

Manager's Guide to PaaS platform

By SearchCIO.in

[Platform as a service \(PaaS\)](#) has evolved from software as a service (SaaS) and infrastructure as a service (IaaS). With internet infrastructure becoming ubiquitous and reliable in India, PaaS platform has gained popularity amongst the country's vast pool of software developers and independent software vendors (ISVs).

This Manager's Guide to PaaS platform has been divided into seven easy to digest topics as below.

- **PaaS platform: The basics**
- **Top PaaS platform market trends in India**
- **Business benefits of PaaS platform deployment**
- **The disadvantages of deploying PaaS platform**
- **PaaS platform evaluation: Ask these 5 questions**
- **Top PaaS platform vendors and their offerings**
- **Links for further reading**

PaaS platform: The basics

PaaS platform, as mentioned above, has evolved from software as a service (SaaS) and [infrastructure as a service \(IaaS\)](#).

In case of [SaaS](#), software applications that run on a [cloud infrastructure are delivered as a service](#) to the user organization through internet. These can be any applications, for example, ERP, collaboration, or accounts management.

IaaS is a cloud computing platform wherein the customer organization accesses IT infrastructure resources such as storage, processing, networking on a pay-per-use model.

In case of [PaaS platform, on the other hand, a user organization](#) accesses the platform hardware and operating system over the internet on pay per use basis.

This allows for refreshing the OS, accessing virtualized servers, and using the associated resources to develop, run, and test software applications in a pay-per-use fashion.

PaaS platform enables independent software vendors (ISVs) to develop, deploy, and manage applications without incurring upfront cost for buying the platform hardware or software.

The ISVs in India find PaaS platform as a usable service model as it provides for the underlying functional conditions, development and testing services, reporting services, and database services necessary for their development projects.

Top PaaS platform market trends in India

- **Supplier explosion:** Current trend of supply exceeding demand will continue as the internet makes it easier to distribute new applications. In that context, boom of PaaS platform providers will fuel this explosion further.
- **Exponential adoption by SMBs:** The current trend of SMBs (small and medium businesses) showing keen interest in PaaS platform is expected to continue in the near future.
- **Resolution of data security and bandwidth concerns:** At present, the concerns around security of data and lack of bandwidth are restricting market growth. Joint effort by PaaS platform vendors and ISVs will result in suitable resolution in the coming years.

Business benefits of PaaS platform deployment

PaaS platform helps ISVs to de-risk their business by offering the following advantages.

- **Ubiquitous access:** Its being internet driven, PaaS platform ensures access to resources from anywhere in the world. This is critically important to software companies whose development work is spread across geographies.
- **Eliminating upgrades:** PaaS platform ensures that an ISV does not have to keep on investing in OS upgrades and maintenance.
- **Low capital expenditure:** PaaS platform makes it easier for the software development companies to manage their working capital needs better as their revenues are largely project driven.
- **Predictable expenditure:** As the resource utilization is controlled by the clients, operating expenses are more predictable. For instance, with PaaS platform, the

outsourced software product development (OPD) companies can assign separate budgets for independent projects with ease.

- **Facilitates collaboration:** PaaS platform allows for collaboration between organizations in neutral third-party land. For example, ISVs can co-develop an application leveraging a third party PaaS platform.
- **Fast implementation:** Since PaaS platform does not entail local installation, the adoption speed is usually high.
- **Rapid scalability:** An ISV can increase the resource utilization as and when required without any delay.

Disadvantages of deploying PaaS platform

- **Data security and privacy:** The biggest concern with PaaS platform in a public cloud model is data security and privacy. This is because the organization's information resides on PaaS platform vendor's infrastructure which is shared by many clients.
- **Data access:** Another concern with PaaS platform in a public cloud model is ensuring uninterrupted access to data as the underlying operating environment is shared.
- **High expenses:** This is particularly true in case of PaaS platform in a private cloud model. Private cloud model also calls for investment in building in-house expertise.

PaaS platform evaluation: Ask these 5 questions

After carrying out information security checks, a CIO should ask the following questions about the PaaS vendor's capabilities before signing a contract.

1. Does the PaaS platform provider offer a hybrid cloud model? This will assure security and flexibility, simultaneously.
2. Can the platform resources of the PaaS vendor integrate smoothly with your company's existing applications? That will show the market readiness of the PaaS vendor.
3. Does the PaaS platform provider have the expertise and willingness to work with you to offer support for integration, testing, or customization whenever needed?
4. Is the vendor's infrastructure robust? See if the vendor assures redundancy, fault-tolerance, and continuity.
5. Does the vendor provide for easy and centralized mechanism to incorporate changes or to perform maintenance?

Top PaaS platform vendors and their offerings

PaaS vendor	What it offers
Amazon Web Services (AWS)	Amazon Elastic Beanstalk of AWS allows developers to host, deploy, and manage applications in the cloud.
Google	Google's PaaS platform, App Engine, allows organizations to build and host their web applications. The vendor promises centralized administration, 99.9% uptime, and security. It charges \$8 per user per month (with maximum of \$1000 a month) for its PaaS platform.
OrangeScape	OrangeScape claims to offer, what it calls, a Cross-Cloud PaaS platform by integrating the resources of Google App Engine, Microsoft Azure, IBM Smart Cloud, and Amazon EC2.
Microsoft	Microsoft offers PaaS platform services using Windows Azure AppFabric. These cloud middleware services include Service Bus, Access Control, Caching, Integration, and Composite App. The vendor assures compatibility with all programming languages and development frameworks including .NET, Java, Ruby, and PHP.
Salesforce.com	PaaS platform offerings of Salesforce.com include Social Application Platforms, Raw Compute Platforms, Web Application Platforms, and Business Application Platforms.
Sify Technologies	Sify's PaaS services are offered using its On-Demand Hosting Platform powered by HP's converged infrastructure components.

Links for further reading

Definition from whatis.com: [What is Platform as a Service \(PaaS\)?](#)

News: [The lines between cloud models are blurring](#)

News: [Microsoft Windows Azure pricing for India simplified](#)

Buyers' Guide: [Cloud selection guide for Indian organizations](#)

Tip: [Gartner's cloud computing evaluation checklist](#)

News: [IT chargeback: A fundamental part of cloud computing takes shape](#)

Blog: [PaaS vs. IaaS: What's Microsoft's private cloud vision?](#)

Blog: [Red Hat to enhance PaaS cloud offering with Makara acquisition](#)

News: [Joyent PaaS may turn Web app world upside down](#)