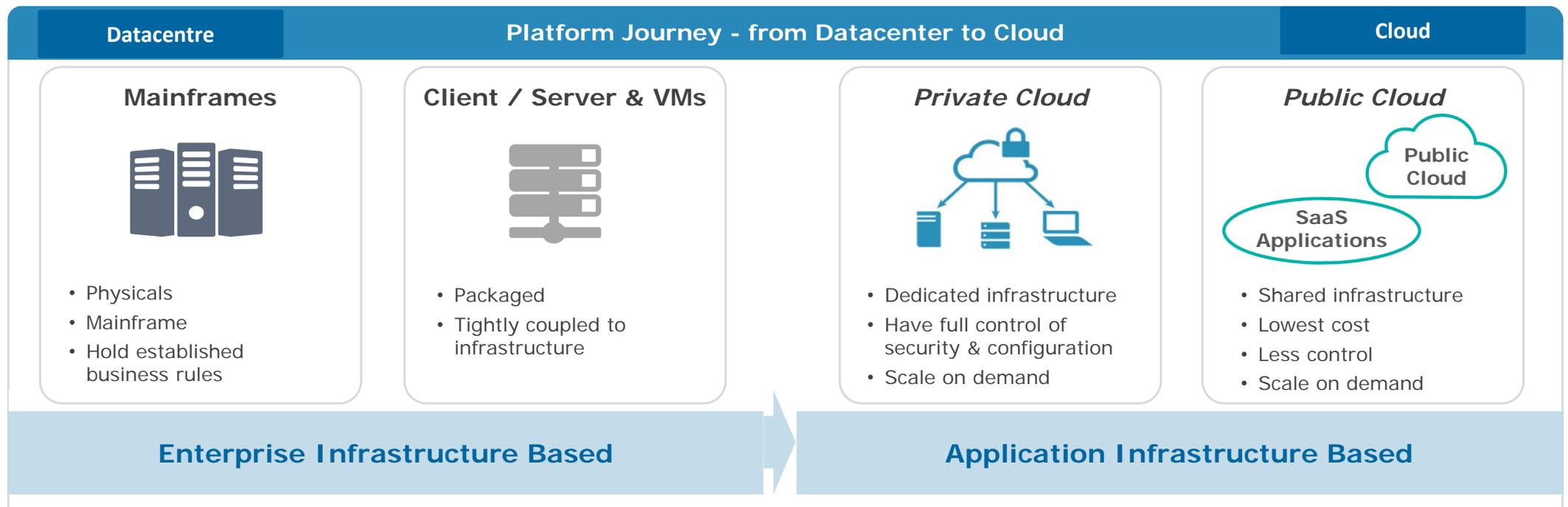# Hybrid IT

The increased adoption of Enterprise Cloud is creating new capabilities which are more agile and able to scale. Most organisations will have a mix of traditional and modern environments.

Each environment will have its benefits and as such organisations want to be able to choose the best platform for applications. Moving established applications can be risky and disruptive to the business, so applications which provide the most benefits are prioritised first. New internet facing applications (which need to be highly scalable) are best suited on the new cloud platforms.

The industry is seeing a demand for hybrid IT where the best platform is being selected for applications and integration is being provided to grant seamless access to applications and data no matter where they are stored.

Datacentre	Platform Journey - from Datacenter to Cloud		Cloud
Mainframes	**Client / Server & VMs**	*Private Cloud*	*Public Cloud*
• Physicals • Mainframe • Hold established business rules	• Packaged • Tightly coupled to infrastructure	• Dedicated infrastructure • Have full control of security & configuration • Scale on demand	• Shared infrastructure • Lowest cost • Less control • Scale on demand

Public Cloud

SaaS Applications

Enterprise Infrastructure Based   **Application Infrastructure Based**

Department of Health & Social Care

Hybrid IT - Cloud Service Models

Software as a Service (SaaS). The capability provided to the consumer is to use the provider's applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user- specific application configuration settings.

Platform as a Service (PaaS). The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.

Infrastructure as a Service (IaaS). The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls).