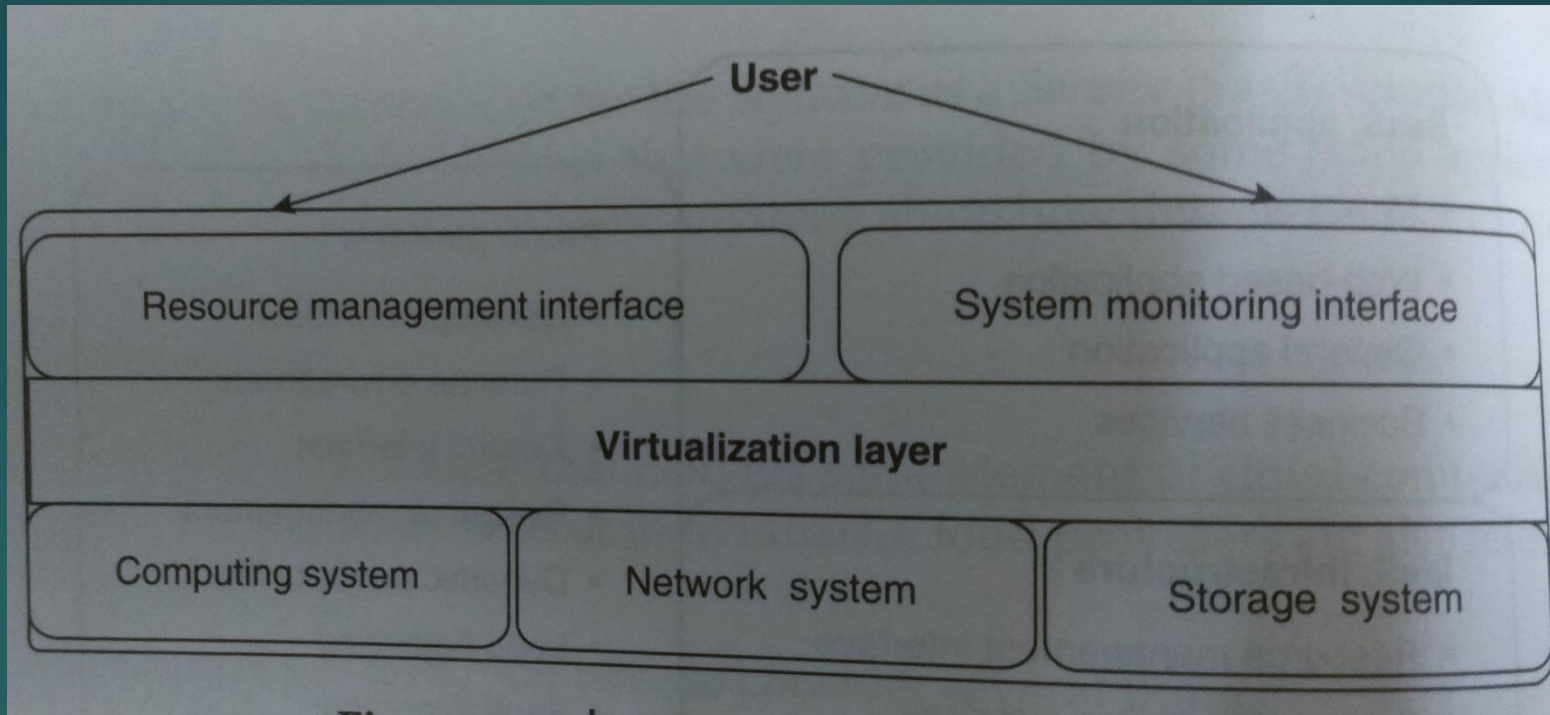
By
Md Ruhul Islam



Traditional IT installation vs IT implementation over the cloud

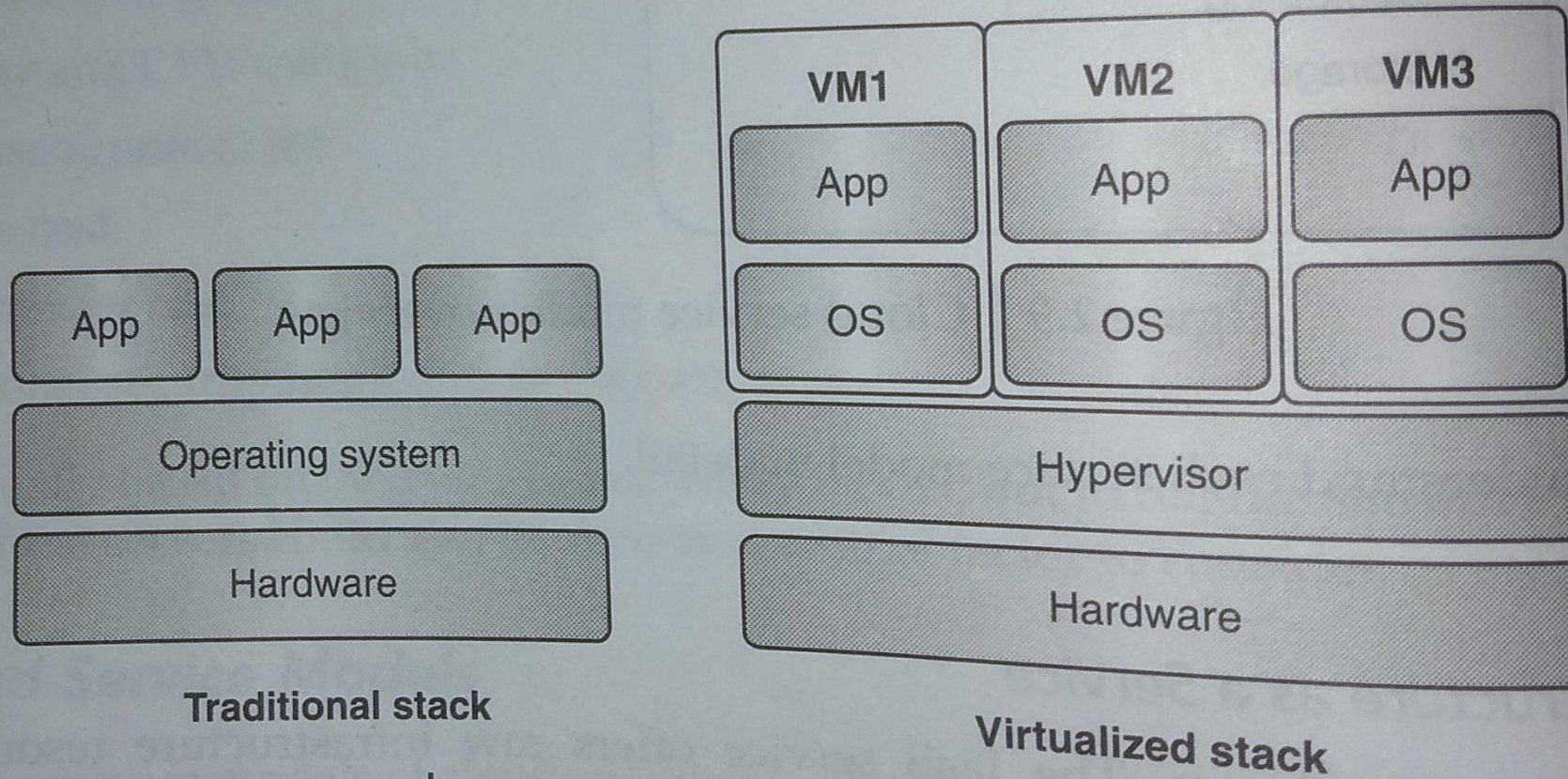


System Architecture of IaaS

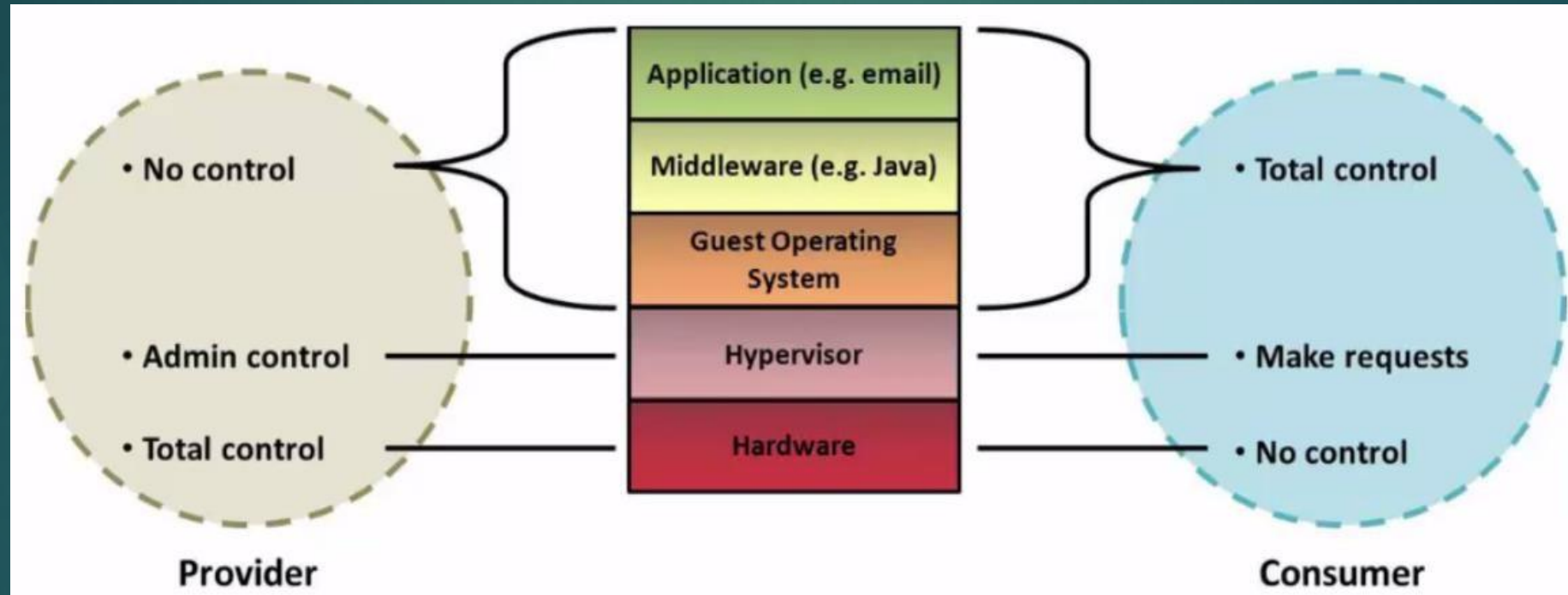


- The main service of IaaS is resource management interface.
- Virtualization is the main enabling technique in the IaaS system architecture.
- It is the abstraction of logical resources away from physical resources.
- Types of Virtualized resources are virtual machine, Virtual storage and Virtual network.

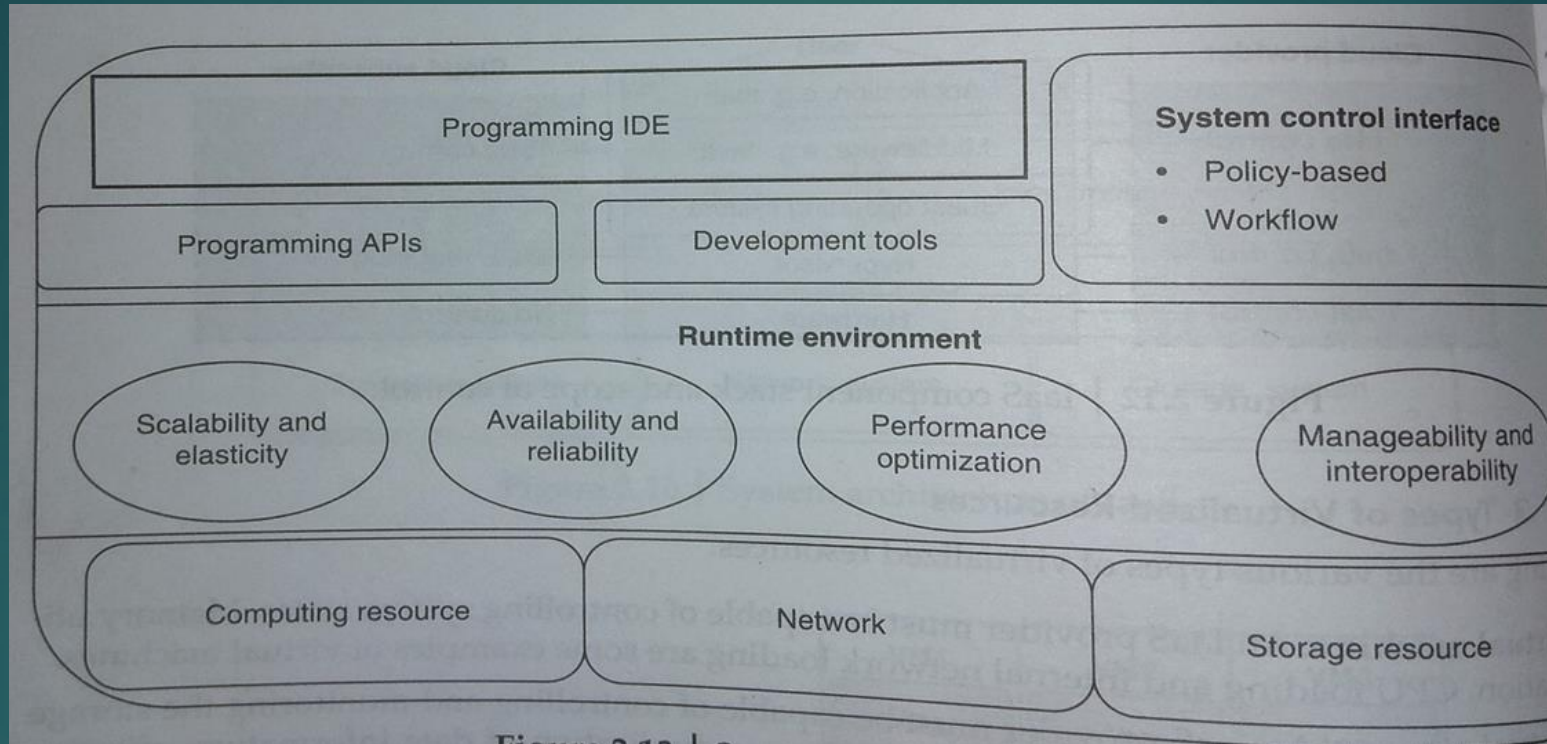
Virtualization



IaaS Protocol Stack



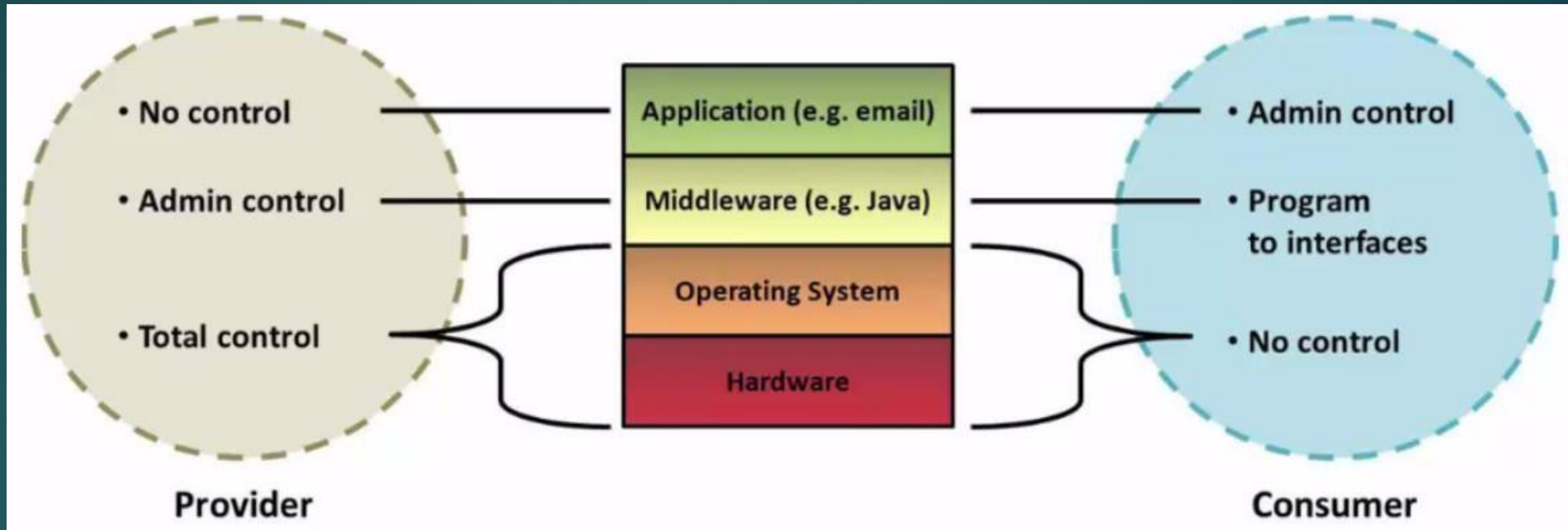
System Architecture of PaaS



The two main features of PaaS is

- **Programming IDE-** it integrates all development functionalities together which is supporting it from runtime environment. Also offer some tools like debugger, profiler and testing environment.
- **System Controller Interface-** Policy based control and Workflow control.

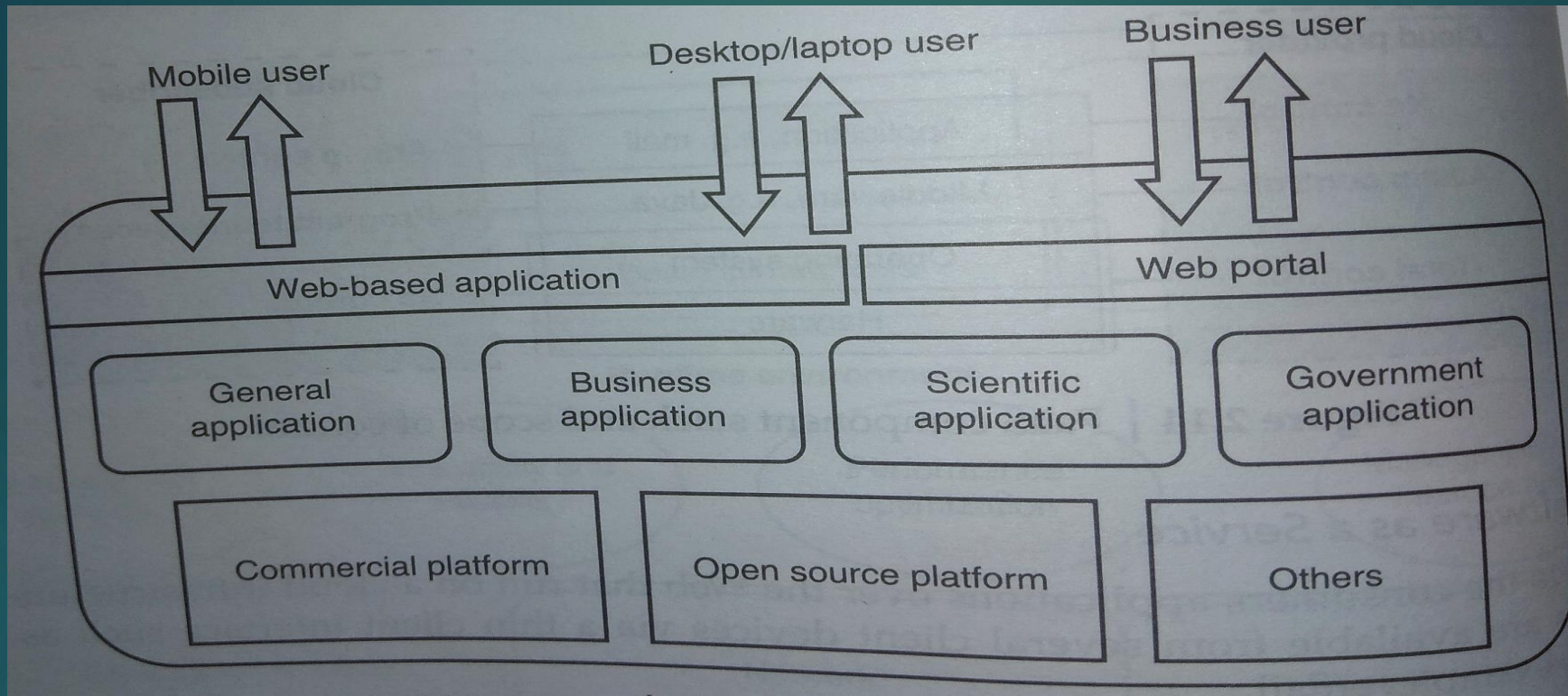
PaaS Software Stack Control



PaaS Benefits

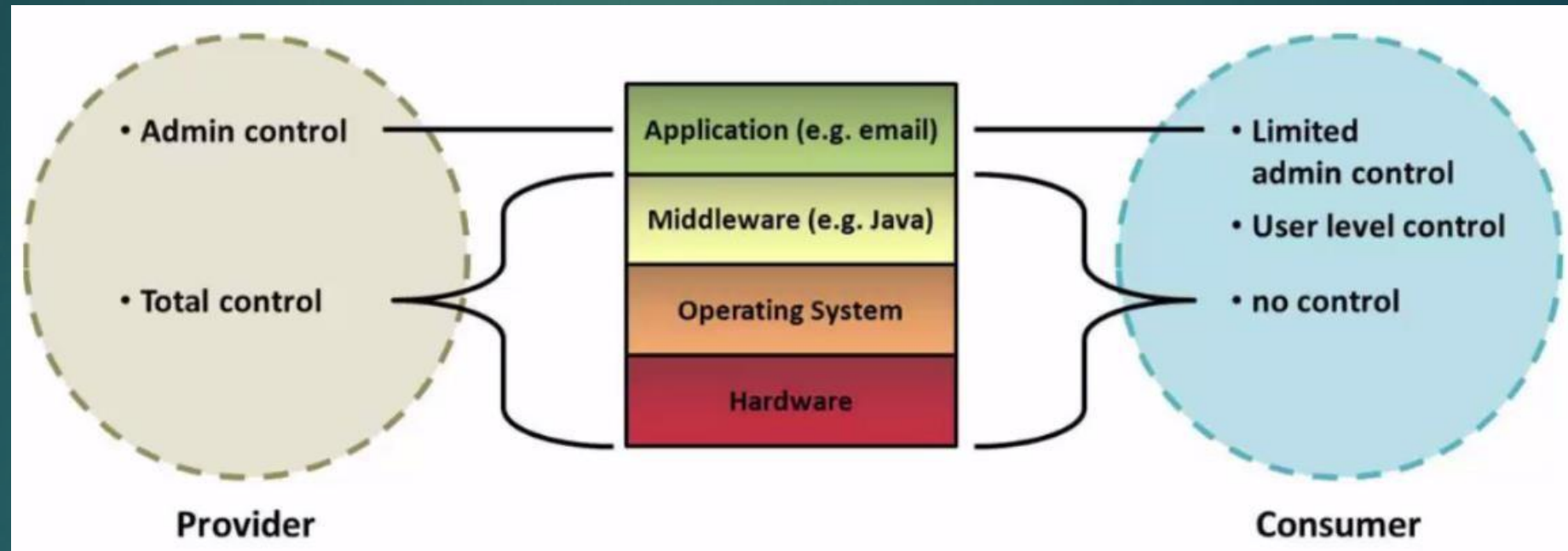
- Reduced Disruption
- Efficient use of Software Licenses
- Centralized Management of Data
- Platform Responsibilities managed by providers
- Up front cost savings

System Architecture of SaaS



1. In SaaS main enabling technique is a Web Service which interact with Web application on WWW.
2. It provides accessibility and portability through web-based applications.
3. SaaS offering Web portal which contains email, latest news, currency exchange and stock price.

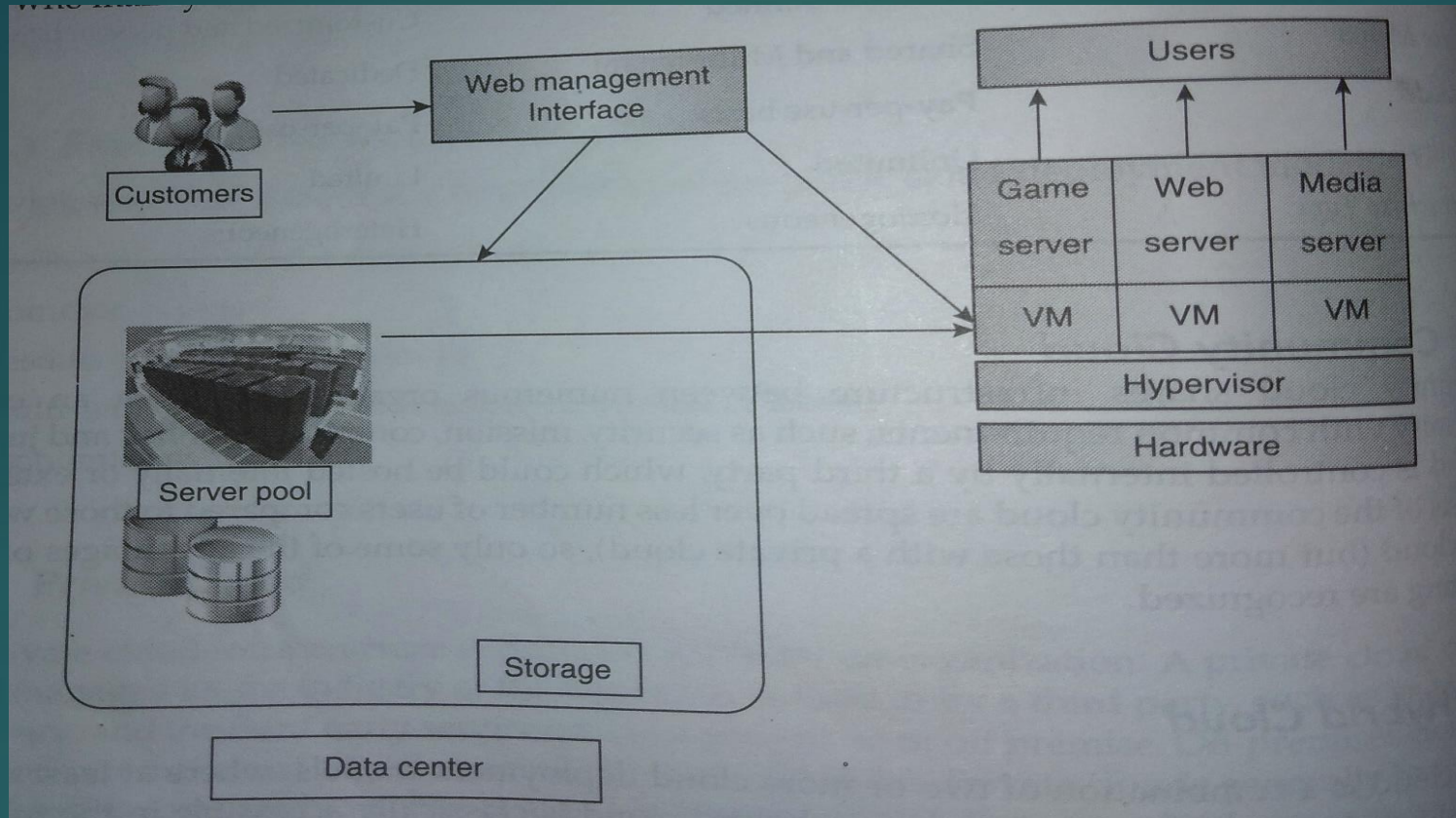
SaaS Software Stack Control



SaaS Benefits

- Reduced Disruption
- Efficient use of Software Licenses
- Centralized Management of Data
- Platform Responsibilities managed by providers
- Up front cost savings

Cloud Architecture



1. Cloud Computing architecture is a general high-level view to visualize structure of the system.
2. It contains various cloud resources, middleware, software component services and relationships among them.
3. User can use various services according to their choice.
4. Service provider provides those services with the help of virtualization technique.
5. The customer can not see the hidden complexities of the cloud provider.